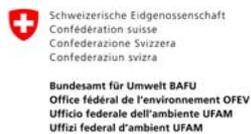




## Payments for Ecosystem Services: What role for a green economy?

United Nations, Geneva – 4-5 July 2011



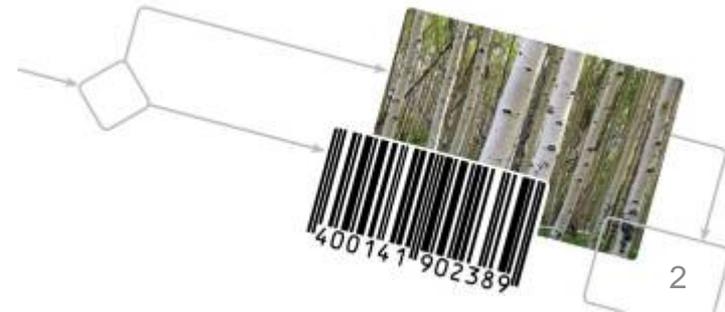
## Session 3 case study: Improving corporate decision-making by valuing ecosystems

James Griffiths, WBCSD



# Agenda – 15 minutes on...

- Introduce World Business Council for Sustainable Development (WBCSD)
- Business case for company action on biodiversity & ecosystem services
- Payments for ecosystem services:
  - ✓ WBCSD perspective
  - ✓ Case studies
- Guide to Corporate Ecosystem Valuation (CEV) released April 2011
- Final remarks





# Regional Network



We also benefit from:

- 61 independent national and regional partner organizations
- involving thousands of business leaders
- two-thirds in developing countries and emerging economies.

[www.wbcd.org/regional/htm](http://www.wbcd.org/regional/htm)



# The case for business action

Business impacts on ecosystems and ecosystem services



Ecosystem change creates business **risks** and **opportunities**

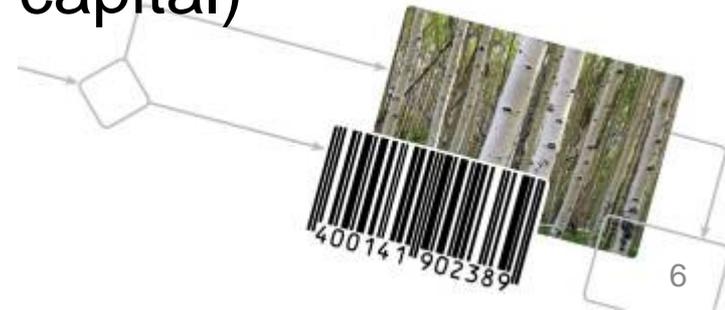


Business depends on ecosystems and ecosystem services



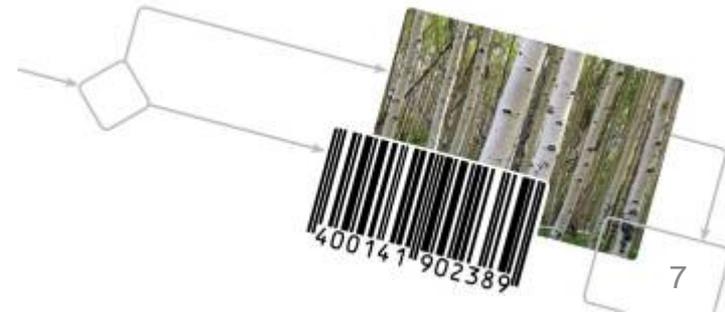
# Business & ecosystem risks & opportunities

- **Operational** (e.g. increased scarcity and cost of raw materials)
- **Regulatory and legal** (e.g. public policies like taxes and moratoria on extractive activities)
- **Reputational** (e.g. relationships and image from media and NGOs)
- **Market and product** (e.g. consumer preferences)
- **Financing** (e.g. availability of capital)



# How can business respond to their biodiversity & ecosystem-related issues?

1. Measure, manage and mitigate dependence & impacts risks
2. Improve decision-making by undertaking *corporate ecosystem valuation* to quantify business risks and opportunities
3. Innovate and help develop new markets for ecosystem services and eco-efficient goods, services & technologies
4. Encourage suppliers & purchasers to adopt best practices
5. Enter into local partnerships to address on-the-ground issues
6. Promote “smart” ecosystem regulation that leverages market forces and business solutions that halt degradation and “levels the playing field” for all



# Effective biodiversity and ecosystem policy and regulation



*Business input to the COP10 of the  
Convention on Biological Diversity*

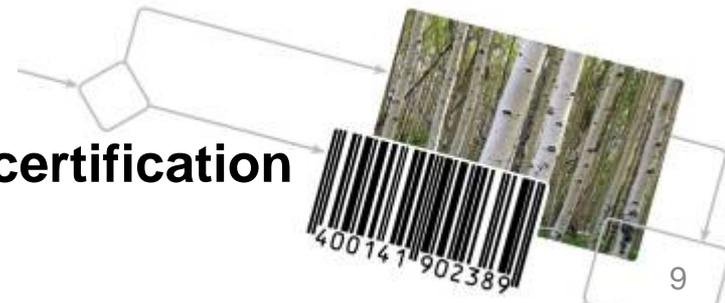


World Business Council for  
Sustainable Development

October 2010

# Biodiversity policy options covered:

- **Intergovernmental Platform on Biodiversity & Ecosystem Services**
- **Green Public Procurement**
- **Access & Benefit-Sharing**
- **Subsidies reform**
- **Payments for Ecosystem Services (PES)**, environmental markets & compensation for loss of ecosystem services
- **Mitigation hierarchy, biodiversity offsets & “no net loss”**
- **Taxes & fiscal incentives**
- **Protected areas & managed areas with conservation targets**
- **National Green Accounting**
- **Investments in natural capital**
- **Environmental regulation, standards & certification**



# Payments for Ecosystems Services – WBCSD perspective

- Potentially a powerful market mechanism complimenting existing strategies to conserve ecosystems (WBCSD/IUCN 2007)
  - ✓ Clear buyer and seller
  - ✓ Prices to reflect true costs/benefits and incentivize ongoing provision
  - ✓ Create conditions for competition and accountability
- A phased approach to REDD+ (The Forests Dialogue, 2007/11)
  - ✓ Public policy reform to enable SFM, generating forest carbon credits to supply the formal/mandatory market
  - ✓ Social, ecological and economic safeguards needed
- Can be an effective public policy option (WBCSD @ CBD COP 10)
  - ✓ Establish a **level playing field both** for companies competing
    - in the same markets
    - that use the same resources
  - ✓ Manage transaction costs which can be high in start-up phase
  - ✓ Based on clear property and tenure rights



# WBCSD Vision 2050: 9 billion people living well within limits of the planet, including Forests Pathway

## The pathway to Vision 2050



# Responding to the biodiversity challenge – company case studies

Business contributions to the Convention on Biological Diversity



# Conserving a unique transboundary ecosystem

<b>CBD Objectives</b>		<b>Country covered</b>	Mexico
<b>CBD Strategic Goal</b>	<b>D.15</b> – Restoration of at least 15 of degraded ecosystems by 2020	<b>Business case</b>	<ul style="list-style-type: none"><li>▪ Part of CSR program</li><li>▪ Build stakeholder relationships</li></ul>

## ❖ The issue

- Owns land in a biodiversity hotspot located in the border region of Mexico and USA
- A region that has been heavily exploited by logging, mining and overgrazing for more than 100 years

## ❖ The response

- El Carmen Transboundary Conservation initiative
- Unique partnership between a large number of stakeholders: government, private landowners, NGOs, universities, etc

## ❖ The results

- 200,000 ha of protected area (CEMEX and other private landowners)
- 500 species of plants, 290 species of birds, 80 species of reptiles & amphibians, 81 species of mammals and 140 species of butterflies
- Expertise building in land management and biodiversity conservation
- Possibility to participate in emerging markets for carbon sequestration and watershed protection



# Creating business value through ecological stormwater management



US BCSD  
Member  
Company

<b>CBD Objectives</b>		<b>Country covered</b>	US
<b>CBD Strategic Goal</b>	<b>D.14</b> – Ecosystem providing essential services (inc. water) are restored	<b>Business case</b>	<ul style="list-style-type: none"><li>▪ Reduction of natural hazards (flooding)</li><li>▪ Cost efficiency</li></ul>

## ❖ The issue

- Ageing stormwater management infrastructure → recurrent flooding

## ❖ The response

- Restoration of the local ecosystem through construction of a wetland, able to regulate stormwater
- Worked in partnership with stakeholders to analyze, design and construct the wetland
- Valuation study of the two options (management infrastructure vs. wetland)

## ❖ The results

- Wetland more cost efficient in the long run
- Improvement of stormwater regulation
- Improvement of the public water system in the region
- Biodiversity enhancement: plant diversity expected to increase by 30 species



# Restoring wetlands to secure water supply



<b>CBD Objectives</b>		<b>Country covered</b>	South Africa
<b>CBD Strategic Goal</b>	<b>B. 7</b> – Areas under forestry are managed sustainably	<b>Business case</b>	<ul style="list-style-type: none"> <li>▪ Dependency of water for operations</li> <li>▪ Social and environmental license to operate</li> </ul>

## ❖ The issue

- South Africa: a water scarce country, where 55% of wetlands have been damaged
- Mondi high reliance on water (commercial forests and processing plants)

## ❖ The response

- Creation of *Mondi wetland programme* – partnership between Mondi, WWF, Wildlife and Environment Society of South Africa and the Mazda Wildlife Fund: 1) awareness program (incl. training on management tools and resources) and 2) removal of commercial trees on or close to riparian or wetland areas

## ❖ The results

- Substantial contribution to the maintenance of functioning freshwater systems (renounced to 5% of its productive forestry land)
- Costs are part of social and environmental license to operate and commitment to communities



# Using market mechanisms to protect biodiversity in the Panama Canal basin



<b>CBD Objectives</b>		<b>Country covered</b>	Panama
<b>CBD Strategic Goal</b>	<b>D.14</b> – Ecosystems providing essential services (incl. water) are restored	<b>Business case</b>	<ul style="list-style-type: none"> <li>▪ High dependency on freshwater</li> <li>▪ New business opportunities</li> </ul>

## ❖ The issue

- High consumption of water: freshwater from the basin supply more than half the country's population and the Panama Canal operations
- More pressure on natural resources due to population growth and development of economic activities in the region

## ❖ The response

- 20-year project “ The Environmental Economic Incentives Program” aiming at ensuring freshwater availability in quantity and quality:
  - Protection of existing forest cover and regulation of land use
  - Improvement of biological connectivity among national protected areas
  - Recovery of specific areas through agroforestry, silvopastoral systems, and commercial reforestation activities involving local farmers
  - Financing through market instruments (certified emissions reduction in voluntary markets)

## ❖ The results

- Restore over 20,000 ha of lands and natural resources, and reduce CO2 emissions for a 20-year period





## *Guide to* Corporate Ecosystem Valuation

## What the Guide is

- ✓ A framework for improving corporate decision-making by valuing ecosystem services
- ✓ A set of resources to navigate through related jargon and techniques

## What the Guide is not

- ✗ A price list of biodiversity & ecosystem services
- ✗ A calculator to “crunch numbers”
- ✗ A stand-alone methodology



# Partners and Road Testers

## Partners



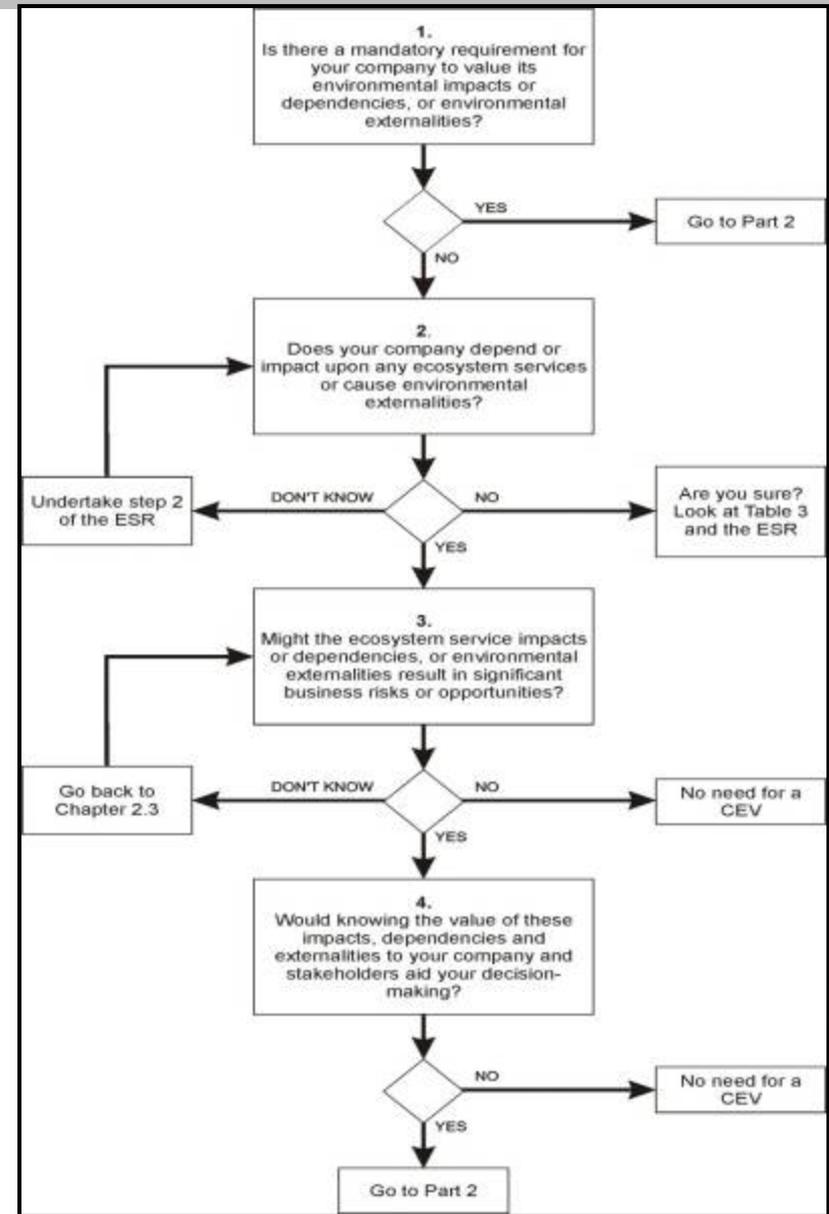
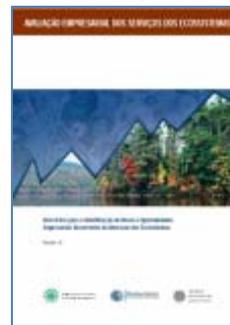
## Road Testers



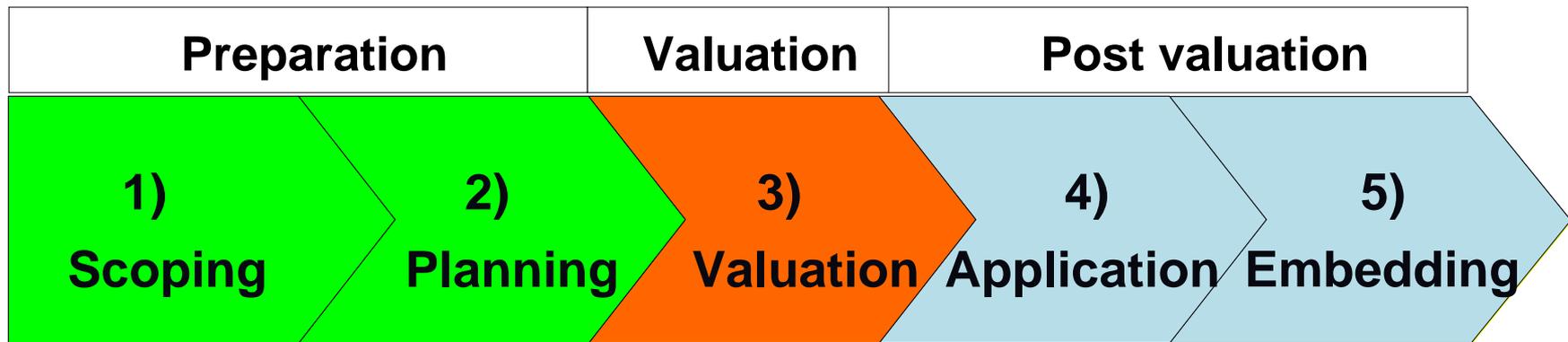
# Part 1: Screening – decision support tree: Do you need to conduct a CEV at all?

- Have you done an ecosystems impacts & ecosystem service dependence assessment?
- Are results “material”?
- How will valuation help?
- Mandatory requirement?
- WRI/WBCSD Corporate Ecosystem Services (ESR) guide resource available

since 2008  
wbcsd ecosystems



# Part 2 - Methodology: 5 stages to undertake a CEV exercise



define scope for valuation exercise, using checklist of questions

develop suitable plan to undertake valuation effectively

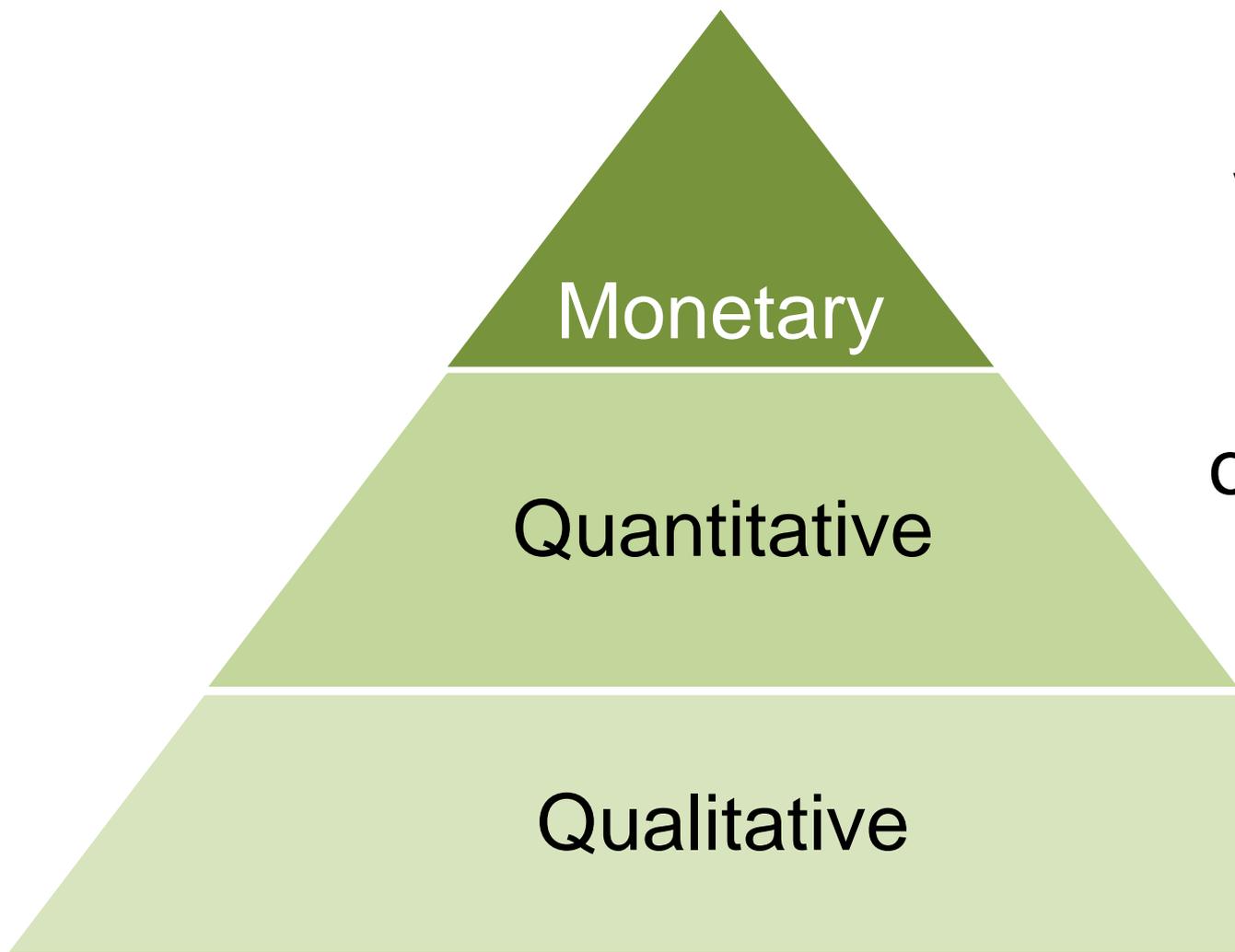
actual valuation: may be qualitative, quantitative and/or monetary

use & communicate valuation results to influence internal & external decision-making

embed the CEV approach within company processes & procedures



# Hierarchy of valuation approaches

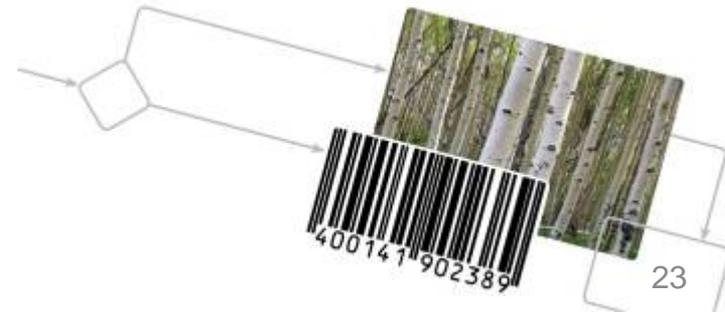


**Monetary**  
values not  
always  
**available**  
or **required**



# How CEV helps improve decision-making and...

- **Save costs**
  - ✓ e.g. cheaper & more effective waste management options
- **Reduce taxes**
  - ✓ e.g. gain deductions in Federal taxes
- **Get new revenue streams**
  - ✓ e.g. implement a fee-to-access program for recreational users of unused lands
- **Assess liability & compensation risks**
  - ✓ e.g. calculate oil spill natural resource damages to be used in courts of laws
  - and more...



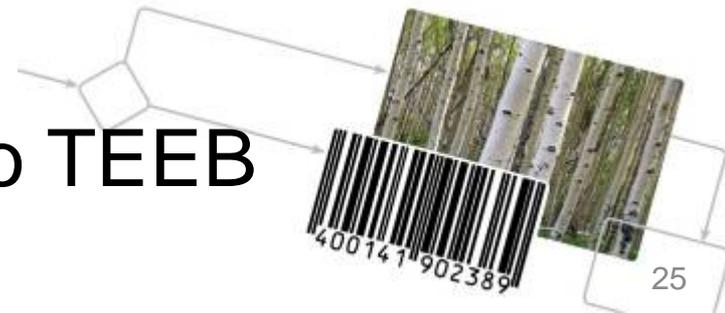
# CEV road test example - Weyerhaeuser

- Assess the economic value of ecosystem services produced under different management scenarios for forested land – including different mixes of tree species, bio-fuel crops and other land uses
- Framework and methodology to evaluate forest productivity and ecosystem service values for any site
- Used “trade-off” analysis and change in productivity approaches
- Improve land use and forest management decision making taking into account wider range of potential revenue streams



# CEV Guide – additional features and benefits

- Developed with business for business
  - ✓ 14 case studies
  - ✓ Compelling illustration, helpful hints
- Builds the business case
- Principles how to conduct a CEV
- Valuation techniques and selection
- Check lists – who to involve, assessing costs, time estimates
- Corporate level response to TEEB

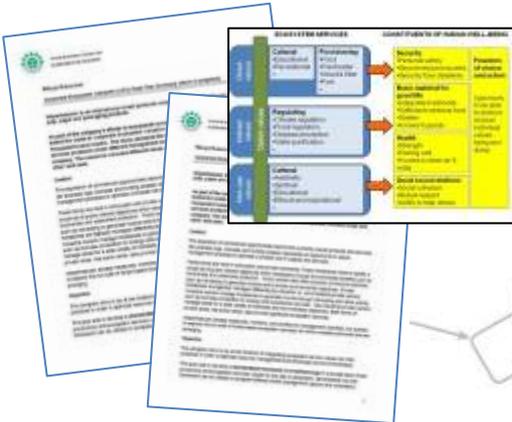


# Reports & guide

# Additional resource notes

- Concepts
- Selection & application of techniques

# Road tester summaries PPT packs



# In summary

- Business **depends** and **impacts** on biodiversity & ecosystem services
- CEV can help business **manage risk** and consider new business **opportunities**
- Anticipate changing **stakeholder expectations** & regulatory **frameworks**
- Valuing these impacts and dependencies helps business make **better decisions**
- Ecosystem valuation will increasingly be considered by **governments, finance sector** and business-to-business **customers**
- CEV process is **complementary** to other business tools (e.g. ESIA, LCAs)

