Forests in a green economy The role of business

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TEEB: Recognizing and capturing the value of forest ecosystem services in the MENA region

Tunis, 28-29 June 2011





- Macroeconomics of greening the economy (Green Economy Report, synthesis)
 - Employment effects in a green economy (Green Jobs)
 - Recognizing, demonstrating and capturing biodiversity values (TEEB for business)



Rio+20



Conference Aims

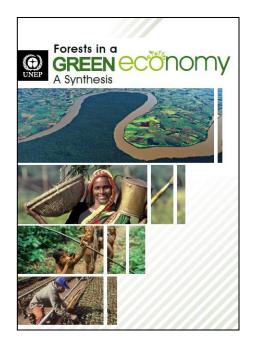
- Securing renewed political commitment to sustainable development
- Assessing the progress and implementation gaps in meeting already agreed commitments
- Addressing new and emerging challenges

Themes

- Green Economy within the context of sustainable development and poverty eradication
- Institutional Framework for sustainable development

Call for a "strong private sector track"

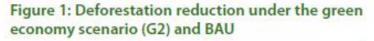
In a Green Economy...



- Full value of forests recognized and invested in as a source of natural capital and environmental services
- Public and private investments in forests are catalyzed and supported by targeted policy reforms, regulation changes and capacity building.
- Forests are managed and invested in as an asset class and are important factors of production.
- International mechanisms increase investments in forests.
- Forest management hinges critically on an effective and transparent **accounting system**.⁴

Investments in the forest sector

The Green Economy Report suggests that an average annual additional investment of US\$ 40 **billion** is required to halve global deforestation by 2030, and increase reforestation and afforestation by 140 per cent by 2050, relative to business as usual (BAU).



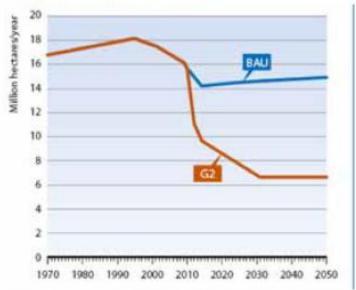
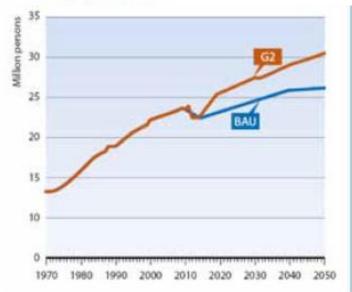


Figure 2: Employment under the green economy scenario (G2) and BAU



Enabling conditions: Role of the international community

- Agree on an international REDD+ scheme
- Generate knowledge on forest ecosystem services
- Stimulate engagement from the commercial financial sector
- Re-invest income from royalties and taxes into the forest sector



Enabling conditions: Role of **Governments**



- Create markets and employ market-based instruments
 to promote green
 investment and innovation
- Guarantee adequate returns on risk-adjusted investment
- Devise transparent and efficient procedures
- Agree on a national vision for ways and means in which forests can contribute to development

Enabling conditions: Role of Business, financial institutions

- Investing in forest projects
- Providing independent, easily accessible and verifiable risk assessments
- Leveraging resources and providing finance
- Insuring and guaranteeing investment and risks particular to the forest sector
- Applying conventional financial instruments to the forest sector

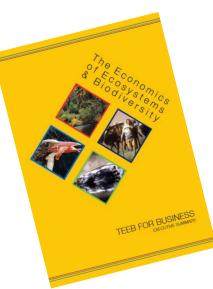


FSC Canada



Business, biodiversity and ecosystem services (BES)

- The value of nature is changing:
 - Increasing scarcity of natural resources
 - Increasing visibility of ecosystem values
 - More demanding citizens, consumers and public policies
 - New technologies that add value to biodiversity & ecosystems
- All businesses are affected, directly or indirectly
- New and growing BES risks must be managed
- Just as climate change has stimulated new technologies, business models and markets, BES offer opportunities for investors and entrepreneurs





Ecosystem service losses (1950-88)	US\$12.2 Bn
Property loss from flooding	5.5%
Loss of river transport capacity	1.7%
Sedimentation of water bodies	0.3%
Desertification (crop yields)	7.7%
Reduced lumber output	7.9%
Loss of plant nutrients	16.7%
Reduced water runoff	27.2%
Reduced precipitation	33.0%

Source: Hongchang, W. (1997)

Universal Ownership Why environmental externalities matter to institutional investors

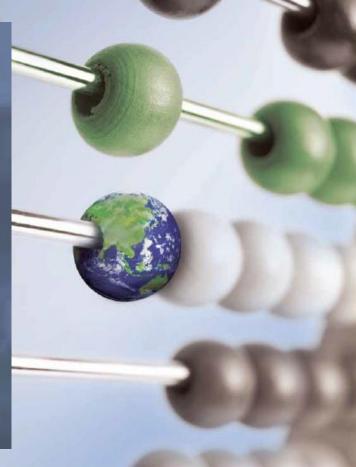
US\$ 2.15 trillion

The cost of environmental damage caused by the world's 3,000 largest publicly-listed companies in 2008.

>50%

2011

The proportion of company earnings that could be at risk from environmental costs in an equity portfolio weighted according to the MSCI All Country World Index.







The PRI is an investor initiative in partnership with UNEP Finance Initiative and the UN Global Compact



Drivers of improved BES reporting

Stakeholder expectations

- Global Reporting Initiative
- Carbon Disclosure Project
- Forest Footprint Disclosure Project
- Accountancy standards
 - UK Environment Agency & ICAEW "Environmental Issues and Annual Financial Reporting" (2009)
- Regulatory requirements
 - US Securities and Exchange Commission "Guidance Regarding Disclosure Related to Climate Change" (February 2010)
- Potential extension to BES?

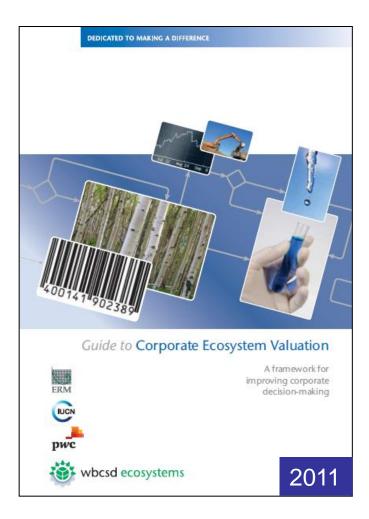
Scaling down biodiversity & ecosystem risks to business

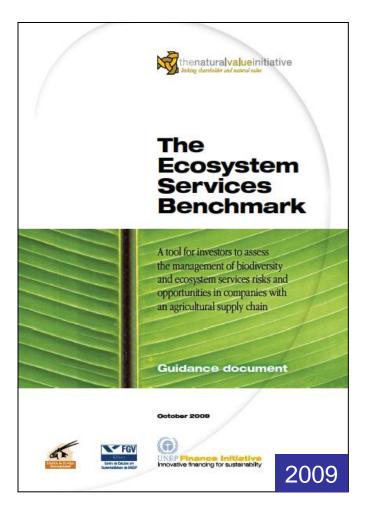
- Integrated Biodiversity Assessment Tool
 - <u>http://www.biodiversityinfo.org/ibat/</u>
 - GIS database for site-level risk assessment
 - Based on World Database of Protected Areas, World Biodiversity Database, IUCN Red List of Threatened Species
- Business and Biodiversity Offsets Program
 - <u>http://www.forest-trends.org/biodiversityoffsetprogram/</u>
 - Guidance on designing and implementing biodiversity offsets to ensure "no net loss"
 - Led by Forest Trends, Wildlife Conservation Society and Conservation International
- Certification and labelling
 - <u>http://www.isealalliance.org/</u>
 - Global hub for social and environmental standards
 - Members represent fair trade, forest stewardship, organic agriculture, fisheries, etc.













Increasing biodiversity business opportunities

Adding BES to existing business

- Agriculture
- Biodiversity mgmt services
- Cosmetics
- Extractive industries
- Finance
- Fisheries
- Forestry
- Garments
- Handicrafts
- Pharmaceuticals
- Retail
- Tourism

- New markets for biodiversity and ecosystem services
- Bio-carbon & REDD
- Biodiversity banking
- Enabling policy & tools

Biodiversity offsets and banking: Wetland mitigation banks in the USA

- Authorized under federal Clean Water Act
- Developers must compensate for loss of wetlands
- Most compensation is 'in-kind' and within the same watershed as damage
- Developers can do it themselves or purchase 'credits' from approved 'banks'
- 450+ approved wetland banks, most privately financed on commercial basis
- US market currently worth ~\$2 billion/year

Offset and compensation programmes worldwide The global annual market size is USD 2.4-4.0 billion at minimum, and likely much more, as 80% of existing programmes are not transparent enough to estimate their market size.





Ecosystem Marketplace, 2011

From carbon neutral ...

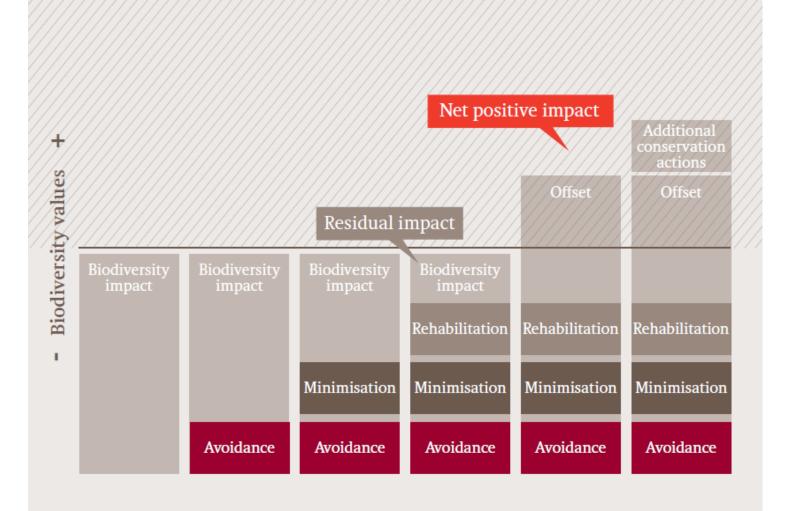


... to biodiversity positive

- Danone Group: "Attain carbon neutrality for the major Danone brands, including Evian, by the end of 2011."
- Marks & Spencer: "Our goal is to become carbon neutral by 2012 in our UK and Republic of Ireland operations."
- Coca Cola: "Our goal is to safely return to communities and nature an amount of water equivalent to what we use in all of our beverages and their production."
- BC Hydro: "long-term goal of no net incremental environmental impact."
- Walmart: "Committed ... to permanently conserve at least one acre of priority wildlife habitat for every developed acre."
- Rio Tinto: "Our goal is to have a 'net positive impact' on biodiversity."



The concept of "Net Positive Impact"



Source: Rio Tinto

Enabling policy for biodiversity business

- Subsidy reform (agriculture, fisheries, water, transport, etc)
- Tax credits and other incentives for conservation
- Certification and eco-labelling (voluntary / mandatory)
- Payment for Ecosystem Services (national, international)
- Environmental responsibility (EU Environmental Liability Directive, damage assessment and compensation)
- Environmental trading schemes (REDD+, USA wetland and species mitigation, Australia biodiversity banking)
- Public access to information (Global Reporting Initiative, Carbon / Forest / Water footprint disclosure projects)



Aligning BES and development: Rio Tinto in Madagascar

- Net Positive Impact (NPI) policy entails impact avoidance, mitigation, restoration and offsets
- Support for conservation project (60,000 ha lowland forest)
- Potential benefits:
 - Carbon storage US\$26.7 million
 - Wildlife habitat US\$2.7 million
 - Hydrological regulation US\$760,000
 - Eco-tourism US\$2.5 million
- Potential costs:
 - PA start-up and management US\$3.2 million
 - Lost agricultural output & NTFPs US\$9.7 million
- Benefit-sharing with local communities (REDD revenue)

Source: Olsen & Anstee (2010)



What can business do TODAY?

- 1. Identify impacts and dependence on biodiversity and ecosystem services (BES)
- 2. Assess the business risks and opportunities associated with these impacts and dependencies
- 3. Develop BES information systems, set targets, measure and value performance, report results
- 4. Avoid, minimize and mitigate BES risks, using in-kind compensation ('offsets') where appropriate
- 5. Grasp emerging BES business opportunities, e.g. cost-efficiencies, new products and new markets
- 6. Integrate BES actions with wider Corporate Social Responsibility
- 7. Engage with business peers and other stakeholders to improve BES guidance and policy

unep.org/greeneconomy teebweb.org

What is a Green Economy?

A **Green Economy** is one that results in increased human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.



- A green economy is about redirecting a society's investment
- The public sector has a leadership role to play in redirecting the flow of investment
- Public investment and economic incentives are particularly important
- A much greater emphasis should be placed on public-private partnerships