DEDICATED TO MAKING A DIFFERENCE

Effective biodiversity and ecosystem policy and regulation

Business input to the COP10 of the Convention on Biological Diversity

World Business Council for
Sustainable Development

About the World Business Council for Sustainable Development (WBCSD)

The WBCSD is a CEO-led, global coalition of some 200 companies advocating for progress on sustainable development. Its mission is to be a catalyst for innovation and sustainable growth in a world where resources are increasingly limited. The Council provides a platform for companies to share experiences and best practices on sustainable development issues and advocate for their implementation, working with governments, non-governmental and intergovernmental organizations. The membership has annual revenues of USD 7 trillion, spans more than 35 countries and represents 20 major industrial sectors. The Council also benefits from a network of 60 national and regional business councils and partner organizations, a majority of which are based in developing countries.

www.wbcsd.org

The Ecosystems Focus Area Core Team would especially like to thank the Forestry and Ecosystems team from PricewaterhouseCoopers (part of their global Sustainability and Climate Change practice) for their role as technical advisors to this paper and Mr William Evison (PwC), the principle writer of this document, for his significant contribution.

Ecosystems Focus Area Core Team

Bob Elton - BC Hydro (Co-chair)
Antonio Mexia - Energias de Portugal
Hiroaki Nakanishi - Hitachi Ltd.
Markus Akermann - Holcim Ltd.
David Hathorn - Mondi
Tom Albanese - Rio Tinto plc.
Christopher Kirk - SGS S.A.
Michael Mack - Syngenta International AG

WBCSD Secretariat

James Griffiths - Managing Director
Mikkel Kallesoe - Program Manager
Eva Zabey - Assistant Program Manager

Contents

Foreword

In response to the emerging reality of natural resource limits, ecosystem degradation and biodiversity loss, business must anticipate new policies and regulatory frameworks to be developed and deployed by governments. Already we are seeing changing mind sets and expectations among customers, shareholders, investors, NGOs, media and regulators on the acceptable level and scope of business impacts on ecosystem services. Companies will increasingly be called upon to demonstrate sustainable operations and environmental practices.

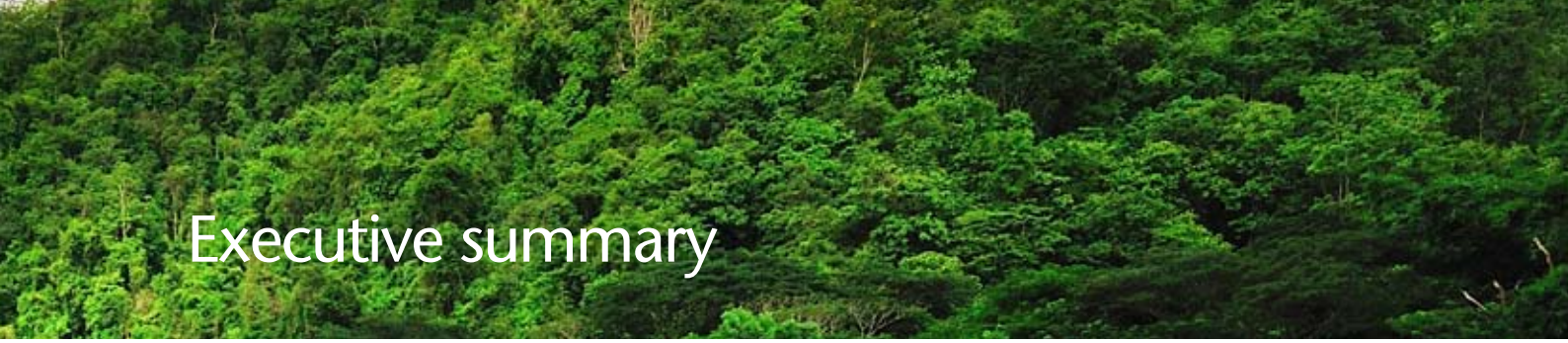
However, businesses will not be able to fully deliver on their role as ecosystem stewards at the scale needed without environmental policies and regulations that: establish a level playing field; leverage market forces; set realistic targets; are predictive, transparent, consistent and time tabled; create appropriate incentives for sustainable use; and secure property and tenure rights (public, private, community or shared).

As pointed out by the recently released The Economics of Ecosystems and Biodiversity (TEEB) Report for Policy-Makers there is ample scope to improve environmental policies and regulatory frameworks by rewarding ecosystem benefits through payments and markets, reforming environmentally harmful subsidies, establishing appropriate environmental standards and liability regimes and investing in ecological infrastructure.

The following paper, which was developed by the World Business Council for Sustainable Development (WBCSD) supported by PricewaterhouseCoopers (PwC), is intended as a business contribution to the current debate around environment policy and regulatory reform. It provides practical and constructive advice from business to policy makers, but does not seek to restate all the scientific, economic or moral arguments for or against particular environmental policies and regulatory options. Rather it seeks to provide insights from a business perspective to achieve the greatest positive impact on biodiversity and ecosystems whilst minimizing any economic and social costs and maximizing economic and social benefits.

Ultimately, halting biodiversity loss and reducing ecosystem degradation is a shared responsibility and business must be a committed solution provider.

Bjorn Sigson
President, WBCSD



Executive summary

This paper considers a number of related proposals in the broad area of biodiversity and ecosystems policy currently receiving significant attention from national and international policy makers. The WBCSD is supportive of many of these proposals and drawing on the wealth of experience of its member companies is able to offer a number of practical recommendations and a concise summary of views on the relative merits of the various proposals.

Key messages

- The WBCSD strongly supports the key principle of The Economics of Ecosystems and Biodiversity (TEEB) report for policy makers; namely, that biodiversity and ecosystem values should be integrated more consistently and effectively into policy and regulation.
- Businesses have a strong interest in ensuring ecosystems continue to function properly to deliver both business and societal value. To this end, businesses are already helping to deliver improved conservation outcomes through their own actions including through investment in conservation-related research and development, through the creation and strengthening of sustainable supply chains and through programmes which build capacity, transfer technology and enhance monitoring and reporting performance.
- Businesses are keen to work more closely with policy makers on the design and implementation of biodiversity and ecosystem related policy and this collaboration can significantly improve the chances of delivering policies that work.
- A framework for closer collaboration between business and policy makers on biodiversity conservation is needed. This framework should include a more defined role for business within the Convention on Biological Diversity as well as in other multilateral environmental agreements.
- Much biodiversity and ecosystem policy and regulation relies on the private sector in its implementation, and in any event, it is often the private sector which has the resources and flexibility to develop and implement solutions at scale. For these reasons, as part of increased involvement from business it is essential that over-arching objectives and targets are designed to be relevant for business.
- New biodiversity and ecosystem policy and regulation should draw from successful examples from other policy fields and should seek to build on and scale up successful private sector voluntary initiatives in the field of biodiversity and ecosystem conservation.
- New biodiversity and ecosystem policy and regulation should also be based on sound principles, and section 1.4 in this paper provides a view from business to inform these. Principles should include providing clear signals for business, creating a level playing field, recognising the importance of property rights, being mindful of potential economic and social impacts and adaptable to cultural differences between nations.
- This paper primarily focuses on proposals for new biodiversity and ecosystem policy and regulation. However, it is important to note that in many cases it is not new policy and regulation that is required, but the capacity and resources for more effective implementation and enforcement of existing policy and regulation.
- Beyond policy and regulatory reform, governments can take a leading role in the implementation of measures to enhance biodiversity and ecosystems by using their direct influence over state owned enterprises to drive the implementation of such measures.

1 Introduction

"The degradation of ecosystems and the services they provide destroys business value and limits future growth opportunities. There is a need to account for the full value of ecosystems and their services in order to ensure their sustainable use."

– Björn Stigson, president of the WBCSD

1.1 Business and ecosystems

All businesses depend upon and impact biodiversity and ecosystem services and many are facing increased risks associated with natural resource scarcity. Growing awareness of the business impacts of biodiversity loss and ecosystem degradation is leading businesses to measure and manage the associated risks and to scale up mitigation, offsetting and sustainable use approaches. Associated with these risks, there are also opportunities to tap into new markets and business models. Some businesses are increasingly becoming positive agents of change and are often the source of innovation, helping to create new ecosystem-friendly markets and developing more sustainable technologies and business practices.

1.2 The need for this paper

While there have been notable successes, when taken in aggregate current policy measures and existing business efforts have largely failed to stem the tide of biodiversity loss and ecosystem degradation. The WBCSD believes that business has a major role to play in reducing and ultimately reversing this loss of biodiversity and that new policies are also required to correct the market failures which contribute to this loss.

It follows that sustainable businesses should actively participate in helping to shape the policies which will ultimately influence their role in the management of earth's natural capital. This paper forms part of that participation which has been on-going for some time. There are many proposals 'on the table' and this paper is designed to provide input to those proposals from a group of leading businesses. Beyond this paper, a framework for closer collaboration between business, governments and international organisations (including the Convention on Biological Diversity) is needed to ensure that when policy is developed, it works.

1.3 What this paper covers

This paper considers a range of proposals in the broad area of biodiversity and ecosystems policy currently receiving attention from policy makers. Versions of each of these proposals have been variously identified and promoted by; The Economics of Ecosystems and Biodiversity (TEEB), the Convention on Biological Diversity (CBD), the United Nations Environment Programme (UNEP), and a range of other international organisations.

The scope of this paper is therefore broad, with proposals ranging from specific targeted instruments (e.g. Reducing Emissions from Deforestation and forest Degradation - REDD-plus) and policy objectives (e.g. Green Public Procurement), to new international institutions (e.g. the Intergovernmental Platform on Biodiversity and Ecosystem Services - IPBES) and incentive measures (e.g. green subsidies) as well as many things in between. However, despite its breadth, it is not exhaustive and when considering proposals the paper focuses on specific areas where business can help, or has a point of view.

Finally, there have been examples of policy success; this paper highlights a few of them. Equally, some businesses have helped to innovate to improve outcomes for biodiversity and ecosystems on a voluntary basis; some of these innovations can be scaled up and applied more broadly with the help of policy interventions and this paper outlines a selection of these opportunities.

1.4 Prerequisites and principles for biodiversity policy proposals to work

Assuming the political will exists to develop new biodiversity policies, which will in many cases be challenging and disruptive, key prerequisites need to be met and clear principles should be applied to ensure their success.

A key prerequisite is to have clearly defined goals, supported by targets (including interim targets) which are specific, measurable, attainable, relevant and time-bound (SMART). A further challenge for targets agreed at an intergovernmental level (e.g. under the auspices of the CBD) is to establish and enforce accountability for their delivery and to provide adequate resources for their implementation.

The current CBD 2010 target is 'to 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'[1] which is supported by a number of sub-targets. The CBD has proposed 20 new targets to be achieved by 2020[2] including targets on the reform of environmentally harmful subsidies, the extent of protected area coverage and the inclusion of biodiversity values in national accounts. In order for business to further support the implementation of the Convention, these 2020 biodiversity targets need to be adapted to a business context. As currently framed some of the proposed targets are vague, not easily measurable and difficult to

assign accountability for. Businesses can support the CBD by bringing to bear their experience in setting targets and can also help with the development of metrics and indicators for measuring performance against targets.

A number of the proposals discussed in this paper show some degree of alignment with strategic goals and specific targets currently proposed by the CBD. If the strategic goals are to be met then the target setting process must take due account of the realities of implementation, and in due course, new policy proposals must be aligned with strategic goals.

In the course of reviewing the range of policy related proposals, the WBCSD has developed an initial set of principles which are set out below.

In the WBCSD's view policy proposals and subsequent regulation should:

- Set realistic but challenging targets and clearly assign accountability for their delivery.
- Provide clear policy signals into the future (at least 5-10 years and longer where policy will influence long term business decision making).
- Establish a level playing field both for companies competing in the same markets, and for companies competing to use the same resources.
- Respect, protect or assign property rights.
- Be cognizant of and commensurate with relative ecosystem value wherever possible.
- Be aligned with specific and clearly stated policy objectives and create the right incentives for the delivery of those policy objectives.
- Deliver stated policy objectives at the lowest economic and social cost or with the greatest economic and social benefit.
- Provide incentives as directly as possible to resource managers to maintain and enhance the provision of valuable ecosystem services.
- Seek to achieve consistency between nations to assist in the management of trans-boundary issues.
- Internationally relevant proposals should allow sufficient flexibility to reflect cultural differences when they are implemented at a national level.

2 Biodiversity policy options – a business perspective

This chapter provides the WBCSD views on eleven specific public policy and regulatory options to reverse biodiversity loss which have been identified by TEEB, the CBD and the United Nations Environment Programme.

2.1 Institutional proposals and policy objectives

2.1.1 Intergovernmental Platform on Biodiversity and Ecosystem Services

What's the concept?

On the 11th June 2010 in Busan, South Korea, governments agreed to establish an Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).

"The IPBES is a mechanism proposed to further strengthen the science-policy interface on biodiversity and ecosystem services, and add to the contribution of existing processes that aim at ensuring that decisions are made on the basis of the best available scientific information on conservation and sustainable use of biodiversity and ecosystem services. IPBES is proposed as a broadly similar mechanism to the Intergovernmental Panel on Climate Change (IPCC)."[3]

The new body will aim to bridge the gulf between scientific knowledge - documenting degradation of the natural world - and the government action required to reverse these damaging trends.

Its various roles will include carrying out high quality peer reviews of the wealth of science on biodiversity and ecosystem services emerging from research institutes across the globe, in order to provide 'gold standard' reports to governments.

WBCSD view

Business wants to engage and participate in IPBES and the WBCSD applauds its recent establishment.

The need to engage business in IPBES is twofold:

Business will benefit from IPBES as it will set the reference for credible and relevant scientific knowledge on biodiversity and ecosystem services. Businesses are encouraged, and in many instances incentivised, to find sustainable solutions to avoid, minimize, and offset their impacts on ecosystems. Methods and tools emanating from IPBES could support decision-making on business environmental strategies and policies, the measurement of ecosystem impacts as well as accounting and reporting for these. Additionally, information flowing from IPBES could set the foundations for market-based mechanisms, like biodiversity offset frameworks. Using information from IPBES would give more credibility to mechanisms used by businesses and should help to improve the development and application of environmental standards.

Involving business in IPBES will also add value and legitimacy to IPBES. Businesses are providers of information and can therefore contribute to the generation and assessment of knowledge: for example, companies often commission data gathering which encompasses conservation values and ecosystem function and hold in-house data-sets. Good practices developed by business for sustainable use of biodiversity are also valuable sources of knowledge to be assessed by IPBES. Businesses are also decision-makers and have an important role to play in the conservation, use and management of biodiversity and ecosystem services upon which they depend. Business brings complementary perspectives to those from governments, and can help identify and prioritize the most relevant information gaps to be addressed by IPBES.

IPBES needs to be a multi-stakeholder platform to ensure its credibility, legitimacy and transparency. It needs to respond to the needs of the wide range of decision-makers and practitioners contributing to biodiversity, ecosystem services, and human well-being, including those in the business sector.

IPBES should particularly aim to:

- Assess existing knowledge, identify gaps and encourage further research in areas where it is needed.
- Deliver methods and tools that are relevant and readily usable for decision makers and practitioners, including those in the private sector.[4]

2.1.2 Green Public Procurement and government support for 'green markets'

What's the concept?

The European Union defines Green Public Procurement (GPP) as follows: "Green public procurement means that public purchasers take account of environmental factors when buying products, services or works. The goal is to reduce the impact of the procurement on human health and the environment."[5]

The name 'Green Public Procurement' does not exclude due consideration of social factors. Indeed as many have observed, ensuring a socially equitable outcome is often fundamental to delivering on environmental objectives. Many of the green standards and labels which are targeted by Green Public Procurement efforts include stringent social requirements.

The concept of Green Public Procurement has achieved particular prominence in the EU in recent years and there are established GPP policies in many other parts of the world, including Japan, China, New Zealand, Korea and the US.

According to the TEEB report for policy makers "A product or service can only qualify as 'green' if it goes beyond what is required by law and beyond the performance of products commonly sold in the market. Whereas regulatory standards create a minimum baseline, GPP helps to green the markets: ecologically innovative products can increase market share and often get a price premium."[6]

Beyond public procurement, some governments and international institutions have also intervened to strengthen or promote markets for products which are generally recognised as being socially or environmentally superior. For example, in April 2009, the European Commission issued a Communication signalling its strong support for the Fair Trade movement applauding private sector initiative in this area.[7] Bodies such as the Convention on Biological Diversity (CBD), the United Nations Conference on Trade and Development (UNCTAD), the Convention on International Trade in Endangered Species (CITES) and a growing number of countries support BioTrade* activities for the promotion of goods and services derived from native biodiversity under strict sustainable development criteria.

WBCSD view

Public authorities have huge purchasing power, for example, they account for 16% of the EU's gross domestic product.[8] It follows that by using their market leverage to opt for goods and services that also respect the environment, they can have a major influence on suppliers and stimulate the production of more sustainable goods and services. Public endorsements of particular standards and approaches can also be helpful but public mandates are clearly more powerful and provide clearer signals for business.

The WBCSD is supportive of GPP and public endorsements as measures to encourage 'green production' as long as they can be intelligently and consistently developed and implemented in consultation with business.

In the first instance, the parameters and requirements of GPP should be clearly defined such that they provide clarity for businesses seeking to comply. Where possible, approaches should also be harmonised across borders to minimise the number of different standards with which companies are required to comply. GPP guidelines should leverage existing standards where appropriate, but ensure that these are independently reviewed (e.g. in accordance with the UK Green Claims Code and similar EU, US and international guidance).

*BioTrade is concerned with the production or collection and commercialization of goods and services that are derived from native biodiversity: the vast array of plants, species and organisms on our planet. This includes trade in products that come from genetic resources, species and ecosystems and that are used in line with environmental, social and economic sustainability criteria (www.unctad.org/templates/Page.asp?intItemID=3790&lang=1).

2 Biodiversity policy options – a business perspective

The growing adoption of GPP approaches also raises a number of potential competitive concerns which if not addressed may lead to sub-optimal outcomes:

- GPP can tend to favour larger and more established supplier groups or countries and thus smaller suppliers may require support to achieve the necessary standards.
- The scope of application of GPP is also significant, including particularly, whether state owned companies are required to apply and comply with GPP guidelines. If applied in its broadest sense GPP can be a powerful greening influence in emerging economies where other regulatory mechanisms may be less developed. If applied selectively, GPP can have anti-competitive results, for example, favouring state operators.
- Related to the previous observation, GPP guidelines should be set based on the best available science to deliver defined policy objectives, not used selectively for other reasons; for example, as an excuse to buy local and preclude foreign imports.

Beyond green public procurement, governments can take a leading role in the implementation of measures to enhance biodiversity and ecosystems by using their direct influence over state owned enterprises to drive the implementation of such measures.

2.1.3 Access and Benefit-Sharing

What's the concept?

Consideration of Access and Benefit-Sharing (ABS) under the CBD relates principally to the use of genetic resources and traditional knowledge. Genetic resources provide source material for a range of commercial products from mainstream pharmaceutical to botanical medicines, new seed varieties, ornamental horticultural products, new enzymes and microorganisms for biotechnology, crop protection products and personal care and cosmetic products.

Ensuring the fair and equitable sharing of benefits arising from the utilization of genetic resources is one of the central aims of the CBD, which recognizes the sovereign rights of States over natural resources in areas within their jurisdiction. Parties to the Convention therefore have the authority to determine access to genetic resources in areas within their jurisdiction. Parties also have the obligation to take appropriate measures with the aim of sharing the benefits derived from their use. Genetic resources, whether from plants, animals or micro-organisms, may be used for different purposes.

Users of genetic resources can include research institutes, universities and private companies operating in various sectors such as pharmaceuticals, cosmetics, agriculture, horticulture and biotechnology. Benefits derived from genetic resources may include the result of research and development carried out on genetic resources, the transfer of technologies which make use of those resources, participation in biotechnology research activities, or monetary benefits arising from the commercialization of products based on genetic resources.

Under the auspices of the CBD, detailed proposals have been developed for the establishment of an International Regime on Access and Benefit-sharing (IRABS) and IRABS is one of the key agenda items at the 10th Conference of the Parties in Nagoya, Japan. The full IRABS text is available at: www.cbd.int/wgabs9.

WBCSD view

Both businesses and society more broadly derive substantial value from the use of genetic resources and have a strong interest in the protection of those resources. To this end the WBCSD supports the objective of fair and equitable sharing of benefits arising from the utilization of genetic resources as a means towards their sustainable conservation.

It is worth noting that in all but a few cases, genetic resources achieve significant commercial value only as the result of lengthy and costly research and development programmes funded invariably by private sector organisations. This is in contrast to many other natural resources (e.g. fossil fuels, metal ores etc.) which require only relatively limited processing, and whose benefits can be reliably estimated in advance. We should not underestimate this important role that businesses play in creating value from genetic resources.

Commenting on the details of IRABS is beyond the scope of this paper, but in general, any new international regime on access and benefit sharing should aim to ensure that businesses have sustainable access to genetic resources at prices which also provide incentives to protect those resources for the long term.

As Case Study 1 illustrates, some businesses are working with local communities to develop innovative benefit sharing arrangements which also contribute to improved conservation outcomes and help to support local livelihoods.

2.2 Interventions to re-align incentives

2.2.1 Making subsidies work for the environment

What's the concept?

Subsidies come in many forms including:

- Direct transfers of funds and potential direct transfers (to cover possible liabilities e.g. for nuclear accidents).
- Income or price support (e.g. for agricultural goods and water).
- Tax credits, exemptions and rebates (e.g. for fuel).
- Low-interest loans and guarantees.

Case study 1

NATURA - Sharing the Benefits Arising from the Use of Biodiversity in Cosmetics

Natura is a Brazilian cosmetic, fragrance and personal hygiene products company that has adopted the sustainable use of Brazilian biodiversity as a business model since 2000, combining scientific research and the knowledge of traditional communities. In Natura's 'Ekos' line the company is partnering with local communities to develop a range of 100 cosmetic products sourced from native species.

Natura partners with communities in accordance with the principles of the Convention on Biological Diversity and seeks to promote fair trade, sustainable use, social development and biodiversity conservation. The company has developed partnerships with 26 communities, who in return for providing access to the natural ingredients and their traditional knowledge receive direct payments and benefits from other investments made by Natura in community development initiatives.

The results

The community benefits from Natura's activities because the partnership generates income for participating households.

Natura benefits through the added consumer appeal and sales its 'Ekos' line have on the market.

There are ecological and biodiversity benefits derived from increased stewardship by communities of their local forest resources.

For further information please contact Marcos Vaz at marcosvaz@natura.net

Table 1: Value received by traditional communities in 2009 from Natura Ekos partnerships

	Funds received 2009 (US$)
Supply	1,531,000
Benefit sharing	587,000
Local development funds	632,000
Use of image	8,000
Training	84,000
Certification and management	15,000
Studies, consultancy and support	207,000
TOTAL	3,064,000

2 Biodiversity policy options – a business perspective

- Preferential treatment and use of regulatory support mechanisms (e.g. demand quotas).
- Implicit income transfers when natural resources or services are not priced at full provisioning cost (e.g. water, energy).

TEEB defines an environmentally harmful subsidy as "a result of a government action that confers an advantage on consumers or producers, in order to supplement their income or lower their costs, but in doing so, discriminates against sound environmental practices."[9]

Table 2: Aggregate subsidy estimates

Sector	Region
Agriculture	OECD: US$ 261 billion/year (2006-8)[10]
Fisheries	World: US$ 15-35 billion[11]
Energy	World: US$ 500 billion/year[12]
Transport	World: US$ 238-306 billion/year[13]
Water	World: US$ 67 billion[14]

To illustrate the scale of environmentally harmful subsidies TEEB highlights analysis which indicates that up to 75% of subsidies in the transport and water sectors (as shown in Table 2) can be considered environmentally harmful.

A number of areas of subsidy have received particular attention in recent years, the most commonly identified as priority candidates for reform being:

- Capacity-enhancing or effort-enhancing fisheries subsidies.
- Production-inducing agricultural subsidies.
- Production and extraction inducing fossil fuel subsidies.

As well as (somewhat more selectively) water, transport and energy subsidies.

Alongside reform efforts, recent years have seen an upsurge in new 'green' subsidies. Many of these focus on promoting renewable energy, but they also include new subsidies for energy efficiency measures in buildings, and subsidies to support greener modes of transport. These types of green subsidy have been a fairly consistent feature of fiscal stimulus strategies around the world.

The 'green' subsidies likely to have the most direct impact on ecosystems are so-called agri-environment subsidies which aim to shift the focus of agricultural subsidies from rewarding production to rewarding effective land stewardship.

WBCSD view

The objective to reduce so called 'perverse' or 'harmful' subsidies is widely accepted by many governments around the world and strongly supported by the WBCSD. To date the action required to achieve this objective has tended to lag the rhetoric significantly, largely for reasons of national political expediency. It is worth noting though, that many subsidies are not environmentally harmful and indeed that some are specifically designed to deliver improved environmental outcomes.

Improving the quality and comprehensiveness of available subsidy data and analytical information will be important for successful reform. Transparency on subsidies is a key precondition for a well-informed public debate on current subsidy programmes, it can help in defining a clear plan for reform and can itself provide a powerful motivating force for change.

As implementation plans for subsidy reform are developed, analysis of the impacts of reform will require the sophisticated application of systems thinking. In this respect business can help. Private sector economic and industry analysts should be co-opted to support and input to the required analysis.

Needless to say, reforms will be extremely painful for some sectors and this reality may delay urgently needed change. Financial and other transitional support will be needed by communities and sectors experiencing drastic subsidy reductions in the short term and will help to ensure that reforms can be delivered in a timely fashion.

The strongest argument for any subsidy comes from the presence of market failure in the form of positive externalities. In the case of 'green' subsidies in general, rigorous analysis is needed to demonstrate that externalities are net positive and that a subsidy will be an effective tool to deliver a more efficient outcome. In particular this analysis should consider potential indirect impacts on ecosystems in the design of green subsidies.

On agricultural subsidies specifically, the WBCSD is supportive of measures which seek to reward stewardship over production.

2.2.2 Payments for Ecosystem Services, environmental markets and compensation for loss of ecosystem services

What's the concept?

Payments for Ecosystem Services (PES) is a generic name for a variety of arrangements through which the beneficiaries of ecosystem services pay the providers of those services.

TEEB for policy makers defines PES as: "…voluntary transactions where a well-defined ecosystem service (or land-use likely to secure that service) is 'bought' by at least one ecosystem service buyer from at least one ecosystem service provider, if and only if the ecosystem service provider secures ecosystem service provision (conditionality)."[15] Many groups apply a broader

definition which includes ecosystem payments required by regulation and direct transfers from governments.

In recent years the concept of International Payments for Ecosystem Services (IPES), and in particular, payments for Reducing Emissions from Deforestation and Forest Degradation (REDD), has been high on the agendas of many policy makers. Over time the concept of REDD has broadened to 'REDD-plus' which includes sustainable forest management and the enhancement of carbon stocks alongside reducing emissions from on-going deforestation and degradation.

Considerably less developed, a new initiative called the Green Development Mechanism (GDM) seeks to create a global mechanism to stimulate demand for the preservation and sustainable use of biodiversity and to mobilise new and sustained financial support.

In general market based approaches to ecosystem management involve creating new rights or liabilities for the use of natural resources, and then allowing business to trade them. Both REDD-plus and a GDM may ultimately use this model but many of these environmental markets already exist.

Perhaps the best-known example of tradable environmental rights is that of carbon credits based on government-allocated emission allowances and the purchase of voluntary and compliance grade carbon offsets by both organizations and individuals. Similar approaches have been developed for the conservation of natural habitats (often termed biodiversity or conservation banking) and for some ecosystem services. Examples include the emergence of wetland banking in the US, trade in forest conservation obligations in Brazil, and markets for ground-water salinity credits in Australia. What all of these initiatives have in common is the possibility of trade, i.e. buying and selling environmental obligations to meet government mandates or voluntary aspirations.

In addition to approaches which reward the delivery of ecosystem services, a variety of mechanisms exist to compensate for damage to ecosystems and loss of biodiversity. Compensation arrangements take many forms, but all aim to follow the polluter pays principle which suggests that parties causing environmental damage should pay.

2 Biodiversity policy options – a business perspective

WBCSD view

Payments for ecosystem services

The WBCSD continues to be a strong advocate of the expansion of regimes which encourage payments for ecosystems services and notes that businesses are both willing buyers and sellers of ecosystem services.

However, despite well intentioned efforts, private PES arrangements have been relatively slow to develop. A major reason for this is their high transaction costs including for example, the mapping of supply and demand of ecosystem services, engaging and aligning relevant stakeholders, understanding current and expected future use of resources, supporting validation and verification, and training administrators. Costs of monitoring and enforcement can also be high.

There is a role for regulators in facilitating the establishment of private PES both by ensuring that the pre-requisites described in section 1.4 are in place and by implementing specific measures to reduce the transaction costs of setting up PES schemes.

REDD-plus

The WBCSD believes that of all the options for responding to climate change, forest-related mitigation measures are among the most practicable and cost-effective. They also tend to have low opportunity costs and can make an immediate and direct contribution to sustainable development and rural livelihoods.

REDD-plus should be designed as a performance-based mechanism that achieves real CO_2 emission reductions by reducing deforestation and degradation, and through conservation, sustainable forest management and the enhancement of carbon stocks. A phased approach will enable REDD-plus to address the drivers of deforestation according to country-specific circumstances. Each phase of REDD-plus should be funded through a portfolio of financial resources that make optimal and coordinated use of both markets and funds, as well as other sources of finance. Safeguards must guarantee equitable participation and distribution mechanisms for indigenous peoples and local communities as well as biodiversity conservation.

Previous experience suggests that inadequate investment in standard setting and approval systems can stifle deal flow. For example, out of some 2,262 Clean Development Mechanism (CDM) projects registered as of July 2010, just 15

Case study 2

WEYERHAEUSER - Mitigation Bank Projects on Southern Timberlands

Weyerhaeuser is a forest products company with business divisions including timberlands, wood products and cellulose fibres, and commercial forestland management worldwide.

Weyerhaeuser has identified new revenue streams in biodiversity linked with emerging markets such as mitigation banking.

The company's objectives are to:

- Achieve an economic return on company-owned assets.
- Create offsets to compensate for unavoidable loss of wetlands.
- Manage ecosystem health and provide ecosystem services to society.

A mitigation bank is a project to restore, create, enhance, or preserve a wetland, water body, or wildlife habitat undertaken to compensate for unavoidable losses. They are most commonly set up for the purpose of providing compensatory mitigation in advance of impacts authorized by law. Because the markets for mitigation banks are created

by public policy enacted into a regulatory requirement, they are often referred to as policy-enabled markets. The most developed mitigation banks in the U.S. are for wetlands.

The results

Weyerhaeuser currently has proposed 11 mitigation banking projects in the U.S. In terms of the US market, there are 431 active banks, 182 banks pending approval, and 88 banks that were sold out in 2009. The wetland credit pricing ranged from $3000 to $653,000 per credit[17]. These figures show that this market is now becoming substantial, which implies new business opportunities, as well as opening up new perspectives for biodiversity conservation.

For further information please contact Venkatesh Kumar at venkatesh.kumar@weyerhaeuser.com

were forestry projects (afforestation or reforestation projects). In designing new market instruments (for example to govern REDD-plus projects) we must learn from both the successes and challenges of the CDM. In particular, new measures must avoid the high transaction costs, administrative burden and delays associated with the CDM process.

A Green Development Mechanism

The WBCSD is supportive of the establishment of a consistent mechanism which is designed to channel more finance towards the conservation of biodiversity whilst minimising associated transaction costs for participants. However, as the key proponents of a GDM acknowledge, more work is needed to define the scope and operation of any such mechanism.

Environmental markets

The WBCSD believes that environmental markets can significantly reduce the public cost of protecting the environment and/or maximize the value of resource use.

There are many opportunities to support the development of tradable rights as a new business sector at local, national and corporate levels. Even where government does not require compensation for the loss of ecosystem services, some companies and agencies are cooperating to establish offsets on a voluntary basis (see for example Case Study 3 in section 2.2.3).[16] Such initiatives could be encouraged more widely and extended to include biodiversity banks and tradable credits, with a focus on companies in land-intensive sectors, e.g. agriculture and forestry, oil and gas, road construction, utilities, mining, etc.

Case Study 2 shows how North American forest products company Weyerhaeuser is taking advantage of US legislation which has created a market in hectares of wetland habitat, to generate revenue and simultaneously deliver improved conservation outcomes.

In general, proposals for REDD-plus, a GDM and where applicable other PES schemes and environmental markets, should provide clear guidance on expected benefit sharing models, and the maintenance of access to ecosystem services by customary users, to ensure that project developers do not face lengthy or contentious community engagements.

Financial compensation for loss of ecosystem services

Compensation for direct financial losses as a result of ecosystem damage should be relatively straight forward to calculate and administer. However, this relies on clear legislation - setting out the financial losses which warrant compensation and how these should be calculated - supported by effective governance and enforcement.

Far more challenging is determining the appropriate level of compensation for the loss of non-traded ecosystem services. In the view of the WBCSD, compensation calculations should include rigorous economic analysis including the use of accepted economic valuation techniques. Legislation needs to include consistent practical guidance on the circumstances where compensation is payable, the identification of recipients for compensation, and clear direction on the acceptable use of economic valuation techniques in arriving at reasonable compensation amounts.

2.2.3 The mitigation hierarchy, biodiversity offsets and 'no net loss'

What's the concept?

The mitigation hierarchy is a recognised approach for managing biodiversity risk at both a project level and a strategic environmental planning level. According to the hierarchy, efforts should be made to prevent or avoid impacts to biodiversity, then minimise and reduce, and then repair or restore adverse effects. Some groups have suggested that after these steps, any significant residual effects be addressed via a 'biodiversity offset' in order to achieve 'no net loss' of biodiversity.

2 Biodiversity policy options – a business perspective

Case study 3

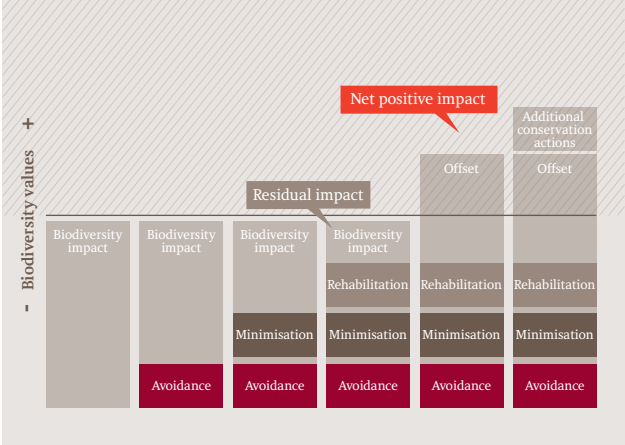
RIO TINTO – Applying the Mitigation Hierarchy

Rio Tinto's biodiversity strategy sets out the long-term goal of Net Positive Impact (NPI) on biodiversity. This means ensuring, where possible, that Rio Tinto's actions have positive effects on biodiversity features and their values that not only balance but are broadly accepted to outweigh the inevitable negative effects of the physical disturbances and impacts associated with mining and mineral processing. They aim to achieve this by reducing impacts and implementing positive conservation measures in the form of biodiversity offsets and other conservation measures.

The figure below illustrates how a company can reduce negative biodiversity impacts through the mitigation hierarchy (avoidance, mitigation and restoration) and have a positive impact on biodiversity through the use of offsets and additional conservation actions, with the overall aim of achieving NPI as indicated by the positive value on the graph.

For further information please contact Stuart Anstee at Stuart.Anstee@riotinto.com

Figure 1: Biodiversity offsets and impact mitigation in Rio Tinto



There are numerous approaches to and definitions for 'biodiversity offsets'. The Business and Biodiversity Offsets Programme (BBOP) define biodiversity offsets as "… measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development and persisting after appropriate prevention and mitigation measures have been implemented. The goal of biodiversity offsets is to achieve no net loss, or preferably a net gain, of biodiversity on the ground with respect to species composition, habitat structure and ecosystem services, including livelihood aspects."[18]

No net loss is an aspirational objective of measures to mitigate biodiversity impacts underpinned by the concept that loss of conservation value in one geographically or otherwise defined area can be balanced by commensurate gains elsewhere.[19] Having first come to prominence when applied to the extent of US wetlands in the late 70's and 80's, the concept has more recently been popularised and applied to a number of aspects of biodiversity.

WBCSD view

The WBCSD encourages the application of the mitigation hierarchy by all businesses with significant impacts on ecosystems and its inclusion in public policy and regulation.

Enshrining the concept of 'no net loss' in policy and regulation poses more immediate practical challenges. These include for example: difficulties in achieving accurate scientific measurement of biodiversity, uncertainties around the pace of ecosystem recovery and challenges with in regulatory enforcement of a no net loss policy. Some businesses are actively engaging with regulators to overcome these challenges.

Case Study 3 illustrates Rio Tinto's strategy for applying the mitigation hierarchy including the use of biodiversity offsets and additional conservation actions. Biodiversity banking, which extends the concept of offsets such that they become marketable credits is briefly considered in section 2.2.2.

2.2.4 Taxes and fiscal incentives

What's the concept?

Economic instruments such as taxes, charges and fees, as well as targeted exemptions from these instruments, are proposed as an important element of the policy maker's toolkit to complement other measures discussed in this paper.

Environmental taxes have been defined by the OECD, the International Energy Agency and the European Commission as: "Any compulsory, unrequited payment to general government levied on tax-bases deemed to be of particular environmental relevance", where the tax bases "include energy products, motor vehicles, waste, measured or estimated emissions, natural resources etc."[20]

The basic rationale for the use of taxes and charges in ecosystem policy is provided by the existence of externalities: impacts on ecosystems, which are side-effects of processes of production and consumption, and which do not enter into the calculations of those responsible for the processes. Where the effects are negative, externalities are costs. By levying a tax or charge on the activity giving

rise to the effect, the external cost can be partially or wholly internalised.[21]

Alongside taxes and charges, targeted exemptions are an obvious option to incentivise conservation. A tax exemption can function like a PES to reward positive conservation efforts: the difference is that the PES is a direct payment for a service whereas the exemption is effectively a non-payment (of moneys that would otherwise be due as tax).

Governments in several countries have developed tax incentives to encourage resource conservation.

In the United States, for example, income tax relief on charitable contributions has motivated donations of land or "development rights" (also known as "easements") to private environmental trusts around the country, thereby protecting over 810,000 hectares.[22]

WBCSD view

The WBCSD believes that environmental taxes can deliver environmental improvements in some circumstances and concurs with the OECD view that they can also provide incentives for innovation, as firms and consumers seek new, cleaner solutions in response to the price put on their environmental impacts. These incentives can also make it commercially attractive to invest in R&D activities to develop technologies and consumer products with a lighter environmental footprint.

The design of environmentally related taxation plays an important role. A positive environment for innovation, characterised by general stability and credibility in tax rates, is critical to encourage investment in innovative activities. Unlike market uncertainty (such as oil prices), policy uncertainty is more difficult to hedge against.

However, despite the incentives for innovation provided by environmental taxation, high-risk, long-term efforts needed for "breakthrough" advances still face barriers – policy and market uncertainty, access to capital and economies of scale – even if all pollutants were taxed optimally.

Combining environmentally related taxation with other environmental policy instruments may help overcome some of these barriers, such as with government funding of basic R&D into the development of breakthrough technologies, and with information campaigns that can help increase the impact of environmentally related taxation with consumers.[23]

2 Biodiversity policy options – a business perspective

2.3 Regulating use

2.3.1 Protected areas and managed areas with conservation targets

What's the concept?

CBD definition of protected area: "A geographically defined area which is designated or regulated and managed to achieve specific conservation objectives."[24]

IUCN definition of a protected area: "A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values."[25]

The IUCN further defines seven categories of protected area (Categories I(a & b) – Category VI) based on their primary management objective.

There are already over 120,000 designated protected areas covering around 13.9% of the Earth's land surface. Marine protected areas still cover only 5.9% of territorial seas[26] and 0.5% of the high seas but are increasing rapidly in number and area.

The CBD has proposed a target on protected area coverage that: "By 2020, at least 15% of land and sea areas, including the areas of particular importance for biodiversity, have been protected through representative networks of effectively managed protected areas and other means, integrated into the wider land- and seascape."[27]

Beyond the IUCN protected area categories, governments, NGOs and private sector organisations are responsible for a variety of land management arrangements covering large areas of land which involve some form of protection, enhanced stewardship or sustainable use (as illustrated in Case Study 4 some privately managed areas can achieve legal recognition as protected areas).

WBCSD view

Many governments face difficulties securing the funding for protected areas and subsequently ensuring their effective management; this is particularly true in developing countries where governance gaps can be more pronounced. Business can help in both regards; both specialist management companies and existing businesses with large areas of land under management have a significant role to play in protected area monitoring and management. In developing countries, businesses often have greater capacity than government agencies and their resources may also be more suited to protected area management. This capacity must be leveraged if we are to achieve conservation goals.

Companies currently protect vast areas of land around the world under a range of different tenure arrangements, management approaches and levels of control. Although centralised information on private protected areas is limited, as an indication of its significance the area under private protection in South Africa exceeds the area protected by the government and areas under private protection are substantial in many other countries.[28] As Case Study 4 illustrates, in some countries the benefits delivered by private protected areas already achieve legal recognition.

In many countries there is a need to develop a more integrated protected area approach based on the best available science which encompasses both publicly and privately protected and managed land. Where sustainable extraction (e.g. selective logging according to rigorous internationally recognised standards) or use (e.g. responsible tourism, conservation agriculture) can help protected areas be sustainably financed without compromising ecological integrity, this should be encouraged.

As stated (at the time of writing) the CBD's proposed target for protected area coverage by 2020 leaves open the potential to leverage privately protected land and land managed for sustainable use. The WBCSD supports the recognition of conservation value delivered by land managed for sustainable use (beyond conventional protected area definitions) as part of efforts to achieve conservation objectives as long as this is done on a negotiated basis with respect for existing property and use rights.

The WBCSD notes that any expansion of formally protected areas must be supported by increased resources for protected area management and particularly for spatial mapping to provide robust biodiversity datasets.

It is also important that the designation of protected areas reflects the best available science, for example explicitly considering the value of ecosystem services delivered from protected areas and considering the necessary linkages between protected areas to deliver other conservation objectives. Alongside this WBCSD would also highlight (as acknowledged by TEEB) the importance of policy actions to address the distribution of benefits and costs of protected areas in order to ensure that where they are implemented, protected areas are a socially and economically attractive choice.

2.3.2 National Green Accounting

What's the concept?

Green accounting incorporates environmental assets and their source and sink functions into national and corporate accounts. It is the popular term for environmental and natural resource accounting. Accounting for natural capital is a significant aspect of green accounting approaches.

Conventional national accounts largely ignore new or newly observed scarcities of natural resources, which threaten to undermine the sustainability of economic performance and growth, and environmental degradation as an 'external' (social) cost of economic activity.

Case study 4

FIBRIA - Establishing Private Natural Heritage Reserves

The Brazilian pulp and paper company Fibria owns an area of 1,043,000 hectares, of which 393,000 hectares are native reserves dedicated to environmental conservation. Fibria has engaged in a protection program under the Brazilian legal framework of Private Natural Heritage Reserves (or Reserva Particular do Patrimônio Natural, RPPN).

The RPPN is a system that was created by Federal Decree 20 years ago and provides a mechanism for the creation of environmental conservation areas on private land. Today, Brazil has around 1,000 of these private reserves, covering a total area of 700,000 hectares.

Fibria decided to apply for RPPN registration for a total of 6,367 hectares of land. In these areas, Fibria is implementing different biodiversity conservation initiatives, and is enhancing biological diversity through the expansion of areas connected by ecological corridors. Fibria devotes its efforts to not only setting up the reserves, but also carrying out the support work of cataloguing, maintaining and surveying biodiversity in depth together with institutions, NGOs and universities. Fibria will also grant access to the public for environmental education projects.

The results

Fibria has now completed the legalization process for three RPPNs, representing a total of 2,677 hectares.

These RPPNs are:

- Restinga de Aracruz, which is one of the only preserved areas of coastal forest in the north of Espírito Santo;
- Recanto das Antas, situated in Linhares (ES) within the Atlantic Forest biome. It is among the ten largest RPPNs within Brazil's Atlantic Forest biome according to the Instituto BioAtlântica, and is home to the tapir, one of the largest mammals in the Americas; and
- Mutum Preto, also located in Linhares (ES) within the Atlantic Forest biome. It is home to the black curassow, an endemic bird that is in danger of becoming extinct.

For further information please contact João Carlos Augusti at joao.augusti@fibria.com.br

Further critique refers to a possible distortion from counting environmental protection expenditures as an increase in national income, despite the fact that such 'defensive expenditure' tends to maintain, rather than increase, the welfare of society.[29]

The most comprehensive and widely accepted guide for green accounting is the System for integrated Environmental and Economic Accounting (SEEA) which was issued by the United Nations in 1993 and revised in 2003. SEEA introduces nature's environmental and economic assets and the 'environmental cost' of their degradation and depletion into the System of National Accounts (SNA).

Amongst a number of specific recommendations, TEEB lays down a challenge for the coming revision of SEEA (2012/2013) to better incorporate broad concepts of ecosystem valuation into its framework.

WBCSD view

WBCSD is strongly supportive of measures to include ecosystem value more comprehensively in national accounting. Like many other commentators the WBCSD sees enhanced national green accounting as a potentially transformative force, especially if it can subsequently be promulgated to businesses and other economic actors.

With progress on initiatives such as REDD-plus and the associated need to establish national level forest baselines and carbon inventories, more of the key building blocks required to effectively account for natural capital are in the process of being established.

Businesses are expert at accounting for a huge variety of stocks and flows and have a significant role to play. Crucially they can advise on national level accounting measures which are suitable for disaggregation to a sectoral or value chain level, and therefore valuable and applicable for business.

In parallel to efforts at a national and international level, the WBCSD is leading an initiative with 15 member companies and a number of technical partners to develop a standardised approach to ecosystem valuation and accounting for corporate use.

2 Biodiversity policy options – a business perspective

2.3.3 Investments in natural capital

What's the concept?

Investments in natural capital are generally understood to include investments in the restoration of ecosystems or investments in activities to pre-emptively prevent, or halt on-going, reductions in the provision of ecosystem services.

Activities may include, but are not limited to:

- Restoration and rehabilitation of terrestrial and aquatic ecosystems.
- Ecologically sound improvements to arable lands and other lands or wetlands that are managed for useful purposes i.e. cultivated ecosystems.
- Pre-emptive investments to avoid projected loss of ecosystem services.
- Active management and enhancement of bio-capacity on land and at sea.
- Establishment or enhancement of socio-economic activities and behaviours that incorporate knowledge, awareness, conservation and sustainable management of natural capital into daily activities.

Governments can provide incentives for this purpose by paying for or subsidising private activities such as reforestation and/or prescribing mandatory offsets to mitigate ecosystem disturbance caused by human interventions.

Additionally, governments may also need to consider directly investing public funds in natural capital and its restoration when:

- Returns lie in the realm of public goods and interests and will be realised only over the long term.
- Restoration involves large-scale and complex interrelated ecosystems - where the costs of restoration are very high due to the size of the restoration site, the level of degradation and/or uncertainties about the technical efforts needed.
- Early action is likely to be the most cost-effective approach.
- Potential beneficiaries are unable to afford restoration costs.

WBCSD view

Many businesses can and do invest in natural capital as part of their day to day business and increasingly companies are choosing to proactively invest in natural capital instead of in more expensive engineering solutions (see Case Study 5).

In some circumstances it may be appropriate for government to lead this investment but effective policy measures (such as REDD-plus) can also help to channel private finance and innovation towards natural capital.

Vision 2050 – a recent WBCSD leadership project looking at the role of business in securing a sustainable future – reconfirmed the critical importance of maintaining natural capital. In commenting on "must have" policy shifts, Vision 2050 identified the need for true value pricing of natural assets, the removal of perverse subsidies, and effective incentive structures for eco-efficient management of ecosystems and use and consumption of ecosystem services.

2.3.4 Environmental regulation, standards and certification

What's the concept?

The regulatory toolkit includes a wide range of prohibitions, restrictions, mandatory requirements, standards and procedures that directly authorise or limit certain actions or impacts.

There are three basic types of regulatory instruments for biodiversity and ecosystem services:

- Regulation of emissions, which usually involves emissions standards, ambient quality standards and technical standards (e.g. Best Available Techniques (BAT)); performance standards (e.g. air quality management); or management prescriptions for good practice (e.g. in agriculture).
- Restrictions on the use of products (e.g. illegally logged timber, activities damaging to endangered species etc.) or production standards (certification, best practice codes, etc.).
- Spatial planning, which involves regulation of land uses that have direct implications for ecosystem services or habitats. Planning decisions in most countries are devolved to local or regional planning boards. Designation and establishment of protected areas is a specific regulatory tool based on spatial planning (see section 2.3.1).

Regulation has long been, and still is, the most widely used instrument for environmental protection. It is used to establish protection objectives, reduce pollution and hazardous events and trigger urgent environmental improvements.

Alongside direct regulation a wide range of voluntary and quasi-voluntary standards exist which explicitly extend to or have indirect relevance for biodiversity and ecosystems.

These include for example:

- The International Standards Organisation (ISO) 14000 series of standards which companies can seek accreditation to.
- The Global Reporting Initiative (GRI) reporting indicators on biodiversity (Environmental indicator number (EN) 11 – EN15) which companies can voluntarily report against (GRI guidelines and indicators on biodiversity are currently being updated and revised).
- Sustainable sourcing initiatives including use of certified products and materials.

Case study 5

VOLKSWAGEN - Replenishing Groundwater through Reforestation in Mexico

Car manufacturer Volkswagen operates a factory in the Puebla Tlaxcala valley in Mexico, a region where the water-supply situation is particularly critical. Although the waste water Volkswagen produces is treated and recycled, it has been obvious for years that there would not be enough fresh water for the growing city of Puebla and the industrial area nearby. In this context, securing a reliable water supply was critical for Volkswagen to ensure the stability of its production.

The company decided to join forces with specialists from the Comision Nacional de Areas Naturales Protegidas and the Free University of Mexico City to comprehensively examine the groundwater situation in the region. The analysis found that groundwater replenishment in the valley was contingent to a substantial degree on the functionality of the ecosystems on the volcanic slopes of Popocatépetl and Iztaccíhuatl. It was important, therefore, to re-plant the deforested slopes between the two volcanoes in the source region of the Rio Atoyac.

Volkswagen de México earmarked $430,000 of funding for the project for the first two years and will subsequently lend its further support to maintaining and managing the restored forest area.

The results

These measures will enable more than 1,300,000 additional cubic meters of water per annum to be fed into the ground reserves in the source region. That is significantly more groundwater than Volkswagen de México itself consumes every year. Over the long term,

the additional forest biomass will also sequester atmospheric CO^2 and provide habitat for native flora and fauna.

Securing water supply is critical for Volkswagen's long term operations in the region. This project will help to prevent water rationing, rising water prices and unrest in the local population, therefore guaranteeing the social license to operate for Volkswagen in Mexico.

For further information please contact Dr. Christiane von Finckenstein at Christiane.von.finckenstein@volkswagen.de

2 Biodiversity policy options – a business perspective

WBCSD view

Environmental regulation is necessary in certain instances but alternative policy approaches which rest on true realignment of economic incentives should be considered in the first instance and direct regulation used only where other approaches are not practical.

Where it does not jeopardise conservation outcomes, environmental regulation should incorporate flexibility and include clear timetables for review and adaptation over time according to changing conditions.

Regulation must avoid stifling the innovation often provided by voluntary standards and industry initiatives. As well as delivering innovation, these voluntary and quasi-voluntary measures provide businesses with the opportunity to differentiate themselves, and can therefore harness market forces to drive environmental improvements. If they prove successful in the market this tends to encourage wider adoption. Where they can be shown to deliver improved environmental outcomes these measures should be strongly supported. In due course successful examples of voluntary initiatives can be brought within the scope of regulation where this is appropriate to deliver wider benefits and a level playing field.

The transition from voluntary to compliance driven mechanisms should be managed such that early action is rewarded. To be self sustaining and encourage uptake, standards and labelling should be built around the premise that markets will financially reward suppliers that meet those standards and should therefore be developed from the outset with the market proposition in mind alongside relevant conservation objectives.

Case study 6 highlights two resources which the WBCSD has co-developed with the aim of expanding the application of credible certification aimed at the procurement and financing communities respectively.

Case study 6

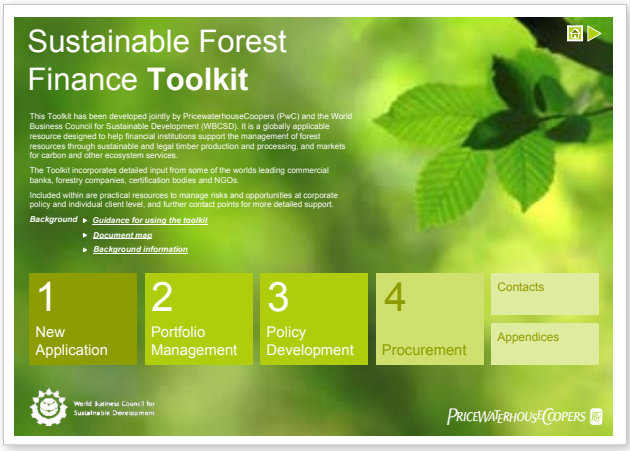
WBCSD – Tools to Expand the Use of Certification through Procurement and Financing

Sustainable Procurement of Wood and Paper-Based Prodcuts

The WBCSD partnered with the World Resources Institute (WRI) to provide reliable, impartial and technically "easy-to-understand" information to assist sustainability officers and business procurement managers, especially major purchasers of wood and paper-based products, in their purchasing decisions.

Sustainable Forest Finance Toolkit

The WBCSD partnered with PwC to develop a globally applicable resource to help financial institutions invest in and finance sustainable forestry operations worldwide. The toolkit focuses heavily on the importance of credible certification in mitigating financing risk.



3 Conclusion

Improved policy and regulation is required to meet the growing list of environmental challenges faced by society including biodiversity loss and ecosystem degradation. The policy toolbox includes a wide range of voluntary and mandatory options that can be used alone or in parallel to encourage improved conservation of biodiversity and sustainable use of natural resources. This paper has provided a business perspective on many of these options which have been raised by The Economics of Ecosystems and Biodiversity (TEEB) and discussions within the Convention on Biological Diversity (CBD).

The WBCSD hopes that public policy makers will take these views on board when designing new policy and regulation and adapting existing frameworks. The business community is central to the success of policy and regulation - indeed business is often the ultimate target of regulation - and closer collaboration between business and policy-makers is therefore needed to ensure the optimal policy solutions are developed and subsequently implemented.

To this end, opportunities to engage the business community in policy discussion should be capitalised upon, both through high level processes such as the CBD, and at national and local levels. This paper is intended as a starting point for further dialogue between business and policy makers such that businesses' views are heard and the effectiveness and efficiency of policy and regulation is duly enhanced.

Appendices

A. References

[1]www.cbd.int/2010-target

[2]"Updating and Revision of the Strategic Plan for the Post-2010 Period", Executive Secretary note from the Convention on Biological Diversity, (UNEP/CBD/WGRI/3/3) Annex I, 17th February 2010

[3]http://www.iucn.org/about/work/programmes/ecosystem_management/ipbes/

[4]Adapted from: WBCSD & IUCN (2010), Business involvement in the Intergovernmental and multi-stakeholder science-policy Platform on Biodiversity and Ecosystem Services (IPBES)

[5]http://ec.europa.eu/environment/gpp/index_en.htm

[6]TEEB (2009), The Economics of Ecosystems and Biodiversity for National and International Policy Makers (Ch5)

[7]EC (Commission of the European Communities) (2009) Contributing to Sustainable Development: The role of Fair Trade and nongovernmental trade-related sustainability assurance schemes. Communication COM(2009) 215 final, Brussels

[8]TEEB (2009), The Economics of Ecosystems and Biodiversity for National and International Policy Makers

[9]TEEB (2009), The Economics of Ecosystems and Biodiversity for National and International Policy Makers - adapted from earlier OECD definitions

[10]OECD – Organisation for Economic Co-operation and Development (2009) Agricultural Policies in OECD Countries. Monitoring and Evaluation. OECD, Paris

[11]UNEP – United Nations Environmental Programme (2008a) Fisheries Subsidies: A Critical Issue for Trade and Sustainable Development at the WTO: An Introductory Guide. UNEP, Geneva

[12]GSI – Global Subsidies Initiative (2009a) Achieving the G-20 call to phase out subsidies to fossil fuels. Policy Brief October 2009. GSI, International Institute for Sustainable Development (IISD)

[13]EEA – European Environment Agency (2005) The Use of Subsidies, Taxes and Charges in the EU Transport Sectors. EEA, Copenhagen, Denmark

[14]Myers, N. and Kent, J. (2002) Perverse Subsidies: how tax dollars can undercut the environment and the economy. Island Press, Washington, D.C.

[15]TEEB (2009), The Economics of Ecosystems and Biodiversity for National and International Policy Makers

[16]See also: BBOP at www.forest-trends.org/biodiversityoffsetsprogram; BNI at www.biodiversityneutral.org/index_content.html; ICMM at www.icmm.com/newsdetail.php?rcd=67

[17]Madsen, Becca; Carroll, Nathaniel; Moore Brands, Kelly; (2010). State of Biodiversity Markets Report: Offset and Compensation Programs Worldwide, Ecosystem Marketplace

[18]http://bbop.forest-trends.org/

[19]Adapted from: http://www.law.ufl.edu/conservation/waterways/waterfronts/pdf/no_net_loss.pdf

[20]OECD (Organisation for Economic Co-operation and Development) (2006) The Political Economy of Environmentally Related Taxes, OECD, Paris

[21]Adapted from: Ekins (2009), Theory and Practice of Environmental Taxation. In: Chartered Institute of Taxation (2009), Green Tax Report

[22]Clark, D. and D. Downes (1996). What Price Biodiversity? Economic Incentives and Biodiversity Conservation in the United States. Washington, DC: Center for International Environmental Law.

[23]Adapted from: OECD (2010), Taxation, Innovation and the Environment

[24]Article 2 of the Convention on Biological Diversity. www.cbd.int/convention/articles.shtml?a=cbd-02

[25]Dudley, N.; Mansourian, S.; Stolton, S. and Suksuwan, S. (2008) Safety Net: Protected areas and poverty reduction. WWF. http://assets.panda.org/downloads/safety_net_final.pdf

[26]Coad, L.; Burgess, N. D.; Bombard, B. and Besançon, C. (2009) Progress towards the Convention on Biological Diversity's 2010 and 2012 targets for protected area coverage. A technical report for the IUCN international workshop 'Looking at the Future of the CBD Programme of Work on Protected Areas', Jeju Islad, Republic of Korea, 14-17 September 2009. UNEP-WCMC, Cambridge

[27]"Updating and Revision of the Strategic Plan for the Post-2010 Period", Executive Secretary note from the Convention on Biological Diversity, (UNEP/CBD/WGRI/3/3) Annex I, 17th February 2010

[28]C.W. Watkins, A.M. Barrett, R. Smith and J.R. Paine (1996), World Conservation Monitoring Centre, Private Protected Areas: A Preliminary Study of Private Initiatives to Conserve Biodiversity in Selected African Countries

[29]Adapted from: Peter Bartelmus (Lead Author); Amy Richmond and Surender Kumar (Topic Editor);. (2008). "Green accounting." In: Encyclopedia of Earth. Eds. Cutler J. Cleveland (Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment). http://www.eoearth.org/article/Green_accounting

B. Relevant WBCSD publications

The following are key WBCSD resources around business, biodiversity conservation and the sustainable management and use of ecosystems services.

Reports

1. Vision 2050 The new agenda for business:
   http://www.wbcsd.org/Plugins/DocSearch/details.asp?DocTypeId=33&ObjectId=Mzc0MDE
2. Ecosystems Challenges and Business Implications:
   http://www.wbcsd.org/DocRoot/Ejk5KCJOlkVkRngCksWD/Business%20and%20Ecosystems_211106_final.pdf
3. Markets for Ecosystem Services – New challenges and Opportunities for Business and the Environment:
   http://www.wbcsd.org/DocRoot/7g8VZQpq0LeF1xNwsbGX/market4ecosystem-services.pdf
4. Sustain - Ecosystems + Equity + Economics equals SD (for the 2008 World Conservation Congress):
   http://www.wbcsd.org/DocRoot/23TIlulMCE8ncAf5tPOe/Sustain30.pdf
5. Corporate Ecosystems Valuation - Scoping Study:
   http://www.wbcsd.org/DocRoot/pdK9r5TpPijC1XXpx7QR/EcosystemsServices-ScopingReport_280509.pdf
6. Corporate Ecosystem Valuation - Issue brief:
   http://www.wbcsd.org/DocRoot/3Bk2xNdb650b4Q29JD70/EcosystemsServices-IssueBrief_280509.pdf
7. Corporate Ecosystems Valuation - Building the business case:
   http://www.wbcsd.org/DocRoot/sTRJLXdoq8SPdrVilYHq/CorporateEcosytemsValuation-BuildingTheBizCase.pdf
8. Policy Directions to 2050 – business contribution the dialogues on energy and climate cooperative action
   http://www.wbcsd.org/DocRoot/bdA09BFxjVkjEeXJKjle/int_low_res.pdf
9. Tackling climate change on the ground – Corporate case studies on land use and climate change:
   http://www.wbcsd.org/DocRoot/EBCdFOJntcCbpHn8h6N3/LandUse_Final.pdf
10. Water Facts and Trends:
    http://www.wbcsd.org/DocRoot/lD1tMGiLZ7NL9mBOL2aQ/WaterFactsAndTrends-Update.pdf
11. Water, Energy & Climate:
    http://www.wbcsd.org/DocRoot/Dg6GYWJq7xuaLO0OwZOi/WaterEnergyandClimateChange.pdf
12. Water for Business – Initiatives guiding sustainable water management in the private sector:
    http://www.wbcsd.org/DocRoot/4vktD3RTDFDYliXT5GnF/Water4Business.pdf

Appendices

Implementation Tools

1. Ecosystem Services Review (ESR) Guide: http://www.wbcsd.org/Plugins/DocSearch/details.asp?DocTypeId=25&ObjectId=Mjg5NjQ
2. Sustainable Procurement of Wood and Paper-based Products Guide, Resource Kit and web site: http://www.sustainableforestprods.org/
3. GHG Account Protocol: http://www.wbcsd.org/templates/TemplateWBCSD1/layout.asp?type=p&MenuId=Mjc3
4. Sustainable Forest Finance Toolkit: www.pwc.co.uk/forestfinancetoolkit
5. Global Water Tool: http://www.wbcsd.org/web/watertool.htm
6. Water Scenarios to 2025: http://www.wbcsd.org/plugins/DocSearch/details.asp?type=DocDet&ObjectId=MTk2MzY

Ecosystems "Training"

1. Ecosystems Training: http://www.wbcsd.org/Plugins/DocSearch/details.asp?DocTypeId=251&ObjectId=MzMwNTk
2. Ecosystems Buy Sell Trade Game: http://www.wbcsd.org/templates/TemplateWBCSD5/layout.asp?type=p&MenuId=MTYyMg&doOpen=1&ClickMenu=LeftMenu

Disclaimer

Printed on paper containing 40% recycled content and 60% from mainly certified forests (FSC and PEFC), 100% chlorine free, ISO 14001 certified mill.

World Business Council for Sustainable Development **www.wbcsd.org**

4, chemin de Conches, CH-1231 Conches-Geneva, Switzerland, Tel: +41 (0)22 839 31 00, E-mail: info@wbcsd.org

1500 K Street NW Suite 850, Washington, DC 20005, Tel: 202-383-9505, E-mail: mcglyn.us@wbcsd.org

c/o Umicore, Broekstraat 31, B-1000 Brussels, Belgium, E-mail: brussels@wbcsd.org