

European Initiative on

Business



Biodiversity

Portuguese Presidency of the EU Council
and European Commission

Conference Proceedings

High Level Conference on Business & Biodiversity

Lisbon, 12-13 November 2007



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Contents

Foreword	7
Preface	8
Introduction	9
A European commitment for business and biodiversity	9
The message from Lisbon on business and biodiversity	10
Overview of the plenary sessions	11
Summary of the plenary sessions	13
European biodiversity commitments and business	14
High-level Roundtable: The 2010 business challenge	15
Keynote Speech	16
Business Roundtable: Business perspectives on biodiversity challenges – What can European business do?	17
Towards an EU initiative on biodiversity and business	19
Next steps for business and biodiversity in Europe	20
A: Biodiversity-related responsibility schemes	21
First session: Schemes that support companies in shaping their biodiversity commitments	22
Second session: Schemes that support companies in effectively implementing their biodiversity commitments	25
Third session: Schemes that support companies in better communicating performance and commitment	27
B: Business-related biodiversity assessments	31
First session: State of the art in the biodiversity assessment	32
Second session: Biodiversity benchmarking	36
Third session: Governance and accountability	38
Summary of conclusions and recommendations	39
C: Markets for biodiversity goods and services	43
First session: Where are we now?	44
Second session: What are the priority challenges and opportunities?	46
Third session: Moving to action: What should the EU do?	47
D: Business and biodiversity partnerships	49
First session: State of the art in business and biodiversity partnerships in Europe	50
Second session: Partnerships at work: Challenges and opportunities	51
Third session: Business and biodiversity partnerships	54

Discussion Paper from the European Commission: Business and biodiversity - Building partnerships	57
Discussion paper A: Biodiversity-related responsibility schemes	61
Incorporating biodiversity into corporate responsibility schemes	62
Schemes that support a corporate commitment to biodiversity management	65
Schemes that support the implementation of a corporate commitment to biodiversity management	68
Schemes that support the communication of corporate performance in biodiversity management	74
Conclusions	77
Annex: Analysis of biodiversity content in a sample of corporate responsibility schemes	79
Discussion paper B: Business-related biodiversity assessments	89
Business and biodiversity assessment: a perspective	90
Introduction	91
Business and biodiversity assessments	93
Conclusions and recommendations	107
Discussion paper C: Markets for biodiversity goods and services	111
Building Biodiversity Business	112
Discussion paper D: Business and Biodiversity Partnerships	117
Introduction	118
Types of partnerships	118
Why engage in biodiversity partnerships between various stakeholders?	119
Examples of successful partnerships	120
Challenges	123
Acronyms	125
Annex	125
List of Participants	126
Acknowledgements	138

Foreword

We are the stewards of nature and a clear majority of European citizens understand that we have a moral obligation to protect biodiversity. We also have a strong self interest in protecting biodiversity because the human race depends on the complex web of interactions that occur in natural ecosystems. Biodiversity is a source of resources and services that are central to our economies. The destruction of species and habitats has an enormous economic impact even though this effect can be difficult to measure in precise terms.

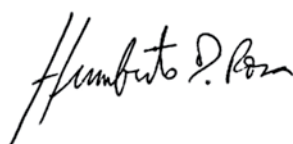
For these reasons, stopping the loss of biodiversity is a challenge every bit as important - and as difficult - as the fight against climate change.

Businesses consume ecosystem goods and services and they contribute to ecosystem change. They can have a huge impact on biodiversity. But for many their profits depend directly on well functioning ecosystem services – for example, farmers, the food industry, timber, paper, pharmaceutical companies and much of the tourism sector. For these companies conserving biodiversity makes good business sense. And all businesses depend on a good reputation with their customers and employees. Billions of euros are spent each year developing corporate images and no company can afford to be seen as contributing to the destruction of nature.

Things are beginning to change and companies are beginning to recognise the competitive advantages that can be gained from the sustainable use of biological resources. Governments and policy makers alone cannot cope with the scale of the biodiversity crisis. This is why the Commission's Biodiversity Action Plan from 2006 identified the building of partnerships with businesses as one of its key measures. For the same reason the Portuguese Presidency chose a European Business and Biodiversity Initiative as one of its environmental priorities in 2007 - a project it developed in close cooperation with the European Commission and the IUCN Countdown 2010 Initiative.

A high level Conference on Business and Biodiversity, held in Lisbon on 12 and 13 November 2007, brought together representatives from over 150 companies. A number of important conclusions were reached: on the need to include biodiversity strategies in corporate strategies, on raising awareness among consumers, on offering information and expertise to business, and on assisting companies to shape their individual commitments to biodiversity. This report is an attempt to capture the richness of those presentations and discussions.

The European Commission is committed to implementing the Message from Lisbon, and to ensuring that the European Business and Biodiversity Initiative delivers measurable results. With this in mind, we hope this report will stimulate further thinking and innovation on how to engage businesses in addressing the common challenge that lies ahead, and provide guidance for forthcoming activities to be carried out throughout the European Union.



Humberto D. Rosa
Secretary of State for Environment
Portugal



Stavros Dimas
Commissioner for the Environment
European Commission



Preface



The Lisbon conference on Business and Biodiversity provided another key step in building the business case for biodiversity. Over the last decade, IUCN has developed and tested mechanisms for engaging the private sector in the biodiversity agenda.

We are grateful that the Portuguese EU Presidency, through the Instituto de Conservação de Natureza e da Biodiversidade and the European Commission has decided to work with the Union and its Countdown 2010 initiative in organizing the Lisbon Conference which attracted, in addition to the important individual participants, representatives of more than 160 companies.

Biodiversity is increasingly being seen as the foundation for all economic, social and cultural life on our planet. Destroying it – whether through climate change, pollution or the unsustainable use of natural resources – could irrevocably damage the water, food, air and other natural resources that people, societies and businesses depend on.

In the early days, conversations about biodiversity involved only conservation organizations. Today, as the Lisbon conference demonstrated, interest in biodiversity has escalated and comes from all quarters. At IUCN, while biodiversity conservation remains our heartland work, we know that it cannot be separated from human well being.

I believe such a conference could not have happened 5 or even 2 years ago. Biodiversity was not high on the global agenda and did not feature in many company boardrooms. But with the rapidly-growing awareness of climate change, biodiversity is following suit and looks set to become the next big issue for the private sector, as reflected in this report which attempts to capture the rich discussions of the Lisbon Conference. Times have changed--the conservation community is more open to engaging with business and the business community is more aware of the benefits of taking care of biodiversity for market opportunity and not simply for good public relations.

We have reached a convergence between public and private sectors on the critical importance of biodiversity and what needs to be done now to stem a steadily worsening global crisis.

As you will note from this report, the work did not stop with the **“Message from Lisbon”**. The Message has set into motion a process in Europe and beyond and was adopted at the EU Council meeting in December 2007. The Message calls on business, governments, the EU and NGOs to:

- Continue raising awareness of the strong competitive advantage to be gained by conserving biodiversity;
- Promote the use of a wide range of market mechanisms, corporate responsibility and regulatory schemes to conserve biodiversity;
- Support large and small businesses with operational tools for biodiversity conservation and measuring their performance in meaningful ways; and
- Encourage new incentives to develop and strengthen partnerships between companies, governments at all levels, NGOs and academia.

It is clear that we are all committed to taking concrete action. We already know that the European Union and its member states will follow up on the outcomes of this meeting.

IUCN will take the results beyond Europe to its international members and partners on all continents. A great opportunity to measure progress on our commitments will be at the IUCN World Conservation Congress in October 2008 in Barcelona where I look forward to seeing all of you.

Julia Marton-Lefèvre

Director General

IUCN (International Union for Conservation of Nature)

Introduction

In 2000, in Lisbon, the EU Heads of State and Government agreed to make the EU “the most competitive and dynamic knowledge-driven economy by 2010.” In 2001, the EU further committed to “halting biodiversity decline by 2010.” In 2006, the European Commission launched a biodiversity communication, which included a commitment to engage the private sector in partnerships for biodiversity.

Then, in 2007, under the Portuguese Presidency, business leaders, biodiversity experts, NGOs and policy makers, returned to Lisbon to explore how European business can improve performance through biodiversity responsibility. The meeting of more than 400 leaders from business, governments, the European Union and NGOs signalled a major step in business commitment to biodiversity conservation.

This report provides an overview of the rich array of presentations and discussions which took place on 12–13 November 2007, at the High Level Conference on Business and Biodiversity in Lisbon, Portugal. The Conference was organized under the Portuguese Presidency of the EU Council in partnership with the European Commission and the IUCN Countdown 2010 Initiative.

Convergence between public and private sectors on the critical importance of biodiversity – the rich diversity of animals, plants and nature that supports us all – and what needs to be done now to stem a steadily worsening global crisis from its continuing loss, emerged at the Conference.

The Conference also contributed to an improved understanding of the competitive advantages that can be gained from conserving biodiversity and using biological resources sustainably. Importantly, the Conference provided substantive guidance to the European Commission’s new initiative on business and biodiversity.

In November, in Lisbon, a new European 2010 agenda for business and biodiversity was established. This was clearly articulated in the message of the Conference.

A European commitment
for business and biodiversity

European Initiative on

Business



Biodiversity

The message from Lisbon on business and biodiversity

Following extensive consultations and drafting sessions, the delegates of the Conference adopted a message for the European Union and European business on business and biodiversity. Adopted by consensus on the second day of the Conference it states:

“We the Ministers and representatives from governments, business and civil society participating in the High level Conference on Business and Biodiversity organized by the Portuguese Presidency of the EU Council, held in Lisbon, Portugal from 12 to 13 November 2007:

“*Convinced* that as part of the common efforts to implement the objectives of the Convention on Biological Diversity and in particular CBD Decision VIII/17 on private sector engagement, there is a strong business case for biodiversity, including the competitive advantage gained from conserving biodiversity and using biological resources in a sustainable way and recognizing that competitive markets also have an enormous potential to mobilize private resources and stimulate innovation.

“*Recognize* the significant progress that has been made in recent years by a number of business sectors and leading companies and support the scaling up of such efforts across other business sectors in Europe and abroad.

“*Acknowledge* the primary need to promote an even greater awareness of the importance of biodiversity throughout the business sector as well as among consumers, to make knowledge, information and relevant expertise available to business and to assist companies in shaping their commitments to biodiversity.

“*Recognize* that there is an urgent need to promote biodiversity conservation in micro, small and medium-sized enterprises, and in particular those with a strong link to biodiversity conservation as well as those based in the rural economy and to provide them with the information, relevant expertise and tools which are adapted to the operating conditions of these enterprises and recognizing also the valuable role that business associations can play in this process as well as the potential value of clusters of interest groups working within the context of specific, physical landscapes.

“*Encourage* the incorporation of biodiversity considerations into existing responsibility schemes and the implementation of such schemes in combination with other approaches (e.g. market mechanisms, regulatory frameworks). Improvements in the understanding of biodiversity and ecosystem services through research and practical experience should support the evolution of business contribution to biodiversity so as to engage businesses in a process of continuous improvement.

“*Welcome* the progress made in biodiversity performance assessment and reporting by several leading businesses which complement the regulatory assessment schemes such as those established within the EU under the Habitats Directive,

the Environmental Impact Assessment and the Strategic Environmental Assessment Directives.

“*Encourage* establishing and strengthening public/private partnerships between and among local, regional and national governments, NGOs, business and academia to fight biodiversity loss as well as the development of mechanisms by which these stakeholders and other relevant groups can identify each other with a view to developing practical, operational partnerships.

“*Recommend* the development and testing of market-based approaches for biodiversity, learning from the approaches and models which have been implemented in connection with climate change-related instruments.

“*Recognize* the need to promote the principle of a level playing field at a global level in order to provide the correct incentives and signals to those companies that are taking active steps to conserve biodiversity and practise sustainable use and recognizing also that the EU could play a significant role in this context.

“*Welcome* within the context of the EU’s objective of halting biodiversity loss by 2010, the launching by the Portuguese Presidency of the EU Business and Biodiversity Initiative and the commitment from the EU Commission to establish a technical facility to support this initiative.

“*Welcome* and congratulate the government of Portugal for identifying business and biodiversity as a priority during the Portuguese Presidency of the EU and, in particular, for providing a new approach by engaging the business sector in the biodiversity agenda through a high level multi-stakeholder Conference on the subject.

“*Welcome* also the German efforts to advance the business and biodiversity agenda in preparation of CBD COP-9 and the actions taken by Slovenia in its capacity as the next EU Presidency in continuing to support this agenda.

“*Invite* the Portuguese EU Presidency to transmit the Message from Lisbon on Business and Biodiversity to the EU Summit in December 2007 and to the ninth meeting of the Conference of the Parties to the Convention on Biological Diversity to be held in Bonn in May 2008, including its High-level Segment and the IUCN World Conservation Congress in Barcelona in October 2008.

“*Express* our gratitude to the government of Portugal for hosting this Conference with the support of the European Commission and IUCN’s Countdown 2010 initiative.”

Overview of the plenary sessions

Day 1: Monday, 12 November

Opening Plenary: European biodiversity commitments and business

- **Francisco Nunes Correia**, Minister for Environment, Spatial Planning and Regional Development, Portugal
- **Gunther Pauli**, President of ZERI and founder of Ecover, on “Private sector engagement: Biodiversity challenges and opportunities”
- **Peter Carl**, Director General for DG Environment, European Commission, on “Halting the loss of biodiversity: The role of business”
- **Jaime Gama**, President of the Portuguese Parliament

The Conference took place over two days in mid-November 2007 and consisted of a series of plenary sessions as well as four parallel workshops. The plenary sessions and their participants were as follows:

High-level Roundtable: The 2010 business challenge

- Chair: **Jonathan Hutton**, Director, UNEP World Conservation Monitoring Centre (UNEP-WCMC)
- **João Vasco de Mello**, CEO, Brisa Auto-Estradas de Portugal, S.A.
- **João Paulo Capobianco**, Executive-Secretary of the Ministry of Environment of Brazil, on “Development and biodiversity”
- **Brigita Schmognerova**, Vice President, EBRD Energy and Biodiversity, on “Finance and biodiversity”
- **Martin Taylor**, Chairman of the Board, Syngenta International AG, on “Business and biodiversity”
- **Joan Ruddock**, UK Environment Minister, commenting on the roundtable from the floor

Introduction to the workshops: Setting the 2010 action agenda

- Chair: **Humberto Rosa**, Secretary of State for Environment, Portugal
- Workshop A: Biodiversity-related responsibility schemes by **João Menezes**, President of ICNB, Portugal
- Workshop B : Business-related biodiversity assessments by **Nigel Winser**, Executive Director, Earthwatch Institute Europe
- Workshop C: Markets for biodiversity goods and services by **Alan Bernstein**, CEO, Sustainable Forest Management Ltd
- Workshop D : Business and biodiversity partnerships by **Kirsi Sormunen**, Vice President and Head of Environmental Affairs, Nokia Corporation

Keynote Speech

- **Achim Steiner**, Executive Director, United Nations Environment Programme

Overview of the plenary sessions

Day 2: Tuesday, 13 November

Business Roundtable: Business perspectives on biodiversity challenges – What can European business do?

- Chair: **Guy Corcelle**, Deputy Head of Unit for Sustainable Development, Climate Change and Competitiveness, DG Enterprise and Industry, European Commission
- **Richard Sykes**, Executive Secretary, International Petroleum Industry Environmental Conservation Association (IPIECA)
- **Bernard Küng**, Area Manager Western Europe, Holcim
- **Jacques du Puy**, Executive Committee Member of Bayer CropScience, Head of Europe, Middle-East and Africa
- **José Honório**, CEO, Portucel Soprocel
- **Jean-Claude Steffens**, Senior Executive Vice President, SUEZ SA
- **António Mexia**, CEO of Energias de Portugal (EDP)
- **Kirsi Sormunen**, Vice President Environmental Affairs and CR, Nokia Corporation
- **Simon Brooks**, Vice President, European Investment Bank (EIB)

Plenary Session: Towards an EU initiative on biodiversity and business

- Chair: **Julia Marton-Lefèvre**, Director General, IUCN
- Report on Workshop A: Biodiversity-related responsibility schemes by **George Jaksch**, Senior Director, Chiquita International
- Report on Workshop B: Business-related biodiversity assessments by **Nigel Winser**, CEO of Earthwatch Institute Europe
- Report on Workshop C: Markets for biodiversity goods and services by **Andre van der Zande**, Secretary General, Ministry of Agriculture, Nature and Food Quality, The Netherlands
- Report on Workshop D: Business and biodiversity partnerships by **Kirsi Sormunen**, Vice President and Head of Environmental Affairs, Nokia Corporation

Closing Session: Next steps for business and biodiversity in Europe

- Chair: **Francisco Nunes Correia**, Minister for Environment, Spatial Planning and Regional Development, Portugal
- **Julia Marton-Lefèvre**, Director General, IUCN on “Summing up: A glance at the Conference outcomes”
- **Janez Kaspelic**, on behalf of **Janez Podobnik**, Minister of Environment and Spatial Planning, Slovenia on “A bridge to the Future: Preparing the upcoming EU Presidency”
- **Jochen Flasbarth**, on behalf of **Sigmar Gabriel**, Minister for the Environment, Nature Conservation and Nuclear Safety, Germany on “Biodiversity : We need a global approach”
- **Belmiro de Azevedo**, President Sonae SGPS SA on “Managing Expectations: A 2010 Roadmap for Business”
- **Sir Brian Unwin**, President, ECNC – European Centre for Nature Conservation and President of the European Task Force on Banking, Business and Biodiversity on “Joining forces for an action agenda for Europe: True life experiences and approaches”
- **Ahmed Djoghlaif**, Executive Secretary, Convention on Biological Diversity on “The 2010 biodiversity target: A view towards CBD CoP9”

Summary of the plenary sessions

This section of the report summarizes the key presentations and discussion which took place in the plenary sessions of the Conference.



Francisco Nunes Correia, Jaime Gama and Peter Carl during the opening plenary

European biodiversity commitments and business



Gunter Pauli and Francisco Nunes Correia during the opening plenary

Francisco Nunes Correia, Minister for Environment, Spatial Planning and Regional Development, Portugal, opened Conference by underscoring the unprecedented rate of biodiversity loss despite the importance of ecosystem goods and services for business. Correia drew attention to unsustainable development patterns and to the critical role for business in preserving biodiversity. Noting the responsibility of governments and the EU in preparing biodiversity policies, he called for their implementation with the support and participation of civil society and the private sector. Noting the importance of voluntary agreements with businesses, he stated that: “The Portuguese Presidency is committed to involving business in biodiversity conservation.”

“If you give a man a fish, he will not be hungry for a day, if you teach him how to fish, he will... overfish,” said **Gunter Pauli, President of Zero Emissions Research Initiative** explaining provocatively how well intended decisions can have unforeseen consequences on the environment. Pauli presented examples of chemical compounds derived from animals and plants that could replace harmful technologies, concluding that “nature is an untapped source of solutions” for many problems. He drew attention to “Nature’s 100 Best,” a publication to be released in 2008, and noted that entrepreneurship was about changing business models and creating new rules whilst remaining competitive. He concluded that the EU needs new policy options so that businesses can make money whilst respecting the commons and restoring biodiversity.

Peter Carl, Director General for DG Environment, European Commission stated clearly that the EU is committed to the 2010 biodiversity target and to doing as much as possible to halt the “otherwise unstoppable decline of biodiversity” within and beyond its boundaries. He drew attention to a plethora of initiatives and policies for biodiversity conservation and called for stronger partnerships with business. “The public perception of the economic importance of the loss of biodiversity has been distorted by partial arguments and false logic,” he said. Noting that business practices need to be altered, Carl highlighted the economic value of biodiversity. “Protecting biodiversity makes sound economic sense but is also essential to our wellbeing,” he stated. Carl further noted that climate change and biodiversity are two pressing issues that should not overshadow one another and called for businesses interested in working with the EU on its new business and biodiversity initiative to come forward.

Recalling the commitments made in Rio in 1992, **Jaime Gama, President of Portuguese Parliament**, noted that biodiversity is still disappearing, which jeopardizes the environment’s ability to respond and adapt to climate change. “This Conference provides the opportunity to identify common areas of interest, to work with business,” he said. Underscoring the ambition to avoid another mass extinction, Gama urged delegates “to make Europe the world champion in the preservation of biodiversity.”

High-level Roundtable: The 2010 business challenge

Jonathan Hutton, Director, UNEP World Conservation Monitoring Centre (UNEP-WCMC), chaired this roundtable which had discussions revolving around the themes of the four Conference workshops: biodiversity-related responsibility schemes; business-related biodiversity assessments; markets for biodiversity goods and services; and business and biodiversity partnerships.

Hutton provoked the audience, saying that “we don’t rely on corporate social responsibility (CSR) to deal with pollution, human health or labour; so it might not be a good idea to have CSR deal with biodiversity issues.” He further noted that European corporations are calling for global standards and regulations, as opposed to European ones, to “create a level playing field” internationally. This is an important development for markets within Europe as well as for markets with the rest of the world.

Panellist **Vasco de Mello, CEO, Brisa Auto-Estradas de Portugal, SA**, underscored the links between biodiversity conservation and economic development. He expanded on the World Business Council for Sustainable Development (WBCSD) network and the way it provides a platform for business leaders to engage on environmental issues. He discussed Brisa’s environmental policies and stressed that “we do not protect what we do not value.”

Drawing attention to what Minister Marina Silva refers to as “ethical responsibility”, **João Paulo Capobianco, Executive-Secretary of the Ministry of Environment of Brazil**, noted that if no action is taken, “the future will hold only memories of good intentions.” He outlined the many commitments made on the road to 2010 and, noting the principles of the Convention on Biological Diversity (CBD), called for the fair and equitable sharing of benefits arising from the use of genetic resources. He noted the value of in situ conservation and urged developing nations not to make the same mistakes as industrialized countries and jeopardize their natural assets.

Brigita Schmognerova, Vice-President, European Bank for Reconstruction and Development (EBRD), discussed the involvement of financial institutions in biodiversity issues, noting a lack of knowledge and understanding of EU directives or the CBD. She underscored the importance of: raising awareness of the impacts of biodiversity loss and the associated reputational risk; considering biodiversity a business opportunity; and regional variations in markets directly dependent on biodiversity. She noted the need for a “carrot and stick” approach to get businesses interested in biodiversity.

“Low yields are a recipe for deforestation and the destruction of fragile habitats,” said **Martin Taylor, Chairman of the Board, Syngenta International AG**. In a world of rising meat consumption and ever-growing populations, he noted the company’s drive to use technology to increase agricultural yields, whilst underscoring European concerns in this regard, saying “it is time for Europe to wake up.” He stressed that Syngenta’s seed business depends directly on biodiversity and that CSR was therefore not needed.

UK Environment Minister, Joan Ruddock commented from the floor, calling for: the implementation of existing measures to safeguard biodiversity; innovation; and business participation. “The degradation of biodiversity is bad for business,” she said, noting that the UK is engaging with business partners on a biodiversity strategy. She noted the UK’s efforts to avoid illegal timber and to promote sustainable sources.

Other participants supported or opposed Syngenta’s approach to agricultural research, whilst others underscored the importance of an access and benefit sharing (ABS) regime.



Martin Taylor, John Hutton and Brigita Schmognerova during the High-level Roundtable

Keynote Speech

“Some believe that the current world focus on climate change is drawing attention away from biodiversity issues; I would like to challenge this myth,” said **Achim Steiner, UNEP Executive Director**. He noted that people in both hemispheres are becoming increasingly aware of climate change and its impacts on the environment. Drawing on the press coverage received by the recent fourth Global Environment Outlook report, he underscored that society is sensitized to its ecological footprint and concerned with the downwards trend of biodiversity.

Steiner highlighted that markets drive product innovation and that some “environmentally-friendly” markets, such as for organic produce, had taken off in the past five years, illustrating the consumer’s will to choose. He further opposed the notion that man can always artificially produce what is found in nature. With a backdrop of increasing oil and grain prices, he wondered about the long-term viability of industries faced with resource shortages.

Drawing attention to the many instruments, policies, rules and regulations pertaining to biodiversity, he noted that the Countdown 2010 initiative had responded to a thirst for simplicity and that the European Initiative on Business and Biodiversity could place biodiversity centre stage. As four priority areas for future work, he defined:

- milestones that break down the bigger problem of biodiversity loss and enable people to contribute;
- the concept of “net biodiversity loss”;
- no-go areas; and
- access and benefit sharing.

He concluded that “not having perfect knowledge of biodiversity is not a reason not to act.”



Achim Steiner, Executive Director, United Nations Environment Programme addresses the conference participants, Lisbon, 12 November 2007

Business Roundtable: Business perspectives on biodiversity challenges – What can European business do?

Guy Corcelle, Deputy Head of Unit for Sustainable Development, Climate Change and Competitiveness, DG Enterprise and Industry, European Commission, chaired this roundtable. Panellists introduced their respective businesses, underscoring their commitment to biodiversity.

Noting three areas of future work as being: biofuels; regulation and decision making; and ecosystem services, Richard Sykes, Executive Secretary, International Petroleum Industry Environmental Conservation Association (IPECA), said that “businesses like certainty and need clear signals on markets and prices.” He also drew attention to initiatives linking the business and conservation communities, such as Project Proteus with UNEP-WCMC and the Shell-IUCN Partnership. IPECA was created in 1974 following the establishment of UNEP and provides one of the industry’s principal channels of communication with the United Nations on biodiversity-related issues.

“Concrete is the second most consumed produce after water,” noted Bernard Küng, Area Manager Western Europe, Holcim, noting that raw materials and also energy are needed in production processes. He underscored the need to choose locations carefully, improving operations in existing sites and returning used sites to nature. Holcim is one of the world’s leading suppliers of cement and aggregates (crushed stone, sand and gravel) and has direct impacts on biodiversity in many countries.

Discussing current trends in cereal production and prices, Jacques du Puy, Executive Committee Member of Bayer CropScience, Head of Europe, Middle-East and Africa, noted that two kilos of grain are needed to produce one kilo of poultry meat. He noted that increasing crop production over the next decades to match demand could impact on biodiversity. He defined good farming practices and the use of knowledge and technology in integrated crop



management, and called for more science and certification schemes. Bayer CropScience is one of the world's leading innovative crop science companies in the areas of crop protection, non-agricultural pest control, seeds and plant biotechnology.

The Portucel Soporcel Group occupies a leading position in the international pulp and paper market and as such is one of Portugal's strongest world brands. It is one of the five largest producers of uncoated wood-free papers in Europe. **José Honório, CEO, Portucel Soporcel** noted that the company had joined WBCSD and was looking at fine-tuning its management practices. "We use natural resources that we need to preserve," he noted. Honório called for the EU to make a level playing field, addressing trade issues beyond its border, through the likes of the World Trade Organization.

"Awareness, expertise, commitment all take time to establish," noted **Jean-Claude Steffens, Senior Executive Vice President, SUEZ SA**, underscoring the company's approach to biodiversity through time. He noted that there was no "one size fits all" solution to environmental issues and called for a policy formulation enforceable in a decentralized group and business-oriented indicators to measure and communicate actions taken. SUEZ designs sustainable and innovative solutions in electricity, natural gas, energy services, water and waste management.

Antonio Mexia, CEO of Energias de Portugal (EDP), described the company's investments in wind and hydro power. He drew attention to legal and reputational risk linked to public opinion. He underscored that: biodiversity should be integrated in business discussions; opportunity costs of different alternatives should be highlighted; the EU needs to consider environment and energy "horizontally." "Today we are talking about getting a better world and getting a better business," he concluded. EDP's principal activities are the generation, transmission, distribution and sale of electrical energy.

Environmental management in Nokia is based on life-cycle thinking; "we choose environmentally-friendly materials, optimized recyclability, voluntary take back programmes, and reduced packaging," said **Kirsi Sormunen, Vice President and Head of Environmental Affairs, Nokia Corporation**. She discussed the value of environmental impact assessments and urged the EU to look into international environmental requirements. Nokia is the world's leading mobile phone supplier and a supplier of mobile and fixed telecom networks including related customer services. Nokia Corporation is a Finnish multinational, focused on the key growth areas of wired and wireless telecommunications.

"We need business management systems that will reward the good guys and penalize the others," said **Simon Brooks, Vice President, European Investment Bank (EIB)**. Seeing biodiversity as only a commodity will not be enough to save it, he noted. Brooks also stressed the value of partnerships and emphasized that biodiversity was a key issue for their clients. EIB is the EU's financing institution and was established under the Treaty of Rome (1957) to provide financing for capital investment furthering European Union policy objectives, in particular regional development.

Discussions in the roundtable session revolved around: partnerships, creating new goods and products based on biodiversity, the need for environmental education and drawing knowledge in from different sources, ensuring biodiversity conservation generates revenue.

Towards an EU initiative on biodiversity and business

Julia Marton-Lefèvre, Director General, IUCN chaired the plenary “Towards an EU Initiative on Biodiversity and Business.” Representatives from the four workshop streams presented their results and introduced the Conference declaration.

Workshop A discussed biodiversity-related responsibility schemes. **George Jaksch, Senior Director, Chiquita International** explained that while many schemes exist, most don't take biodiversity into account. This is partly due to a lack of clarity in the concept of 'biodiversity.' Better measurement systems and education of the general public and businesses are thus needed. The workshop identified a strong role for consumers and governments as customers for biodiversity-friendly goods and services. To support responsibility schemes, Jaksch noted that the EU should harmonize sectoral policies and make biodiversity an integral part of any process, create incentives for companies to engage in biodiversity conservation, and help companies and institutions to share experiences.

Workshop B focused on business-related biodiversity assessments. **Nigel Winser, CEO of Earthwatch Institute Europe**, explained that one of the main challenges would be to extend good practices to other sectors and adapt them to small and medium-sized enterprises. In addition, companies could benefit from better engagement with consumers, governments and other stakeholders. To support biodiversity assessments, Winser said the EU should use best practices to create tools and standards, and educate consumers to create demand for better biodiversity indicators.

Workshop C looked at markets for biodiversity goods and services. **Andre van der Zande, Secretary General, Ministry of Agriculture, Nature and Food Quality, The Netherlands** outlined how the complexity of biodiversity influences the business reality. Shell and IUCN presented a publication titled “Building Biodiversity Business” (to be published in December 2007). The workshop analyzed how a biodiversity market would differ from the carbon market, and noted the EU should use its expertise in creating an enabling economic framework to help business become more biodiversity-friendly. Van der Zande added that the EU business and biodiversity facility could play a valuable role as a think tank, matchmaker and funding agency.

Workshop D analyzed business and biodiversity partnerships. **Kirsi Sormunen, Vice President and Head of Environmental Affairs, Nokia Corporation** said that for companies like Nokia, “environmental sustainability is no longer optional, it is the licence to operate.” Partnerships would be an excellent way to deliver this promise if they provide proper incentives, clear targets and an atmosphere of trust. The workshop called on the EU to continue its engagement on business and biodiversity beyond 2010 and help create networks to promote partnerships.

Marton-Lefèvre emphasized the need to make the case for biodiversity and to invest in education, communication and the sharing of solutions. While all workshops outlined difficulties, they also proposed solutions and ideas to move forward. Participants further discussed the role of the financial sector in promoting biodiversity and potential EU policy instruments in agriculture and regional policy. Many highlighted citizens as observers providing objectivity and knowledge to business biodiversity assessments. Several business associations were mentioned as a good framework for business-to-business partnerships on biodiversity.

Closing this session, **Patrick Murphy, DG Environment, European Commission** presented the message from Lisbon which was approved by acclamation by the Conference delegates.



Julia Marton-Lefèvre, Director General, IUCN summarizes the conference outcomes

Next steps for business and biodiversity in Europe



Francisco Nunes Correia, Minister for Environment, Spatial Planning and Regional Development, Portugal chairing the closing roundtable

Francisco Nunes Correia, Minister for Environment, Spatial Planning and Regional Development, Portugal, chaired the closing roundtable on the next steps for business and biodiversity in Europe.

Julia Marton-Lefèvre, IUCN Director General, summed up the outcomes of the Conference, noting that delegates had taken stock of the seriousness of the issue at hand and realized it was time for action. She highlighted the demonstrated willingness of the business and biodiversity sectors to work together.

“This Conference has outlined that biodiversity counts,” said **Janez Kaspelic, of the Ministry of Environment and Spatial Planning, Slovenia**, on behalf of the Minister, noting the critical role of international conventions and the ecosystem approach in preserving nature. Underscoring the importance of the EU agenda and the upcoming Slovenian Presidency, he presented national biodiversity initiatives involving business and suggested furthering forestry partnerships.

Jochen Flasbarth, of the Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany, on behalf of the Minister, announced that Germany is currently preparing a package of some forty laws to address climate change. He noted progress towards the CBD ninth Conference of the Parties to be held in Bonn, Germany, in 2008, saying it would build on this Conference and other similar initiatives.

Providing an overview of changing business models since the last world war, **Belmiro de Azevedo, President Sonae SGPS SA**, said that biodiversity needed a business case. He noted that the road to 2010 and later depends on combining the regulatory power of governments with the financial power of businesses and the support of NGOs. He called for the development of standards to account for biodiversity in business decisions.

Reminding delegates of the objective of this Conference – to create a genuine partnership between business and biodiversity that delivers tangible results – **Sir Brian Unwin, President of the European Centre for Nature Conservation**, called for practical actions to follow the message from Lisbon and for the momentum created by the Conference not to be lost. “Acorns grow into large oak trees,” he noted and proposed as a slogan: “there is a business case for biodiversity and there is a biodiversity case for business.”

Ahmed Djoghlaif, Executive Secretary, Convention on Biological Diversity, commended the Intergovernmental Panel on Climate Change, Al Gore and all those involved in putting climate change centre stage globally and noted that 2008 would be a landmark year for biodiversity. He offered the services of the CBD Secretariat, emphasizing the focus put on business and biodiversity and on the role played by cities and city administrations in conserving biodiversity.

Francisco Nunes Correia, Minister for Environment, Spatial Planning and Regional Development, Portugal, delivered the closing speech, acknowledging outcomes of the meeting and assuring they would be brought to the CBD COP9 and to the 4th IUCN World Conservation Congress. He thanked all meeting stakeholders and delegates, and closed the meeting.

Biodiversity-related responsibility schemes

This workshop looked at the current integration of biodiversity objectives into examples of corporate responsibility schemes, including challenges, opportunities and recommendations.

For ease of analysis, schemes were divided between three sessions:

- those that assist companies in shaping a commitment;
- those that enable a company to implement that commitment;
- those that provide guidance on how to communicate their performance in implementing their commitment.

A number of common issues were raised across the three sessions, including:

- Challenges for small and medium-sized enterprises (SMEs)
- Links to climate change
- Need for further research into developing biodiversity indicators

The key question addressed by the workshop was: What can the EU do to mainstream biodiversity into corporate responsibility schemes?



First session: Schemes that support companies in shaping their biodiversity commitments

Chair

- Paolo Lombardi, Director, WWF MedPo

Presentations

- Séverin Fischer, Entreprises pour l'Environnement
“Is biodiversity addressed by existing corporate responsibility schemes?”
- Javier Ojeda, APROMAR, Asociación Empresarial de Productores de Cultivos Marinos
“Aquaculture and the environment: Integrating into sustainable development in Europe”
- Francisco Mendes Palma, Banco Espírito Santo
“Biodiversity, environment and sustainability”
- Despina Symons, European Bureau for Conservation and Development
“Opportunities and challenges for SMEs in integrating biodiversity considerations in their operations: An overview of the main schemes adopted”

There are many and diverse corporate responsibility schemes. However, most worldwide schemes, such as the UN Global Compact or the OECD Guidelines for Multi-national Enterprises are essentially methodological guidelines that can be applied to biodiversity but do not specifically mention it. Some sector-specific schemes, such as the CERES and the Equator principles or the ICMM (International Council for Mining and Minerals) charter are more specific and do address biodiversity.

The overall conclusion is that biodiversity is not yet sufficiently included in corporate sustainability schemes. The schemes do not provide a very helpful framework to include biodiversity in corporate responsibility and need to be further developed to overcome this limitation. One way to move forward could be to go more in depth into approaches such as the Millennium Assessment Initiative.

Recommendations towards the inclusion of biodiversity into existing responsibility schemes aim at delivering simpler and better rules; at reducing bureaucracy; at developing incentives for investment in biodiversity preservation; and at innovation. It is necessary to develop capacity-building schemes and to raise awareness of companies to the benefits they can have by contributing to biodiversity preservation. In doing so, it should not be forgotten that there are already initiatives in place and lessons to be learned, which is especially relevant for SME.

In particular for SME, tailor-made schemes should be developed since the ones in place are mostly inaccessible to small businesses. Such schemes should encourage networking and clusters, using the expertise of professional associations. Sectoral and regional commitment schemes or guidelines work better than cross-sectoral ones, because they can be more specific and allow biodiversity to be more clearly a part of the scenario. And governments should create financial incentives; for example, developing subsidies for biodiversity protection projects or tax exemptions for proactive companies.

It is useful to link the biodiversity preservation issue with the climate change problem, since biodiversity preservation contributes to reducing climate change, and climate change is making good use of available market approaches. However more work is needed on how exactly to do so, especially as there is not an easy algorithm for measuring biodiversity losses, compared to calculating carbon footprints in order to estimate CO₂ production.

Another open question for further discussion will be: How do we integrate biodiversity concerns in companies that do not produce consumer goods? For these companies the main issue is mitigation and reduction of impact, rather than creating a business out of a natural resource.

State of the art

In presenting a range of the most significant global “issues-wide” responsibility schemes, some were highlighted for their lack of specific reference to biodiversity. These included the Global Compact, OECD guidelines and the ICC Charter. Some of the principles and methodologies of these schemes, however, can be applied to biodiversity.

Sector-specific schemes are more likely to include biodiversity, such as the ICMM guidelines for the mining and minerals sector and the Code of Conduct for European aquaculture which reflects all aspects of sustainability, including health and safety and consumers, as well as biodiversity.

The level of biodiversity integration, however, varies. For example, while the CERES principles look directly at the protection and sustainable use of biodiversity, the Equator Principles for banking also include communities affected by biodiversity impacts. Also, not all sector-specific codes refer explicitly to biodiversity; for example, the Responsible Care code for the chemicals sector.

Local authorities also have a role in developing specific charters, such as that of the Île de France, which promote strategies for biodiversity as well as strong engagement with action plans.

The experience of Banco Espírito Santo – which has signed up to the Equator Principles – illustrates how a company’s biodiversity strategy can evolve from philanthropic to risk avoidance and beyond minimum compliance to include the promotion of pro-biodiversity business models.

SME engagement is, however, limited to a select range of sectors – such as eco-tourism and organic agriculture – where the financial case for sustainably managing biodiversity has been demonstrated. In general, however, SMEs often lack awareness of the financial benefits of environmental management and lifecycle thinking. Common challenges mentioned include a lack of capacity as well as an inevitably short-term outlook and difficulties of financing. Reporting is also a comparatively large administrative burden for SMEs.

Challenges and opportunities

Technology can also be used to support implementation across large companies and ensure homogeneous application. Banco Espírito Santo, for example, established software systems to implement the Equator Principles for sophisticated analysis of both direct and indirect biodiversity impacts.

Despite depending on healthy ecosystems for both product quality and health and safety, not all European aquaculture companies perform well. It depends basically on how they undertake aquaculture operations. Therefore for this sector a series of guidelines were developed and updated with new research, to assist companies to put in place their sustainability commitments.

The International Social and Environmental Accreditation and Labelling (ISEAL) Alliance questioned the “chaos” of the large number of existing aquaculture schemes and the debate, particularly between southern and northern-based aquaculture industries, on future directions. Such a range of schemes allows debate across a number of forums, which often include the same experts and therefore ensures similarities, but also allows for appropriate guidelines to be developed. For example, European aquaculture does not refer to mangroves.

Confusion arises with a large number of certification schemes. Though a world-level certificate is probably impossible, certification schemes should be designed from a consumer’s point of view across global markets.

A number of speakers, supported by audience participants, highlighted the general lack of awareness of biodiversity and business linkages. This is true not only for SMEs but also big businesses, particularly where a direct link to biodiversity is not obvious. All managers within a company should be made aware of how they depend on as well as impact on biodiversity.

For SMEs, measuring an individual company’s impact is difficult and therefore a collective impact based on a particular site or sector may be more appropriate. A participant from the Ornamental Traders Association, for example, reminded the audience that SMEs are not starting at ground zero. Many SMEs are already applying best practice but without schemes. Schemes may only codify an approach rather than radically transform behaviour.

Furthermore, such SMEs may not want to “stick their head above the parapet” through fear of criticism. Focus should thus be placed on the positive potential of addressing biodiversity rather than on negative impacts. Finally, drivers for encouraging a critical mass of SMEs to integrate biodiversity may differ depending on the sector.

Governments have an important role to play as consumers, with opportunities including the promotion of biodiversity-responsible SMEs in public procurement. In Europe, governments can also act as businesses in managing forests and farms and therefore should be included in any relevant discussions on business and biodiversity. Legislation can also drive pro-biodiversity business such as promoting the establishing of wetlands following peat withdrawal.

Challenges also lie in addressing businesses that are not consumer-focused, such as the example given by a civil infrastructure company. In such a case, biodiversity impacts can be significant and tools such as ISO14001 certification are important. Potential exists in working with other businesses and governments, such as combining biodiversity action plans.

Several speakers and participants made a connection between addressing climate change and biodiversity. For example, the European Peat and Growing Media Association is working with the European Emissions Trading Systems based on the potential for biodiversity as a carbon sink – such financing is a powerful incentive.

Lessons can be learned from activities to fight climate change and create carbon markets. However, this approach of linking climate and biodiversity was cautioned as, biodiversity is different in that it is not so easily measured, therefore limiting potential for a biodiversity equivalent of the European Emissions Trading System. Further research is needed in this area, based on the ecosystem goods and services, such as climate regulation and water regulation. The Millennium Ecosystem Assessment (MA) has started such an analysis.

Recommendations

For SMEs, simple, voluntary, cheap and easy schemes are required; whether simpler versions of existing sector-specific schemes or even bespoke schemes. These should be accompanied by schemes that focus on capacity building, perhaps through professional associations or clusters on a landscape or sectoral basis. It may be that a sector-based association is most likely to succeed in promoting biodiversity to SMEs as they can be more specific.

A need for clear, straightforward incentives for action also exists, particularly to reward those companies that make the first moves. One possibility is microfinance to support biodiversity-friendly projects. In this case, however, demand needs to be generated by entrepreneurial SMEs with innovative biodiversity business models.

Furthermore, financial incentives can also be used to reward those companies who actually put in place recognized environmental management systems such as ISO14001 or EMAS. For example, there could be a 40% tax exemption on the rental of public coastal waters for small-scale aquaculture producers in Spain. This is a concept which is easy for a small aquaculture producer to understand. Lessons from experiences outside of Europe could also be useful. In Costa Rica, for example, payments are also given for biodiversity activities.

Second session: Schemes that support companies in effectively implementing their biodiversity commitments

Gérard Bos, Holcim, shared how the cement industry has created a tool to evaluate and manage impact of a cement site. The Cement Sustainability Initiative, which brought together the knowledge of the top 80 world cement companies, was established under WBCSD and elaborated guidelines for finding new ways to implement sustainability in the sector. Though fostering stakeholder engagement, it produced a strong reliable guidance document. Bos proposed that the EU needs to reward early movers and should not penalize them for sharing information with the society and thus opening themselves up to more exposure and potentially more criticism.

Mathieu Tolian, Environmental Product Manager, Veolia, explained that his company works with internal and external experts who model ecosystem functioning indicators. GIS and biodiversity survey data are used to help measure the sensitivity of sites. The company has also produced a booklet on biodiversity which provides examples for site managers of good practices. Concerning necessary action from the EU, Tolian was in favour of strong regulation for environment protection, including environmental liability, and also support for the development of indicators and for the implementation of economic valuation.

Guido Sonnemann, UNEP Sustainable Innovation and Life Cycle Analysis, presented the Life Cycle Assessment (LCA) initiative which is being executed in cooperation with WBCSD. LCA is used for strategic decision making in product development, but not directly for assessing biodiversity. Regarding future EU policy, it should address the integration of sustainable consumption with biodiversity policies, research project financing, and promote instruments like certification schemes and the Millennium Assessment to make biodiversity more visible.

Erika Mink, Environment Director Europe, Tetra Pak International, noted that the company's supply chain has a direct impact on biodiversity via resource usage. It also has an indirect impact via its carbon footprint. Tetra Pak is applying its own set of tools in this field, such as traceability (including certification) and LCA, to serve as benchmarks and to ensure competitive products. Carbon footprint labelling is the most important challenge and opportunity for them because – although they can show good performance – no standard methods exist.

Key comments and suggestions which arose in this second session of the workshop included the following:

- There is a need to get more comprehensive views on what is important for biodiversity.
- Embark on some sort of process for certification. There are already some initiatives, up to now still small and hesitant, that could doubtless be extended.
- Integrate biodiversity into existing certification schemes.
- The challenge is to better integrate biodiversity into existing tools, such as environmental management systems.
- We need more research; stakeholders, companies and researchers should work together to better understand the issues.

State of the art

Life cycle assessment (LCA) is one tool for implementing biodiversity commitments. Another tool is the Global Compact principles. However, whereas total GHG emissions are often included in LCA, biodiversity management is less so. The first reason – as noted by a Tetra Pak representative – is because this is not demanded by consumers or retailers. Secondly, LCA for products tends to be done on a global level whereas biodiversity is site-specific and more difficult to incorporate.

Chair

- **Agnieszka Bolesta**, Vice Minister of Environment, Poland

Presentations

- **Gérard Bos**, Holcim Group Support Ltd.
- **Mathieu Tolian**, Veolia Environnement
- **Guido Sonnemann**, UNEP LCA Initiative
- **Erika Mink**, Tetra Pak

Tetra Pak uses LCA as a benchmark where standards don't already exist for products, such as aluminium or plastics – versus forest sustainability principles. LCA must be used with other tools in the box, such as certification schemes and labels as well as environment management systems (EMS), risk assessments, traceability, reporting and principles.

Simple and easy-to-operationalize guidelines can help to mobilize employees, such as those developed by Veolia. A special publication helps their site managers to integrate biodiversity management into their EMS, with the key aim of identifying and reducing direct as well as secondary impacts on the environment, and identify occasions when an expert is required.

The Cement Sustainability Initiative was highlighted as an example of how environmental and social impact assessment (ESIA) guidelines can be developed. They were based on WWF and EU guidance documents on scoping and screening, and were adopted by the top cement companies, representing 80 companies with 60% of global production outside of China.

An ESIA is useful for evaluating and managing the impact for the lifecycle of a cement project – from identifying sites to closure and future use. The overall biodiversity objective is to mitigate as well as compensate, with biodiversity resources examined in the scoping phase – which could at this stage also lead to an alternative location of the project.

Challenges and opportunities

The LCA tool was conceived as a tool to prevent damage but could be used to promote opportunities, when linked to the MA.

An umbrella approach, such as the Cement Sustainability Initiative, has buy-in guaranteed as the actors themselves developed the guidelines. The language used is then also applicable to the specific sector. With all actors in the group wanting to do their best, no compromises were made and the bar was raised high – with future revisions planned. However, it is important to ensure that the right people are on the team, including personal commitment from individuals.

Challenges exist with finding biodiversity information on the right level. For example, mapping information is generally provided by oil and gas firms with large fields and is not appropriate at a smaller site level. The key performance indicators are also not process-orientated and it is difficult to gauge net biodiversity impact.

The difficulty of quantifying biodiversity was brought up by several speakers and audience participants. Comparisons were made with the metric system for climate change – e.g. a tonne of carbon – and a missing equivalent for biodiversity. Indicators have to be invented, incorporating both quantitative and qualitative biodiversity survey data. External expertise, for example, is required to develop ecosystem functioning indicators to better understand biodiversity evolution.

Incorporating the economic value of biodiversity into financial and accounting policies and systems will enable biodiversity to be more fully integrated into a business's core strategy, providing associated opportunities for waste water treatment to natural environment management. This was highlighted particularly in the case of Veolia.

Many participants brought up the learning potential from, and possible connections between, climate change and biodiversity, such as developing an equivalent to the Emissions Trading System for biodiversity trades.

Recommendations

Both Holcim and Veolia referred to the EU Natura 2000 sites as a good foundation for hotspot indicators, which are stable from a risk management perspective.

Third session: Schemes that support companies in better communicating performance and commitment

The EU should consider how to reward early movers and not penalize others for opening their books to scrutiny and potential criticism, and also how to help ensure a level “eco-playing field” globally – biodiversity requirements should apply to ensure all companies have equal competition. Veolia suggested the need for stronger regulation for protection of the environment.

In order to develop indicators, the EU could promote technical dialogues which incorporate public and private R and D. These could be linked, for example, to the International Mechanism of Scientific Expertise on Biodiversity (IMoSEB) process. The definition of such indicators should meet the needs of different stakeholders, including economic values to support policy making. Markets for ecosystems should also be explored further. Biodiversity research should be linked to developing and improving schemes.

Sustainable consumption/production is not very well integrated into biodiversity or climate change principles. Special biodiversity annexes can also be included, such as for the European Biofuel Directive. The EU has an important role in extending discussion on what biodiversity actually is and how it can be integrated.

Participants in this session agreed that communicating biodiversity impacts is a complex and challenging task. Great differences exist in communication requirements and practices between large and small companies, and also within different sectors.

Although the wide diversity in certification and labelling schemes increases competitiveness, it may also create problems, such as consumer confusion and hampering implementation by smaller players. Furthermore, many of the initiatives are small and do not have international recognition. In such cases, communications are isolated and fragmented, making it harder to ensure credibility.

To improve credibility there is a need for databases with systemic and systematically collected data that can be used to illustrate the effects of standards and certification systems on biodiversity. Nonetheless, it is still a major challenge to measure performance regarding biodiversity impacts, especially for companies that do not use land and thus have only indirect impacts.

Discussion is on-going on development and the use of sector or area-specific indicators and schemes versus cross-sectoral or more global indicators. Whereas companies more easily implement sector-specific indicators, there should be benchmarking across sectors and countries. A promising way forward is to develop a common set of core issues and indicators across sectors at a more global level, which can then be broken down into specific indicators at a sectoral level. In doing so it should be clear that biodiversity is one of several core issues and a holistic approach is necessary.

A need for flexibility and for different levels of information communication depending on the objective seems to be consensual. Schemes should be set through credible multi-stakeholder processes, considering existing national procedures and not imposing a heavy burden on users. Accreditation is necessary for national and international endorsement recognition.

There seems to be agreement that regulation should provide a clear and perhaps even mandatory obligation to report information. However, regulation should not define in detail what information should be communicated as this is sector-specific, and much successful voluntary work has been done. Business should be the central focus of regulation but governments should set an example, reporting information on state-owned companies and implementing biodiversity concerns in public procurement.

The EU could play an important role helping to integrate as far as possible the existing schemes. It could also contribute

Chair

- **George Jaksch**, Senior Director, Chiquita International

Presentations

- **Bernward Geier**, Rainforest Alliance
“How sound certification programmes can help to protect biodiversity – challenges and opportunities in the sustainable tourism sector”
- **Sasha Courville**, ISEAL Alliance
“Challenges and opportunities for integrating conservation in certification schemes”
- **Christine Copley**, International Council on Mining and Metals
“Global reporting and the Good Practice Guidance on Mining and Biodiversity”
- **Antoine Mach**, Covalence
- **Guillaume Sainteny**, Ministère de l'Ecologie, du Développement et de l'Aménagement Durable

to raising awareness and to building capacity in particular among SMEs. The EU should ensure that governments provide good examples both for consumers and companies, and that benchmarking is promoted. The EU could also contribute to ensuring that broader supply chains are considered when communication schemes are developed and that level playing fields exist for businesses to operate on. Finally, contradictions between different policy areas, such as promoting biodiversity conservation and implementing the common agricultural policy (CAP), should be minimized.

State of the art

Schemes that help a company to communicate its sustainability performance – from certification to reporting – have proliferated. Though this proliferation helps create competition and drive improvements, it also creates confusion for producers and consumers. Differences in the way biodiversity is defined and classified also mean that biodiversity is a big challenge for assessment as well as communication. A link to biodiversity is clear for some sectors, such as forestry or fisheries, and is therefore generally easier to communicate. For other sectors, however, biodiversity is more relevant when linked to other sustainability issues.

A “hierarchical” approach to biodiversity indicators is emerging, with broad, core criteria established for comparison across issues and sectors complemented by specific, detailed indicators for specific sectors. For example, after a long process of engagement with shareholders and stakeholders, the International Council for Mining and Minerals (ICMM) has developed a mining sector supplement to the Global Reporting Initiative (GRI) guidelines. They also included new protocols such as independent assurance. Such a tool has a practical application and also provides assistance with reporting. Further positive impacts of their approach include data collection to feed into national networks.

Whether certification schemes can actually benefit biodiversity was raised by ISEAL and the Rainforest Alliance (RA). Consumers potentially have lots of interest in biodiversity, such as increasing tourism in biodiversity hotspot countries. ISEAL has evidence from case studies that demonstrates benefits from certification in specific sectors, particularly fisheries and forestry. As major improvements tend to be made during the implementation process of certification, the full benefits of certification are difficult to capture unless a baseline survey is conducted at the beginning of the process. Internal and external audits as well as databases are also required.

Increasing numbers of rating agencies are providing independent evaluation and information for stakeholders on corporate responsibility issues, generally focusing on listed companies and driving improvements. Agencies may use over 100 indicators to determine a company’s performance. Environmental issues such as emissions, waste and pollution are more likely to be included under environmental factors than biodiversity. Where biodiversity is included, it tends to be used in the context of stories about business leaders and/or company profiles.

Challenges/opportunities

One of the main challenges is how to avoid the potential of “green-washing” or false credibility claims. Biodiversity claims are easily made and there is a danger of “eco green-washing” and false claims. The tourism sector was highlighted, where numerous certification schemes cause confusion for tourism agents as well as consumers. Local schemes also have no international recognition, and communication is therefore isolated and fragmented. Solutions

include establishing an accreditation network to set out minimum baseline criteria for certificate schemes, and to assess and recognize individual schemes (such as established organic networks). However, such a process is difficult and takes time. For example, an initiative for a new tourism stewardship council was started in 1999.

The lack of a clear definition of biodiversity was cited as a reason for the difficulty in including it in schemes. It was suggested that people could be involved in defining indicators – whether it's the people's need for nature, or nature itself. To be better understood, biodiversity needs to be further “qualified.” Companies and consumers may not understand the business case for a focus on species or habitats. On the other hand, the function of ecosystems and their services which are supported by biodiversity may be more relevant to them. However, much more research is needed in this area. For example, the peat industry highlighted the use of some birds as flagship indicators for the health status of restored wetlands.

Furthermore, indicators for company performance also need further development. It's perhaps clearer where a company is a landowner and therefore may have direct impacts related to land-use change. However, indirect impacts need to be quantified as well. Indicators tend to be sector and area-specific. An academic representative suggested this could be taken further with indicators that can be designed on an individual company basis. However, some companies such as Tetra Pak would like to benchmark with other companies. Therefore, there is a preference for stable indicators and for tools such as LCA that link specific biodiversity aspects throughout the life cycle of a product and can determine how much reduction in environmental impact has been achieved.

Differences in mandatory or voluntary communication on biodiversity were reflected throughout the discussions. Certification tends to be voluntary where as reporting can be voluntary but is increasingly demanded. For example, ICMM members must comply with an agreed sustainable development framework, which includes 10 sustainability principles, public reporting, independent assurance and sharing good practice, within which is a requirement to contribute to biodiversity conservation.

Furthermore, the French Ministry of Ecology outlined how a decree passed in 2002 required all 800 listed companies in France to include in their accounts how they impact on the environment. The implementation of the law has improved since 2005, especially for larger companies though some sectors, such as media and finance, suggested that they had no influence on the environment. In general, the required biodiversity “green” elements were explained less than other “brown” elements. Several reasons were offered why: pollution and waste are perceived as more relevant for health and risk; more indicators exist for “brown” issues with more historical regulation. As has been previously noted, clearer indicators are required for biodiversity. Debate is on-going about whether to extend the decree to all companies, including those not on the stock exchange, and state-owned companies who should be more accountable as they actually use state money.

The role of the consumer was brought up in the ensuing discussions, and the need to encourage their understanding and participation. For example, standards wouldn't exist without consumers. Tourism was highlighted as an issue which can cause negative impacts but also had potential for benefits. For example, biodiversity tourism can provide education opportunities, such as highlighting how biodiversity is more than species.

Recommendations

The proliferation of communication schemes has increased confusion. The EU should actively help to protect consumers and biodiversity. “Less is more” – one common approach to schemes provides certainty. A lot can be learned from the experience of organic and fair trade sectors, for example, promoting certification accreditation.

The mining and metals sector is indicative of the wider business and biodiversity situation. At the large corporate level, sustainability and biodiversity communication is well established, whereas there is a challenge in disseminating guidelines to SMEs. The EU should help to engage such groups and provide practical tools and capacity for them to act on existing guidance.

RA as well as other speakers suggested that such initiatives should not be mandatory and should remain that of the civil society and business. Covalence said that biodiversity is too complex an issue to be mandatory and for the setting of targets, though some element of reporting could be mandatory.

The EU can make better use of reference tools to stimulate and support research and dissemination. For example, the Millennium Ecosystem Assessment identified drivers for direct impact on biodiversity, which could be used by companies to set principles. The EU could help communicate the MEA principles to promote broader learning.

The EU and governments could themselves make better use of certified products through procurement and their wider supply chain, third-party use and access as part of the development of regional planning frameworks. SMEs are closer to the environment and local communities. Consumers International also believes governments should lead in sustainable procurement roles. The collective power of large multinational companies (MNCs) could also be harnessed to collaborate within sectors and across sectors.

Additionally, the European Environment Agency (EEA) has recently developed a series of biodiversity indicators. It would be interesting to benchmark best practice between EU countries for environmental indicators in general, such as tax, urban sprawl, soil etc.

Finally, the workshop participants suggested that the EU should address the contradictions between its policies on biodiversity and those on agriculture and regional development. For example, the latter policies seem to give priority to over-fishing and highway development over biodiversity.

Business-related biodiversity assessments

This workshop explored the challenges and opportunities of developing biodiversity targets, performance indicators and assessment methodologies for measuring the biodiversity impacts of business. It covered such topics as corporate biodiversity assessments, industry-wide biodiversity assessments, landscape-level biodiversity assessments and accountability and reporting. The key question addressed by the workshop was: What can the EU do to strengthen methods and tools for biodiversity assessments?



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First session: State of the art in the biodiversity assessment

Chair

- **Nigel Winsor**, CEO, Earthwatch Institute Europe, Oxford, UK

Presentations

- **Nigel Winsor**, CEO, Earthwatch Institute Europe, Oxford, UK
“Staying the course: Achievements, gaps and challenges of biodiversity assessment in business”
- **João Menezes**, President, ICNB, Portugal
“Are we ready? Public policy and markets for biodiversity assessments in Europe”

Discussion

- **Ladislav Miko**, Director, Protecting the Natural Environment, EU Environment Commission, Belgium
- **João Menezes**, President, ICNB, Portugal
- **Sylvie Bénard**, President of Orée, France
- **Hendrikus (Henk) Feith Silvicaima**, Sociedade Silvícola Caima S. A. Portugal
- **João Silva Carvalho**, Secretário-general, ANPC – Associação Nacional de Proprietários e Produtores de Caça, Portugal

The focus of the first session of the workshop was on the state of the art in biodiversity assessment (BA). Biodiversity assessment was presented as a set of integrative tools that enable business to put biodiversity management within its strategies and operations. For example, in a more conceptual framework, strategic level assessment is defined as an assessment carried out either internally by business or externally by other organizations with a view to assessing the risks and opportunities associated with biodiversity conservation within individual businesses, business sectors or ecosystems.

The session reviewed positive achievements with respect to biodiversity assessment. These included those undertaken through corporate partnerships with the Earthwatch Institute (Europe). There were specific success stories from Syngenta, Shell and British American Tobacco. The Rio Tinto Biodiversity Strategy was also presented as a case of applying an analysis framework to define company strategies.

The session also noted that it is necessary to engage SMEs to internalize environmental costs and to report on biodiversity performance. Biodiversity assessment so far remains limited mostly to large MNCs. Finally, regarding the EU, the session proposed that it should develop a few simple indicators to enable SMEs to assess, manage and report on their environmental or biodiversity footprint. The EU should also encourage the different sectors to get involved in this.

In the context of the focus of this session on the state of the art in biodiversity assessment, **Nigel Winsor, CEO, Earthwatch Institute Europe**, introduced two key questions. These questions which follow were highlighted throughout the workshop:

- What can the EU do to help the EU business community to improve its biodiversity assessment?
- What can the EU business community do to improve its biodiversity assessment commitments?

The presentation explored the achievements, gaps and challenges in biodiversity assessment. In particular, the following hypothesis was tested: Can biodiversity assessment be understood as more than simply monitoring?

Recognizing that all sizes of business – small, medium and large – have a direct or indirect impact on biodiversity and ecosystems, the background paper highlighted a wide range of biodiversity assessment tools that have already been developed. These were presented as a conceptual framework toolbox. For example, strategic level assessment was defined as an assessment carried out either internally by a business or externally by another organization focusing on risks and opportunities associated with biodiversity conservation across individual businesses or specific business sectors. The toolkit thus can help companies to see which tools are available to assess their biodiversity performance.

In this session, a number of success stories regarding the application of biodiversity assessment in business were also presented. Examples included Syngenta’s involvement in integrated farming methods (wheat fields in UK), Shell’s push to mandate biodiversity action plans within the company, British American Tobacco’s Biodiversity Partnership, and the biodiversity work of Rio Tinto.

Regarding Rio Tinto, this company stands out with respect to its performance in Madagascar where it conducted independent assessment of ecological research centres and conservation zones. In so doing, the company was also able to create income-generating activities for local communities linked to the sustainable use of native biological resources.

Several gaps were also identified in this session. Conventional environmental impact assessment (EIA), for example, does not include biodiversity assessment. In this context, gaps can occur in the areas of internalizing environmental costs, reporting biodiversity performance and creating capacity for biodiversity assessment in developing countries.

SMEs – though a significant element when measuring the biodiversity performance of the private sector – are unable to undertake biodiversity assessments due to financial limitations. In any case, performance indicators need to be based on a broader knowledge of ecosystems. Two high-level recommendations were made on agriculture and fisheries.

Following this line of thought, the workshop emphasized that the EU should develop a few simple indicators to enable SMEs to assess, report and manage their environmental footprint on a global and national scale. Further it was recommended that the EU should also encourage other sectors to get involved in this process.

In his presentation, **João Menezes, President, ICNB, Portugal**, explained that biodiversity does enjoy a high level of public recognition in the EU and it is only slowly receiving the necessary attention from the business community. Biodiversity metrics and assessment, however, are essential for a quantitative approach to biodiversity. They are still underdeveloped and there remains a critical need for the development of benchmarking and assessment tools as well as for a conducive policy framework.

Menezes referred to the development of various biodiversity indicators such as the:

- EU headline biodiversity indicators;
- EEA 26 headline indicators;
- 2010 EC Action Plan with its four broad policy areas and ten main objectives.

The source of the challenge, however, is less based on the lack of indicators and more on the serious difficulty in establishing a common language. All too often environmental frameworks and business frameworks are still perceived to be at opposite ends of the spectrum. However, both do contribute essential elements of a civil society and this drives the need to find a common language. A common understanding and recognition of the issues has to come before we can speak of verification or certification. Recognition, however, should be easier to implement as it is a basic building block of establishing a platform for partnerships between business and the society.

As a possible solution, Menezes proposed the concept of public agents acting as facilitators. Facilitators can deliver action through three channels:

- Establishing an enabling framework;
- Acting as proactive catalysts for engaging business and creating partnerships;
- Supporting business in developing assessment and reporting frameworks.

The development of a European platform is regarded as essential for introducing benchmarking, best practices and the development of sector-specific biodiversity auditing and monitoring as well as recording and oversight protocols. New partnerships between business, NGOs and the public sector to stop the loss of biodiversity are critical. Through the establishment of a common language to address common problems, major gains for all involved partners can be expected.

Ladislav Miko, Director, Protecting the Natural Environment, EU Environment Commission, Belgium, noted that all EU policy frameworks must stress the aspects of evaluation of both ecosystem services and natural capital. In the context of the Potsdam Initiative, there is a growing recognition of the need to produce a report on the economic values of biodiversity and ecosystems along similar lines to the Stern Report on climate change.

Miko noted that the main objective of all the workshops should be a dialogue aimed mainly at gathering the expectations and demands of business from the EU. The EU must represent a knowledge-based society, constantly using the dynamics of how much is known about biodiversity in order to assist business in finding the next steps after assessing their impact.

For example, EIA is a powerful tool, since Article 6 of the Habitats Directive sets out the obligation to assess direct impacts on biodiversity. EIA depends, however, on the availability of experts, but do we have enough experts and enough access to experts? How can business access the expertise they need in a short time? In conclusion, a critical factor is to provide functional space for nature. This challenge also needs to be addressed with business partners.

Sylvie Bénard, President of Orée, France explained that a main objective of Orée is to share good practices, exchange experiences, challenges and needs. To support this effort, a working group of companies and associations meets regularly to see how biodiversity can be integrated into corporate social responsibility (CSR).

One of the main difficulties appears to be the lack of awareness about biodiversity issues, amongst both the public and stakeholders causing confusion and at times conflict between biodiversity and climate change issues. Partnerships with scientists are needed. Biodiversity is not only an environmental issue but also a social and economic matter and decision makers must be made aware of this. There is a need to promote the positive impacts of biodiversity rooted in the economy and inside enterprises.

Hendrikus Feith Silvícaima, Sociedade Silvícola Caima S. A., Portugal, asked why a forestry company should bet on biodiversity? The answer is that the market asks for biodiversity assessment and for certification. His company, for example, follows the ISO and FSC standards. They conduct operational business assessments including environmental and social impact assessments and have adopted the PRO-FOREST guidelines to identify high-conservation-value forest areas. The recommendation from these assessments and guidelines has been made to put more focus on biodiversity quality and less on quantity.

Biodiversity assessment is a starting point, but it is not a goal in itself. There are, however, several positive impacts related to biodiversity assessment such as:

- More knowledge leading to better management;
- Achieving technical transparency through an increase in external recognition;
- Motivational incentives for company workers;
- Extra value gained for forest products and producers.

Communication is a key element in this context. The improvement of communication with stakeholders is essential.

Negative aspects regarding biodiversity assessment, on the other hand, include the issue of financial resources. Biodiversity assessment consumes significant amounts of financial resources. A second challenge is that it relies on a high quality of expertise. Conflicts between conservation and production goals need to be resolved by finding consensus. Closely related to the latter, a set of biodiversity targets might prove difficult to define.

Related to the question of what the EU can do for companies like Silvicaima, recognition is important. Public recognition through an improvement of communication and the use of biodiversity assessment is of particular importance.

João Carvalho, Secretário-general, ANPC – Associação Nacional de Proprietários e Produtores de Caça, Portugal, presented an innovative wildlife estates initiative. This initiative is not driven directly by markets, but rather by the landowners. The initial project idea was to create a network of estates remarkable for their biodiversity value. All assessment would result in certification and recognition of the conservation actions undertaken. For example, game management and sustainable hunting can promote biodiversity through habitat management. This project has been implemented with DG Environment involvement.

A simple but effective system was created, starting with several main indicators and later reducing them to 15 related to bio-geographical regions and scoring through monitoring. This score system allows a maximum of 250 points. A report is sent to every member: those that do not obtain a minimum of 180 points, will not get recommendations on improving their performance.

The objectives of the initiative are to promote good practices and extend ideas. A network of wildlife estates is to be created in the future using such a multifunctional approach. The recognition of this effort associated with a brand image will also give higher market value.

Importantly, this initiative is also creating a large database through its monitoring and assessments. This will enable us to spot trends in biodiversity performance. These data will be made accessible to the public. Finally, a handbook on good practices in game keeping will be produced for the managers of game properties.

As a recommendation, the EU can extend this initiative to other geographic areas and make good practice examples for various geographical regions.

Second session: Biodiversity benchmarking

Chair

- **Teresa Presas**, Managing Director, Confederation of European Paper Industry (CEPI), Brussels, Belgium

Presentations

- **James Griffith**, Director, World Business Council for Sustainable Development, Geneva, Switzerland
“Ecosystem services assessment in the private sector”
- **Annelisa Grigg**, Director of Corporate Affairs, Fauna and Flora International
“Biodiversity benchmarking: Learning from the extractive and financial sectors”
- **Seb Beloe**, Vice President of Research and Advocacy, SustainAbility
“Biodiversity risk and opportunities mapping in business”

James Griffith, Director, World Business Council for Sustainable Development (WBCSD), explained that sustainable growth, social progress and ecological balance rely on best practices. Aspects like ecological balance or compliance with the critical regulatory services are essential. Ecosystem maintenance and sustainable development seem to be business risks, but they also present business opportunities including:

- new technologies
- new products
- new markets
- new businesses
- new revenues

WBCSD helps member companies proactively through its partnership, projects and tools to:

- assess measure and value ecosystems
- reduce impacts
- explore business opportunities
- mobilize and utilize ecosystem assets
- advocate sustainable ecosystem governance

In terms of ecosystem services, specialist assessment tools and resources are available for business. These include environmental impact assessment (EIA), strategic impact assessment (SEA) and the tools of the Business and Biodiversity Offset Program (BBOP).

Examples of useful sectoral approaches and resources were also mentioned such as the Good Practice Guidance on Mining and Biodiversity produced by ICMM and IUCN and the Business and Biodiversity Resource Centre. Several ecosystem services tools were also highlighted such as the Green House Gas (GHG) Accounting Protocol produced by the World Resources Institute (WRI) and WBCSD, the Global Water Tool produced by WBCSD, and the Sustainable Procurement of Wood and Paper-Base Products Tool produced by WRI and WBCSD.

Within this portfolio of resources and tools, two gaps are apparent to business:

- Corporate-level focus on ecosystem services
- Standardized approaches to ecosystem evaluation and costing

A special mention was also made of the development by WBCSD and WRI of an Ecosystems Services Review (ESR). The ESR partners include six pilot collaborating organizations. Already emerging from these ESR pilots is the need to focus more on ecosystem services.

In conclusion, Griffiths mentioned that healthy ecosystems are a prerequisite for sustainable development and that market mechanisms can help. The next steps must include:

- further innovation and development
- field testing and validation
- harmonization and integration of approaches
- uptake and deployment
- scaling up

The key take-home message of his intervention was the necessity of the simplicity of the tools.

Annelisa Grigg, Director of Corporate Affairs, Fauna and Flora International, first addressed the need for biodiversity assessment because biodiversity is still framed in terms of business risk and there are increasing links between shareholder value and environmental issues. The biodiversity benchmark approach identifies commonly accepted good practice in consultation with business and NGOs. It fills a gap because the information needs of investors are not being met and few tools exist within the finance sector to enable rigorous evaluation.

Several tools were mentioned that were all applied within the extractive industry. Also there is another emerging assessment framework – the Natural Value Initiative (NVI) – which intends to develop a tool for evaluating financial risk. Companies and financial organizations tend to be optimistic regarding the use of these new tools.

Some challenges were identified including:

- too many schemes
- how to measure performance
- the lack of a clear business case
- the separation of impact from benefits
- implementation costs

What can the EU do in this area? It can create an incentive framework based on priority issues and it can build capacity. Regarding the business sector, it can catalogue more effectively business cases, share best practices, bringing in the experience from climate change, and innovate and experiment. According to Grigg, a key issue is that the tools are still to be applied on a voluntary basis.

Seb Beloe, Vice President, Research and Advocacy, SustainAbility, explained that risk and opportunity mapping is a tool for conservation partnerships. In this context, SustainAbility focuses on emerging issues and on the importance of markets for delivering sustainable development, and the company has developed a basic mapping tool.

The scope of assessment should be decided at the outset and it should consider several levels such as:

- the impact on ecosystem services;
- the degree of business impact, in terms of risks and opportunities both for current operations and future potentials;
- the degree of influence or control that a company has over a particular issue.

For the SustainAbility mapping tool, these three levels are scored – low, medium or high – and a final map is presented as a matrix. In this context, a “risks to opportunities” approach helps to position the company’s conservation commitment for long-term success.

Regarding recommendations, first there is the question of sufficient and accessible expertise. Second there is the issue of the quality of indicators relative to the quantity of indicators. Lastly, there is a particular challenge to engage management and finance in biodiversity assessment.

Third session: Governance and accountability

Chair

- **Teresa Fogelberg**, Senior Director, Business Engagement and Relationship Management, Global Reporting Initiative, Amsterdam, NL

The topics to be discussed in this workshop were proposed by the chair and included:

- assessment of governance and accountability
- responsibility schemes
- reporting
- SMEs
- present legislation

Presentations

- **Jacqueline McGlade**, CEO, European Environment Agency Denmark
- **Teresa Fogelberg**, Senior Director, Business Engagement and Relationship Management, Global Reporting Initiative, Amsterdam, NL
“Reporting biodiversity performance: The strengths and challenges of GRI reporting for biodiversity performance and accountability”
- **Steve Rochlin**, Director, AccountAbility, North America, Washington DC, USA
“Assessing corporate governance for biodiversity”

Jacqueline McGlade, CEO, European Environment Agency, referred to three types of assessments:

- (inter)governmental
- scientific
- citizens/business/NGOs

The two former types are already in place and operating. The (inter)governmental reports are negotiated documents and they play an important role in making countries accountable. Scientific assessments are mostly independent and science-driven with little or no governmental intervention. Unfortunately, they often do not fulfil their tasks.

The third type is a rapid assessment relying on citizens and business. It is important for biodiversity accounting since it calculates the full restoration costs of meeting objectives for countries and companies. This represents a different way to work since it relies on citizens to legitimate the data. It also places importance on documenting local changes. The development of a global citizens’ observatory could be a key asset to the biodiversity assessment.

Teresa Fogelberg, Senior Director, Business Engagement and Relationship Management, Global Reporting Initiative then focused on reporting biodiversity performance using a voluntary reporting framework known as the Global Reporting Initiative (GRI). GRI has a range of 70 indicators of which five are directly related to biodiversity. For biodiversity, the importance of GRI lies notably in how suppliers can be involved.

Finally, **Steve Rochlin, Director, AccountAbility**, talked about the corporate governance of biodiversity, expressing the importance of engaging citizens’ voices towards partnership and collaborative processes. He mentioned that nowadays it is impossible to dissociate environment, biodiversity, social and inequality issues. He mentioned traps that should be avoided. Finally, he suggested that the EU can have a powerful convening role by:

- beginning to set the standards for collaborative processes
- setting policies that cut off free-riders
- embracing collaborative approaches
- helping to configure the landscape for collaboration between companies and citizens and enlarging it to bring in other partners

During the final discussion, the following recommendations were extracted from a set of central issues:

- It is important to understand the drivers that make SMEs consider getting involved in a BA process.
- Governments should provide a favourable environment to change consumption behaviour.
- Consumers should be a key piece of the whole process, since companies respond quite quickly to market pressures.

Summary of conclusions and recommendations

The organizers and chairs of Workshop B on business-related biodiversity assessments came up with the following list of conclusions and recommendations from the richness of the presentations and discussions in the three sessions:

1. Biodiversity assessment in Europe is characterized by the development and existence of a range of assessment tools and indicators, paralleled by a repeatedly expressed need for the industry to have key performance indicators that can be applied with credibility and at reasonable costs. It is likely that development of assessment frameworks in the past was supply driven. **The need therefore is to enhance the streamlining and application of existing assessment indicators and tools, and better tailor future research and development to the requirements of markets, science and governance.**
2. Moving from 'islands of excellence' of biodiversity conservation in the private sector to a system-wide systemic change is an eminent challenge and priority. Most of the past work has focused on state-level indicators or on select business sectors such as the extractive industry. **This calls for a focused effort in biodiversity assessments, conservation and benchmarking at the critical leverage points.** These include the finance sector and others such as agriculture, fisheries, renewable energy and major infrastructure which have a large footprint or dependence on nature and natural resources.
3. Expertise in biodiversity assessment, management and reporting emerged as a major issue. While Europe prides itself on being a knowledge-based society where biodiversity has been most extensively studied and assessed, expanding the conservation effort by business seems constrained by lack of expertise. This might be indicative of disparity in the need and supply of expertise, the difficulties and costs associated with mobilizing available expertise, or a general trend in higher education increasingly tilted away from physical and natural sciences.
4. On the one hand, there is a growing community of consultants indicating availability of needed environmental expertise; on the other hand, there is a call for more scientific research and advice regarding the drivers and barriers on the path to motivating business for enhanced conservation efforts. These rather divergent views perhaps highlight the uneven distribution of investments in research and capacity for biodiversity conservation across the different thematic and geographic areas. In any event, large European businesses have global reach, and the lack of expertise in the developing world where they operate might be a limiting factor. **The issue of biodiversity expertise needed for an expanded business effort in conservation, therefore needs serious consideration.**
5. The expertise debate is more relevant to SMEs. There is a consensus that the goal of biodiversity conservation can not be accomplished without the participation of SMEs that mostly lack both the motivation and means to respond to an onerous call for biodiversity assessment, conservation and reporting. A start therefore can and should be made by:
(a) making the existing biodiversity assessment work more relevant to SMEs, for example by adopting simple even if simplified biodiversity performance indicators and assessment tools, with a view to steadily raising the bar as SMEs are better able and prepared; and
(b) harnessing supply chain opportunities for SMEs to enhance their commitment to, and capacity for, biodiversity conservation.

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6. Risk management has been driving biodiversity performance assessment in business, and thus helping to integrate biodiversity in corporate policies and operations. However, the uptake has been admittedly low, albeit increasing. Mapping and harnessing of biodiversity business opportunities is likely to provide additional incentives for businesses to conserve biodiversity as is the benchmarking of businesses, especially by investment houses.
 7. The lack of uptake is partly attributable to the business case that needs to be made more vigorously and repeatedly. Most businesses still do not see or understand the business benefits of biodiversity assessment and conservation, highlighting the need and importance of greater investment in establishing the business case in different sectors, enhancing public awareness and consumer demand for biodiversity conservation, and strengthening public policy frameworks for encouraging and rewarding corporate social responsibility. The current voluntary initiatives by leading businesses can only go so far and may have to be internalized in public policy for them to have a wider impact.
 8. Credible assessments of biodiversity conservation outcomes and related monitoring, based on key performance indicators, are critical not only to credible partnerships for business and biodiversity but also to increasing stakeholders' confidence and improving the policy-science interface.
 9. Biodiversity assessments are relatively easy at site level largely facilitated by an extensive body of work on 'state' indicators. They are more difficult at the corporate level. The challenge stems from a lack of key performance indicators that can effectively communicate performance, aggregated at the corporate level, at reasonable cost and efficiency. Performance can only be assessed against a base line highlighting the importance of corporate level assessment of ecosystem risks and opportunities associated with a business, based on much needed standardized approaches to such assessments. The business community needs to commit support to the development of the requisite tools and approaches and to using them for mainstreaming biodiversity in their policies and operations.
 10. Collaborative and quantitative assessment (accounting) of ecosystem services is a major emerging need for augmenting the business case for conservation. Tools such as Global Citizens Observatory, developed by the European Environment Agency, that allow stakeholders to directly input their observations into an assessment (map) would be very useful for the purpose. However, any assessment of performance over time would only be relevant in the context of a well established biodiversity baseline in a given landscape or seascape.
 11. Corporate governance has been a subject of greater public and media attention recently but is seldom linked to biodiversity conservation despite the vulnerability of biodiversity to neglect due to its perception of common property. The emerging trends in collaborative governance that incorporates concepts of involving affectees of decisions, downward accountability, reciprocal accountability, and generating popular (policy) support for the decisions can better attract attention and support for biodiversity conservation. However, good governance in governments is a precondition for good governance in business.

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12. Related is the role of consumers. Corporate behaviour is largely driven by public policy and consumer choices and, considering public policy is a factor of public needs and aspirations, consumers' education offers the greatest promise to biodiversity conservation through credible assessment and reporting. Some people have called it 'Consumer Science at Play' signifying that consumers can not only shape markets and production patterns for biodiversity use and conservation, they can also usefully contribute to assessments of biodiversity baselines, performance and benchmarking.
 13. The EU Business and Biodiversity Initiative can provide the much needed space and momentum to enable the participation and fulfilment of obligations of the private sector in conserving the world's biodiversity, together with other stakeholders. Creation of a corresponding technical facility is a welcome means to give practical meaning to this aspiration.
 14. The scope of this initiative and facility may include:
 - a) Enabling partnerships for biodiversity assessment and conservation, in particular facilitating the participation of conservation organizations who often feel encumbered or vulnerable to accusations of green-wash (risking credibility of the partnerships) for having to rely on funding from the business partner;
 - b) Supporting an ecosystem-based approach to assessment, facilitating contributions and awareness raising around the 'Stern-like report' for biodiversity already in hand, and using it as a vehicle to protect 'spaces for nature' and for promoting market-based approaches to sustainable use of ecosystem services;
 - c) Helping put the different assessment and indicator frameworks in perspective, taking on board the messages of 'less is more' and 'simpler indicators are needed', and that 'effective and credible assessment at reasonable cost' is the key for giving greater currency to qualitative and quantitative improvements in biodiversity conservation by the private sector;
 - d) Refraining from substitute funding of the routine partnership activities, targeting funding into research on partnership experimentation and innovation, and into filling critical gaps in knowledge, expertise and tools essential for scaling up biodiversity assessment and conservation in business;
 - e) Recognizing and rewarding business leadership in conservation as a means to stimulate greater uptake of biodiversity assessment and conservation across the different business sectors and scales;
 - f) Continuing to require, encourage and reward greater transparency in biodiversity assessment, management and reporting;
 - g) Strengthening the EU's convening and standard-setting role, notably in the area of corporate governance, rewarding good performers and calling laggards to account; facilitating common language, dialogues and partnerships; building capacity in civil society to support biodiversity assessment, reporting and accountability on business; and stimulating change among peers – other governments outside EU; and
 - h) Consumer education, apart from, and sometimes to balance, aggressive marketing campaigns by business, with a view to positively influencing consumption levels and patterns and to providing space for broader society's input into establishing biodiversity baselines, benchmarks and performance levels.

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Markets for biodiversity goods and services

This workshop explored the challenges and opportunities of developing markets and business opportunities for biodiversity-friendly goods and services. It discussed such areas as eco-agriculture, sustainable forestry and non-timber forest products, fisheries and aquaculture, bio-carbon, watershed services, biodiversity offsets/banking, corporate biodiversity management services, ecotourism, and recreational hunting and fishing. The key question addressed by the workshop was: What can the EU do to encourage private investment in sustainable biodiversity businesses?



First session: Where are we now?

Chair

- **Alan Bernstein**, CEO, Sustainable Forestry Management Ltd

Presentations

- **Joshua Bishop**, Senior Economics Advisor, IUCN “Building biodiversity business”
- **Izabela Flor**, Chief Executive, BirdLife International “Supporting SMEs for biodiversity benefits”

Roundtable

- **Barney Dickson**, Head of International Policy, Fauna and Flora International
- **Ludwig Gruber**, Managing Director, BIO-Hotels
- **Sachin Kapila**, Biodiversity Advisor, Shell International Ltd
- **Carsten Sjöholm**, Novozymes
- **Jim Turnbull**, Co-Founder, Fundatia ADEPT and Managing Director, Belmont Management Consultancy

The major challenge addressed in this session of the workshop was how to develop markets and business which inherently conserve biodiversity through using biological resources and ecosystems sustainably. A particular challenge is how to put in place regulations which protect biodiversity through business activities and in so doing foster truly sustainable economic development.

The presentations focused on biodiversity conservation as a business opportunity, instead of the more usual view of biodiversity as a business risk, burden or obligation. By fully integrating biodiversity into corporate decision making and business plans, biodiversity may be conserved as a core business proposition.

In the light of current trends in public opinion regarding environmental concerns, businesses which explicitly operate in ways which conserve biodiversity may enhance their position and the economic security in the marketplace. In this respect, several examples of successful biodiversity business projects were presented and discussed throughout the workshop.

Regarding the emerging markets for ecosystem services and goods, there is a need to look specifically at each product within a broader landscape-level perspective. In this respect, through addressing the interests of different stakeholders within a landscape, it becomes clear that there is no single business case for biodiversity conservation. Rather there are several business cases related to different ecosystem products and stakeholder interests.

However, there are still open questions related to biodiversity business. There are questions related to the policy framework for conserving biodiversity through market processes. There are questions related to business advice and technical assistance to ensure that biodiversity conservation and sustainable use are linked to business drivers such as revenue generation and profit seeking. And there are questions related to financing biodiversity business. Can more financing be made available or are there other possible incentives which can be provided?

The first session of the workshop included two keynote presentations: “Building biodiversity business” by Joshua Bishop and “Supporting SMEs for biodiversity benefits” by Izabela Flor. They presented complementary programmes of work on how to promote markets and enterprise for biodiversity goods and services. Although using rather different approaches, both programmes delivered a similar message – biodiversity should be seen as an opportunity for business and business should be promoted as a tool for biodiversity conservation. The precise way forward remains uncertain, but the lessons learned from these two programmes are promising and provide a basis for future efforts to promote biodiversity business.

Bishop described a collaborative effort between IUCN and Shell on biodiversity and business. This effort has produced a study on building biodiversity business. It is based on an extensive literature review as well as a long list of interviews with key biodiversity business professionals. According to the IUCN/Shell study, the business case for biodiversity can be illustrated by the presentation of a number of existing examples, such as:

- The nature-based recreation market is estimated as US\$ 100 billion annually and is still growing. This market is aimed at new consumer groups such as young well informed people that have disposable income and are keen on enjoying themselves responsibly.
- Eco-labelling and certification schemes have created new markets with significant growth in two major sectors: organic agriculture and forestry. Though the certification schemes do not focus specifically on biodiversity, they indicate an interest on the part of both producers and consumers to treat nature responsibly.
- Watershed protection has been applied by water supply companies to reduce costs of water provision. By paying for ‘ecosystem services’ – such as a famous example from New York City

and also examples from Nestlé and Danone in Europe – the costs of supplying consumers is lowered through biodiversity protection.

- The growth of the global market for carbon credits has also increased sharply and provides insights for biodiversity. Though application of a similar scheme for biodiversity conservation is still to be developed, there is some hope that it could be developed in the not too distant future.
- One possibility is to develop a market for biodiversity offsets from loss of habitat due to development. Early examples of a biodiversity offset approach can be found in several countries including the USA with its wetland banking, Australia, Brazil, Mexico, South Africa, Switzerland and elsewhere in Europe. This approach, however, requires more work on standards and procedures. For instance, there is a need to define both ‘go’ and ‘no-go’ areas for development.

To sum up, the lessons learned from the IUCN/Shell study indicate that the challenges consist of linking biodiversity conservation regulatory regimes created by governments to business and financing practices. There is also a need to create business models that incorporate the lessons learnt from the examples analyzed in the study. To further this, IUCN/Shell proposes the constitution of a think tank that addresses policy issues and practical tools for biodiversity business.

Flor then presented an EU-funded project that focuses on mechanisms to support biodiversity-benefiting SME activities in Natura 2000 sites. Natura 2000 is a key EU-wide conservation instrument. The project partners include BirdLife Poland as well as NGOs in Poland and Hungary.

The costs of managing Natura 2000 sites are estimated to be roughly € 6.1 billion and the sources of funding are mainly national governments, various EU mechanisms and NGOs. These sources of funding are, however, insufficient.

On the other hand, key stakeholders within or near Natura 2000 sites are SMEs which use biodiversity as their primary resource. These SMEs are diverse and include major business sectors such as: Forestry, Hunting and fishing, Tourism and Farming.

The relationship between SMEs and Natura 2000 sites has not been harmonious, as the protected sites have often been seen as an obstacle to business. The private sector has generally not yet perceived the sites as a business opportunity. Investment in Natura 2000 sites is required to follow a specific procedure and that is not obviously conducive to enterprise development. To approach Natura 2000 sites as an opportunity, there is a need for awareness raising and knowledge transfer regarding biodiversity, business and finance.

Within the scope of this project, an innovative approach was developed in Poland. Here the project has created a platform for SMEs to meet the Natura 2000 requirements and it has provided biodiversity expertise in a language business people can easily understand. This includes a methodology to assess and identify SMEs that are pro-biodiversity and tools for knowledge transfer aimed at promotion of an economically sustainable development. The results of such an approach include:

- The establishment of biodiversity technical assistance units
- A handbook for developing pro-biodiversity investments
- Research on financial markets, which resulted in negotiations to create a financial package for pro-biodiversity SMEs
- The establishment of national expertise networks

The sheer number of existing SMEs across Europe makes them a particularly interesting client for business-oriented strategies to protect biodiversity.

After the two presentations, a brief session of questions and answers was held. This was then followed by an interactive roundtable discussion session with the participation of Barney Dickson, Ludwig Gruber, Sachin Kapila, Carsten Sjöholm and Jim Turnbull. The roundtable discussion made clear that there is a possibility of adopting business approaches to biodiversity conservation, but that much work still needs to be done to articulate the various business cases for biodiversity.

Second session: What are the priority challenges and opportunities?

Chair

- **John Hontelez**, Secretary General, European Environment Bureau

Presentations

- **Alan Bernstein**, CEO, Sustainable Forestry Management, Ltd
“Making capitalism work for conservation”
- **Jan Fehse**, Senior Consultant, EcoSecurities
“Lessons from the carbon market”

Roundtable

- **Alan Bernstein** CEO, Sustainable Forestry Management, Ltd
- **Peter Carter**, Environmental Coordinator, Environment and Advisory Division, European Investment Bank
- **Annik Dollacker**, International Affairs/ Sustainability, Bayer CropScience
- **Jan Fehse**, Senior Consultant, EcoSecurities
- **Miguel Ribeirinho**, CEO, Novadelta

This session of the workshop reviewed the development of the carbon market and analyzed lessons from it which can be learned for biodiversity. One of the key points highlighted was the need to have clear biodiversity commitments from governments. Such commitments have to be quantitative and their implementation process properly integrated and efficient.

A solely voluntary scheme, although providing guidance, is definitely not enough. There is the need to make biodiversity and its conservation an everyday concern of the business sector, paralleled by citizens' preferences to 'go green.' This requires governments to set up viable frameworks for the effective success of both business and biodiversity conservation.

The workshop included two keynote presentations: “Making capitalism work for conservation” by Alan Bernstein and “Lessons from the carbon market” by Jan Fehse. These presentations focused on the lessons learned from the carbon market and intended to make clear that biodiversity conservation could, in part, be based on a similar market development.

Forestry restoration and conservation was presented as one of the major opportunities in the carbon market. Forestry holds a position under the Kyoto Protocol which is likely to strengthen in post-Kyoto schemes. For example, changes of reforestation and deforestation practices undertaken within the forestry sector can be managed to comply with the Kyoto protocol. This, of course, will have direct impact on biodiversity conservation with respect to forested landscapes and timber and non-timber species.

The synergies between existing carbon markets and potential biodiversity markets were also highlighted by the second keynote presentation. The carbon market shows that there is clearly a need for the public sector to establish the markets and to encourage participation by the private sector. Equally the public and private sectors from the developed world and the developing world have to join in. The core issue is that all of them will have to be involved in the definition of market policies and practices.

Hence, we can learn from carbon market schemes and see how their structures might be applied to conserving biodiversity. One of the major contributions to the development of the carbon market was the introduction of the overriding issue of climate change, and the need to reduce greenhouse gas emissions, into all levels of decision making – from consumers to producers and from citizens to governments. Importantly, this included the financial sector. The turning point for raising awareness and decision making on carbon was when the market gained a certain size – specifically, in 2005, when the EU started its carbon trading scheme.

The size of the market really matters if we are to have a material impact on the loss of biodiversity. To achieve a sizable market and a significant impact there is a need for a quantitative commitment from governments. The EU proposal to make biodiversity business voluntary unfortunately will not create a market of sufficient size.

The commitments of governments are equally important for clarifying rules and providing guidance. The private sector role in the carbon market has proved to be a facilitator of technological transfer and capacity building. The same can be expected for the biodiversity market. Another advantage for using a carbon-like market scheme is that certain pricing strategies such as taxing poor biodiversity performance directly are more difficult to implement due to lack of willingness of consumers to accept them.

But, is a carbon-like market the right approach for biodiversity? This question remains open. Or perhaps we should use the existing carbon markets to conserve biodiversity? Will this by itself lead to real biodiversity gains or are we limiting ourselves?

Third session: Moving to action: What should the EU do?

Regarding a market for biodiversity, there are still many ambiguities and open questions left:

- Which types of investments are required?
- Does biodiversity require subsidies?
- Will a carbon-market scheme work?
- How will biodiversity performance be monitored?
- Who pays in the end?
- What do we want to achieve in terms of biodiversity?

After the two presentations a brief session of questions and answers was held. This was followed by a roundtable panel session with the two speakers plus Peter Carter, Annik Dollacker and Miguel Ribeirinho. One thread of the roundtable discussions focused on the sustainability of organic farming versus conventional farming and the relative contributions of each to biodiversity conservation. Once again the need for indicators to measure sustainability was addressed. Another discussion looked at the experience of Delta Café and their social responsibility policy as a way to promote biodiversity. Overall the roundtable agreed that biodiversity-benefiting markets could and should be developed.

The final session of the workshop highlighted the need for a new intervention framework for the business sector which would address the complexity of biodiversity as a market proposition.

Public views, business cleverness, scientific knowledge and other stakeholder experiences have to be duly integrated into this new framework and synergies need to be explored. Innovation, standard setting and incentives are part of the rules of the game for the development of biodiversity markets and businesses.

Development of a biodiversity market is a complex issue and requires the integration of different policies at different levels. Specifically, the costs of implementing various biodiversity market schemes have to be addressed and appropriate funding sources or strategies have to be identified.

Two main points were highlighted to avoid market failure: diversified approaches to technical management and appropriate financial support. A landscape-level approach was also identified as the most appropriate spatial management unit for most cases of intervention. Finally, two sensitive points were also noted: the high transaction costs for maintaining certain biological resources and the serious challenge of putting a value to certain biodiversity goods and services.

The session opened with a rich presentation from **Kerry ten Kate** on the possibility of developing a market for biodiversity offsets and the challenges which the EU will need to address to establish this market. She noted that in spite of all the regulations in favour of conservation, biodiversity losses continue to increase, showing the need for new approaches and renewed markets. Hence, the Business and Biodiversity Offset Programme – known as BBOP – has undertaken seven pilot projects to provide guidance on developing a new approach. BBOP is also producing a toolkit for offsets, principles for implementation and strategies to influence government policies in the EU and elsewhere.

Ten Kate emphasized the importance of defining the ‘rules of the game’ in order to support the development biodiversity markets. These rules should in the end create new markets, define rights and standards, promote links and cooperation between companies and create incentives for the implementation of biodiversity conservation schemes. Also communication and training as well as providing capital and financial products are important matters that will support the emerging market for biodiversity offsets.

Chair

- **André van der Zande**, Secretary General, Ministry of Agriculture, Nature and Food Quality, The Netherlands

Presentation

- **Kerry ten Kate**, Director, Business and Biodiversity Offsets Program (BBOP), Forest Trends
“Legal constraints to building biodiversity business”

Roundtable

- **Alfredo Cunhal Sendim**, Chief Executive, Freixo do Meio
- **Zbig Karpowicz**, Coordination BTAU Project, RSPB
- **Kerry ten Kate**, Director, Business and Biodiversity Offsets Program (BBOP), Forest Trends
- **Adam de Sola Pool**, CEO, Environmental Investment Partners

The presenter was joined in the roundtable by Alfredo Cunhal Sendim, Zbig Karpowicz and Adam de Sola Pool. Their discussions included the following set of comments and suggestions:

- Everyone should move beyond “business as usual” and create new frameworks for innovative biodiversity markets. These frameworks have to integrate policies and public opinion in order to promote ways of intervention for the business sector.
- New biodiversity markets should only be developed if they will indeed support biodiversity conservation.
- Biodiversity offsets should also consider the role of ecosystem or biodiversity services. Who are the beneficiaries of the offsets and the associated services? They may not be the same groups.
- Legal mechanisms, like Natura 2000, are necessary to conserve biodiversity, but they do not answer how biodiversity is be conserved outside Natura 2000 sites.
- Offsets within Natura 2000 probably should be a measure of last resort but perhaps could be promoted as a general working solution that can be applied both inside and outside Natura 2000 sites.
- Innovative markets based on biodiversity conservation within Natura 2000 sites are possible and could finance some of the costs of conservation.
- The EU should look at the Lisbon Strategy and adapt it to the creation of diversified approaches to technical management and financial support for biodiversity business.
- The costs of developing biodiversity markets need to be made clear and should be done before even thinking about the value of biodiversity services and goods.
- ‘Cleverness of business solutions’ should stand as a part of the response to market failures as it allows the sharing of successful business cases and good and bad practices, and promotes financial incentives for the business sector.

Business and biodiversity partnerships

Over the last decade a diverse and interesting portfolio of business and biodiversity partnerships have developed mostly between companies and NGOs. This workshop explored the challenges and the opportunities of scaling up such partnerships across Europe. The key question it addressed was: What can the EU do to promote biodiversity partnerships with European businesses?



First session: State of the art in business and biodiversity partnerships in Europe

Chair

- **Kirsi Sormunen**, Vice President and Head of Environmental Affairs, Nokia Corporation

Presentations

- **António Serrano Rodríguez**, Secretary General, Spanish Ministry of Environment
“Where are we now on business and biodiversity partnership? Introduction of document on the state of the art”
- **David Richards**, Principal Advisor, Environment, Rio Tinto Limited
“The Rio Tinto experience: Process, benefits and problems”
- **Paul Temple**, Vice President, National Farmers Union
“UK arable industry win-win experience on business and biodiversity”

The three speakers focused on experiences with business and biodiversity partnerships from different perspectives. Their examples demonstrated the importance of proper incentives for successful business and biodiversity partnerships and the need to link partnership objectives to business targets. They also highlight the value of voluntary initiatives.

Antonio Serrano, Secretary of State, Spanish Ministry of Environment, explained that in Spain, a local government network was established within the programme of ‘+ Biodiversity 2010.’ It has not only conserved but also increased biodiversity in Spain. Various types of partnerships involving private companies, civil society, local authorities and other stakeholders contributed to that. These partnerships have covered expertise, training, risk management, resources and have focused on results and the improvement of financial performance. The programme involves a yearly amount of one million Euros and is supported by the Spanish Federation of Municipalities and Provinces.

David Richards, Chief Adviser Environment, Rio Tinto, noted that his company has been deeply involved in biodiversity partnerships. The partnerships are established at a global level, and then implemented at a local level. Partnerships were established with organizations in the UK, Australia and the USA amongst others. Furthermore, business units establish their own partnerships at a local level.

For the company, partnership is different from sponsorship. Partnerships are professionally managed, have defined objectives and formal agreements, yearly work programmes, sustainability and communication plans. Rio Tinto enables its employees to take part in group-wide events linked to environmental issues. In 2004 they established the function “NGO Partnership Manager”, who focuses on making the partnerships work. There are projects ongoing in Madagascar, Guinea, South Africa, Australia and Brazil.

However, there are new challenges. One of the main challenges is to avoid the “institutionalizing” of partnerships. To establish a partnership, both parties need to have awareness and capacity in the broader organization. The scope, coverage and expertise must be defined with clarity to identify gaps and needs. Partnerships should also keep up the energy level to maintain the flow of innovation and creativity.

The role of partnerships in the company has evolved from corporate strategic inputs to policy formulation to involvement in the delivery of conservation outcomes on the ground.

Paul Temple, Vice President, National Farmers Union, explained that UK farmers have been managing the challenges of self-regulation on pesticides. It is a voluntary initiative and was founded in 2001 by the industry. Best practices are publicized and broad participation has been a key factor of success. These regulatory activities have implied costs – roughly £ 45–47 million. The major activities target the spray operators. There are 19,000 such operators in the UK; and in spite of initial difficulties with accepting some of the measures, they have increasingly accepted these activities.

A crop protection management plan was implemented as well as compliance with best practices. This has improved awareness and reduced the quantity of pesticides in water and soil. Furthermore, risk assessment tools and decision trees were developed. Biodiversity is being measured, and agronomists are being trained. This is an example of voluntary measures working, since the programme has had widespread adoption, support from industry, NGOs and the Government, as well as measurable benefits.

Second session: Partnerships at work: Challenges and opportunities

The SAFFIE Programme shows six ways to enhance biodiversity without any change in farming practices. For example, through the implementation of simple measures such as reintroducing wild flowers in field margins, it has increased beneficial insects by up to 80%. Another commitment is known as Environmental Stewardships. They allow for two different schemes. The five-year agreement implies meeting point targets and various options including 2 m buffer strips. The higher level, ten-year agreement includes capital work, such as ponds and the obligation to deliver maximum benefits. Rural development programmes fund these schemes. Today, almost 50% of agricultural land in the UK is included in one of these schemes.

Good case studies on biodiversity were presented by UEPG on behalf of the non-energy extractive industries. Other presenters also shared their experience on establishing partnerships. A key observation was that in order to cope with biodiversity goals, it is important to create partnerships at all levels, between companies, local communities, governments, academia and NGOs.

In various countries there are good examples of partnerships. These have to adapt to the circumstances at local level, but must also serve the interest of the companies and the environment. Establishing a professional relationship between companies and NGOs, however, is a complex process. It implies mutual trust and respect of each other's points of view, as well as the ability to commit to joint targets. It is clear from the examples, that communication between all actors is essential.

The parties have to be honest in order to achieve the common goal. Global companies should look for partnerships at both the global and local levels which embrace the concept of the three pillars of sustainability: social, economic and environmental aspects. Notably the human dimensions of biodiversity are an important part of the concept of sustainability. It is important to respect not only biodiversity, but also the traditions of the local communities. It is important to understand how the objectives of biodiversity translate into everyday life.

Often it can be vital to have corporate funding in the initial phase of a project. Institutional money, on the other hand, is useful but is often inflexible and comes very late. Successful partnerships can support companies to make embracing biodiversity a competitive advantage. Companies see the added value of an engagement in preserving biodiversity. It helps to improve their reputation as today's customers are more and more conscious of environmental issues and the challenges of sustainability.

Companies can obtain a competitive advantage by differentiation – that is by incorporating biodiversity management into their businesses. The challenges they face, however, are to create the needed expertise, assign scarce resources and institutionalize biodiversity management.

Excessive regulation from the European Union may threaten traditional business, such as traditional farms, because they cannot comply with the rules. It is also important that The European Commission and member states recognize the vital role of small-scale enterprises and farming communities in maintaining biodiversity and that they support them by integrated planning. It is also unrealistic to expect these small businesses to meet the standards of large-scale enterprises.

Chair

- **Nat Page**, ADEPT Foundation

Presentations

- **Aldo Consentino**, Director General, Ministry of Environment, Territories and the Sea, Italy
“Partnerships from the government perspective”
- **Michel Picard**, VP Environment Quarries, Aggregates and Concrete, Lafarge
“How partnerships work in practice: Challenges and opportunities”
- **Denis Mertens**, President, UEPG
“UEPG partnership with IUCN for Countdown 2010”

Regulation should aim to eliminate the problem of “free-riders” – companies which compete in the same markets as leaders without meeting even minimum standards for biodiversity issue management – while allowing leading companies to continue to pursue leadership positions where they see competitive advantage.

In order for partnerships to deliver real conservation value, the EC should also make sure that framework conditions are in place to support the products and services on which business can rely to develop their biodiversity programmes.

Nat Page, ADEPT Foundation, opened the session by observing that today we have to find key elements for partnerships and attract partners – governments, businesses, and NGOs. An example is ADEPT’s partnership in Romania, a project developed with the Romanian government, which generates benefits for both sides.

It is essential to create incentives for partnerships between businesses and NGOs on biodiversity issues. Biodiversity is more than only saving species. It is about conserving a complex mosaic of habitats. The ADEPT Foundation has set up a project to monitor the effects of biodiversity change. It is working with farmers, students and the Romanian branch of the multinational telephone company, Orange. Without Orange’s funding, the NGO could not have achieved its goals. The company’s funding is effective because it is flexible and on time, while funding from governments is usually late and inflexible.

Page also noted that biodiversity conservation is an important element in Europe. Unfortunately excessive regulation from the EU and member states, as for instance on food hygiene, can wipe out traditional farms overnight.

Aldo Consentino, Director General, Ministry of Environment, Territories and the Sea, Italy, said that governments have difficulties in communicating with private industry. Today one speaks about biodiversity and business. However, he believes that biodiversity should be seen as business.

A large part of Italy consists of protected areas, but the human presence is so strong that it is impossible to talk of biodiversity protection without seeing the country as a whole. Biodiversity in Italy is perceived in a broader sense, implying tradition and culture that characterize the territory. Protection means not only caring for habitats but also saving traditional knowledge and the characteristics of human settlement as an integral part of the landscape.

A major problem is the abandonment of the countryside due to human migration to urban areas. Hence, the Ministry of the Environment has promoted strategies, including the notion of ‘slow food.’ They have done a study on traditional agricultural food products and came to the conclusion that it is possible to maintain biodiversity linkages. Supportive action of authorities must provide rules and support start-ups to generate mechanisms for biodiversity management. The most interesting experiment in collaboration with the Italian Ministry of Environment used air companies as carriers. This was very effective, leading to secondary effects and augmenting the prestige of these companies.

In this example, one problem was how to draw the attention of passengers to problems other than Kyoto, and focus on issues in local communities. The air company gave 20 cents of each e-ticket to ecological campaigns, which was even more favourable for the company. This was the follow up to the three-year collaboration with the Ministry. Start-up is crucial but it is also important to convince companies to join the campaign. Every passenger was involved in the campaigns which led to a new forest three years after the project with the Ministry. The government did not impose obligations but only established rules for nature and environment. Rather it created a new awareness of biodiversity at a national level by simply respecting rules and preserving tradition, culture and environment.

Michel Picard, Vice President for Environment, Lafarge, opened his remarks by explaining that Lafarge is a French-based, world leader in construction material. The EU represents 40% of its total market sales today. Lafarge operates 900 quarries with a lifetime of 5–100 years each. The company follows an environmental policy and has had a partnership experience with WWF since 2000.

Biodiversity is one of the areas covered in the partnership with WWF. The company also has other local partnerships – for example, in France, the UK and Spain. At each stage of its product life cycle, partnerships are possible. These may include site selection and development, extraction, and follow up. At each stage, dialogue is a must and partnership a real added value.

Picard discussed how they convince business units within the company to engage. He noted that this is a real issue in many organizations. There's no miracle recipe and there are many obstacles. Communication is vital as well as maintaining motivation and awareness. Communicating and involving the public is especially powerful. Furthermore there is a need for meaningful indicators. A resource dedicated to managing the partnership is also a real plus.

Success factors include the following:	Ideas for application on a larger European scale include the following:	Examples of solutions for everyday business transactions are:
<ul style="list-style-type: none"> • Shared visions that are not necessarily common visions • Shared values • Acknowledgement of barriers • Agreement that disagreements may persist but are of no harm • Communication at all levels and at all times • Honouring achievements • Praising activities 	<ul style="list-style-type: none"> • Catalogue of best practices • Solutions for everyday business transactions • Commercial offer of biodiversity-friendly goods and services • Incentives for students to take up wildlife biology 	<ul style="list-style-type: none"> • Green roofs (wild grass) • Composting • Conserving old trees • Nature trails • Storm water pounds

The drivers and benefits for companies are not only the licence to operate, but also employee pride and communicating a good message.

Denis Mertens, UEPG President, noted that quarries have side aspects related to sustainability. The European Union is committed to reduce biodiversity loss by 2010 and one way is through partnerships at a local level, including quarries. UEPG gives awards to projects to promote best practices in the industry. On the 28,000 sites worldwide, construction means working with nature and having lots of opportunities. At the end of April 2007, UEPG created a Biodiversity Task Force. Biodiversity is important at each stage of production and on each quarrying site, because there are always a great variety of habitats.

Local communities are not forgotten, either. What is UEPG doing? They have established partnerships in several countries such as Austria, Belgium, France, Germany and Israel. In Israel, quarrying partnerships allowed the discovery on a site of eight unknown species of invertebrates and new bacteria. For the company, this meant protecting part of the quarry, which also meant a cost impact. A study undertaken in Ireland proved that after extraction, the number of species had multiplied by a factor of 4 to 8, in comparison to the situation prior to exploitation. Quarrying is too often seen as only destroying. Local partnerships are needed for each quarry, and we are looking for these partnerships.

Third session: Business and biodiversity partnerships

Chair

- **António Serrano Rodríguez**, Secretary General, Spanish Ministry of Environment

Panel discussion

- **Ian Swingland**, CSO, SFM LTD
- **Risto Laukkanenthe**, President, Poyry's Infrastructure and Environment Business Group
- **Simone Quatrini**, Policy and Investment Analysis, Global Mechanism of the UNCCD
- **Frank Petter**, Business and Biodiversity 2010 – Promising Experiences in the Noord-Brabant Region
- **Carlos Abreu**, SECIL – Companhia Geral de Cal e Cimento

Ian Swingland, CSO, SFM LTD, opened the discussion stating that the EU plays a significant role in creating the framework for economic sustainability. The EU should create a legal and fiscal environment for the protection of biodiversity, because not all forms of engagement can be reflected in profits for the companies. Soon there will be an MBA course at the University of Oxford on biodiversity conversation. The EU can set the environment so that such trends can develop.

Risto Laukkanenthe, President, Poyry's Infrastructure and Environment Business Group, noted that in relation to biodiversity framework processes, the following aspects should be considered:

- Universities should include biodiversity issues in their curricula;
- Transparency allows stakeholders to learn from each other;
- There needs to be the creation of a widespread understanding of biodiversity values;
- NGOs and industry should exchange information from their databases;
- Due diligence should incorporate biodiversity aspects;
- International organizations should give more support to biodiversity.

Simone Quatrini, Policy and Investment Analysis, Global Mechanism of the UNCCD, observed that it was good to have this Conference and that it is encouraging to see that industry is engaged. It means that processes are ongoing. However, a key question is still: what are the drivers to encourage companies to engage themselves in biodiversity issues? Both regulation and market forces play a role. The EU and member states already have a set of instruments, but we must not underestimate the role of companies.

It is important to see biodiversity as a complex system that affects environment, society and the economy as a whole. Financing and the rewarding of best practices can teach organizations to integrate these issues in their core business. The EU should develop norms and standards on clear guidance for companies.

Frank Petter, Business and Biodiversity 2010 – Promising Experiences in the Noord-Brabant Region, focused his remarks on the successful case of a regional and local initiative which aimed at stopping the loss of biodiversity. The region's biodiversity is highly stressed by urbanization and agriculture. Inspiring results led mayors to convince neighbouring mayors to participate. Stakeholders from many different parts of society were involved including industry, civil society, tourism, and farmers.

A major driving force was the establishment of a biodiversity action plan, which proposed practical activities for all stakeholders. Biodiversity-aware entrepreneurs started to include biodiversity in their business processes. The same occurred in the tourism sector. Dissemination and communication activities included organizing an international conference and several seminars. Cross-border activity was also actively pursued. The region offers to be a pilot on biodiversity and would like to share its on-going experiences.

Carlos Abreu, Secil, proposed that with respect to biodiversity there are three types of companies:

- those who make money from biodiversity
- those who put money into biodiversity inputs
- the majority of companies who don't really care about putting a value to biodiversity

The problem is that the value of biodiversity is unknown. Were it measurable, it would be much easier to have companies join initiatives or engage in partnerships.

The way forward – Recommendations

The EU has a significant role in creating the framework for economic sustainability. It should create the legal and fiscal environment for the protection of biodiversity. Transparency, information sharing, and due diligence that considers biodiversity aspects are also essential factors to promote biodiversity in business. A key question is: what are the drivers to encourage companies to engage themselves in biodiversity issues?

Both regulation and market forces play a role. The EU and member states already have set instruments, but the role of companies should not be underestimated. The EU should develop norms and standards on clear guidance for companies. Local authorities have a role in promoting biodiversity.

A clear EU regulatory framework is required which supports biodiversity conservation and is not obstructive. A clear package of legal and fiscal incentives should be established to promote biodiversity conservation. A main concern of the participants of the workshop is that EU legislation might hinder a market approach. As an example, it was suggested that EU policies on food hygiene could destroy traditional sustainable farming.

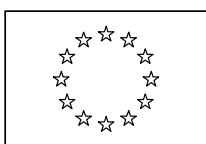
The main objective of this session was to outline five key recommendations to support biodiversity conservation in Europe. In the end, the participants agreed on the following main recommendations for the EU:

- Look beyond 2010. Though the 2010 target was an important instrument to build awareness, different commitments should be made in terms of internalizing biodiversity in the business models of companies and not only for reasons of social responsibility.
- Encourage subsequent EU presidencies (Slovenia and France) to continue this business and biodiversity initiative well beyond 2010.
- The EU should reassess its position of not allowing carbon credits from forestry exploitation in the European Emission Trading Scheme.
- Communicate the messages of partnerships and the importance of biodiversity in business activities to the member states which in many cases hold permitting and regulatory responsibility.
- Design and implement a communication and awareness programme amongst all stakeholders and constituencies.
- Establish peer groups and networks to help governments at the local level. Promote partnerships through secondments between companies and other organizations.
- Valuation of ecosystem services is a priority for the business community to help in making a case for biodiversity conservation.
- Partnerships should also be made with academia and not just with NGOs and governments.
- Since biodiversity is a global issue the EU should promote solutions at the global level, take a holistic approach considering all dimensions of the problem, and continue to promote commitments and management of natural resources and ecosystems in a sustainable way beyond 2010.
- Secure financing to stimulate replication of best practices, innovation and creativity, making biodiversity a core business and promote private-public partnerships. NGOs recommended establishing a fund with a 1% contribution of profit from businesses to strengthen capacity for biodiversity conservation.

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- The technical assistance unit of the European Commission should draw up a shortlist of outcome indicators that companies could use to measure success regarding their efforts in biodiversity conservation.
 - Help and support should be made available to conserve traditional small-scale farming communities that are an important store of biodiversity in Europe.
 - Partnerships with the agriculture sector outside NATURA 2000 sites should be promoted. The importance of partnerships that will promote conservation of marine biodiversity was also stressed.
 - In order to protect high nature value areas it was suggested that meetings are convened to network on best practices and on how to use the AgriEnv Fund (second Pillar).
 - Marine biodiversity must not be forgotten.
 - Furthermore, the EU has the moral obligation to protect Wilderness. Natura 2000 should be better valued and protected.

Subsequently, the workshop organizers and chairs condensed this long list into ten main recommendations for the EU:

1. Look beyond 2010: Though it was an important instrument to build awareness. Different commitments should be made in terms of internalizing biodiversity in the business models of companies and not only for reasons of social responsibility.
2. The EU should reassess the position of not counting with credits from forestry exploitations in the European Trading Scheme.
3. Global is local: it is important to give incentives to local communities and local stakeholders like NGOs.
4. Set a signal to the market: Give focus to the most important environmental issues.
5. Protected areas need to obtain protected value.
6. Invite future presidencies to keep up these issues.
7. Communication is a key objective.
8. Marine biodiversity must not be forgotten.
9. The EU should put forward indicators for biodiversity to clearly access politics and practices at government, civil and private levels.
10. EU has the moral obligation to protect Wilderness. Natura 2000 should be better valued and protected.



BUSINESS AND BIODIVERSITY - BUILDING PARTNERSHIPS

THE EU BUSINESS AND BIODIVERSITY INITIATIVE BEYOND THE LISBON CONFERENCE

A DISCUSSION PAPER FOR THE EU BUSINESS AND BIODIVERSITY CONFERENCE, LISBON, 12-13 NOVEMBER, 2007

DG ENVIRONMENT EUROPEAN COMMISSION

The EU agenda for biodiversity

The European Union has a stated political aim dating from the 2001 European Summit in Gothenburg "to halt biodiversity decline by 2010". At a global level, in 2002 at the World Summit on Sustainable Development, the EU also committed itself to "significantly reduce the rate of biodiversity loss by 2010".

In May 2006 the European Commission adopted a Communication entitled "Halting the loss of Biodiversity by 2010 - and beyond - sustaining ecosystem services for human well-being"¹. This communication sets the EU agenda for biodiversity. While confirming the central importance of existing legislation and in particular the Natura 2000 network, the communication also sets out a more comprehensive and inclusive vision for biodiversity protection with a specific focus given to the goods and services provided by ecosystems.

This Communication identified a number of key objectives and actions that will be necessary to halt biodiversity decline. One of the key measures is the building of more effective partnerships, including partnerships with Business both at the level of the EU and in the Member States, fully in line with the global commitments under the Convention on Biological Diversity (CBD).

In the political agendas of the German, Portuguese and Slovenian presidencies of the EU (January 2007 - June 2008), the protection of biodiversity and the integration of biodiversity criteria into business decision-making and corporate governance ("Business and Biodiversity") have been recognised as a common priority.

¹ COM (2006) 216 OJ C184, 8.8.06 p. 121.

More specifically Portugal, in its capacity as current Presidency of the EU, has been working with the European Commission on the development of an initiative to strengthen the links between business and biodiversity protection. The working title for this is "Building Better Partnerships: linking Business to Biodiversity" (The EU B@B initiative)².

The European Commission has organised a series of stakeholder consultations to obtain the views of Member States, business and non-governmental organisations about the principles, objectives and possible elements for any EU-level action on business and biodiversity.

Added value of EU dimension

The European Commission is aware that there are already different national and international initiatives aimed at promoting the integration of biodiversity into business governance. However, the integration of biodiversity into major EU policy areas such as agriculture, regional development, fisheries, energy, transport, trade, development aid and research means that there is a clear added value to an EU action on Business and Biodiversity. EU leadership has also proven to be a valuable catalyst for national action, sharing of experience and good practice, and for the communication and mainstreaming of results.

Specifically for the business and biodiversity initiative:

- The EU has a clearly established biodiversity agenda, and provides an excellent forum for cooperation and common action;
- The EU has set an ambitious target and will play a leading role to help meet the global commitments under the CBD;
- There is also a very important clear link to Natura 2000, the EU's ecological network, the centre-piece of EU nature protection, the establishment of which is now moving on to management and financing of the sites. This provides a potentially very good opportunity for business, especially Small and Medium Enterprises (SME) at the local level and is appropriate for site-specific actions with multi-stakeholder approach.

Further development of the EU Business and Biodiversity Initiative

The Lisbon conference will provide an opportunity for representatives of Business, Member States, NGOs and the Commission to identify areas of mutual interest for co-operation in relation to the linkages between Business and Biodiversity.

The Directorate General for the Environment of the European Commission would invite those Business sectors with an interest in building partnerships for biodiversity protection at the European level to take contact with the Commission with a view to developing joint actions.

In taking forward this initiative, DG Environment will be guided by the following principles:

- The Business and Biodiversity initiative is directed towards stopping biodiversity decline. Actions engaged under the initiative should deliver tangible and measurable results for Biodiversity protection;

² Explanatory note: the B@B acronym is proposed because B&B is the short-hand for bed-and-breakfast accommodation.

- Engagement and actions undertaken by Business in the context of the B@B initiative are not a substitute for - or an exemption from - existing environmental regulatory commitments: they must go beyond current legal requirements;
- Any partnerships developed with Business sectors must also involve the Member States and the NGO community in the design and the implementation of the partnership;
- Additional actions taken by Business with regard to biodiversity protection under the initiative should be of a voluntary nature (B@B will not be a regulatory measure);
- The B@B initiative will pay particular attention to the role of SMEs in the delivery of biodiversity protection;
- B@B aims to provide EU added value and to build upon, and be synergetic with, on-going actions at the local, national, regional and global level;
- The initiative should not give rise to heavy bureaucracy or red-tape;
- An attempt will be made to monitor and quantify the contribution of the initiative towards halting biodiversity decline;
- The initiative will support medium/long-term partnerships;
- The initiative will give recognition to the importance of business good-practices to reduce the rate of biodiversity decline and the value of biodiversity for sustainable entrepreneurial activity.

Commission Follow-Up

In 2008 DG Environment of the European Commission is planning (subject to the satisfactory completion of all the necessary financial and administrative steps) to establish a technical support facility to promote the continued development of the EU Business and Biodiversity Initiative. The role of the facility will be to:

- i) work with interested Business sectors to promote an awareness of biodiversity protection within the sector;
- ii) work with the sectors to bench-mark best practice in that sector with regard to the protection of Biodiversity. This may also include the development of best practice guidance concerning the responsibilities and opportunities already existing for companies in relation to the EU nature legislation (e.g. working with Natura 2000 network, using Natura 2000 in the context of sustainable tourism or the development of labelling and marketing associated with products originating from High Nature Value and/or Natura 2000 areas);
- iii) work with the Business sectors, their associated national federations, Member States organisations and representatives of civil society to promote the implementation of best practice adapted as required to the specific conditions of the companies concerned;
- iv) make a special effort, by working through the Business Associations, national federations and other bodies, to promote awareness of biodiversity issues among SMSs;

- v) develop mechanisms for monitoring and recording the delivery of biodiversity benefits resulting from the actions associated with the project.
- vi) develop an award/rating system to recognise Business sectors or companies that make an outstanding contribution to the protection of biodiversity.

The facility will, as a matter of principle, involve civil society as well as business in its activities.

It is intended that the facility will be in existence for a number of years but that its activities should eventually become self-financing.

Discussion paper A: Biodiversity-related responsibility schemes



A

Incorporating biodiversity into corporate responsibility schemes

Introduction

The UN Convention on Biological Diversity (CBD) defines biodiversity as “... *the variability among living organisms from all sources... - terrestrial, marine and other aquatic ecosystems – this includes diversity within species, between species and of ecosystems*”. The CBD defines three objectives related to biodiversity:

- the conservation of biological diversity (environmental dimension)
- the sustainable use of the components of biological diversity (economic dimension)
- the fair and equitable sharing of the benefits arising out of the utilization of genetic resources (social dimension).

Businesses can impact on biodiversity directly such as through *habitat change* and *overexploitation* of natural resources, or indirectly, such as through *climate change*, introducing *invasive species*, and *nutrient overloading*.

These five factors were all identified by the Millennium Ecosystem Assessment as the main causes of current and future biodiversity loss.

Biodiversity, as most other sustainability aspects, can be addressed by a company at different levels (see figure 1 below):

- **Compliance**, when a business focuses its efforts to comply with local and national legislation;
- **Philanthropy**, when a business responds to the challenges to biodiversity by making donations to external conservation organizations;
- **Management**, when corporate strategies, policies and operational responses are developed, based on biodiversity assessments to reduce, control and mitigate impacts;
- **Value Creation**, when a company fully integrates biodiversity into its business model and develops new business opportunities linked to biodiversity conservation.

Companies that have responded to the call for a more responsible approach to biodiversity management in their business operations – going beyond compliance and philanthropy and pro-actively managing their impacts on biodiversity – have generally done so by adopting

responsibility schemes. Hundreds of schemes related to corporate responsibility have been developed. Most of the existing responsibility schemes address one or all of the three pillars of sustainability – environmental, social and economic. Depending on the scheme, biodiversity is one of the specific aspects addressed within the context of environmental sustainability.

Responsibility schemes are generally non-legally binding in nature, although there are many examples where they are a prerequisite for membership in an association or initiative. With regards to their development, stakeholders’ engagement is a key element of most corporate responsibility schemes. Stakeholders include groups, communities or individuals with an interest in a sector, such as environmental or humanitarian NGOs, civil society organizations, inter-governmental organizations,

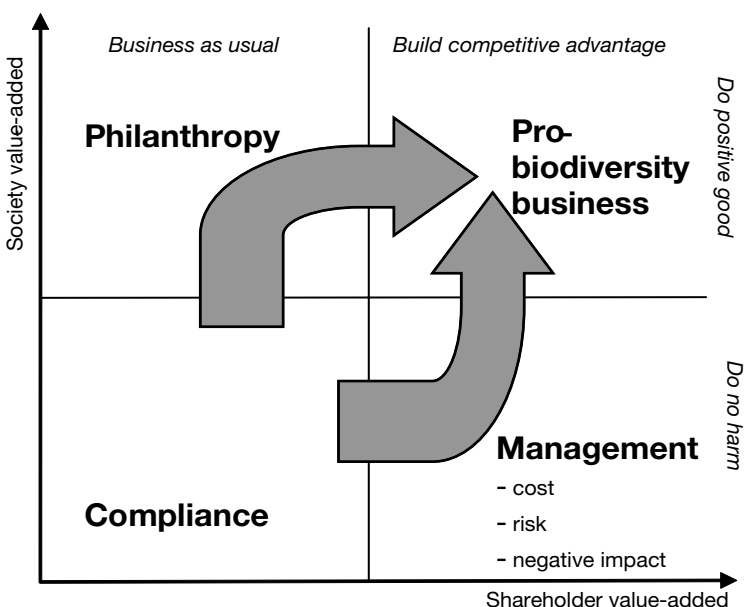


Figure 1: Different levels of corporate responsibility

indigenous communities and academia. Schemes developed with business involvement have higher relevance and acceptance. However, when non-business stakeholders are included in the process, the acceptance and credibility of the scheme is increased.

Some industry-led initiatives have developed a range of schemes to support their members in the effective integration of sustainability principles in their operations. For example, the International Council for Mining and Minerals (ICMM) developed, in conjunction with stakeholders, a Sustainable Development Framework of principles for its members, good practice guidance for incorporating biodiversity within a mine's lifecycle, and the Mining Sector Supplement for the Global Reporting Initiative (GRI) sustainable reporting guidelines. Similarly, independent organizations, such as the International Organization for Standardization (ISO), a world-wide federation of national standards bodies, have developed the ISO 14000 series of environmental standards and guideline reference documents, covering from Environmental Management Systems to Eco-labelling, and Life Cycle Assessment.

If biodiversity is well incorporated into responsibility schemes, they can offer companies a credible and structured way forward for proactively integrating biodiversity into their operations on three key levels:

- **Commitments** – Schemes that establish a broad set of principles which an individual company can adapt and adopt for their own internal and/or public policies.
- **Implementation** – Schemes that provide a framework or methodology that enables a company to integrate commitments into their operations.
- **Communication** – Schemes that enable a company to communicate their performance in implementing commitments.

The focus of corporate responsibility has been on larger businesses, due to their size, resources and reach through subsidiaries and supply chains. However, small- and medium-sized enterprises (SMEs) – companies with fewer than 250 employees – are major contributors to both income generation and resource use in much of the world. The EU's 23 million SMEs represent about 99% of all EU enterprises and 57% of the EU's total economic added value.

Though their impact is individually small, cumulatively SMEs have the potential to significantly impact on – and positively influence – biodiversity. Smaller companies often possess greater understanding of the dynamics of the ecosystem in which they operate and as a result can more easily achieve a win-win for income generation and biodiversity conservation. They are often located where they can readily see the impacts of their operation on biodiversity and livelihoods and hence the case to address those impacts is easier to make. SMEs' engagement with biodiversity issues has so far been limited to a select range of sectors and services where the financial case for biodiversity has been demonstrated, e.g. eco-tourism and organic agriculture.

A main barrier to wider adoption of corporate responsibility schemes is the lack of exposure of SMEs to wider pressure sources, such as consumers, advocacy NGOs and financial institutions. Additional barriers include fear of bureaucracy, time and cost and a lack of knowledge of the issues. Existing corporate responsibility schemes may also be seen as inaccessible – or indeed inappropriate – to smaller businesses.

To this end, the European Commission has created the Environmental Compliance Assistance Programme, to help SMEs minimize the environmental impact of their activities and facilitate compliance with existing legislation. The programme aims to:

-
- Minimise the administrative burden on companies;
 - Help SMEs integrate environmental concerns into their businesses;
 - Support regional and national networks;
 - Build up local know-how;
 - Improve communication.

For example, guides on energy efficiency, air emissions, soil, water and waste for SMEs are planned.¹

Other institutions have also developed support programmes for SMEs. Recognising that almost half the Global Compact business participants in Europe are SMEs, the Global Compact also has an outreach programme for SME capacity building. The UN Industrial Development Organization has also launched a framework for measuring and reporting on social and environmental performance. Known as REAP (Responsible Entrepreneurs Achievement Programme), the programme aims to help SMEs to practise responsible entrepreneurship, by translating corporate social responsibility (CSR) principles into a commercially viable management approach, focusing on implementation of CSR principles rather than on reporting.

This paper aims to present the current status of biodiversity integration in corporate responsibility schemes. A sample of well-established and innovative schemes that could support the effective management of a company's impact on biodiversity has been analysed (details and references in relation to the schemes analysed can be found in the Annex). Many more schemes exist beyond those referred to in this paper (in particular in the group of certification), but it was not the goal of this paper to have a comprehensive inventory of corporate social responsibility schemes.

In order to determine the effectiveness of different types of schemes, the following questions were taken into consideration: what they are, who is involved, whether they are binding or voluntary, and in particular the level and nature of biodiversity integration in the respective schemes. With regards to this element, and for the purposes of this review, the environmental section (where relevant) of the selected schemes was analysed for key words – including *biodiversity, species, ecosystems*, specific ecosystems (such as *marine, forest, wetland, protected areas, World Heritage sites*) and specific species, *habitat, water, air, soil, flora, fauna*, and generally *environment*.

¹ ec.europa.eu/environment/sme

Schemes that support a corporate commitment to biodiversity management

Charters, codes of conduct, guidelines, statements of commitment are some of the type of schemes that support corporate commitment to social responsibility. Once endorsed, these schemes should be translated by the company into a company-specific policy and strategy.

Cross-sector commitment schemes

Among the best known and adopted cross-sectoral schemes are the UN Global Compact, the OECD Guidelines for Multinational Enterprises and the CERES principles.

The **UN Global Compact** is the world's largest corporate citizenship initiative with more than 3,000 business participants from 116 countries worldwide (see figure 2). Despite criticism from some groups concerned about the UN engaging with business, the Compact was launched in 2000 thanks to the vision, commitment and idealism coupled with sound realism of Kofi Annan, the former UN Secretary-General. He proposed a "global compact" of shared values to business leaders at the World Economic Forum in 1999.

The Compact builds on the foundational spirit of the UN Charter in 1945, when there was universal consensus that commerce, investment and trade were indispensable pillars of a peaceful and prosperous world. It encourages companies to sign up to a set of universally accepted principles for sustainability and social responsibility. These are based on declarations associated with labour, environment, human rights and, more recently, anti-corruption. The Environment Principles are derived from the Rio Declaration on Environment and Development.

The **OECD Guidelines for Multinational Enterprises** establish specific recommendations, developed and promoted by governments, for multinational enterprises operating in or from

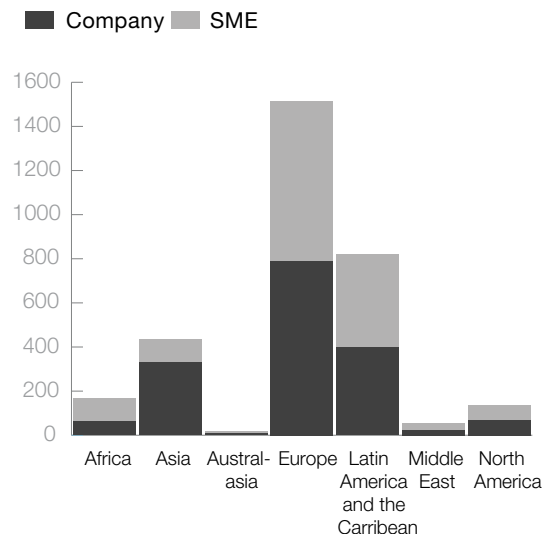


Figure 2: Global Compact business participants by region and size (2007)

Improving the OECD Guidelines?

The environment section of the OECD Guidelines, first established in 1976, was modified following a major review in 2000. The Guidelines now encourage businesses to "raise their environmental performance". However, the principles refer generally to environmental management, disclosure of environmental information, and contingency planning for environmental impacts such as mitigation hierarchy and the precautionary principle. Biodiversity is not referred to either specifically or generally. Even an OECD Roundtable on Corporate Responsibility in 2004, which examined the positive contribution of business to the environment, did not explore opportunities for biodiversity conservation, focusing more on reducing impacts. Nevertheless, engagement with stakeholders and respect of intellectual property rights (IPRs) could be linked to the access and benefit-sharing element of the CBD's objectives.

Reference: www.oecd.org/document/1/0,3343,en_2649_33765_31711425_1_1_1_1,00.html

ICMM partnership for biodiversity

Extractive industries, with a highly visible and direct impact on biodiversity, have been leaders in this area. For example, the International Council on Minerals and Mining (ICMM), formed in 2001, developed its Sustainable Development Framework. The Framework's foundations lie in the Mining, Minerals, and Sustainable Development (MMSD) project, an independent two-year process of consultation and research with representatives of a number of different stakeholder groups (including indigenous communities, NGOs, regulatory bodies, labour organizations, academia and the mining industry itself) at global, national, regional and local levels.

All member companies of ICMM are required to implement the 10 principles of the Sustainable Development Framework and comply with policy commitments made by the ICMM Council. Principle 7 states ICMM members' commitment to: *Contribute to conservation of biodiversity and integrated approaches to land use planning*. To assist ICMM members to meet this commitment, ICMM, in partnership with IUCN, developed relevant guidance based on best practice.

Reference: www.iiied.org/mmsd

Focus on finance

The International Financial Corporation (IFC) developed the **Equator Principles**, launched in 2003 and revised in 2006 – screening criteria used by the financial industry for determining, assessing and managing social and environmental risk in financing for projects with capital costs over US\$ 10m (reduced from US\$ 50m under the 2006 revisions). They apply across all industry sectors but split into high and medium-impact groups. The Equator Principles are not a detailed set of enforceable legal norms but a general, voluntary framework of ten broad principles applicable to project finance transactions only.

the 39 OECD adhering countries. They are used by businesses to develop their own individual codes of conduct, the result of which is adapted and relevant to the individual company.

Both the UN Global Compact and the OECD Guidelines promote a precautionary approach to the environment. This is linked to the Rio Declaration on Environment and Development and translates as a “prevention is better than cure” approach, which encourages companies to assess any actual and potential environmental harm. Although neither scheme mentions biodiversity explicitly, biodiversity can be included when a company integrates the principles into their own business activities.

Sector-specific commitment schemes

Aside from the examples highlighted above, commitment schemes tend to be developed by industry-led sector-specific initiatives on a consensus basis. Though commitments are not legally binding, in many instances their adoption is a prerequisite to becoming part of an initiative, or roundtable or even a business association such as the International Council on Minerals and Mining (ICMM) (see box). Similarly, members of the Cement Sustainability Initiative have to implement the six areas of commitments, though they have up to four years from joining the initiative to do so. The Federation of European Aquaculture Producers (FEAP) takes a less binding approach to their code of conduct, which establishes a common base for sectoral responsibility through effective self-regulation, and demonstrates the considerations of the production sector towards the fish it rears, the environment and the consumer. These schemes often form the platform upon which companies develop their own individual set of principles and policies to address sustainability and specifically biodiversity management. There are many examples where companies have gone beyond the principles stated by the inspiring scheme.

In general, commitment schemes are developed in a multi-stakeholder fashion. The roundtables on Sustainable Palm Oil and Responsible Soy are multi-stakeholder initiatives, therefore NGOs and other interested groups actively participate throughout the development of commitment principles. In the cases of the Tour Operators’ Initiative or the Sustainable Agriculture Initiative, although not included in the membership, non-business stakeholders were consulted before finalizing commitment principles to improve their relevance and acceptance.

The Roundtable on Sustainable Biofuels² is a key multi-stakeholder initiative, established in 2006. Using modern technologies such as wikis and videoconferencing, the Roundtable’s aim is to quickly develop draft standards for sustainable biofuels by mid-2008 in conjunction with NGOs, companies, governments and inter-governmental groups from all over the world.

2 www.bioenergywiki.net/index.php/Roundtable_on_Sustainable_Biofuels

The **UN Principles for Responsible Investment (PRI)** have been developed by the UNEP Finance Initiative and the UN Global Compact. The Principles for Responsible Investment aim to help investors integrate consideration of environmental, social and governance issues into investment decision making and ownership practices, and thereby improve long-term returns to beneficiaries. There are no legal or regulatory sanctions associated with the Principles. They are designed to be voluntary and aspirational. The current 245 signatories, who comprise of asset owners, investment managers and professional service partners, have more than US\$ 10 trillion dollars-worth of assets under management.

Biodiversity is not referred to explicitly within the 10 Equator Principles; however, the Principles are underpinned by International Finance Cooperation (IFC) Performance Standards, guidelines and policies: biodiversity is included under IFC Performance Standard 6, which was strengthened and adopted in 2006. Similarly, the UN Principles for Responsible Investment do not mention biodiversity *per se*. However, the recent launching of the UNEP FI working group on Biodiversity and Ecosystems Workstream reflects a demand from investors to further understand this issue and potentially incorporate these issues into the principles.

The sustainability criteria – greenhouse gas emissions, environmental and social impacts, and implementation – will be based on existing principles where possible, such as those developed by the Forest Stewardship Council and the Roundtable for Sustainable Palm Oil.

The financial sector has led the way in terms of corporate responsibility commitments (see box above). The continuing growth of responsible investment has played a significant role in persuading more companies to respond to sustainability concerns. The Equator Principles, developed by the International Financial Corporation, are not legally enforceable but signatory financial institutions are encouraged to apply them when financing projects over US\$ 10m. Similarly, the UN Principles for Responsible Investment are voluntary.

Principle 2 calls for “an environmental and social assessment that addresses mitigation and management of impacts”. Issues to be covered under the social and environmental impact assessment include biodiversity and natural resource management. Principle 3, Applicable Social and Environmental Standards, suggests that where a project is located in a non-OECD country or a low-income OECD country, IFC Performance Standards³ should apply (see Annex). As of September 2007, the Equator Principles have been adopted by 54 financial institutions from 21 countries, including 10 in Europe.

The responsibility schemes considered within this paper include environmental principles and as such, represent an appropriate leverage point for incorporating biodiversity. Though cross-sectoral schemes reach out to a wide range of business types and sizes, they are less likely to include biodiversity within their principles, consequently reducing the incentive for individual businesses to firstly understand the importance of biodiversity, and secondly to consider integrating biodiversity within their own commitments.

Sector-specific initiatives often incorporate biodiversity if not in the main principle, at least in the detail. Such initiatives importantly tend also to put pressure on member organizations to actually incorporate the common principles within individual company commitments. However, the level of interpretation of biodiversity varies between the schemes.

The sector-specific schemes that include biodiversity tend to include the conservation/*environmental dimension* of biodiversity. This often includes references to “reduce impact”, “protect”, “conserve” and, in the cases of The Energy and Biodiversity initiative, the RSPO and the SAI Platform, to “enhance” and “improve” conservation opportunities. Key indicators of biodiversity referenced in the principles examined in this paper include “endangered species”, “protected areas” or “high conservation value areas” and habitats. The agricultural-based initiatives profiled in this paper all refer to soil as an element of biodiversity too.

The sustainable use/*economic dimension* of biodiversity is only referred to by the SAI Platform and the Tour Operators’ Initiative. The issues to be considered under Equator Principle 2 also explicitly refer to the *sustainable management and use of renewable natural resources (including sustainable resource management through appropriate independent certification systems)*.

³ www.ifc.org/ifcext/enviro.nsf/Content/PerformanceStandards

The **Tour Operators’ Initiative for Sustainable Tourism Development** is a voluntary, non-profit initiative, open to all tour operators, regardless of their size and geographical location. To move towards sustainable tourism, tour operators in the Initiative have to commit themselves to sustainable development as the core of their business activity by integrating the commitment into their own policies. With reference to biodiversity, principle 2 suggests that companies will “*strive to pursue the best practices in all our activities ... especially with regard to: responsible use of natural resources, reducing, minimizing and preventing pollution and waste and conserving plants, animals, ecosystems and protected areas (biodiversity), and conserving landscapes, cultural and natural heritage*”. The members of the Initiative also work together through common activities to promote and disseminate implementation methods and practices compatible with sustainable development.

In the sample of schemes, the inclusion of the fair and equitable sharing/*social dimension* of biodiversity often coincides with that of the economic dimension. Again, Equator Principle 2 is more advanced, referring to socio-economic impacts, communities and indigenous groups and associated cultural values. The SAI Platform and the Tour Operators’ Initiative also include references to enabling local communities and cultural values.

Schemes that support the implementation of a corporate commitment to biodiversity management

The implementation of a commitment to sustainable development, and more specifically to biodiversity conservation, sustainable use and fair and equitable sharing of benefits, requires companies to assess and manage their impacts along the mitigation hierarchy (see figure 3). Depending on the step in the mitigation hierarchy, different schemes are more appropriate. Many schemes have been developed to support companies in undertaking these steps in a credible and systematic way.

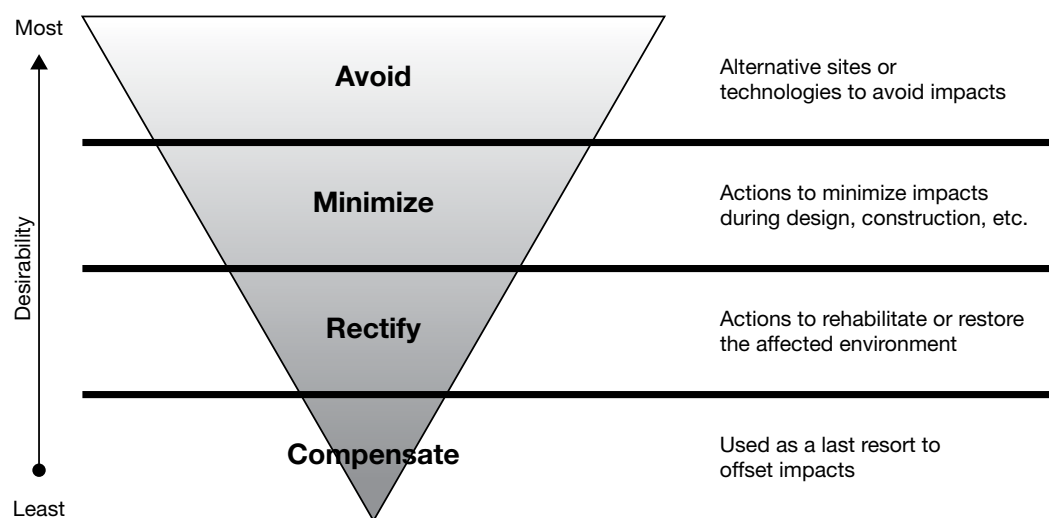


Figure 3: The mitigation hierarchy

Impact assessments

Impact assessments are a hierarchy of steps designed to ensure consideration of environmental (and social) impacts as well as appropriate avoidance, mitigation and management measures.

Key types include:

- Environmental impact assessment (EIA) – assessment at a project level;
- Strategic environmental assessment (SEA) – policy/strategy level assessment for cumulative effects;
- Environmental and social impact assessment (ESIA) – specifically incorporates social as well as environmental impacts.

Impact assessment in its various forms has been identified as having an important role in implementing international environmental policy and law. In 1992, both Agenda 21 and the Rio Summit Declaration contained provisions calling for EIAs to be undertaken for activities likely to impact adversely on the environment. The 2002 World Summit on Sustainable Development went further, calling for using EIA procedures “at all levels”. Similarly, the European Directive 97/11/EC (amended in 2003 following the 1998 signature by the EU of the Aarhus Convention⁴ on public participation in environmental matters) states that an environmental assessment must be carried out for certain projects before development consent is granted. Article 4 determines whether the EIA is mandatory (known as “Annex 1”) or discretionary (“Annex II”). Member States can set criteria or thresholds for Annex II projects.

Article 14 of the UN Convention on Biological Diversity (CBD) identifies impact assessment as a key instrument for achieving the conservation, sustainable use and equitable sharing objectives of the Convention. The article – Impact Assessment and Minimizing Adverse Impacts – requires

⁴ en.wikipedia.org/wiki/Aarhus_Convention

Contracting Parties to introduce appropriate procedures for EIA of proposals that might have effects on biological diversity, and to provide mechanisms for taking the biodiversity impacts of programmes and policies into account. Such multilateral initiatives do not directly involve businesses; rather it is government parties who are required to take action.

Despite this objective, EIAs have historically been criticised for their lack of biodiversity-related aspects. Though impact assessment processes are in place and applied in many countries, biodiversity considerations are often poorly addressed. Barriers commonly identified include:

- A low priority for biodiversity;
- Lack of awareness of biodiversity values and importance;
- Lack of capacity to carry out assessments;
- Lack of adequate data.

To address this, the International Association for Impact Assessment (IAIA) created a Biodiversity and Ecosystems Section in 1998. Later, the IAIA produced a supporting document⁵ to the CBD Guidelines on Biodiversity-inclusive EIA.

5 biodiv.org/doc/reviews/impact/information-guidelines.pdf

Leverage points within the EIA process for integrating biodiversity (adapted from Ramsar, 2007)

- **Screening** – Positive, and negative, lists are used to determine whether an EIA is required or not. If screening criteria do not include biodiversity measures, there is a risk that proposals with potentially significant impacts on biodiversity will be screened out. Based on the three levels of biodiversity, fundamental questions should be addressed here, including:
 - Does the intended activity affect the physical environment in such a manner or cause such biological losses that it influences the chance of extinction of cultivars, varieties, populations of species, or the chance of loss of habitats or ecosystems?
 - Does the intended activity surpass the maximal sustainable yield, the carrying capacity of a habitat/ecosystem or the maximum and minimum allowable disturbance level of a resource, population, or ecosystem?
 - Does the intended activity result in changes to the access to and rights over biological resources?
- **Scoping** – The expected impacts of the proposed activity, including identified alternatives, should be compared with the selected reference situation and with the autonomous development (what will happen with biodiversity over time if the project is not implemented). There should be awareness that doing nothing may in some cases also have significant effects on biological diversity, sometimes even worse than the impacts of the proposed activity (e.g. projects counteracting degradation processes).
- **Assessment** – EIA should be an iterative process of assessing impacts, redesigning alternatives and comparison. Assessing impacts usually involves a detailed analysis of their nature, magnitude, extent and effect, and a judgement of their significance, i.e., whether the impacts are acceptable to stakeholders, require mitigation, or are just unacceptable. Available biodiversity information is usually limited and descriptive and cannot be used as a basis for numerical predictions. There is a need to develop or compile biodiversity criteria for impact evaluation and to have measurable standards or objectives against which the significance of individual impacts can be evaluated. The priorities and targets set in the National Biodiversity Strategies and Action Plans process can provide guidance for developing these criteria. Tools will need to be developed to deal with uncertainty, including criteria on using risk assessment techniques, precautionary approach and adaptive management.
- **Monitoring and auditing** – Used to determine what actually occurs after project implementation has started. Predicted impacts on biodiversity should be monitored, as should the effectiveness of mitigation measures proposed in the environmental impact assessment. Proper environmental management should ensure that anticipated impacts are maintained within predicted levels, and unanticipated impacts are managed before they become a problem and the expected benefits (or positive developments) are achieved as the project proceeds.

The Ramsar Convention on Wetlands developed a handbook⁶ on incorporating biodiversity-related issues into environmental impact assessment legislation and processes (see box below). Priority areas for action include initial screening lists.

Biodiversity offsets are conservation actions intended to compensate for the residual, unavoidable harm to biodiversity caused by development projects, so as to ensure *no net loss of biodiversity*. Some governments including the US, Brazil, Australia, have introduced laws requiring biodiversity offsets within the mitigation hierarchy. An important element for effective and credible biodiversity offset action is the determination of the baseline, the quantification of the impact of the development as well as of the conservation actions, in order to demonstrate no net loss to biodiversity. Following misunderstandings and misuse of the term “biodiversity offsets”, the Business and Biodiversity Offset Program (BBOP), a partnership of businesses, NGOs and governments, is currently developing a scheme to support companies in implementing a corporate commitment to net loss of biodiversity to enable a coherent, transparent and credible approach to biodiversity offsets.

Direct impacts are relatively straightforward to identify, but the assessment of indirect and cumulative impacts is more complex and the determination of magnitude (size and extent of the impact) and significance (the importance for decision making) is difficult. Social impacts are often the most difficult to predict, due to the lack of a clear cause-effect relationship when working with human responses to change, meaningful baselines, etc. Many sector-specific initiatives, such as ICMM and the Cement Sustainability Initiative (CSI), have developed their own, adapted **social and environmental impact assessment scheme**, specific to the needs of their sector – including the integration of biodiversity.

Conventional impact assessments are also limited in that they only identify and assess direct, and to a lesser extent, indirect impacts; other factors that may affect the long-term prospects of successful outcomes for biodiversity are not considered. As ICMM concede in their *Good Practice Guidance for Mining and Biodiversity*,⁷ conventional ESIA techniques are designed to identify and assess potential impacts of mining projects, but they do not touch on some of the key factors that profoundly influence both the analysis or interpretation of baseline data and the longer-term prospects of successful outcomes for biodiversity from either mitigation or conservation efforts. Having an informed understanding of the maturity of the conservation context should enable companies to ‘design’ biodiversity action plans and initiatives that stand a better chance of success.

Similarly, the International Finance Corporation asserts, while an individual project’s impacts on biodiversity or similar environmental issues may not be significant, when taken together with impacts created by other human activities, they can become nationally, regionally or globally significant.

Strategic environmental assessments can address these issues, ideally, before an EIA is conducted. The Strategic Environmental Assessment Directive 2001/42/EC was introduced to address the shortcomings of EIAs and establishes a mix of mandatory and discretionary procedures for assessing environmental impacts on a broader, landscape or national level. This will mean that information on the environmental impact of a plan will be able to cascade down through the tiers of decision making and be used in an EIA at a later stage, thereby reducing the amount of work that needs to be undertaken. Indirect impacts can also be addressed through Strategic Impact Assessments, with a view to mitigating the overall impact of a project. Similarly, a life cycle assessment incorporates third-party risks to biodiversity for projects, such as through the supply chain.

6 www.ramsar.org/lib/lib_handbooks2006_e13.pdf

7 www.iucn.org/themes/business/mining/Good%20Practice%20Guidance.pdf

The Cement Sustainability Initiative (CSI) determined that the most useful tool for evaluating and managing the impacts of a cement site is an Environmental and Social Impact Assessment (ESIA), undertaken with rigorous scientific analysis and stakeholder engagement. The CSI Taskforce, in conjunction with key stakeholders, developed Guidelines for Environmental and Social Impact Assessment.

The ESIA will need to cover the following aspects related to biodiversity throughout the life cycle of a cement site or quarry:

- **Scoping phase**
Biodiversity resources and cultural heritage assets, especially protected areas and species, and the geology, hydrology, soil quality, water resources, climatology and meteorology of the region, as well as alternative locations for plants and quarries.
- **Construction phase**
Traffic impacts on air, soil and water quality, and health and safety. Wastes from construction and overburden, soils and other materials.
- **Operations phase**
Environmental impacts, especially from land use and quarrying, the use of fossil fuels and raw materials, emissions, noise and vibration, solid wastes, liquid effluents and storm water, and traffic. The ESIA should also describe the *environmental management system* (EMS) to be implemented.
- **Closure of the site**
Rehabilitation across the whole area affected by the cement manufacturing footprint, with special emphasis on managing hazardous areas and materials, and End of life monitoring, particularly to measure diffuse low-level contamination in soil or ground water (required by legislation in some locations).
- **Mitigation**
Mitigation measures aim to avoid, minimize, remedy or compensate for the predicted adverse impacts of a cement facility on site; offset has similar aims but remedial actions are focused off site. Measures need to take into account potential impacts close to the site and those some distance away (e.g. impacts on water supply), and to ensure the avoidance of sites that are formally protected (especially for biodiversity and cultural heritage).

With specific reference to data collection, the ESIA Guidelines list the types of data that need to be collected on biodiversity, with recommendations on how this should be collected, and areas that might require special attention:

- Locations of protected areas;
- Locations of sensitive or important habitats or ecosystems;
- Distributions of protected species;
- Distributions of protected habitats;
- Experts in biodiversity, including taxonomic specialists/wildlife biologists;
- Uses of biodiversity resources (e.g. data, information, organizations, etc);
- The geology and hydrology, soil quality, water resources and water quality, climatology and meteorology of the area.

The Guidelines reference the Framework for integrating biodiversity into the site selection process developed by the Energy and Biodiversity Initiative.

Reference: www.theebi.org/products.html

Any activity aimed at the incorporation of biodiversity considerations into national EIA systems should be accompanied by appropriate capacity development activities. Despite the considerable progress that has been made in strengthening impact assessment as a tool to further the aims of the CBD and related conventions, the 183 parties to the CBD and the governments that have signed up to other biodiversity-related conventions and processes need to further build their capacity to develop and apply EIA and SEA procedures for the benefit of biodiversity. To this end, the IAIA initiated a project for Capacity Building in Biodiversity and Impact Assessment (CBBIA) in developing countries. This is designed to support countries in their implementation of the CBD and Ramsar through the establishment of networks of trained impact assessment professionals, capacity building, and the provision of training materials for integrating biodiversity into impact assessment processes.

Environmental management systems

Environmental management systems (EMS) should be part of a company's overall management system and include the organizational structure, responsibilities, policies, procedures and practices, and resources. All management systems have a common approach – plan-do-check-act – which ensures a process of continual performance improvement. Many companies require their environmental management systems to be at least compliant or even certified with the ISO 14001 or EMAS series, which provides an over-arching framework for operations.

Management systems are not subject to legal requirements. Though the Eco-Management and Audit Scheme (EMAS) was initially established by European Regulation 1836/93 and replaced by Council Regulation 761/01, it is actually a voluntary initiative designed to improve companies' environmental performance on a continual basis. The use of the EMAS logo guarantees the reliability of the environmental information provided through independent verification. Many organizations progress from ISO 14001 to EMAS and maintain certification/registration to both. Despite not being mandatory, a good management system is desirable as both business and stakeholder value is created through continuous improvement of a company's/project's social and environmental performance, and can lead to improved economic, financial, social and environmental project outcomes.

The ISO 14001 standard for EMS encourages a business to reduce their negative impact on the environment, within which biodiversity is implicit but not identified as a key component. However, the standards and accompanying certification scheme are process-based, and do not take into account minimum environmental performance. Furthermore, the focus is more on reducing impact than making an overall positive contribution to conservation. Businesses are encouraged to include biodiversity within their EMS yet there is no clear guidance on how to do this. Lafarge

Management systems for biodiversity

The UK-based Wildlife Trust established a Biodiversity Benchmark that, similar to other standards for management systems (such as ISO 14001), is composed of a set of detailed requirements that an organization needs to meet and clearly demonstrate. The Benchmark is the first recognised scheme to award continual biodiversity improvement of land. The Benchmark is flexible and adaptable, so that it can be applied to any organization managing land, from businesses through to local authorities, service utilities, NHS, developers and charities. It integrates biodiversity into an organization and, as a result, improves biodiversity performance. It complements existing environmental systems but can also be used as a stand-alone management system.

Interestingly, the scheme encourages businesses to develop their own biodiversity action plan in line with the relevant national biodiversity action plan, linked to the conservation element of biodiversity. However, the focus remains on reducing impacts on land owned by the company and there is no clear inclusion of the dimensions of sustainable use and access and benefit sharing.

produced an internal document⁸ about how to integrate biodiversity into their EMS process. Responding to this need, a Biodiversity Benchmark was established by the Wildlife Trust.

Life Cycle Management and Assessment

One scheme that encompasses aspects of both impact assessment and management is **Life Cycle Management (LCM)**, which has been developed as an integrated concept for managing the total life cycle of products and services towards more sustainable consumption and production patterns. The underlying analytical tool is the **Life Cycle Assessment (LCA)**; an environmental methodology that assesses the environmental aspects and potential impacts across the life cycle of products, processes and services, known as “cradle to grave”. The life cycle encompasses extraction and processing of raw materials, manufacturing, transportation and distribution, use, reuse, maintenance, recycling and final disposal.

LCA can be used in an array of applications such as product and process improvement, strategic decision making, eco-design, product comparisons, eco-labelling, marketing, and public policy development. Increasingly LCA provides valuable intelligence to guide strategic and tactical decision making with regard to technology evaluation, product development, industry benchmarking and ecological profiling.

The International Organization for Standardization (ISO) has standardized this framework within the series ISO 14040 on LCA to provide credibility to the approach. Other key initiatives include UNEP’s Life Cycle Initiative. The four-step LCA process outlined in the ISO 14040 standards includes the following:

1. Goal and scope of the study are defined;
2. An inventory of relevant inputs and outputs occurring across the life cycle are collected and compiled;
3. The potential environmental impacts of these inputs and outputs are evaluated (impact assessment); and
4. The results of the previous three stages are interpreted.

Environmental impacts considered in LCA include greenhouse gas impacts, resource depletion, human and eco-toxicity, eutrophication, photochemical oxidation, water, land use and biodiversity. With the overall framework of the LCA identified by UNEP’s Life Cycle Initiative, biodiversity was identified as high priority, particularly in non-OECD countries where it is less likely to be considered.

LCA is not suitable for evaluation of very local impacts as it aggregates impacts across the whole production and usage life cycle. For local environmental impact assessment, material flows analysis and risk assessment are still needed to determine if production activities are going to have adverse effects on the local environment in which they are situated.

⁸ www.lafarge.com/lafarge/CONTENT_SHEET/20060526/05262006-event_greenweek_biodiversity-Integration_of_Biodiversity_into_EMS-uk.pdf

Schemes that support the communication of corporate performance in biodiversity management

In response to demands from civil society, consumers as well as investors, for greater transparency on performance as well as on products and services sustainability impacts, more and more companies have adopted certification and reporting schemes to communicate their corporate responsibility commitments. Socially responsible investment indices and benchmarks also provide greater transparency in communication of performance focused specifically to individual and corporate investors.

EU Flower

The Flower is a certification scheme and is a symbol of superior environmental quality and is available to a range of products and services. The scheme, which has been designed and is overseen by the European Commission, sets out specific ecological criteria that products must comply with to be certified as environmentally friendly. The award of the label is independently verified and endorsed by the European Commission. Criteria have been produced for 24 different product groups, covering 12 major manufacturing and 1 service area. The relevant ecological issues and the corresponding criteria are based on comprehensive studies of the environmental aspects related to the entire life cycle of the relevant product. An individual product must comply with all criteria (key, best practice and performance) in order to be awarded the EU Eco-label.

Certification

Certification schemes are increasingly being used to communicate the implementation of corporate responsibility commitments. Consumers, retailers and farmers rely increasingly on logos and certifications to help them identify and distinguish sustainable goods and services. Most schemes have specific guidelines for individual sectors. Examples include the Forest Stewardship Council (FSC) and GLOBALGAP. A recent trend towards networks of cross-sector certification groups has enabled greater brand development linked to certification such as through Rainforest Alliance and the EU Flower.

A wide range of certification schemes currently operates in Europe and their number continues to increase. The agricultural sector has the most certification schemes: 380⁹ were identified in Europe alone. The large number of schemes has, in certain sectors, been addressed by the creation of certification networks, a group of schemes that shares a common set of baseline criteria (and takes advantage of common services such as marketing). For example, VISIT (“Voluntary Initiatives for Sustainability in Tourism”) is a joint European initiative for the promotion of ecolabels and sustainable tourism development. In 2000, VISIT identified about 40 regional, national and international Ecolabels for tourism. Their limited effectiveness due to their diversity required a joint effort. In 2001, VISIT started to co-operate with 10 leading ecolabels in Europe and to develop Common Basic Standards for their criteria and verification procedures. In 2002 this VISIT standard enabled the identification of those ecolabels which guarantee a high environmental quality of their certified hotels, campsites, beaches or marinas. Though biodiversity is not specifically referred to in the certification criteria, out of 21 principles, eight refer to environmental legislation, life-cycle analysis, local to regional environmental impacts and environmental management systems.

Many certification schemes provide the framework for certification, but require independent organizations to accredit participating businesses. This maintains independence between the group that determines standards and requirements, and operations seeking certification. For example, GLOBALGAP have more than 100 such bodies in more than 80 countries, and the Alliance of the Americas is the accreditation agency for the proposed Sustainable Tourism Stewardship Council, which supports the creation of networks.

⁹ www.itfoodtrace.de/dateien/EFITA_Theuvsen_Plumeyer.pdf

Business-to-business certification for agricultural products

GLOBALGAP (formerly known as EUREPGAP) is a private sector body that sets voluntary standards for the certification of agricultural products around the globe. Their aim is to establish one standard for Good Agricultural Practice (GAP) with different product applications capable of fitting to the whole of global agriculture. It is a pre-farm-gate standard, meaning that the certificate covers the process of the certified product from farm inputs like feed or seedlings and all the farming activities until the product leaves the farm and is open to all producers worldwide. Importantly, GLOBALGAP is a business-to-business label and is therefore not directly visible to consumers. The GLOBALGAP Compliance Criteria and the Checklist provide guidance for continuous improvement and the development and understanding of best practice.

Reporting

Non-financial, sustainability reporting is a way for companies to communicate their commitment, strategy and sustainability performance to interested parties. Key schemes include the Global Reporting Initiative (GRI) Guidelines and sector supplements as appropriate.

The Global Reporting Initiative Guidelines aim to help companies with their management and particularly their reporting phases through a common set of sustainability performance indicators. In the third version of the GRI Guidelines – the G3 guidelines, launched in October 2006 – biodiversity indicators focus on reducing negative impacts (relating to endangered species and protected areas). These were complemented in 2007 by a Biodiversity Reporting Resource,¹⁰ with the aim of assisting business in one of the areas that remains one of the most challenging to report.

Some sectors face unique needs that require specialized guidance in addition to the universally applicable common Guidelines and Indicators: Sector Supplements, developed by GRI. They are designed to complement the Guidelines, and should be used in addition to, not in place of, the Guidelines. Ten supplements have been developed or are in development. Key sectors that relate to biodiversity are highlighted below.

- The Sector Supplement for Mining & Metals, developed with ICMM, was published in February 2005 and contains biodiversity indicators that were later added to the updated general G3 guidelines, including the number of IUCN Red list species and protected areas affected by operations.
- The Financial Services supplement, under development with UNEP FI, does not provide additional indicators for impacts on biodiversity. However, they refer to positive impacts on biodiversity under the definition for the indicator that addresses “Total monetary value of specific environmental products and services broken down according to the core business lines” i.e. products and services designed with an explicit aim to address an environmental issue(s). For example, products designed to provide renewable energy, address water scarcity, enhance biodiversity, improve energy efficiency, etc.
- The Tour Operators supplement refers to biodiversity conservation under the indicator describing key environmental, economic and social issues identified in destinations and types of information gathered.
- The Electric Utility supplement is currently under development. The draft version refers to biodiversity extensively under its own section, as well as with reference specifically to water – under managing watersheds for biodiversity. It is being developed by a multi-stakeholder working group comprised of individuals from a range of geographical regions and a number of different constituencies including electric utilities, civil society organizations, trade unions, and mediating institutions.

In some countries, reporting laws exist that require companies to publicly disclose certain of their practices and activities. In the European Union, Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 (amending Directives 78/660/EEC, 83/349/EEC, 86/635/EE and 91/674/EEC), named the “Accounts Modernisation Directive”, amends accounting requirements to enable companies to follow modern, more transparent accounting practices that are consistent with international accounting standards. The Directive requires that “... the analysis should include both financial and where appropriate non financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters”.

¹⁰ tinyurl.com/2p5xxb

Socially responsible investment

Sustainable indexes and ratings are powerful communication schemes to inform investors (individual or institutional) about companies' performance in addressing sustainability in their operations.

The Dow Jones Sustainability Indexes and FTSE4Good are two of the leading sustainability indexes. In the Dow Jones Sustainability Indexes, companies are assessed in cooperation with the Sustainable Asset Management (SAM) Group. An individual company completes a general sustainability assessment in addition to a specific questionnaire (one of the 60 industry-specific ones) that includes trends and challenges derived from economic, environmental and social current as well as future developments. Within the general assessment, the environmental dimension refers to targets to reduce GHG emissions, water use, energy consumption and waste generation, with no biodiversity-relevant targets. Codes of conduct and environmental reporting are also analysed. Companies are asked to identify what Charters or Frameworks they have publicly

endorsed, which includes the OECD Guidelines for Multinational Enterprises but no reference to equivalent environmental declarations. Although the Dow Jones Sustainability Indexes have an environmental dimension, this is given a smaller weighting (10%) compared to social (22.5%) and economic (17.5%) dimensions. Within environment, performance has a weighting of 7.0, reporting 3.0 and industry-specific criteria has weighting dependent on the industry. Biodiversity loss is referred to under sector criteria for food and the tobacco industry.

The FTSE4Good index series was launched in July 2001. The environmental criteria were strengthened in May 2002 by introducing new requirements for all companies in the index (e.g. beyond "high impact" companies to include "medium" and "low" impact companies as well). As a result, 12 companies were deleted from the index as they did not comply with the reporting. However, in general FTSE4Good find that companies continue to respond positively to FTSE's evolving engagement, and have improved practices in order to remain in the Index.

FTSE4Good Environmental Leaders Europe 40 Index¹¹ is designed to identify European companies with leading environmental practices. These are the companies that are doing more than the minimum to manage their environmental risks and impacts whilst reducing their environmental footprint. Except with reference to the uranium sector, there is little direct reference to biodiversity, though opportunities arise to showcase best practice through this group.

Some non-financial institutions have developed their own rating systems. Covalence for example has produced an Ethical Quote rating. The system tracks a business's historical contribution to human development objectives, as measured against a framework of 45 criteria based on six international declarations. The UN Global Compact, the Rio Declaration on Environment and Development and the OECD Guidelines for Multinational Enterprises are included and provide the basis for three environment-related criteria, concerning management, product risks and eco-innovation, though not biodiversity directly.

The **biodiversity benchmark**, developed by Fauna & Flora International (FFI), originally with Insight Investment and later with UNEP FI, is a comprehensive framework that enables investors to examine the comparative biodiversity risk exposure and management of companies, in addition to an objective and consistent basis for shareholder engagement. Similar to Covalence, publicly available data is complemented with additional information provided by the companies on the main elements of governance structures, policy and strategy, management and implementation; assurance and reporting; and leadership.

The benchmark initially targeted three key sectors with direct impacts on biodiversity: mining & metals, oil & gas, and utilities. Results of the 2005 benchmarking exercise suggest that, even if significant areas of weakness remained, 2004 scores were improved for all sectors. Insight Investment, with FFI, used the results as a basis for engagement with the companies that they invest in. Companies involved in the scheme suggest that the benchmark is a powerful driver of improved biodiversity performance, strengthening the business case and providing a logical framework in both the development and audit of their biodiversity management processes.

A second version of the benchmark has been developed for sectors with supply chains that depend on, as well as impact on, biodiversity. The Food and Beverage Biodiversity Benchmark has been developed through a multi-stakeholder process by FFI and is a tool for the finance sector that can be used to evaluate biodiversity and ecosystem services risks within food and beverage company investments.

11 www.ftse.com/Indices/FTSE4Good_Environmental_Leaders_Europe_40_Index

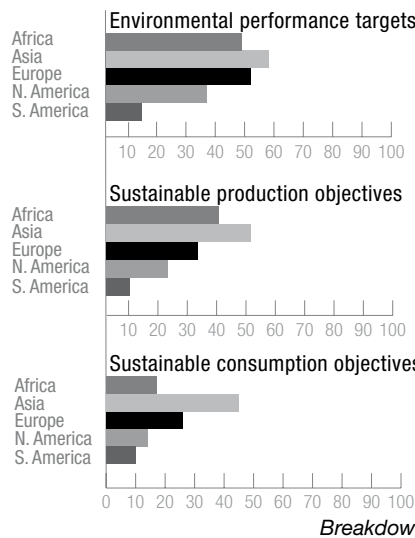
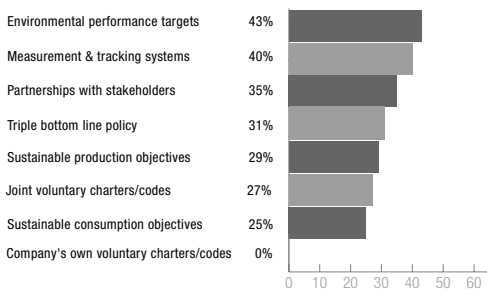
Conclusions

One of the clear findings of this research is that numerous schemes to support companies in shaping their commitments, implementing them and communicating on them, have been developed in the past decades. But are these schemes effectively used by companies? It seems so.

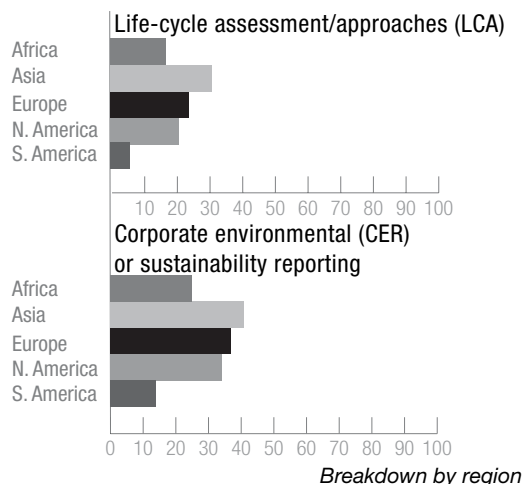
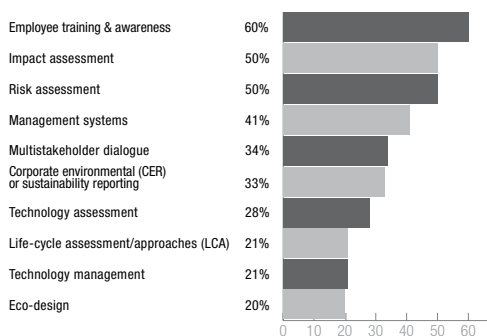
The recent surveys conducted by the Global Compact (which surveyed 400 Global Compact corporate participants) and by the Ethical Investment Research Services (which surveyed 3,000 companies, all from the FTSE All-World Developed Index) highlight that in general there is an increased commitment to responsible business practices.

The Global Compact survey reveals the types of environmental commitments businesses put in place, as well as the implementation policies and practices (see graphs below).

The EIRIS survey points out that at the global level, 57% of all companies have publicly available environmental policy statements, 58% of companies have implemented environmental management systems, while only 29% report on their environmental performance. However, focusing only on companies with high impact on the environment, 78% of them have policies, 81% have environmental management systems and 57% report. The level of commitment in Europe is however higher than in the rest of the world (excluding Japan). In Europe, over 90% of high impact companies have developed basic or advanced policies for managing environmental impacts.



Tools to implement environmental policies or practices employed by respondents to Global Compact 2007 Implementation survey



Environmental policies or practices in place by respondents to Global Compact 2007 Implementation survey

Our analysis shows, however, that biodiversity is included in some, but not all corporate responsibility schemes. One of the reasons for this gap is the fact that the business risks and opportunities linked to biodiversity are still not clearly understood in many sectors. It is foreseeable however that biodiversity will also become one of the pillars upon which the many corporate responsibility schemes, that have supported companies in responding effectively to other sustainability challenges, are built. The development of a new ISO standard (26000) for corporate social responsibility, currently on-going, is also indicative of the trend towards harmonization and globally relevant guidelines. In the (draft) guidance, environment is included as one of the seven key social responsibility principles and goes beyond the ISO14000 series. Though biodiversity is not referred to explicitly, the guidelines promote a precautionary approach as well as the integration of environmental standards in supply-chain management. Conservation or sustainable use are not mentioned but the guidelines explicitly encourage companies to “share benefits equitably”, in line with the social dimension of biodiversity.

With regards to specific corporate responsibility schemes to support companies in defining, implementing and communicating their commitment towards the integration of biodiversity in their business practices, the two main questions are:

- Should biodiversity be integrated into existing schemes or should an *ad hoc* scheme(s) be developed to support the effective integration of biodiversity?
- Should the approach be sector-specific or cross-sectoral?

The adapted or newly created schemes will also have to take into account the needs and aspirations of small and medium-sized enterprises.

To conclude, a number of assessments (and in particular the Millennium Ecosystem Assessment (MA)) have shown that biodiversity plays a key role in ensuring healthy businesses in the long-term. The results of the MA identified six interconnected challenges that are of particular concern for businesses as these affect the integrity of ecosystems and their capacity to provide their key services. These challenges are water scarcity, climate change, habitat change, biodiversity loss and invasive species, overexploitation of oceans and nutrient overloading. Private sector companies, by addressing their footprint, will also be able to manage risk and open new opportunities. In particular they will increase revenue by responding to increased consumer demand for responsible products; obtain the licence to operate by addressing civil society’s (at local and global levels) concerns; preserve and enhance the “natural” capital (including the capacity to provide ecosystem services); retain staff by engaging them and generating pride; improve the quality of products and services; pre-empt regulations and public pressure; make cost savings by a more efficient use of natural resources and improve access to financial capital.

For **Workshop A: Biodiversity-related responsibility schemes**, additional reading included:

- Business and biodiversity: The handbook for corporate action (WBCSD, 2002)
- CBD decision VIII/17 - Private-sector engagement (CBD, 2006)
- Mainstreaming biodiversity into business (FFI, 2004)
- The union for ethical biotrade - Draft proposal (UEBT, 2007)
- CSR frame of reference (mvoplatfrom, 2007)
- The state of responsible business: Global corporate response to environmental, social and governance (ESG) challenges (EIRIS, 2007)

Annex: Analysis of biodiversity content in a sample of corporate responsibility schemes

Commitments	
CROSS-SECTOR CHARTERS/CODES	
<p>The UN Global Compact www.unglobalcompact.org</p>	<p>Three out of 10 principles on environment</p> <ul style="list-style-type: none"> • Principle 7: Businesses should support a precautionary approach to environmental challenges; • Principle 8: undertake initiatives to promote greater environmental responsibility; and • Principle 9: encourage the development and diffusion of environmentally friendly technologies. <p><i>No specific mention of biodiversity.</i></p>
<p>Guidelines for Multinational Enterprises OECD www.oecd.org/daf/investment/guidelines</p>	<p>Of nine recommended principles related to business ethics, principle V concerns the environment.</p> <p>Split into 8 parts, the recommendations cover EMS, environmental health and safety (EHS), intellectual property rights, precautionary principle, mitigation hierarchy, promotion of environmentally-friendly technologies, employee and consumer awareness-raising, and partnerships to improve public policy.</p> <p><i>No specific mention of biodiversity.</i></p>
<p>2010 biodiversity target Parties to the UN Convention on Biological Diversity cbd.int/2010-target</p>	<p>Achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth.</p> <p>Now incorporated in the Millennium Development Goals.</p>
<p>CERES Principles www.ceres.org</p>	<p>Ten point code of corporate environmental conduct.</p> <p>Two of the ten principles relate to biodiversity:</p> <ul style="list-style-type: none"> • sustainable use of natural resources • protection of the biosphere
SECTOR-SPECIFIC CHARTERS/CODES	
<p>The Equator Principles International Finance Corporation (IFC) www.equator-principles.com based on IFC Performance Standards www.ifc.org/ifcext/enviro.nsf/Content/PerformanceStandards</p>	<p>Though developed for financial institutions, the principles cut across project sectors.</p> <p>Issues to be addressed, as appropriate under the SEIA (principle 2):</p> <p>f) protection and conservation of biodiversity, including endangered species and sensitive ecosystems in modified, natural and critical habitats, and identification of legally protected areas.</p> <p>g) sustainable management and use of renewable natural resources (including sustainable resource management through appropriate independent certification systems)</p> <p>l) socio-economic impacts</p> <p>n) impacts on affected communities, and disadvantaged or vulnerable groups</p> <p>o) impacts on indigenous peoples, and their unique cultural systems and values</p> <p>For non-OECD countries or low-income OECD countries, IFC Performance Standards apply: Biodiversity is included under Performance Standard 6: <i>Biodiversity Conservation and Sustainable Natural Resource Management</i></p>
<p>UN Principles for Responsible (PRI) Investment UNEP Finance Initiative and UN Global Compact www.unpri.org</p>	<p>Six principles for incorporating Environment, Social and Governance issues into assessment portfolios and signatories' own policies and practices.</p> <p><i>No specific reference to biodiversity.</i></p>

The list of schemes analysed for this report is not exhaustive. A sample of schemes was selected to allow for a general assessment of the level of integration of biodiversity aspects.

<p>Sustainable Development Framework</p> <p>International Council for Mining and Minerals (ICMM)</p> <p>www.icmm.com</p>	<p>The Sustainable Development Framework comprises three elements – a set of 10 Principles, public reporting and independent assurance.</p> <p>Principle 7: Contribute to conservation of biodiversity and integrated approaches to land use planning.</p> <ul style="list-style-type: none"> • Respect legally designated protected areas. • Disseminate scientific data on and promote practices and experiences in biodiversity assessment and management. • Support the development and implementation of scientifically sound, inclusive and transparent procedures for integrated approaches to land use planning, biodiversity, conservation and mining.
<p>Principles of the Sustainable Agriculture Initiative Platform</p> <p>Private sector initiative, founded by Danone, Nestlé and Unilever</p> <p>www.saiplatform.org</p>	<p>SAI Platform supports sustainable agricultural practices that embody the following principles:</p> <ul style="list-style-type: none"> • Provide the base for ensured food safety by producing high-quality agricultural products and by supporting innovations to improve their quality and safety. • Secure adequate food supplies to meet current and future food demand, by producing high yielding and healthy crops and animals, while increasing efficiency and keeping resource and external input requirements as low as possible. • Protect and possibly improve the natural environment and resources, by minimizing any adverse effects from agricultural activities on soil, water, air and biodiversity, optimizing the use of renewable resources and caring for animal welfare. • Support economically viable and responsible farming systems, enabling local communities to protect and improve their livelihood, safeguard their environment and improve their well-being.
<p>RSPO Principles and Criteria</p> <p>Roundtable on Sustainable Palm Oil (RSPO)</p> <p>www.rspo.org</p>	<p>Principle 5: Environmental responsibility and conservation of natural resources and biodiversity.</p> <p>Criterion 5.1 Aspects of plantation and mill management that have environmental impacts are identified, and plans to mitigate the negative impacts and promote the positive ones are made, implemented and monitored, to demonstrate continuous improvement.</p> <p>Criterion 5.2 The status of rare, threatened or endangered species and high conservation value habitats, if any, that exist in the plantation or that could be affected by plantation or mill management, shall be identified and their conservation taken into account in management plans and operations.</p> <p>Criterion 5.3 Waste is reduced, recycled, re-used and disposed of in an environmentally and socially responsible manner.</p> <p>Criterion 5.4 Efficiency of energy use and use of renewable energy is maximised.</p> <p>Criterion 5.5 Use of fire for waste disposal and for preparing land for replanting is avoided except in specific situations, as identified in the ASEAN guidelines or other regional best practice.</p> <p>Criterion 5.6 Plans to reduce pollution and emissions, including greenhouse gases, are developed, implemented and monitored.</p>

<p>RTRS Principles</p> <p>Roundtable on Responsible Soy (RTRS)</p> <p>www.responsiblesoy.org</p>	<p>RTRS Principles</p> <p>Environmental Principles: four out of nine principles relate to environment.</p> <p>6. Water as a key resource</p> <p>The soy value chain recognizes the importance of water as a key resource for agriculture and human development and should evaluate and address all qualitative and quantitative hydrological changes induced by or related to soy production, with a view to maintaining available water resources in quantity and quality.</p> <p>7. Soil as a key resource</p> <p>The soy value chain recognizes that soil quality is key to maintaining agricultural productivity and should adopt agronomic practices that avoid soil erosion and degradation, in addition to maintaining and enhancing overall soil quality.</p> <p>8. Protection of Biological diversity</p> <p>The soy value chain recognizes the importance of biological diversity at all levels and should adopt management practices that conserve biological diversity and fragile ecosystems in order to minimize and avoid loss of natural habitat.</p> <p>9. Responsible use of agrochemicals</p>
<p>Draft Principles</p> <p>Roundtable on Sustainable Biofuels</p> <p>www.bioenergywiki.net/index.php/Roundtable_on_Sustainable_Biofuels</p>	<p>Four sustainability criteria – GHG, environment, social, implementation.</p> <p>Draft Environment principles:</p> <ul style="list-style-type: none"> • Biofuel production should not directly or indirectly endanger wildlife species or areas of high conservation value. • Biofuel production should not directly or indirectly degrade or damage soils. • Biofuel production should not directly or indirectly contaminate or deplete water resources. • Biofuel production should not directly or indirectly lead to air pollution. • The use of biotechnologies for biofuel production should improve their social and/or environmental performance, and always be consistent with national or international biosafety protocols.
<p>CSI Charter</p> <p>Cement Sustainability Initiative (CSI) run by WBCSD</p> <p>www.wbcscement.org</p>	<p>CSI Charter includes six commitment areas, one of which (5) focuses on Local Impacts on Land and Communities and requires CSI members to:</p> <ul style="list-style-type: none"> • adopt the Environmental and Social Impact Assessment guidelines and develop tools to integrate them into decision-making processes. • draw up rehabilitation plans for our operating quarries and plant sites, and make them available to local constituencies.
<p>Statement of Commitment to Sustainable Tourism Development</p> <p>The Tour Operators' Initiative</p> <p>www.toinitiative.org</p>	<p>Principle 2.6:</p> <p>We will strive to pursue the best practices in all our activities – internally and when forming business relationships with partners, suppliers and sub-contractors – especially with regard to:</p> <ul style="list-style-type: none"> • responsible use of natural resources (e.g. land, soil, energy, water) • reducing, minimizing and preventing pollution and waste (e.g. solid and liquid waste, emissions to air) • conserving plants, animals, ecosystems and protected areas (biodiversity) • conserving landscapes, cultural and natural heritage, respecting the integrity of local cultures and avoiding negative effects on social structures • involving, and co-operating with, local communities and people • using local products and skills

<p>Code of Conduct European Federation of Aquaculture (FEAP) www.feap.info</p>	<p>Code of Conduct developed by FEAP which establishes and recommends guiding principles for those in Europe who are producing live fish species through aquaculture.</p> <p>Twelve guiding principles developed. Focus on:</p> <ul style="list-style-type: none"> • husbandry and welfare • the environment (water use and quality, site selection, inc. ecological function, and management) • social and economic relationship • the consumer
<h2>Implementation</h2>	
<h3>MANAGEMENT SYSTEMS</h3>	
<p>ISO 14001 – environmental management systems www.iso14000-iso14001-environmental-management.com</p>	<p>ISO 14001 is an internationally accepted standard for an environmental management system (EMS). It specifies requirements for establishing an environmental policy, determining environmental aspects and impacts of products/activities/services, planning environmental objectives and measurable targets, implementation and operation of programs to meet objectives and targets, checking and corrective action, and management review.</p>
<p>Eco-Management and Audit Scheme (EMAS) ec.europa.eu/environment/emas/index_en.htm</p>	<p>The EMAS Regulation (761/2001) was officially adopted by the Council of the European Union and by the European Parliament on 19 March 2001. EMAS requires participating organisations to implement an environmental management system (EMS). Since 2001, the EMS must meet the requirements of the International Standard BS EN ISO 14001.</p>
<p>Social and Environment Management Systems (IFC Performance Standard 1)</p>	<p>A Social and Environmental Management System is part of the client’s overall management system for the project. It includes the organizational structure, responsibilities, policies, procedures and practices, and resources, and is essential for successfully implementing the project-specific management programme developed through the social and environmental assessment of a project.</p>
<p>Biodiversity Benchmark The Wildlife Trust www.biodiversitybenchmark.org</p>	<p>The Biodiversity Benchmark, based on similar management systems, has ten components:</p> <ol style="list-style-type: none"> 1. Commitment 2. Survey 3. Assessment 4. Legislation 5. Planning 6. Implementation 7. Measurement 8. Partnerships 9. Communication 10. Review
<p>Guidelines for Integrating Biodiversity Conservation into Oil & Gas development The Energy and Biodiversity Initiative www.theebi.org</p>	<p>The Energy and Biodiversity Initiative (EBI) produced practical guidelines, tools and models to:</p> <ul style="list-style-type: none"> • improve the environmental performance of energy operations • minimize harm to biodiversity, and • maximize opportunities for conservation wherever oil and gas resources are developed.

IMPACT ASSESSMENT	
EU Impact Assessment Directive	<p>EC Directive 97/11/EC1 states that “the environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 11, the direct and indirect effects of a project on the following factors:</p> <ul style="list-style-type: none"> • human beings, fauna and flora; • soil, water, air, climate and the landscape; • material assets and the cultural heritage; • the interaction between the factors mentioned in the first, second and third indents.
IFC Equator Principle 2: Social and Environmental Assessment	<p>For each project assessed as being either Category A or Category B, the borrower has conducted a Social and Environmental Assessment process to address, as appropriate and to the Equator Principle Financial Institution’s satisfaction, the relevant social and environmental impacts and risks of the proposed project (which may include, if relevant, the illustrative list of issues as found in Exhibit II). The Assessment should also propose mitigation and management measures relevant and appropriate to the nature and scale of the proposed project.</p>
Strategic Environmental Assessment (SEA) Directive 2001/42/EC	<p>SEA is a system of incorporating environmental considerations into policies, plans and programmes.</p> <p>The structure of SEA is based on the following phases:</p> <ul style="list-style-type: none"> • “Screening”, investigation of whether the plan or programme falls under the SEA legislation; • “Scoping”, defining the boundaries of investigation, assessment and assumptions required; • “Documentation of the state of the environment”, effectively a baseline on which to base judgments; • “Determination of the likely (non-marginal) environmental impacts”, usually in terms of Direction of Change rather than firm figures; • Informing and consulting the public; • Influencing “Decision taking” based on the assessment; and • Monitoring of the effects of plans and programmes after their implementation. <p>The EC directive also includes other impacts besides the environmental, such as material assets and archaeological sites.</p>
Environmental and Social Impact Assessment Guidelines Cement Sustainability Initiative (CSI) www.wbcdcement.org	<p>Guidelines for environmental and social impact assessment studies for the cement sector, which cover both cement plants and associated quarries.</p> <p>Biodiversity and ecosystems covered under Scoping Phase.</p>
Business and Biodiversity Offsets Program (BBOP) www.forest-trends.org/ biodiversityoffsetprogram	<p>Biodiversity offsets are conservation actions intended to compensate for the residual, unavoidable harm to biodiversity caused by development projects, so as to ensure no net loss of biodiversity. BBOP is developing a practical tool kit for managing social and environmental risks and liabilities.</p>
LIFE CYCLE ASSESSMENT AND MANAGEMENT	
Life cycle assessment and management UNEP Life Cycle Initiative lcinitiative.unep.fr	<p>The Natural resources and land use (TF LCIA 2)2 task force aims at establishing recommended practice and guidance for use for natural resources and land use categories, i.e.: water resources, minerals resources, energy carriers, soil resources and erosion, land use, salinisation and desiccation and biotic resources. It will address both midpoint categories and their relation to damage categories such as the biotic and abiotic natural environment (focus on water).</p> <p>There is no mention of biodiversity in “Life Cycle Management Guide to Sustainability for Business” (resource extraction as part of life cycle).</p>

Communication

CERTIFICATION – SECTOR-SPECIFIC

<p>Forest Stewardship Council (FSC) www.fsc.org</p>	<p>These Principles and associated criteria form the basis for all FSC forest management standards.</p> <p>Principle 1: Compliance with Laws and FSC Principles</p> <p>Principle 2: Tenure and Use Rights and Responsibilities</p> <p>Principle 3: Indigenous People’s Rights</p> <ul style="list-style-type: none"> • Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies. • Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. <p>Principle 4: Community Relations and Workers’ Rights</p> <p>Principle 5: Benefits from the Forest</p> <ul style="list-style-type: none"> • The rate of harvest of forest products shall not exceed levels which can be permanently sustained. <p>Principle 6: Environmental Impact</p> <ul style="list-style-type: none"> • Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest. <p>Principle 7: Management Plan</p> <ul style="list-style-type: none"> • A management plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated. <p>Principle 8: Monitoring and Assessment</p> <p>Principle 9: Maintenance of High Conservation Value Forests</p> <ul style="list-style-type: none"> • Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach. <p>Principle 10: Plantations</p> <ul style="list-style-type: none"> • Plantations should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests <p>There are two types of FSC certificates available from certification bodies:</p> <ul style="list-style-type: none"> • Forest Management (FM) Certificate • Chain of Custody (COC) Certificate
<p>Marine Stewardship Council (MSC) www.msc.org</p>	<p>MSC’s fishery standard, are based on the FAO Code of Conduct for Responsible Fisheries and other international conservation instruments and reflect the results of eight regional workshops and two expert drafting sessions. The three MSC principles also include 23 criteria:</p> <ul style="list-style-type: none"> • A fishery must be conducted in a manner that does not lead to over-fishing or depletion of the exploited populations and, for those populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery • Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically related species) on which the fishery depends • The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable

<p>Common Standards for Ecolabels for Tourism in Europe</p> <p>Voluntary Initiatives for Sustainability in Tourism (VISIT)</p> <p>www.yourvisit.info</p>	<p>21 principles and requirements for the Ecolabels' development, criteria and procedures, in accordance with the general ISO 14024 standards for Ecolabels. Biodiversity -related principles include:</p> <p>The VISIT Ecolabel:</p> <ul style="list-style-type: none"> • has considered product life cycle issues when setting product environmental criteria; • requires attainable levels and gives consideration to relative environmental impacts (“per unit”), measurement capability and accuracy; • is based on sound scientific, engineering, management and social principles. The criteria are derived from data that support the claim of environmental preferability (high environmental benefit and/or efficiency); • took into account during the process for establishing the criteria relevant local, regional, and global environmental issues, available technology, and economic and social issues avoiding compromising service quality; • declares that compliance with environmental and other relevant legislation is a pre-condition for the applicant to be awarded and to maintain the label; • has selected product criteria which may relate to impacts on the environment and natural resources or emissions to the environment. Such performance criteria shall be expressed in absolute (numbers) or relative (%) figures and measure units (e.g. kWh, litre, volume, weight per product, room, bed, overnight stay, m²) and may also recommend the exclusion / non-use of special materials or substances; • requires criteria in the following environmental fields as far as relevant in its area of operation and as far as relevant for the specific product group : purchasing, transport and mobility, energy, water, waste, chemical substances, air, noise, nature/landscape; and • for accommodation shall have the following management criteria which complement other Environmental Management Systems: Environmental commitment, Environmental co-ordinator, communication and training: guests, staff, public; monitoring regularly energy, water, waste consumption/overnight.
<p>GLOBALGAP (formerly EurepGAP until September 2007)</p> <p>(Global Good Agricultural Practice)</p>	<p>GLOBALGAP, the global partnership for safe and sustainable agriculture, is an industry-owned and controlled initiative working for the consumer (i.e. retailers and suppliers). A Good Agricultural Practice (GAP) framework for benchmarking existing Farm Assurance Schemes and standards including traceability and certification. The GLOBALGAP Protocol for fresh fruit and vegetables addresses 13 issues.</p> <p>Under 13.b. Wildlife and Conservation Policy, enhancement of biological diversity is included as a ‘minor MUST’. A key aim must be the enhancement of environmental biodiversity on a farm through a conservation management plan.</p>
<p>Rainforest Alliance Certification</p> <p>www.rainforest-alliance.org/certification</p>	<p>Rainforest Alliance certification ensures that goods and services were produced in compliance with strict guidelines protecting the environment, wildlife, workers and local communities. The comprehensive process promotes and guarantees improvements in</p> <p>Forestry (through Smartwood, they are an accreditor of FSC standards);</p> <p>Tourism (currently through Sustainable Tourism Certification Network of the Americas, with the aim of setting up a Sustainable Tourism Stewardship Council);</p> <p>Agriculture (including bananas, citrus, coffee, cacao, flowers & ferns, tea forthcoming).</p>
<p>“The Flower” – EU Eco-label scheme</p> <p>ec.europa.eu/environment/ecolabel</p>	<p>The EU Flower has developed criteria for 24 different product groups, covering 12 major manufacturing and 1 service area. These include relevant ecological issues and the corresponding criteria based on comprehensive studies of the environmental aspects related to the entire life cycle of the relevant product. Each product must comply with all criteria (key, best practice and performance) in order to be awarded the EU Eco-label.</p>

REPORTING	
Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 (amending Directives 78/660/EEC, 83/349/EEC, 86/635/EE and 91/674/EEC)	In the European Union, Directive 2003/51/EC of the European Parliament and of the Council of 18 June 2003 (amending Directives 78/660/EEC, 83/349/EEC, 86/635/EE and 91/674/EEC), named the “Accounts Modernisation Directive”, amends accounting requirements to enable companies to follow modern, more transparent accounting practices that are consistent with international accounting standards. The Directive requires that “the analysis should include both financial and where appropriate non financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters”
Performance Indicators Global Reporting Initiative (GRI) www.globalreporting.org	Environmental indicators relating to biodiversity EN11 (core) - Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas. EN12 (core) - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas. EN13 (additional) - Habitats protected or restored. EN14 (additional) - Strategies, current actions, and future plans for managing impacts on biodiversity. EN15 (additional) - Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.
Mining & Metals Additional Criteria GRI Sector Supplement www.globalreporting.org/ReportingFramework/SectorSupplements	Additional indicators In addition to EN11 (formerly EN6) EN23. Total amount of land owned, leased, or managed for production activities or extractive use. EN24. Amount of impermeable surface as a percentage of land purchased or leased. In addition to EN12 (formerly EN7) EN25. Impacts of activities and operations on protected and sensitive areas. (e.g., IUCN protected area categories 1–4, World Heritage sites, and Biosphere Reserves). EN26. Changes to natural habitats resulting from activities and operations and percentage of habitat protected or restored. Identify type of habitat affected and its status. EN27. Objectives, programmes, and targets for protecting and restoring native ecosystems and species in degraded areas. EN28. Number of IUCN Red List species with habitats in areas affected by operations. EN29. Business units currently operating or planning operations in or around protected or sensitive areas.
Financial Services Additional Criteria GRI Sector Supplement www.globalreporting.org/ReportingFramework/SectorSupplements	Additional indicators: F12. Total monetary value of specific environmental products and services broken down according to the core business lines. Definition of “Environmental products and services”: Products and services designed with an explicit aim to address an environmental issue(s). For example, this could include products designed to provide renewable energy, address water scarcity, enhance biodiversity , improve energy efficiency, etc.
AccountAbility’s AA1000S Series Assurance Standard	Launched in 1999, AccountAbility’s standards, the AA1000 Series, are principles-based standards that provide the basis for improving the sustainability performance of organisations. They are applicable to organisations in any sector, including the public sector and civil society, of any size and in any region. Over 150 companies use or refer to the AA1000 Assurance Standard in their reporting to date. The AA1000 Framework was developed to help organisations build their accountability and social responsibility through quality social and ethical accounting, auditing and reporting . It addresses the need for organisations to integrate their stakeholder engagement process into their daily activities. The Framework provides guidance to users on how to establish a systematic stakeholder engagement process that generates the indicators, targets, and reporting systems needed to ensure greater transparency, effective responsiveness to stakeholders and improved overall organisational performance.

<p>Tour Operators Additional Criteria</p> <p>GRI Sector Supplement</p> <p>www.globalreporting.org/ReportingFramework/SectorSupplements</p>	<p>Additional indicators</p> <p><u>Product Management and Development</u></p> <p>PMD3. Describe key environmental, economic and social issues identified in destinations and types of information gathered.</p> <p>Issues may include:</p> <p>Environment: water, wastewater, energy, and transport infrastructures; hazardous and solid waste disposal; air and water quality; land-use and biodiversity conservation; local environmental management structures.</p> <p><u>Supply Chain Management</u></p> <p>SCM9. State types of information requested from suppliers, by type, on their:</p> <p>(a) Environmental practices and performance.</p> <p>Include: Materials, water, energy, purchasing, solid waste, hazardous waste, effluents, emissions, transport, land-use and biodiversity.</p> <p><u>Cooperation with Destinations</u></p> <p>D6. Provide evidence of benefits generated (in D4 and D5), particularly at destinations, in support of community development, biodiversity conservation and other social, economic and environmental improvements at destinations.</p>
<p>Electric Utility Additional Criteria</p> <p>GRI Sector Supplement</p> <p>www.globalreporting.org/ReportingFramework/SectorSupplements</p>	<p>Additional indicators</p> <p><u>Water</u></p> <p>CommENDMA. Water: Watershed management in order to balance water supply for multiple uses (e.g., irrigation, drinking water, ecosystem conservation, tourism, etc.). Include approaches for managing watersheds for biodiversity and siltation of dams.</p> <p><u>Biodiversity</u></p> <p>CommEN13. Describe criteria and management approaches for assessing biodiversity of compensatory ecosystems. Report on how the biodiversity of compensatory ecosystem is compared to the biodiversity of the area it is replacing. Report also on provisions for facilitating fish passage around existing dams. <i>(Commentary on EN13: Habitats created or restored [Additional])</i></p> <p>CommEN14. Report on the impacts and mitigation measures to the following where appropriate:</p> <p>Forested areas (e.g., alterations to crown density)</p> <p>Landscape (e.g., impacts of wind farms)</p> <p>Freshwater and wetland ecosystems (e.g., downstream water quality including turbidity, sedimentation, siltation and water quality of the lakes behind hydro-electric dams). Assessment and mitigation should consider alterations in the migration, breeding, or habitat of animals from the reporting organization's infrastructure (e.g., power lines and dams) and its maintenance.</p> <p><i>(Commentary on EN14: Strategies, current actions, and future plans for managing impacts on biodiversity [Additional])</i></p> <p>EU14. Percentage of area under Integrated Pest Management. <i>(New Performance Indicator)</i> <i>Explanation</i> Integrated Pest Management includes management of both flora and fauna.</p> <p>EU15. Ratio of compensatory ecosystem area to total area of land acquired with high biodiversity value. <i>(New Performance Indicator)</i> <i>Explanation</i> Refer to EN11 Indicator Protocol for the definition of areas of high biodiversity value.</p>

SOCIALLY RESPONSIBLE INVESTMENT	
<p>Dow Jones Sustainability Indexes www.sustainability-index.com</p>	<p>Three dimensions, including Environmental Dimension</p> <ul style="list-style-type: none"> • Environmental performance (eco-efficiency) (weight 7.0) targets relate to reductions in GHG emissions, water use, energy consumption and waste generation. • Environmental reporting (weighting 3.0) evaluation of company's appropriate sustainability report. • Industry specific criteria (weighting dependent on industry) (tobacco and food refer to biodiversity loss)
<p>Sustainability Assessment criteria (for the Dow Jones Sustainability Indices) SAM Group www.sam-group.com</p>	<p><u>Code of Conduct</u></p> <p>19. Corporate codes of conduct have been defined at a group level (including subsidiaries), Environment, health and safety</p> <p><u>Environmental Dimension</u></p> <p>25. Environmental Performance (Eco-efficiency) including targets for GHG emissions, water use, energy consumption and waste</p> <p>26. Environmental Reporting Content, context and coverage of the environmental reporting included in other reports or on your website</p> <p><u>Talent attraction and retention</u></p> <p>37. Please indicate your company's pre-defined corporate indicators relevant for the variable compensation of all employees. Environmental metrics (e.g. corporate Emission reduction)</p>
<p>FTSE4GOOD Index Series www.ftse.com/Indices/ FTSE4Good_Index_Series</p>	<p>"Working towards environmental sustainability"</p> <p>Companies are classified as high, medium or low impact based on the environmental footprint of their activities. The higher the environmental impact of the company's operations, the more stringent the inclusion criteria based on core and desirable indicators linked to the policy, management and reporting of a company's environmental footprint.</p>
<p>Rating Criteria Covalence www.covalence.ch/docs/ CovalenceCriteria.pdf</p>	<p>26. Environmental impact Has the company adopted programmes of management of the environmental impact of its activities? What can be said about the effect of these programmes on local economic and social development?</p> <p>31. Product environmental risk Has the company taken particular measures relative to the environmental risks of certain products, c.f. reference to international agreements, cooperation with international agencies, NGOs, universities, local communities?</p> <p>33. Eco-innovative Product Has the company launched a new product or service which is environmentally friendly while contributing to human development?</p>
<p>Biodiversity benchmark scheme (developed by FFI and Insight Investment)</p>	<p><u>Companies engaged and actively managing (Score >66%)</u></p> <ul style="list-style-type: none"> • Biodiversity is acknowledged as a potential business risk and opportunity • Biodiversity risk has been formally assessed • Specific related policy commitments and management tools in place <p><u>Companies aware and mobilizing (Score 33% - 66%)</u></p> <ul style="list-style-type: none"> • Awareness demonstrated through acknowledgement of company's impact on biodiversity, its inclusion within certain aspects of risk management and/or some reference within policy documents and/or management tools <p><u>Companies in early stages</u></p> <ul style="list-style-type: none"> • Little or no evidence that potential risks relating to biodiversity have been formally assessed • No publicly expressed rationale provided for any conclusion that biodiversity is not a business risk • Policy for biodiversity risk management is limited in geographical and/or business function scope or does not exist at all

1 ec.europa.eu/environment/eia/full-legal-text/9711.htm

2 www.estis.net/sites/iciatf2

Discussion paper B: Business-related biodiversity assessments



B

Business and biodiversity assessment: a perspective

Business both affects and is affected by biodiversity and the services that ecosystems provide. While the nature, extent and intensity of biodiversity impacts may vary, all businesses – from the smallest to the largest – impact directly and indirectly on biodiversity. Biodiversity assessment represents a set of integrative and iterative tools that, on the one hand, enable a business to take action and incorporate biodiversity within its strategies and operations, and on the other, empower broader society and markets in making informed choices for a sustained supply of ecosystem goods and services.

This paper highlights a selection of the wide range of business-related biodiversity assessment tools that have been developed, finding that a few sectors, thanks to leading businesses in partnership with conservation organizations, are more advanced in applying biodiversity assessment tools. An ecosystem services approach to biodiversity assessment is likely to be more helpful in different industry sectors, including SMEs, to understand, address and communicate the environmental impacts and their mitigation.

The 2007 Business and Biodiversity Conference represents a prime opportunity to address gaps and identify priority areas to scale up biodiversity assessment as a critical element of conserving the society's endowment from nature.



The European Union, under the Portuguese Presidency, is organizing a conference on Business and Biodiversity on 12–13 November 2007 in Lisbon, with the support of IUCN. This paper serves as a background to one of four workshop streams of the Conference, focusing on biodiversity assessments in relation to business.

Biodiversity – short for biological diversity – means the variability among living organisms from all sources: terrestrial, marine and other aquatic ecosystems. This includes diversity within species, between species and of ecosystems (according to the UN Convention on Biological Diversity (CBD)). Biodiversity drives the functioning of ecosystems to provide services that underpin society and as such, enable all business to operate. Biodiversity values vary for each business but some values are shared directly or indirectly by all including: food provisioning, fresh water, climate regulation, pest regulation, recreation and inspiration. The Millennium Ecosystem Assessment, led by an international team of experts, concluded that of 24 ecosystem services assessed, 60% are being degraded. Biodiversity loss in particular has been exacerbated by habitat change, climate change, invasive alien species, overexploitation and pollution.

This paper examines biodiversity assessments as they relate to a business. The terms “biodiversity” and “ecosystems” are used interchangeably, reflecting the importance of the concept “ecosystem services” as one of the best ways for a company to relate to biodiversity. Underlying this paper is the premise that the ultimate purpose of business-related biodiversity or ecosystems assessment is to ensure that the world, including the company itself, continues to benefit in perpetuity from goods and services that ecosystems provide.

In this briefing, we provide an analysis of approaches that can be used by a business and other stakeholders to assess biodiversity. Examples of tools and methodologies for such assessment are provided in section 3, and will be useful for companies, NGOs and governments to review when considering the most constructive approaches to choose from. Section 4 identifies some fundamental issues that remain, with key questions on how to address the gaps in order to improve biodiversity assessment for effective conservation and sustainable development outcomes.

Compatible perspectives on sustainability

Business both affects and is affected by biodiversity. Some sectors, such as mining, oil and gas, have clear direct impacts on biodiversity. While the nature, extent and intensity of biodiversity impacts may vary, all businesses – from the smallest to the largest – impact on biodiversity indirectly, to some extent, through the supply chain or the investments they make. This cumulative impact has significant implications for the future provisioning of ecosystem services. Conversely, businesses rely on the services that biodiversity provides e.g. healthy, functioning soils, access to pollinators for agricultural crops. In addition, all businesses have the opportunity to enhance biodiversity, through supporting conservation projects with finance or staff time, or actively managing their land holdings, or through harnessing the energy of their workforce to apply their core business skills to conservation initiatives. Biodiversity is fundamental to the triple bottom line of a business. Table 1 below illustrates the relationship of biodiversity to business.

Table 1: Business and biodiversity inter-relationship

Dimension	Biodiversity	Sustainable business	Sustainable finance	Sustainable development
	conservation	environmental protection	environmental value	environmental protection
Economic	sustainable use	economic growth	economic value	economic development
Social	equitable sharing	social equity	social value	social development

Source: *Business & Biodiversity: The Handbook for Corporate Action, 2002*

The purpose of business and biodiversity assessments

A business needs to understand and assess the general risks and opportunities that biodiversity presents to its core activities, both directly and indirectly. A business may adopt a biodiversity policy or statement accordingly. In order to develop a strategy for implementing biodiversity policy and addressing risks and opportunities, biodiversity needs to be incorporated within a business's existing environmental management system: impact assessment is a key input here, including monitoring and assessment on the ground. To this end, businesses undertake biodiversity assessments at different levels. Apart from internal assessments, businesses also use and benefit from biodiversity assessments carried out externally by others, notably by conservation and research organizations, investors and regulators. These external assessments serve a broader purpose of establishing biodiversity baselines, benchmarks, reporting standards and good governance.

Thus biodiversity assessment represents a set of integrative and iterative tools that, on the one hand, enable a business to take action and incorporate biodiversity within its strategies and operations, and on the other, empower the broader society and markets in making informed choices for a sustained supply of ecosystem products and services.

It is on this premise and promise of biodiversity assessment that the conceptual framework summarized in Table 2 below is based and has been adopted for discussing the different facets of biodiversity assessment in this paper.

Table 2: A conceptual framework for categories of business and biodiversity assessments

Level of assessment	Internal assessment	External assessment
Strategic	1. Identifying biodiversity risks and opportunities at the corporate level to inform corporate policies and strategies	4. Assessing biodiversity from society's perspective of business performance, governance and accountability
Operational	2. Assessing biodiversity or biodiversity impacts specific to a business operation or site "on the ground"	3. Assessing biodiversity for establishing overall baselines as to the status of biodiversity and trends in its conservation (loss) over time.

In this conceptual framework, strategic level assessment is defined as an assessment carried out either internally by businesses or externally by other organizations with a view to assess overall risks and opportunities associated with biodiversity conservation across individual businesses or business sectors and/or ecosystems. In contrast, operational level assessment refers to biodiversity assessment "on the ground" and is primarily aimed at establishing baselines, biodiversity performance (against established standards, commitments and targets) and benchmarking (comparing biodiversity performance within and across business sectors). Operational level assessment too can either be internal, by the business for the business, or external by other organizations. Whether an assessment can or should be internal or external depends on the overall objective. A key contributing factor to the successful implementation of the tools above is the process by which they are implemented. Often this requires facilitation or training to build the capacity of the businesses employing them to understand and identify biodiversity risks and opportunities.

Business and biodiversity assessments

Strategic business assessments: corporate risks and opportunities

Some leading businesses in sectors with a clear direct and indirect impact on biodiversity have pioneered the identification of potential risks and opportunities arising from their activities on biodiversity and its conservation. However, many businesses lack the capacity to understand biodiversity and their associated relationship, particularly when it is indirect or further down the supply chain.

Corresponding to the first quadrant in the conceptual framework, the following are a few tools and examples of internal strategic assessment of biodiversity by business. Such assessments aim to identify and address strategic risks and opportunities in businesses as measures of their profitable and sustained operation over the long term.

Ecosystem Services Review

What is it?

Developed by the World Business Council for Sustainable Development (WBCSD), the World Resources Institute (WRI) and Meridian, the Corporate Ecosystem Services Review (ESR) is an analytical approach that enables a company to identify the business risks and business opportunities associated with the use, degradation, restoration and sustainability of ecosystem services.

How is it useful?

The ESR uses a systematic framework methodology of analysis:

- Evaluate dependence and impact on ecosystem services;
- Identify which are most significant;
- Understand the status and key trends in priority services;
- Identify resulting business risks and opportunities.

How has it been applied?

The ESR is being road-tested by BC Hydro, Syngenta, Rio Tinto and Mondi.

What improvements may be sought in future?

Road-testing of the tool is currently underway to identify areas for improvement before a full scaling-up. Meanwhile, an obvious challenge is how to make the tool applicable across the different geographies and scales of operations, where interest and capacity to collect and analyze information vary greatly.

Risk and opportunity tool

What is it?

SustainAbility, in conjunction with IUCN, has developed a draft tool that enables a business or conservation organization to map a set of key variables – degree of impact, degree of opportunity, degree of influence – based on the six interconnected sustainability issues identified by the Millennium Ecosystem Assessment: water scarcity, climate change, invasive species, overexploitation of oceans, nutrient overloading and habitat loss. Each one provides a specific reference point against which to identify implications and gauge performance.

How is it useful?

The initial aim of the tool was to provide a framework that enables IUCN and other conservation organizations to choose strategic private sector partners with respect to the ecosystem risks

and opportunities. However, consultations have identified a second use of the tool, allowing businesses to quickly and easily identify and map opportunities that present the greatest value from both business and ecosystem services perspectives.

How has it been applied?

The tool is currently in draft format and will possibly be piloted by a bank and an agribusiness. For example, a bank could use the risk and opportunities mapping tool to assess potential clients of the bank and inform the relevant investment or lending decisions. Banks and other companies could also use the tool to define their biodiversity policies/principles and targets.

What improvements may be sought in future?

The tool's current focus is on the regulating, provisioning and supporting functions of biodiversity and ecosystems. Future versions could include cultural/social issues.

Operational business assessments: site-specific baselines and impacts

This section deals with internal assessments by business of the status of biodiversity and how it might be impacted by their activities at specific sites and operations, as indicated in the second quadrant in the conceptual framework.

A number of mechanisms, methods and approaches are used by companies to establish biodiversity baselines and how precisely biodiversity is, or could be, affected by their activities. Such assessments investigate biodiversity *in situ*, resulting from a company's direct or indirect environmental footprint. Often, companies will work in partnership with other organizations that bring particular know-how, in order to assess their biodiversity impact and related impacts from business operations.

Environmental and Social Impact Assessment (ESIA)

What is it?

ESIA is the process of predicting and evaluating an action's impacts on the environment. The need to incorporate biodiversity into ESIA is referred to under article 14 of the CBD.

The European Commission Directive 97/11/EC states that "the environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case ... the direct and indirect effects of a project on the following factors:

- human beings, fauna and flora;
- soil, water, air, climate and the landscape;
- material assets and the cultural heritage;
- the interaction between the factors mentioned in the first, second and third indents."

ESIA provide a general framework to allow a company to:

- assess the current status of the environment;
- review the characteristics of the proposed development (and alternatives);
- predict the future state of the environment depending on the possible action;
- propose actions to avoid, reduce and mitigate for negative impacts, and potentially offset residual impacts.

How is it useful?

The ESIA encourages monitoring and evaluation throughout and after the life of the project and should be used as the basis of the environmental management plan for the location. It also enables adaptation of both the project design and environmental mitigation measures during the actual implementation of the project as needed.

How has it been applied?

ESIAs are legally required in the EU for certain types of projects. “Annex I” projects referred to in the EIA Directive tend to refer to large energy or construction projects, waste disposal and other projects with high potential environmental impacts. ESIAs are encouraged for “Annex II” projects, including certain types of projects relating to agriculture, extractives, energy, metal processing, chemical, food, textiles, and infrastructure.

Some sectors have responded by producing their own sector-specific biodiversity conservation guidelines, which shape business approaches to ESIA. Examples include the International Council of Mining and Metals (ICMM) *Good Practice Guidance for Mining and Biodiversity* and the Energy and Biodiversity Initiative in the oil and gas sectors. Furthermore, Shell, in partnership with IUCN, has worked to incorporate biodiversity into their ESIAs to further inclusion of habitats and ecosystems. This has also been assisted by the inclusion of ecologists in assessment teams in addition to engineers.

How can it be improved?

The inclusion of biodiversity within ESIAs has long been discussed. Current approaches which take a “list approach” have been criticized as they cannot account for the interconnected nature of biodiversity and the various services that ecosystems provide. There is a role for training/ capacity building of companies undertaking ESIAs to enable them to understand and integrate biodiversity issues, impacts and sensitivities into their analysis.

Fauna & Flora International conducted a review of the extent to which ecological factors were incorporated into impact assessment in two provinces in China. The results showed that there was a need to build capacity of the government and other key stakeholders to understand and address biodiversity issues within ESIA. This is particularly important in countries with legal frameworks that are still under development but are undergoing significant economic expansion.

ESIAs are not adequate for assessing the cumulative impacts of many projects in one area. In such a situation, a strategic environmental assessment, on the local, regional or national government level, is more appropriate, into which individual ESIAs can be linked. However, this practice is not yet widespread.

Consultation within the ESIA process is also an issue: companies may be reluctant to consult with NGOs through fear of being criticized, or concerns about confidentiality. However, stakeholder consultation is a crucial, often under-represented part of biodiversity assessments. Ensuring a representative range of stakeholders is a challenge for a company particularly in the context of many stakeholders being resource constrained.

Increasingly, environmental NGOs are being asked to take a lead in this role. Often investors and lenders put in place an independent, multi-disciplinary expert panel to review and audit the design and feasibility of larger projects, including environmental impact assessments. For example, the Sakhalin Energy Investment Company (SEIC) asked IUCN to convene an independent scientific review panel to evaluate the science around the critically endangered western grey whale population in the context of impending oil and gas development in the north-east of Russia. The panel was found to be a very useful mechanism and thus eventually transformed into a standing advisory panel on the subject.

Biodiversity Risk Assessment Tool

What is it?

During 2006 the British American Tobacco Partnership (including British American Tobacco, Fauna & Flora International, Earthwatch Institute and the Tropical Biology Association) developed a Biodiversity Risk Assessment Tool. The purpose of this tool is to provide a simple method for assessing the risks from BAT's business activities to biodiversity and ecosystems, but also the opportunities.

How is it useful?

Increasingly biodiversity is seen as one of a range of social and environmental risks which a business must manage in order to retain their social licence to operate. For BAT these risks primarily sit within the agricultural supply chain – the growing and curing of tobacco leaf and the sourcing of packaging materials. Risks in relation to biodiversity are posed where BAT is operating in proximity to ecologically sensitive sites such as protected areas and or where the environmental services of the areas are depleted.

The Risk Assessment Best Practice for Biodiversity tool identifies and prioritizes key biodiversity risks and opportunities for BAT on an operational level.

How has it been applied?

The risk assessment tool has been tested in BAT's operational companies in Uganda, Brazil and Indonesia. The tool is now integrated into the EHS biodiversity policy. All BAT operational companies will be expected to conduct a biodiversity risk assessment after this year. The assessment should involve managers, employees and other stakeholders such as local universities, NGOs and local communities. Where there is a threat to biodiversity an appropriate corrective action plan in support of conservation is required to be developed. The risk assessment tool consists of a screening exercise and three assessment stages:

- The first phase is a desk exercise and involves consultation of stakeholders and people with knowledge of the local situation. The procedure assesses threats to biodiversity; identifies potential deficiencies; and alerts senior managers to areas of concern. It identifies opportunities for corrective action. Information from agricultural or forestry extension teams and/or a specialist, NGOs or local universities are also included. It also determines if there is any likelihood of the assessor organization's operations impacting on biodiversity.
- Phase two requires field work and further consultation. It refines understanding of biodiversity impacts, issues and opportunities
- And finally, the last phase is the development of a corrective action plan.

The results of the process were used by BAT in their sustainability report for the Global Reporting Initiative's indicators on biodiversity, including protected areas (EN11) and endangered species (EN15). They also feed into the company's mainstream risk management register and are tracked alongside all other risks. The other fundamental basis of the tool was to ensure that each impact was linked to a business risk and thus that the business case for managing that risk and reducing the impact could be clearly made, justified and funded at an operating company level.

What improvements may be sought in future?

The tool is still in its trial phase. A key lesson learnt from the testing process is that capacity was needed at the site to drive the assessment and promote ownership of the findings. The tool will be reviewed and strengthened when more experience has been gathered from use in the field. It may also be linked more explicitly to methods of assessing biodiversity risks at a strategic, global level.

Site Biodiversity Action Plans

What is it?

A site (or project) Biodiversity Action Plan (BAP) is precisely that: a plan to manage the biodiversity impacts of a company's operations in a particular location. It is a company's process for identifying what to measure and manage with respect to biodiversity impact. It is distinct from Company Biodiversity Action Plans which are at a strategy level for companies, and it is distinct – but can be linked to – National Biodiversity Action Plans which are managed at a national government level.

How is it useful?

Site Biodiversity Action Plans are a way for companies to carry out the entire process of planning for and implementing actions that reduce impact on biodiversity at a given site. It is a mechanism to assess the level of significance of both primary and secondary impacts, undertake stakeholder consultations, interpret contextually relevant conditions and review needs and benefits of mitigation or offset actions taken.

How has it been applied?

ConocoPhillips has developed a Biodiversity Action Plan for its work in the Gulf of Paria, North East Venezuela. In collaboration with Conservation International, ConocoPhillips has published its assessment and response to biodiversity risks, and has dedicated a website to explaining its activities. Following a workshop with relevant local, national and international stakeholders, the company has prioritized key actions and committed to scientific research studies. Results of the scientific assessment have shown that the Orinoco River Delta and the Gulf of Paria are intrinsically connected and maintain fragile ecosystems. The BAP was useful for assessing biodiversity, disseminating knowledge, raising awareness, achieving consensus on priorities and encouraging regional conservation as well as sustainable development through cooperation among stakeholders.

Fauna & Flora International has also developed a biodiversity action planning tool as part of their partnership with Rio Tinto. This has been tested at three locations (South Africa, Namibia and Brazil) in consultation with key local and international stakeholders. The tool is still being tested but will be rolled out throughout Rio Tinto's operations, prioritizing those which have been identified as being biologically sensitive.

What improvements may be sought in future?

BAPs must be accompanied by an upfront and thorough consideration of how the operations of a company are affecting biodiversity and how that impact can be avoided or reduced. Stakeholder consultation and input is a key component of the action planning process; without this there is a risk that risks and opportunities remain unidentified. Care should be taken that a BAP does not simply provide anecdotal evidence of a biodiversity project at one point in time, but that necessary attention is paid to all measures taken to avoid, reduce, mitigate and offset impacts. Responsibility and resources need to be clearly assigned at site level to drive the implementation of the action planning process, and the results need to be clearly linked to mainstream risk and environmental management processes.

Rapid Ecological Assessment

What is it?

The Nature Conservancy designed the Rapid Ecological Assessment (REA) as a method for establishing a baseline of species-level biodiversity across landscapes. As a broad survey

of vegetation types and species, it provides a basis for informing conservation planning. It prescribes a ten-step sequence of events for carrying out a high-level assessment of biodiversity and conservation requirements. The ten steps include conceptual development; initial planning; landscape characterization; planning workshop; training workshop; field implementation; report generation; information integration and synthesis; final report and map; publication and dissemination of products.

How is it useful?

Companies may find REAs a useful way of establishing a biophysical baseline in an area where they are planning to operate. The method allows a fuller understanding of the environment, and a basis for ongoing monitoring of biodiversity density and distribution, and so setting performance objectives.

Companies may find information from a rapid ecological assessment helps planning to minimize impact caused by large-scale development projects, which includes both the primary impacts of operations and the secondary impacts of infrastructure development and social changes that their presence brings.

How has it been applied?

Conservation International's Initial Biodiversity Assessment & Planning (IBAP) tool is an example of how the REA approach has been adapted to the specific requirements of companies with large-scale development projects. For example, Alcoa and Alcan are working with the organization to implement an IBAP which will influence the siting of a new alumina refinery in Guinea.

What improvements may be sought in future?

The concept of REA, and the setting of conservation objectives, has been successfully formulated to suit the needs of business with the IBAP approach. While it helps companies incorporate biodiversity into their risk analysis and decision making, the performance measures used at specific sites and criteria for management at each stage, still need further development.

Business and biodiversity offsets

What is it?

A biodiversity offset is a conservation action designed to compensate for the residual, unavoidable harm to biodiversity caused by development projects, so as to ensure no net loss of biodiversity, and possibly a net gain. A successful and credible biodiversity offset entails a robust biodiversity assessment. The Business and Biodiversity Offset Program (BBOP) is an international partnership between companies, governments, financial institutions, conservation organizations, and scientists which seeks opportunities worldwide for businesses to voluntarily create biodiversity offsets that support conservation. BBOP is pushing impact assessment further to a more robust level to measure negative as well as positive impacts of conservation measures related to development projects.

How is it useful?

Biodiversity offsets represent a practical tool which enables businesses to address environmental risks and liabilities. This innovative approach to conservation, linking environmental and economic choices, could become a standard part of business practice for those companies with a significant impact on biodiversity. An important element is being able to determine the baseline, quantify the impact of the development as well as of the conservation actions, in order to demonstrate no net loss to biodiversity, or a net positive impact. BBOP is collecting and

analyzing methodologies for assessment of biodiversity and impacts, including socio-economic dimensions, to develop a tool that could eventually be applied to all development projects.

How has it been applied?

BBOP is developing a portfolio of pilot projects worldwide – ranging from large-scale energy projects, to mining sites, housing developments and small-scale tourism resorts – which are in the process of testing and improving the offset toolkit in order to demonstrate no net loss of biodiversity and livelihood benefits. Fauna & Flora International and Earthwatch have worked with Rio Tinto on developing offsets in Brazil.

What improvements could be sought in the future?

With regard to biodiversity assessment, key issues to be resolved include:

- What are the most practical methodologies for quantifying impacts on biodiversity and conservation gains? BBOP is exploring methodologies that will quantify structural, compositional, functional and livelihood aspects of biodiversity. It remains to be seen whether methodologies can be achieved for assessment that adequately measure biodiversity while keeping transaction costs manageable.
- When conservation actions relate to biodiversity that is not “like for like” or ecologically equivalent to the biodiversity on the original impact site (for example, if the conservation action takes place on a different site), how can different elements of biodiversity be compared and relative gains in biodiversity be accounted for?

BBOP are engaging with the International Association of Impact Assessment and other sustainability schemes to address these questions.

External assessment: biodiversity indicators and baselines

Much of the biodiversity assessment by business draws on research, tools and approaches developed by research institutions, conservation organizations and environment agencies, often externally and independent of business, though at times in collaboration. These operational level assessments (third quadrant of the conceptual framework) inform and facilitate biodiversity-related assessments and actions by business. More significantly, these assessments define the broader biodiversity contexts in which business operates, and help in assessing and tracking business performance, governance and accountability in relation to biodiversity. There are a number of opportunities available for companies to strengthen external approaches to assessing biodiversity *in situ*, and to eventually benefit from the outcomes.

Designated sensitive areas

What is it?

Designated sensitive areas refer to those regions of the world that are classified by internationally respected organizations as being particularly valuable to society from a biodiversity perspective.

Common systems for designating sensitive areas include:

- IUCN’s protected areas: ranked in terms of management objectives from I to VI;
- BirdLife International’s International Bird Areas;
- Ramsar’s List of Wetlands of International Importance;
- Natura 2000: a network of protected sites in the European Union which represent areas of the highest value for natural habitats and species of plants and animals which are rare, endangered or vulnerable;

- WWF's Ecoregions: broad geographical zones recognized as containing valuable species and habitats;
- Conservation International's Conservation Hotspots: areas with especially high levels of biodiversity and/or endangered or threatened species.

How is it useful?

It is very useful for companies to know which areas are considered to be of high value from a conservation perspective. Those are the areas in most urgent need of protection. However there are limitations to this concept, particularly given that protected areas do not always hold areas of high biodiversity. Sensitive areas also provide a useful reference point for assessing biodiversity risks, for avoiding areas of high risk (inescapable loss of biodiversity) and for prioritizing a company's direct and indirect impacts most in need of management.

How has it been applied?

All industry sectors can benefit from knowledge of sensitive area designations. For example, in considering its supply chain impacts, a food and drink company that procures a range of agricultural commodities could start its investigations by inquiring which sensitive areas are affected by those regions in which it has ownership over farmland. Alternatively, in considering its direct footprint, an oil company may want to refer to sensitive areas when reviewing pipeline construction so that it understands which areas are best to avoid disturbing. Banks that are signatories to the Equator Principles may modify their lending requirements for projects that are planned in sensitive areas as a way of reducing their negative impact.

A company can increase its level of public accountability by committing to behave in certain ways when operating in sensitive areas, or identifying certain "no-go areas" where it will not operate. For example, mining companies that are members of the International Council for Mining and Minerals (ICMM), recognize that certain areas will need to be protected from intensive development and have committed not to mine in World Heritage sites and to explore the basis for defining other "no-go" areas. Similarly, Shell has committed not to explore or drill for oil in World Heritage sites, and to publicly report on activities in protected areas of IUCN PA Management Categories I-IV. This is in part the business response to the Amman Recommendation from the 2nd IUCN World Conservation Congress (2000) calling for restrictions on mining, and oil and gas exploration in IUCN Categories I-IV protected areas.

In the financial sector, ABN AMRO uses IUCN PA categories as one of their filters for assessing investment/lending decisions in the extraction sector. Goldman Sachs is conscious not to invest or lend in critical habitats defined to include, amongst others, IUCN Categories I-IV protected areas.

What improvements may be sought in future?

Some argue that creating "no-go areas" can actually hinder sustainable development because it may inhibit increases in wealth, health and well-being of local communities. Furthermore, it may result in the substitution of businesses that are sensitive to environmental issues with those that are less responsible. Careful investment, it is argued, may be more beneficial than leaving areas free for less careful operators or no investment at all. Future improvements are therefore both possible and needed in related public and corporate policies, standards and in their respective applications. For example, the principle of protecting critical biodiversity areas from intrusive developments could be strengthened: on the one hand, by more rigorously defining "no-go" areas to have society-wide acceptability and by striving for more coherent and uniform enforcement of protected areas and "no-go" policies; and, on the other hand, by companies providing adequate and assured investments for improving host environments and communities.

IUCN Red List of Threatened Species

What is it?

The IUCN Red List is the world's most comprehensive inventory of the global conservation status of plant and animal species. It uses a set of criteria to evaluate the extinction risk of thousands of species and subspecies. These criteria are relevant to all species and all regions of the world. With its strong scientific base, the IUCN Red List is recognized as the most authoritative guide to the status of biological diversity.

The overall aim of the Red List is to convey the urgency and scale of conservation problems to the public and policy makers, and to motivate the global community to try to reduce species extinctions. Birds and amphibians have been completely assessed.

How is it useful?

Governments, the private sector, multilateral agencies responsible for natural resource use, and environmental treaties all need access to the latest information on biodiversity when making environment-related decisions. Information about species and ecosystems is essential for moving towards more sustainable use of our natural resources. It can be used as one of a number of pieces of information to feed into ESIA, Rapid Ecological Assessment and biodiversity risk assessment or action planning.

How has it been applied?

A number of corporate assessments encourage the inclusion of endangered species, including the Global Reporting Initiative Reporting Guidelines, which under additional indicator EN15 asks for the "number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk". The social and environmental impact assessment element of the Equator Principles goes further and includes the protection and conservation of endangered species. Similarly, the Roundtable on Sustainable Palm Oil states under Criterion 5.2 that endangered species shall be "identified and their conservation taken into account in management plans and operations".

What improvements may be sought in future?

The IUCN Red List is a global reference for endangered species and is freely available for businesses to access and include in their initial assessments. However, assessing biodiversity is more than species richness. The number of species in an ecosystem does not take into account how variable each species might be, or their contribution to ecosystem properties. Several other taxonomic attributes are valuable for assessment and monitoring, including abundance, variation and distribution.

The Red List is responding to demands to make relevant data available in a format that is more readily usable for decision makers by working with business groups, development organizations and others in the conservation community. In the meantime, this data needs to be used in conjunction with other assessment schemes.

Table 3: 2007 Red List Indicators

Major group of organism	Mammals	Birds	Amphibians	Fish	Invertebrates	Plants
Number of threatened species worldwide in 2007 (as a % of species evaluated)	22%	12%	31%	39%	51%	70%

National Biodiversity Strategy and Action Plans

What is it?

National Biodiversity Strategy and Action Plans (NBSAPs) are promoted under the UN Convention on Biological Diversity as an internationally recognized programme for addressing threatened species and habitats and are designed to protect and restore biological systems. Though Member States are encouraged to produce NBSAPs, smaller Biodiversity Action Plans (BAPs) can also be developed on a local or regional scale by civil society organizations and companies.

How is it useful?

When local BAPs, national plans for priority species and habitats, country strategies and business BAPs are collated, an overall and up-to-date picture of the state of a country's most important biodiversity is provided, enabling better informed decisions and policies, such as priority habitats or maps of actions taken concerning a key species.

How has it been applied?

For example, the Biodiversity Action Reporting System (BARS) is a web-based database and reporting tool used in the UK. The widespread use of the system in the UK and the standard format for data entry allow all organizations and companies to share their knowledge and best practice on BAP implementation speaking a common language. Local BAP partnerships, national plans steering groups, individual organizations and business companies all use BARS to report on their actions to protect important species and habitats, also making the system a useful tool to publicize their biodiversity work and promote best practice amongst the BAP community. Currently six UK companies have added their biodiversity strategies/action plans into the system. Some companies have entered their own action plans; others work in partnership with other organizations in the delivery of local BAPs.

What improvements may be sought in future?

Building on a similar process to BARS, businesses should be enabled to extract information from, as well as contribute to, NBSAPs. This will help to ensure that business actions resulting from a biodiversity assessment fit in within the wider regional and national context, not only adding value to those actions but also improving their relevance and likelihood of long-term success. Business BAP input also ensures that national assessments more accurately reflect current biodiversity status and progress.

Scientific field research

What is it?

Collaboration in independent scientific field research provides a company with the opportunity to demonstrate its contribution to society's shared need to better understand and respond to global biodiversity loss. It offers a way to investigate components of biodiversity that are being affected by environmental change.

There are a number of different methods that may be employed: monitoring biodiversity changes over time, investigating the linkages between different ecosystem components, or assessing the viability of different policy interventions.

How is it useful?

Scientific field research is most useful when it is rigorous and when it leads to recommendations and action. On the one hand, partnering in scientific field research may provide a way to assess baseline conditions of an area before a company starts development activities in an area – its

responsibility to core stakeholders. On the other hand, participation in scientific field research may provide a vehicle for a company to make a positive contribution to understanding and management of biodiversity in areas that are unconnected to the company's activities – its responsibility to society.

How has it been applied?

Scientific field research is often undertaken in partnership with external academic partners or NGOs. It exemplifies how the aspirations of two different organizations can be met while undertaking a shared project.

Earthwatch has developed a model for involving employees of companies directly in scientific field research, making a contribution to the company's goals and to the goals of the scientific community. For example, in collaboration with Cadbury Schweppes, University of Reading and Ghana's Nature Conservation Research Council, Earthwatch has been investigating the relationship between biodiversity and cocoa productivity in different farms in Ghana.

Conservation International has also linked the business interests of companies with their scientific field research competence by developing a "Rapid Ecological Assessment" method to assess biodiversity in the context of ecosystems in locations that are being considered for development.

What improvements may be sought in future?

It is important that companies participate in scientific field research that is action-oriented, and that study findings are used to promote sustainable development. For example, measuring and monitoring biodiversity is most useful where it is linked to management objectives (e.g. how greater biodiversity adds value and opportunity for ecotourism, or how a mine site affects the distribution of species, is only worth knowing if there are aims and objectives put in place to maintain a certain desired level or distribution). Also, scientific research that fully investigates the role of biodiversity in the context of ecosystems and ecosystem services is likely to highlight the utility of biodiversity – and therefore highlight a business case for improved management.

External assessment: corporate biodiversity performance and accountability

This section corresponds to the fourth quadrant of the conceptual framework dealing with strategic level biodiversity assessment by organizations external to a company. Such assessments focus on establishing broader baselines and benchmarks that can support businesses in developing their own business or site-specific baselines, and enable an assessment and comparison of biodiversity performance within and across businesses.

There are a number of methods that are used by external stakeholders to gauge the quality of a business's biodiversity performance. External assessments are useful in general as they are perceived as independent and therefore credible, albeit they have bias in defining what constitutes "good" management. The main groups to perform external assessments are investors, business associations, NGOs and regulators, such as the EU. In some cases, different interest groups may collaborate. External assessments are also very useful for companies to refer to in understanding what is expected of them and in identifying what aspects of management to improve.

Finance sector benchmarks

What is it?

Benchmarking provides an objective and consistent basis for examining comparative risk exposure and management of companies on biodiversity. Benchmarks therefore provide a very useful reference point in engagement between all stakeholders (e.g. government and NGOs as well as investors) with a company on what aspects of performance might need to be improved.

How is it useful?

Benchmarks may be a useful way to stipulate the need for companies to clarify governance structures, policy and strategy, management and implementation, assurance and reporting, and leadership aspects of biodiversity management.

How has it been applied?

A good example is Insight Investment's Extractives Industry Biodiversity Benchmark, which indicates best-practice principles and standards. It has been applied to 22 (2004) and then 36 (2006) companies in the UK from the mining and minerals, oil & gas, and utilities sectors. In each sector, companies are rated as being either a) engaged and actively managing b) aware and mobilizing or c) in early stages. ISIS Asset Management has undertaken a similar assessment for the mining industry. The results of this work are used by the asset managers in conjunction with a process of engagement to encourage improvement in performance.

Benchmark scores may also be used by NGOs to vet which companies they work with and on what issues. Scores are also a basis for advocating what changes in approach to biodiversity management are desirable or necessary.

What improvements may be sought in future?

The scores generated rely on corporate information and how the tools adopted are applied, and so could benefit from some level of verification. The benchmark may not reflect the extent of biodiversity impact by the company operations "on the ground". Also, to date, the benchmark methodology has only been used for companies with a direct footprint on biodiversity.

A Natural Value Initiative is a new benchmark currently being developed by Fauna & Flora International, Brazilian business school FGV and UNEP FI and will adopt a similar methodology to identify the business case and best practice for supply chain management amongst food, beverage and tobacco companies. This is an important step towards measuring upstream biodiversity impacts in a supply chain.

Investment screening processes

What is it?

Financial institutions may use screening methodology to measure how well companies manage biodiversity risks. Some investors, particularly in the rapidly expanding area of socially responsible investment, may use screening to inform their decisions of which companies to invest in, or extend credit to. The aim of screening processes is to generate a methodology which is as consistent as possible across companies and between sectors. Examples of investment screening processes include the Dutch Association of Investors for Sustainable Development's (VBDO) Biodiversity Quick Scan and the CBD Convention Watch developed by Ethical Investment Research Services (EIRIS).

How is it useful?

Screening processes increase accountability and transparency of companies for their actions. They provide a useful reference point for conversations between the investor community and companies on the topic of biodiversity management and reduce the risk of exposure from non-compliance litigation, and campaigns. The screening processes that we refer to aim to translate the intent of the Convention on Biological Diversity to the case of companies.

How has it been applied?

In order to assess a company's adherence to the principles of the CBD, EIRIS apply their Convention Watch methodology. They monitor the occurrence of public allegations that a company may have breached either the conservation or sustainable use principles of the convention, and provide companies with an opportunity to demonstrate how they have addressed the allegations through their policy and actions. For example, Alcoa's development of an Aluminium smelter in Eastern Iceland is resulting in the development of a power station that is estimated to affect fragile habitats and 3% of Iceland's land surface. Following a challenge on its biodiversity impact from a number of campaigning organizations, EIRIS requested Alcoa to provide a formal response. Alcoa articulated a biodiversity policy, details of comprehensive biodiversity assessments and mitigation of impact, in addition to research.

What improvements may be sought in future?

In so far as it highlights relevant and important breaches, screening methods encourage better management. However, only high-profile reported cases will be addressed through the method and this probably therefore limits it to monitoring the biggest impacts of the biggest companies. In themselves, screening processes are useful, but to be really useful to companies they should be accompanied by technical assessment of biodiversity "on the ground".

Global Reporting Initiative Sustainability Reporting Guidelines

What is it?

The Global Reporting Initiative (GRI) promotes and develops a standardized approach to sustainability reporting. To this end, they have produced a series of guidelines based on economic, social and environmental indicators. Following a large consultation process, the guidelines were revised in October 2006 (known as G3), to improve and expand a number of indicators, including biodiversity.

How is it useful?

Companies use the reporting guidelines as a checklist of indicators to include in their sustainability reports. Reports based on the GRI framework can be used by stakeholders and competitors to benchmark organizational performance with respect to laws, norms, codes, performance standards and voluntary initiatives; demonstrate organizational commitment to sustainable development; and compare organizational performance over time.

How has it been applied?

Early environmental reporting focused primarily on the direct negative impacts on environment. GRI, with its direct reference to biodiversity in the general guidelines, ensures that the more than 1000 companies that use the GRI guidelines at least consider biodiversity within their impacts.

Previous biodiversity reporting within corporate reports was considered to be random and inconsistent. The indicators themselves were also considered ill-defined. The revised guidelines now include specific references to protected areas and categories of endangered species. Also, a greater emphasis was included on habitats protected and restored rather than simply changed.

GRI have also produced a biodiversity resource document, published in early 2007, with a view to explaining the biodiversity component and suggesting sources of information on how to report on the indicators. Improvements in reporting performance will only be gauged following publications of 2007 reports in 2008.

What improvements may be sought in future?

GRI guidelines are broad in order to be inclusive and adapted to all business and are therefore limited in nature. Sector supplements have been developed to focus on specific issues and needs of companies in different sectors. These have been developed with existing sector-specific groups, such as ICMM. The current GRI guidance is also perceived by some as playing to the lowest common denominator: the indicators are currently insufficient to be able to identify and manage biodiversity impacts. Companies leading in this area require significantly greater input. Improved guidance is also required in terms of indirect impacts on biodiversity, which are harder to gauge and can be significant.

Indicators to measure progress in Europe for the 2010 biodiversity target

What is it?

Developed by the European Environment Agency, the set of 26 indicators is a useful tool for measuring and helping to achieve progress towards the European target to halt the loss of biodiversity by 2010. Some of the indicators directly track the impact on a component of biodiversity, whereas others reflect threats to biodiversity, its sustainable use and integrity. The set as a whole can be used to help assess the effect of various sectors and sectoral policies on biodiversity.

How is it useful?

The proposed indicators have streamlined many existing indicators across EU countries to provide a consistent format for summarizing complex and often disparate sets of data and thereby simplify information, enabling a comparison of progress. The indicators also enable the identification of where Europe needs to take further action in order to meet its target.

How has it been applied?

The indicators are not intended to be comprehensive, but to provide a first set, based on available data. The set is intended to be as representative as possible and flexible. Moreover, they can also complement other sets of indicators designed to assess progress in other policy sectors. For a business, it remains to be seen whether the indicators can also be applied on an operational or site level. Businesses can monitor their progress towards achieving national and/or European biodiversity objectives.

What improvements may be sought in future?

The proposed indicators were released in October 2007 and further feedback is sought. In the interim the European Environment Agency acknowledges that further work is required. For example, socio-economic driving forces were not included in the first set of indicators.

More generally, EEA calls for improved collaboration and coordination between the vast array of actors and existing data and methodologies. To improve the indicator set, additional methodological areas for development are also identified, including accounting for the physical stocks and flows of ecosystem goods and services; the valuation of ecosystem goods and services; biodiversity and climate change impacts and adaptation links; and modelling future trends for biodiversity and ecosystems in Europe and in the global context.

Conclusions and recommendations

The key points from the four categories of assessments are summarized below, as well as overall observations and recommendations.

Strategic business assessments: corporate risks and opportunities

- The risks and opportunities of biodiversity need to be understood and assessed for an individual business in a given sector. Tools such as those listed earlier provide such a framework.
- The companies can usefully employ these approaches to identify and manage their biodiversity footprint.
- From the subsequent analysis, senior executives may adopt a relevant policy or statement which includes targets to be met both globally and on the ground.

Operational business assessments: site-specific baselines and impacts

- Conventional environmental impact assessments do not specifically include biodiversity issues in their screening phase. Tools such as the BAT's Risk Assessment Tool and the Rapid Ecological Assessment can be incorporated into EIA stages.
- Tools that initially focused on biodiversity and reputational risk are now developing to consider ecosystem services and security of supply.
- Assessing how biodiversity and variability of life is affected by company operations may be useful for clarifying the level of impact (e.g. a construction company establishing the footprint of a real estate development) or developing sustainable strategies (e.g. a coffee company establishing guidelines for cropping and production by farmers).
- Defining robust biodiversity indicators against which reliable baseline and performance assessment can be established remains an unfinished agenda. Some sectors are more advanced than others.
- A widely accepted generic tool is lacking in this area.
- Working in partnership with organizations having relevant technical competency is often the most effective approach to assessing biodiversity affected by company operations.

External assessment: biodiversity indicators and baselines

- Data is currently provided largely by public and civil society environmental organizations that are also leading the development of strategic concepts and approaches to biodiversity assessments, at times in partnership with business.
- Companies can make a positive contribution to biodiversity conservation by participating in scientific assessments.
- Companies improve their understanding of biodiversity, associated business risks, and management of those risks – especially if business occurs at the research site, or in its vicinity or in a similar environment.

External assessment: corporate biodiversity performance and accountability

- The companies can use the overall assessments and baselines established by external organizations in establishing their own business and site-specific baselines and performance targets. The companies can also use external assessments in monitoring biodiversity changes and managing impacts in relation to their activities “on the ground”.
- External measurements that different stakeholders agree to are a powerful tool to enhance the accountability of companies.
- Disparate groups of stakeholders often share a common interest in assessing the quality of a company’s biodiversity management.
- One of the more powerful external approaches to assessing the quality of a company’s biodiversity management is from investors, using benchmarks and screening.

Assessing ecosystems and business

Overall, successfully assessing and managing biodiversity will require adoption of a number of internal and external approaches and methods, which investigate both business performance and biodiversity *in situ*. A number of different approaches should be taken in order to strengthen overall management and, to be most workable and effective, those approaches must be viewed in light of how a company relates to biodiversity and ecosystem services. And the voluntary approaches must not stand alone – to achieve high-level EU targets, they must be accompanied by further fiscal and regulatory incentives.

The Millennium Ecosystem Assessment has provided more tangible evidence of how the interests of global society can be met through conserving ecological services. We therefore believe that the *Business and Biodiversity* agenda has become an *Ecosystems and Business* agenda. In a world where there are scarce resources, and the allocation of ecological services to contribute to human well-being will become increasingly important (and contentious), it is important that decisions are made that will maximize the synergies between different ecosystem services. The methods and approaches to biodiversity conservation, including those listed in this paper, do not become obsolete by any means; but their importance should be seen in the context of whole ecosystems.

Within this recommended approach, every company should (as a minimum) assess its operations and activities with regards to the six specific challenges put forward by the Millennium Assessment, as an organizing framework. These challenges are: water scarcity, climate change, invasive species, overexploitation of oceans, nutrient overloading and habitat loss. Each one provides a specific reference point against which to identify implications and gauge performance. Every company should consider its impact in terms of the links between ecosystem services and human well-being, which include regulating, provisioning, supporting and cultural services. This should also form the basis for stakeholder engagement processes that recognize the value that the environment offers to external groups. Adopting a whole ecosystems view, on the basis of ecosystem services, is the best way for companies to relate to biodiversity, in gearing operations to environmental impacts that matter most and in marketing concepts of biodiversity conservation to internal audiences.

This review has highlighted a number of examples of assessment tools and methodologies that can be used by a business to assess biodiversity and ecosystem services. However, they represent just the tip of the iceberg. In reality, many more schemes exist. For example, over 40

different methods for determining offsets for wetlands are used in the United States. Approaches that attempt to standardize biodiversity and business performance assessment are very welcome, such as those being developed by BBOP.

Underlying all types of business-related biodiversity assessment is the need for performance indicators which can be used to assess whether a target has been achieved. For example, when a business states an overall strategic aim of “no net loss” of biodiversity, or even a “net positive impact”, how can this be measured? On the rehabilitation of a mine site, how can a business determine whether it has successfully reintroduced key flora or fauna species? For NGOs working in partnership with business, how can the biodiversity benefits of those partnerships be verified? Responsible investors too need performance indicators to credibly assess whether a business has sufficiently avoided, minimized and mitigated the impacts of an infrastructure development.

It is important that indicators – including actions measured, scale and reporting – are adapted to the needs and objectives of the assessor. Depending on their relative key features, such as biodiversity components linked to a business opportunity, targets should be set for the relevant attributes, including biodiversity components that fulfil important ecosystem services. Such targets should, where possible, be SMART: specific, measurable, achievable, realistic, time-specific. In addition, decisions should also be taken on where, when, how and by whom the measurements should be taken.

Another remaining issue is the difficulty of identifying what to measure for biodiversity conservation performance assessments and how to measure it. For example, knowledge is lacking on how much an ecosystem can be simplified but still provide the ecological services upon which society depends. Biodiversity knowledge has been developed opportunistically by differing groups, resulting in information that is too patchy and selective for optimal long-term planning. The relevance of the assessment systems that have been developed to date could be improved under a coherent assessment framework.

Some suggest further that performance measures vary so considerably between business sectors, environmental organizations and assessors that generic indicators are unlikely to be successful. GRI have started to respond to this by producing Sector Supplement Guidelines. Such an approach implies that a uniform set of biodiversity performance indicators applicable across all sectors is not possible to define or would be too generic. Considering that much of the biodiversity assessment work in the past has focused on extractive sectors, **what other sectors must now be targeted as a priority for developing and instituting adequate biodiversity assessment frameworks?** However, the issue remains that biodiversity indicators vary from site to site depending on threats, management activities, impact and stakeholder interests and values, hence making consolidation difficult.

Equally important and requiring attention is the outstanding issue of small and medium-sized enterprises (SMEs). The sector assessment frameworks in the extractive industry and elsewhere have primarily remained limited to large multinationals. SMEs cannot be reached without a conscious and concerted effort. A particular challenge is the lack of awareness, means and motivation to assess and report biodiversity performance. Any assessment system that is excessively demanding in terms of indicators and data collection is unlikely to be successful. **Is it possible to develop a few simple – even if simplistic – indicators and a related assessment framework to enable SMEs to at least begin assessing and reporting on their footprint while harnessing the opportunities that biodiversity assessment offers?**

Questions remain as to what the EU, civil society, and companies can do to address the gaps for biodiversity assessment over the next few years. Options include:

- More robust articulation and awareness raising of the business cases for managing biodiversity and ecosystem risks and opportunities.
- Supporting work on the internalization of environmental costs in financial models, perhaps based on the G8 Potsdam Initiative's call for a biodiversity equivalent of the Stern Review on the economic costs of climate change.
- Developing a framework for reporting biodiversity performance, similar to the WBCSD's work on the GHG reporting protocol.
- Developing, with business, a simple "to-do" list of biodiversity indicators, especially for getting biodiversity assessment work off the ground in SMEs, potentially building on the work of the RSPB's Biodiversity Technical Assistance Units project.
- Creating mechanisms to stimulate voluntary actions alongside regulatory compliance for biodiversity conservation.
- Advocating and promoting the selection and targeting of other priority sectors, beyond the extractive industry, for biodiversity assessment and reporting.
- Building ESIA capacity in countries where the rate of development is high and capacity is low.

The 2007 Business and Biodiversity conference in Lisbon provides the opportunity to explore and respond to these questions and imperatives.

For **Workshop B: Business-related biodiversity assessments**, additional reading included:

- Measuring biodiversity for conservation (Royal Society, 2003)
- A review of biodiversity conservation performance measures (Earthwatch Institute, 2006)
- Performance standard 6: Biodiversity conservation and sustainable natural resource management (IFC, 2006)
- Protecting shareholder and natural value (Insight Investment, 2006)

Discussion paper C: Markets for biodiversity goods and services



Building Biodiversity Business

Based on in-depth interviews and a detailed literature review, this forthcoming report provides a snapshot of the biodiversity business landscape. It reviews a range of biodiversity business sectors, assesses what has worked (or not) and why, describes the main constraints and identifies opportunities to expand market-based biodiversity conservation within each sector. The report also reviews the policy frameworks, technical resources and financing mechanisms needed to enable biodiversity businesses to grow, in each case highlighting lessons learned from experience and future opportunities.

The authors conclude that there are numerous pro-biodiversity business opportunities that can generate positive financial returns as well as real biodiversity benefits. Many initiatives have been established with impressive results – however, none have achieved significant scale or leveraged substantial private investment. There is a need to build on existing initiatives, recruit additional investors and entrepreneurs, and ‘raise the bar’ in terms of both the scale and conservation benefit of private investment. To this end, three separate but related institutional functions must be fulfilled: namely the development of appropriate enabling policy; the provision of technical and managerial support tailored to biodiversity business; and access to appropriate finance from investors who understand the particular constraints and opportunities of creating new businesses and markets.

Shell and IUCN plan to publish the final report by the end of 2007.

Executive Summary

Biodiversity forms the foundation and fabric of life on earth but is eroding beneath the feet of human activity. In the poorest countries, the deterioration of the natural environment is making it increasingly difficult for millions of people to meet even bare subsistence needs. Equally, as countries prosper, society is becoming less tolerant of environmental damage and increasingly aware of the extent to which our economies depend on healthy and diverse ecosystems.

Successive international treaties and national strategies have committed governments to stem the tide of biodiversity loss. An imposing edifice of environmental policy is in place in most countries. As much as US\$ 20 billion per year is raised from public finance and private philanthropy for global conservation activities – much of this money is used to maintain over 100,000 protected areas covering nearly 12% of the world’s land surface. Yet all this is not sufficient. The fact is that current efforts to conserve biodiversity are overwhelmed by the adverse impacts of growing human economies. Spending on protected areas remains deficient and undervalued ecosystem services are being eroded.

If current approaches to conservation are not sufficient, what more can be done? One answer is to harness the very market forces that are often blamed for biodiversity loss. The challenge is to re-orient the economic incentives that drive private investment, production and consumption, and to make biodiversity conservation a viable business proposition in its own right. In other words: *building biodiversity business*.

Biodiversity business is defined in this report as: ‘commercial enterprise that generates profits via activities which conserve biodiversity, use biological resources sustainably, and share the benefits arising from this use equitably’.

This definition reflects the three over-arching goals of the United Nations Convention on Biological Diversity (CBD), which also calls for increased efforts to enlist the private sector in biodiversity conservation, sustainable use and equitable benefit sharing. In both the environmental and business communities, there is growing recognition of the potential to conserve biodiversity on a commercial basis. If even a small proportion of private capital flows, international trade and national economic output could be harnessed for biodiversity business, the resulting contribution to conservation would be enormous. Increased private investment in biodiversity business would have the greatest impact in developing nations, where the conservation funding gap is most extreme and where many critically endangered species and habitats are virtually unprotected today.

This report presents a snapshot of the emerging biodiversity business landscape, its constraints, opportunities and requirements. It is based on a 12-month study involving literature review, analysis and extensive consultation with practitioners, policy makers, donors and commercial investors.

From a conservation perspective, a major attraction of biodiversity business is the potential to generate new and additional investment in conservation activities. At the same time, some people remain sceptical of the motives of the private sector; while others worry that market-based approaches may distort conservation priorities. Nevertheless, this report argues that *not* exploring what markets can deliver is no longer an option.

From a business perspective, the reasons to invest in biodiversity business are increasingly compelling. They are most obvious in cases where private profitability depends directly on the health of ecosystems – ecotourism ventures, for instance. Similarly, it is now recognised that greater variability in genes, species and ecosystems is associated with increased resilience and biological productivity in agriculture, ranching, forestry and marine fisheries. Even businesses in urban areas, lacking a direct interaction with the natural world, can be motivated by new policy incentives and changing consumer preferences to ‘go green’. Corporate action on biodiversity can help businesses distinguish themselves from competitors while also improving relations with investors, employees, local communities and others.

New biodiversity business models may also help reduce rural poverty. While employment and skills development are a normal part of every business, biodiversity business has the added benefit that it often stimulates a flow of funds from relatively wealthy urban centres to the countryside, as well as from industrialized to developing nations. Growing markets for ecosystem services and for biodiversity-friendly energy, food, fibre and recreation should provide ample opportunities for rural entrepreneurship and employment.

Today, biodiversity conservation is mainly viewed by business as a risk or liability, rather than a potential profit centre. However, this perception is beginning to change. As public awareness of the global biodiversity crisis grows, an increasing number of companies see a business advantage in developing processes to integrate biodiversity into their operations, as well as seeking market-based solutions and opportunities. Furthermore, even with modest initial returns from most biodiversity business investments – in the range of 5–10% per annum – there are significant profits to be made as the sector grows from niche markets to mainstream business.

A broad spectrum of different sectors and models of biodiversity business are examined in detail in this report. Their status and trends are described, along with constraints and opportunities for investment.

Examples include organic agriculture and certified timber. By demonstrating the potential of more sustainable production practices, these businesses are showing the way forward for mainstream agriculture and industrial forestry – sectors historically responsible for significant biodiversity loss. Although accounting for less than 5% of the overall market today, the growth rate of sustainable or certified products is three to four times greater than the market average. The market for sustainably harvested timber and organic agriculture, for example, has been growing at double-digit rates.

Businesses that provide a range of ecosystem services in emerging markets such as water quality and watershed protection are also considered in the report. One major area of growth is the demand for climate mitigation services through ‘biocarbon’ – i.e. biomass-based carbon sequestration in forests and wetlands and through soil conservation.

Another biodiversity business is based on the search for new compounds, genes and organisms in the wild, known as bioprospecting, an industry that could be worth US\$ 500 million by 2050. The report also examines ecotourism, sport hunting and fishing. The latter sectors are already large and growing: ecotourism is expanding at a rate of 20–30% per year as compared to 9% for tourism as a whole, while private expenditure on recreational hunting and fishing is estimated at US\$ 70 billion per year in the USA alone.

Less conventional markets include biodiversity offsets, wetland mitigation, conservation easements and biodiversity banking. Such businesses can be based on either legislation or voluntary commitments that oblige companies to minimize the biodiversity loss resulting from their activities and to offset (compensate) for residual losses by restoring or enhancing comparable sites. Emerging experience in Australia, Brazil, South Africa and the United States has shown that such approaches can make a significant contribution to conservation efforts and generate substantial business opportunities for offset providers, although there are concerns about the environmental effectiveness of offsets.

One major hurdle facing all biodiversity businesses is developing practical indicators for measuring negative impacts and positive contributions to biodiversity. Experience in some countries shows that biodiversity assets, in the form of endangered species or natural habitat, can be registered, tracked and even traded under appropriate regulatory frameworks. Nevertheless, the world still lacks agreed standards, methods and indicators for valuing ecological assets and ecosystem services.

The development of biodiversity business also depends on a conducive enabling environment, namely the framework of laws, regulations, taxes, subsidies, social norms and voluntary agreements within which companies operate. For businesses to value biodiversity, it must ultimately become more profitable to conserve biodiversity than to ignore or destroy it. A combination of increased rewards for conservation, increased penalties for biodiversity loss and increased information on the biodiversity performance of business will help to create a biodiversity-friendly economy.

In many countries, significant reform of the enabling environment may be required to enable biodiversity business to grow, particularly where existing policies are predicated on conservation of biodiversity by governments and charities, where the role of business in conservation is limited by law, or where policy incentives such as ‘perverse subsidies’ are causing continued harm to ecosystems.

Another constraint on biodiversity business is the lack of understanding between the worlds of business and nature conservation. Priorities, time scales and jargon all differ. Natural scientists often lack the financial acumen and consumer orientation of the private sector; conservationists typically lack business planning and management skills. At the same time, most business people lack understanding of how their companies’ operations affect and are affected by biodiversity and ecosystem services, or how to manage biodiversity in their operations. In addition, the long-standing difficulties of integrating conservation and development agendas still remain. Nevertheless, new biodiversity business tools are being developed that can bring these worlds together and bridge gaps in planning, management and performance assessment.

Even with the best policies and tools in the world, biodiversity benefits will not materialize or be sustained unless biodiversity businesses survive long enough to become commercially viable. Access to patient capital for investment and expansion is a critical factor in the growth of biodiversity businesses. While most businesses depend on financial support from banks or investors to cover initial start-up costs, in the case of biodiversity businesses there may be a need for some grant finance or subsidies to help entrepreneurs get beyond the pilot and learning phase and to stimulate demand for commercial conservation services.

Various existing financing instruments have been adapted for biodiversity business, ranging from grants to debt and equity finance. The experience of early and on-going initiatives can help guide the choice of an appropriate financing blend for new biodiversity businesses. While most biodiversity fund managers seek co-financing and prefer debt finance to equity, a range of innovative financial solutions are being tested that combine commercial and non-commercial investors. The integration of financing with technical and business support is increasingly common and can help ensure that biodiversity business delivers significant conservation outcomes as it grows.

These are early days for biodiversity business and there is much to learn. One clear need is for an integrated approach to building biodiversity business, combining policy advice, technical assistance and innovative finance, at a vastly increased scale compared to current efforts. This report outlines a proposed Biodiversity Business Facility, which would function as: (i) a think-tank, to address and influence the enabling environment and develop biodiversity business metrics; (ii) a business incubator, to build capacity and provide technical assistance to support new biodiversity business ventures; and (iii) a funding mechanism, to invest in and secure co-finance for growing biodiversity businesses. Although the eventual scope and form of such a facility remains to be defined, its potential impact could be enormous. The first step is to assemble a portfolio of biodiversity business enterprise, in order to test, refine and demonstrate the viability of this new approach to conservation.

Around the world, there are mangrove forests that may soon be cleared to make way for shrimp farms, but which could instead be conserved through ‘payments for ecosystem services’ as natural fish hatcheries, storm buffers and water filtration systems. Similarly, there are thousands of fragments of degraded natural habitat which could be linked and restored, by means of biodiversity offsets, to form vital biological corridors for threatened species. And rural communities around the world could be supported to build the skills and networks necessary to market valuable non-timber forest products.

For such initiatives to flourish, for pro-biodiversity markets to develop, fixed ideas and institutional inertia need to be overcome. Experience is the best teacher and the coming years will be crucial to demonstrate, document and share the results of various market-based approaches to biodiversity conservation in different contexts.

Rhetoric is not sufficient. What is needed are more concrete examples of financially viable biodiversity businesses and functioning markets for ecosystem services. Only on the basis of practical experience will it be possible to convince all stakeholders – public and private – to work together to conserve biodiversity on a sustainable and commercial basis. The ultimate aim of this report is to promote more informed experimentation and investment, based on a clear understanding of what biodiversity business needs to thrive.

For Workshop C: Markets for biodiversity goods and services, additional reading included:

- Building biodiversity business (Shell, 2007) [Advanced draft for Lisbon]
- Markets for ecosystem services – New challenges and opportunities for business and the environment (WBCSD and IUCN, 2007)
- Sustainable investments for conservation (PWC, 2007)
- The Kijani investment project proposal (IUCN, 2003)

Discussion paper D: Business and Biodiversity Partnerships



Introduction

Sustainable development can best be achieved by the commitment and interaction of governments, civil society, individuals and businesses. The absence or indifference of any one of these stakeholders can lead to a seriously compromised outcome, falling well short of the desired goals. Over the recent past, more and more businesses have come to realize that their own long-term survival depends not only on traditional key success factors like quality, customer focus, innovation, value for money, robust supply chains, integrity, but also on their wider interactions with people in the communities where they operate, with the environment and with the economy as a whole. Such relationships, expressed within the now commonly-used term, corporate social responsibility (CSR), demonstrate businesses' acknowledgement of their obligations and contribution to sustainable development of the three elements, society, the environment and the economy.

Conserving and sustainably using biodiversity is a vital part of development and nature conservation.

Types of partnerships

Partnerships can take many forms, from the informal provision of information on biodiversity issues to improve understanding among staff and other business stakeholders, to long-term contractual arrangements covering multiple activities and sites, perhaps with secondment of personnel on both sides.

Some examples:

- **Private sector-civil society partnerships**
Typically this would be a partnership with a conservation organization for technical assistance and capacity building.
- **Private sector-public sector-civil society partnerships**
A tripartite arrangement best meets requirements and can be very successful when the objectives of the Biodiversity Action Plan directly involve state-owned land.
- **Private sector partnerships**
Such partnerships between private sector businesses are forged to enable participant companies to address jointly sectoral issues, develop common standards of behaviour to reduce biodiversity degradation and to pool their relevant expertise.
- **Private sector-public sector partnerships**
These partnerships are particularly suited to situations where the company's business activities involve usage of or access to public property or natural resources.
- **Multi-stakeholder partnerships**
Partnerships with many different partners may be the most appropriate model when up-stream or down-stream companies are critical to the desired biodiversity outcome or where several different civil society groups are required for geographic or specialization coverage.
- **Private sector-local communities**
In many instances, effective partnerships with local communities will be absolutely critical in achieving biodiversity objectives. Without their engagement, recognising the criticality of building trust and capacity, success may be elusive or short-lived.

Why engage in biodiversity partnerships between various stakeholders?

To tackle biodiversity loss in Europe, the European Commission stated that one of the four supporting measures identified in the 2006 Biodiversity Communication is building partnerships between government, academia, conservation practitioners, landowners and users, private sector, finance sector, educational sector and the media. It involves building on existing provisions (e.g. under the Common Agricultural Policy and Common Fisheries Policy) and the development of new partnerships, including outside the EU. ¹

WWF stated that “Our partnerships with the private sector not only provide conservation benefits which help us carry out our mission, but also give us the opportunity to work together with the business sector to increase its commitments to sustainable development and environmentally sound business practices”.

“Understanding and reducing the environmental impact of our activities is a top business priority. The partnership with WWF has given us invaluable support in managing issues and in building environmental awareness, helping us to ensure that environmental issues are everybody’s business,” explained Veli Sundbäck, Executive Vice-President, Corporate Relations & Responsibility, Nokia.

Partnerships can generate many synergies:

- **Expertise**
Enable partners to access skills and know-how unavailable in their own organizations.
- **Training**
Through formal and informal training and coaching activities, partnerships help to build morale and engagement, thereby improving staff performance, recruitment and retention.
- **Risk management**
Businesses become more expert at assessing and managing the environmental risks associated with their operations, mitigating compliance and reputation risks.
- **Resources**
Facilitate access to human, financial, land and other resources in the pursuit of the agreed goals.
- **Focus on results**
Partnerships can result in powerful, motivated alliances, mutually supportive, leading to an irrepressible “eagerness to succeed”.
- **Financial**
Businesses’ financial performance can be improved by an enhanced, ethical brand image, increased customer loyalty, avoidance of regulatory costs associated with non-compliance of environmental legislation, faster obtention of building or operating permits, lower cost of capital and bank credit, and a wider network of willing suppliers.

¹ ec.europa.eu/environment/nature/partnerships

Examples of successful partnerships

There are many examples of successful partnerships in many parts of the world; a few are cited by way of illustration.

Rio Tinto

Rio Tinto's stated objective is to have a net positive impact (NPI) on biodiversity. Their biodiversity programmes have focused on two key issues towards achieving that goal:

1. Being able to effectively measure and communicate the company's impacts on biodiversity and the performance of management actions; and
2. Methodologies for innovative compensation or offsetting of residual biodiversity impacts.

Initially, operations use mitigation measures, including actions designed to avoid, minimize and rectify negative impacts. Offsets through sustainable conservation actions, capacity building programmes and livelihood initiatives may then be necessary to compensate for the residual harm to biodiversity and help the company achieve a net positive impact.

Rio Tinto's partnership programme is under-pinned by alliances with 17 different partners including, to name a few, Earthwatch; WWF Australia; BirdLife International; UNEP; Royal Botanic Gardens, Kew.

Rio Tinto's CEOs stated that "Working with BirdLife and other biodiversity partners has assisted Rio Tinto to develop tools and good practice for integrating biodiversity conservation into its business practices."

For more information on Rio Tinto's partnerships go to: www.riotinto.com/media/599_partnerships.asp

Shell/Smithsonian Institution Monitoring and Assessment Biodiversity Program (SI/MAB)

Shell and SI/MAB's partnership focuses on Gabon's Gamba Complex, a protected area system that hosts rich biodiversity and the country's largest onshore oil reserves. The objectives are to increase and disseminate the knowledge from the biodiversity assessments while building the in-country capacity to conduct the assessments, promoting links among the stakeholders and advancing the business-research model.

Fieldwork has catalogued nearly 3000 species, with new species recorded for fish, amphibians, reptiles, insects and trees. Thirty-two Gabon nationals have been trained in standard sampling protocols and a biodiversity centre has been established as a science centre for Gabon and learning laboratory for local communities. Furthermore, SI/MAB will continue to work in the Gamba Complex with Shell Gabon, conducting longer-term ecological monitoring against key indicators of impacts, as well as supporting the integration of biodiversity into Shell Gabon's business processes and management system.

Ultimately, the goal is for Shell to build on what it has learned from this partnership and transfer experience and knowledge to other Shell operations and to the industry in general.

To learn more about Shell's partnerships go to: www.shell.com/home/content/envirosoc-en/environment/biodiversity/our_work_with_others/our_work_with_others_000407.html

British American Tobacco (BAT)/Various partners

BAT's biodiversity programme supports the development of:

1. Projects which embed biodiversity assessment, management and conservation into BAT's operations;
2. Projects which aim to achieve conservation of biodiversity in areas of mutual interest to BAT and its conservation partners.

All projects are selected according to criteria laid out in the Memorandum of Understanding. These include compliance with conservation priorities identified by the partners and with relevance to BAT's activities world-wide and location in countries that are important leaf-growing areas.

Partners: Earthwatch; Fauna & Flora International; Royal Botanic Gardens, Kew; Tropical Biology Association.

To learn more about this partnership go to: www.batbiodiversity.org/proof/Content/partners

Holcim/IUCN

As an example of a recent, ground-breaking biodiversity partnership, the leading building materials company Holcim and IUCN have signed a cooperation agreement to work jointly on ecosystem conservation and biodiversity issues relevant to the building materials sector.

The main areas of collaboration are:

1. Review and assessment of Holcim's approach to biodiversity conservation management;
2. Development of a comprehensive biodiversity policy and strategy;
3. Identification and development of joint initiatives supporting sustainable livelihoods and biodiversity conservation; and
4. Promotion of good practice by sharing the learning with the wider industry and conservation communities.

IUCN and Holcim in Sri Lanka have agreed on the first projects to review the quality of biodiversity conservation activities at Holcim sites in Sri Lanka and to facilitate existing quarry rehabilitation planning and implementation. Holcim Sri Lanka on its part will bring in technical expertise to contribute to the rehabilitation efforts of coral ecosystems. Furthermore the use of sustainably produced biomass as an alternative fuel will be explored to open up an additional source of income for the communities around Holcim sites.

Markus Akermann from Holcim stated that: *"The engagement with IUCN is driven by the conviction that biodiversity conservation issues will play an ever more important role in our long-term resource and reserve strategy. IUCN and its network provide biodiversity expertise and enable Holcim to work more closely with relevant stakeholders across the world."*

Julia Marton-Lefèvre said that *"IUCN seeks intensified private sector engagement to persuade and enable businesses to reduce their environmental footprint and make a positive contribution to nature conservation. With its global presence and commitment to sustainable development, Holcim is an attractive partner for us."*

For more information on this partnership go to: www.iucn.org/themes/business/Cement

Table 1: Other examples of on-going partnerships

Business partner	Conservation partner(s)	Goals
The Coca-Cola Company	WWF	To conserve and protect freshwater resources around the world, specifically to: <ul style="list-style-type: none"> • Measurably conserve seven key freshwater river basins; • Improve efficiency of the company's water use; • Support more efficient use in its agricultural supply chains; and • Decrease the company's carbon dioxide emissions and energy use.
Cadbury Schweppes	Earthwatch	A joint field research project in Ghana examining the relationship between cocoa farming and wildlife.
HSBC	Earthwatch, WWF, BGCI	Investing In Nature is a five year US\$ 50 million programme focused on vital conservation research projects. By the end of 2007, 2000 HSBC employees from across the world will have participated in field research projects, making a huge contribution to conservation research. The programme has also provided training for 230 emerging scientists from developing countries to help protect some of the world's biodiversity hotspots and enabling Earthwatch Institute to develop its reporting capacity (with UNEP-WCMC).
Nokia	WWF	To drive environmental awareness of the company's employees, to find new ways to enhance Nokia's environmental performance and support WWF's conservation goals.
GlaxoSmithKline (GSK)	Earthwatch	The partnership is developing in a number of areas around biodiversity and ecosystems in relation to GSK's business and operational sites, looking at the impacts of particular products, employee education and awareness raising, biodiversity training and participation on GSK's external stakeholder advisory panel.
Lafarge	WWF	To reinforce the environmental policy of Lafarge, to curtail emissions of CO ₂ , to develop a strategy for the ecological rehabilitation of quarries, to heighten awareness amongst the widest possible audience on the importance of environmental preservation through local partnerships such as in Kenya, Austria, France and China.

Challenges

- To establish a partnership there is a need to establish an enabling environment for potential partners to meet. It is difficult for a private business to identify the potential NGO or government agency (GA) that will be willing to enter into a partnership. At the same time for the NGOs and GAs it is also difficult to learn to trust potential partners.
- For a partnership to work, as a minimum, the partners need to have a clear agreement on, and whole-hearted commitment to, the objectives and benefits. So the first challenge is to develop and be precise about the objectives, identify the benefits, and gain commitment to them on a wide scale. An effective communication programme is imperative with demonstrable support from senior levels of the organization.
- Spend time to understand the cultures of your partner(s) and what “makes them tick.” It is not unusual to find that your organization’s priorities and theirs do not coincide, and priorities influence behaviour! Mutual understanding will help to avoid some unnecessary friction.
- Be prepared to find different degrees of acceptance or resistance between the company’s headquarters and their operational units where most of the biodiversity work will, of necessity, take place. One size does not fit all!
- Develop jointly the framework and procedures for measuring performance against the objectives. Corrective action to keep on track will almost certainly be required. This too will need ample and open debate amongst the stakeholders.
- Training and capacity building are key to the ongoing success of partnership endeavours so time and resources will need to be made available to develop and deliver a carefully designed programme.
- Reach out to as many employees of the company as is possible, even in small, seemingly insignificant ways. Their involvement will surely give the initiatives much welcomed momentum.

Key questions to ensure that EU companies establish new and strengthen existing partnerships

- What kinds of incentives are needed to promote Business & Biodiversity partnerships in Europe?
- How will companies convince their business units to engage in Business & Biodiversity partnerships?
- How can we ensure businesses include biodiversity as a core business issue?
- Can NGOs engage creatively with businesses and governments without compromising their integrity?
- How will partners evaluate achievements and effectiveness in delivering mutual objectives?

For Workshop D: Business and biodiversity partnerships, additional reading included:

- Business and biodiversity partnerships: Making it happen! (IUCN, 2004)
- Partnerships for biodiversity (WBCSD, 2004)
- Getting real: The challenges of sustaining biodiversity partnerships (IBLF, 2002)
- Operational guidelines for private sector engagement (IUCN, 2006)
- Partnerships: Building alliances to address biodiversity issues (IFC, 2006)

Other references:

- From challenge to opportunity. The role of business in tomorrow's society. (2006) World Business Council for Sustainable Development. www.wbcsd.org
- A Guide to Biodiversity for the Private Sector: Why biodiversity matters and how it creates business value. International Financial Corporation. www.ifc.org/biodiversityguide
- Engaging businesses with biodiversity. Guidelines for local biodiversity partnerships. (2005) Earthwatch Institute. www.earthwatch.org
- A European Roadmap for Businesses. Towards a sustainable and competitive enterprise. CSR Europe. www.csreurope.org

Related websites:

- www.earthwatch.org/europe/our_work/corporate/
- www.panda.org/about_wwf/how_we_work/businesses
- www.iucn.org/themes/business
- www.cbd.int/cooperation/partnership.shtml
- www.cbd.int/decisions/default.shtml?m=COP-08&id=11031&lg=0
- www.celb.org/xp/CELB
- www.theebi.org
- www.fauna-flora.org/business.php
- www.katoombagroup.org
- www.rtcc.org/2007/html
- www.toinitiative.org
- businessandbiodiversity.org
- www.greeningofindustry.org
- www.bsr.org
- www.wbcsdcement.org/
- www.geocities.com/aboutcsbe/
- www.ciria.org
- www.icmm.com
- www.tourismpartnership.org
- www.ifoam.org
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- www.fsc.org
- www.aquariumcouncil.org
- www.msc.org
- www.ceres.org
- www.equator-principles.com
- www.insightinvestment.com

Annex

Acronyms

BAP	Biodiversity Action Plan
BARS	Biodiversity Action Reporting System
BAT	British American Tobacco
BBOP	Business and Biodiversity Offsets Program
CBD	UN Convention on Biological Diversity
EEA	European Environment Agency
EIA	Environmental Impact Assessment
EIRIS	Ethical Investment Research Services
ESR	Ecosystem Service Review
EU	European Union
FFI	Fauna & Flora International
GRI	Global Reporting Initiative
ICMM	International Council for Mining and Minerals
IUCN	International Union for Conservation of Nature
NGO	Non-governmental organization
RSPB	Royal Society for the Protection of Birds
SME	Small and medium-sized enterprise
SRI	Socially responsible investment
UNEP FI	UN Environment Programme Finance Initiative
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute
WWF	World Wide Fund for Nature

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The Conference organizing committee included the following experts from the public, private and NGO sectors:

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IUCN (International Union for Conservation of Nature) coordinated the workshops and background papers, in particular:

Workshop A: Business-related biodiversity responsibility schemes

Workshop Coordinator: Giulia Carbone, Business and Biodiversity Programme, IUCN

Author of the background paper: Giulia Carbone (IUCN) and Nadine McCormick (IUCN)

Workshop C: Markets for biodiversity goods and services

Workshop Coordinator: Joshua Bishop, Senior Adviser - Economics and the Environment, IUCN

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Workshop B: Business-related biodiversity assessments

Workshop Coordinator: Mohammad Rafiq, Head - Business and Biodiversity Programme, IUCN

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Workshop D: Business and biodiversity partnerships

Workshop Coordinator: Margarita Astralaga, Director, IUCN Centre for Mediterranean Cooperation

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