



Guide to Corporate Ecosystem Valuation

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- Value of ecosystems
- Ecosystem drivers & business context
- Business risks & opportunities
- How can business respond?
- Guide to Corporate Ecosystem Valuation (CEV)
- In summary



Definitions: ecosystem services & biodiversity

Ecosystem



Functional unit composed of living (e.g. plants, animals, micro-organisms) and non-living environments

e.g. forest, mountain, marine, inland water (rivers, wetlands)

Ecosystem services



Benefits society and business obtain from ecosystems / “goods and services of nature”

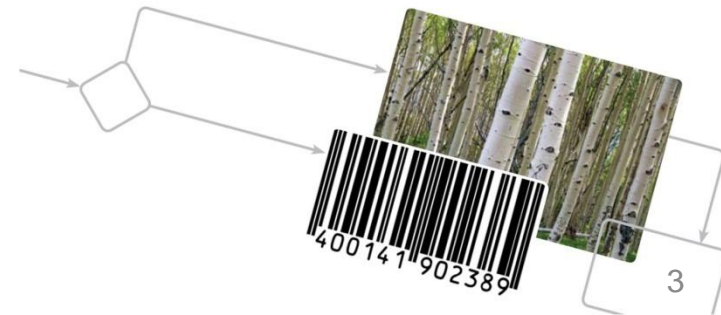
e.g. freshwater, food, fiber, climate regulation, pest and flood control

Biodiversity



Variability among living organisms

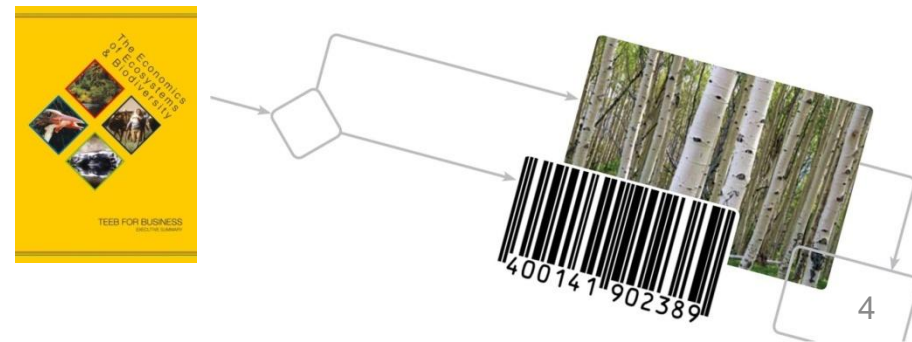
- within species
- between species
- between ecosystems



Value of ecosystems

- **€ 1.35 trillion / year**: minimum estimate of **natural capital loss**, just from deforestation
 - ✓ Approx total GDP of UK or France in 2010
- **US\$ 190 billion / year**: contribution of insect **pollination** to agriculture output
 - ✓ Approx. 8 times Walmart's 2010 total operating income

Source: *The Economics of Ecosystems and Biodiversity TEEB for Business 2010*

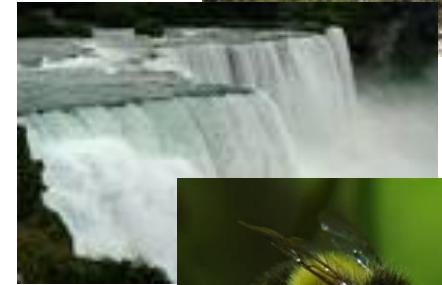


Biodiversity & ecosystem business impacts & dependence

Business impacts on ecosystems and ecosystem services

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

Business depends on ecosystems and ecosystem services



Biodiversity & 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)

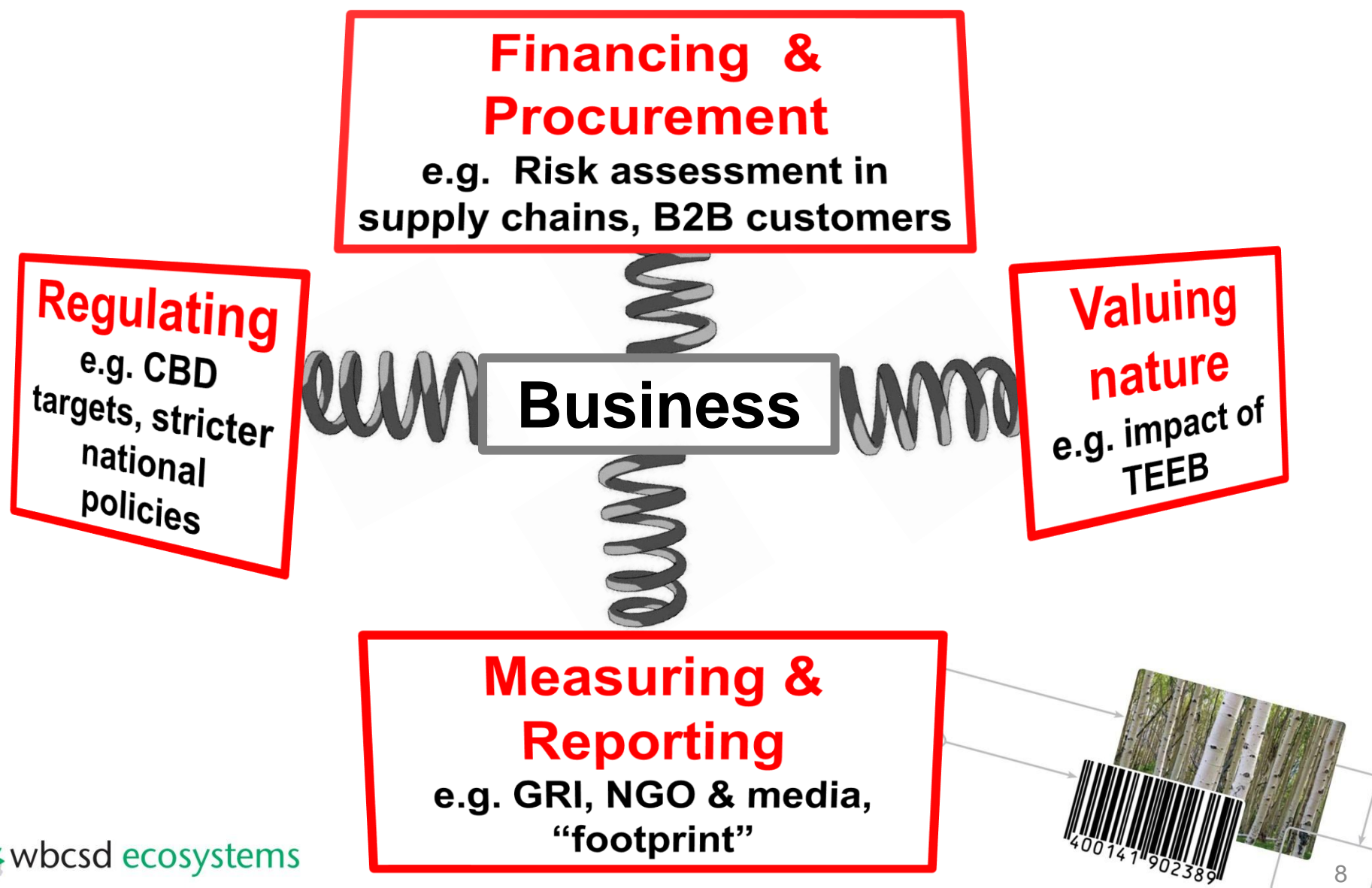


How can business respond to their ecosystem-related issues?

1. Measure, manage and mitigate risks and impacts
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



Ecosystem drivers & business context



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

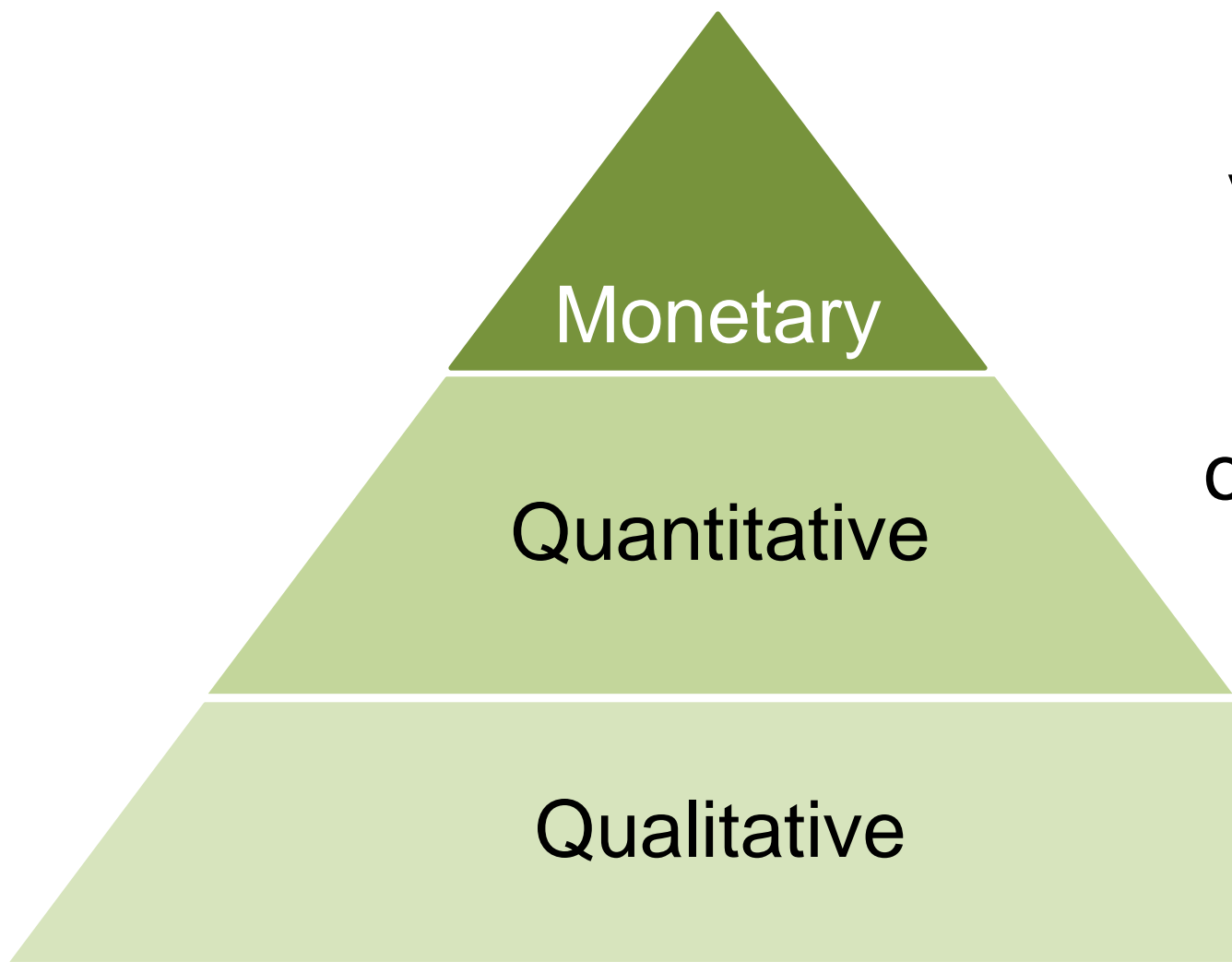


How CEV helps improve decision-making and...

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



Hierarchy of valuation approaches



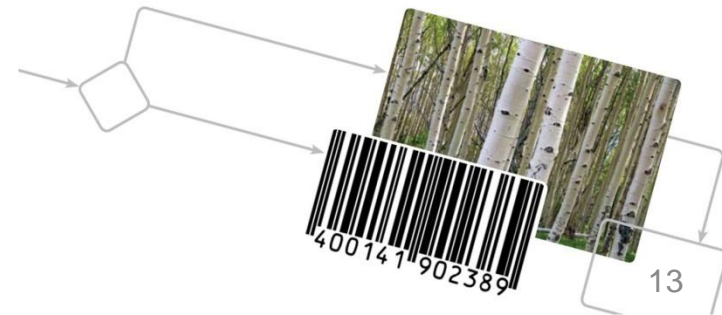
Monetary
values not
always
available
or **required**



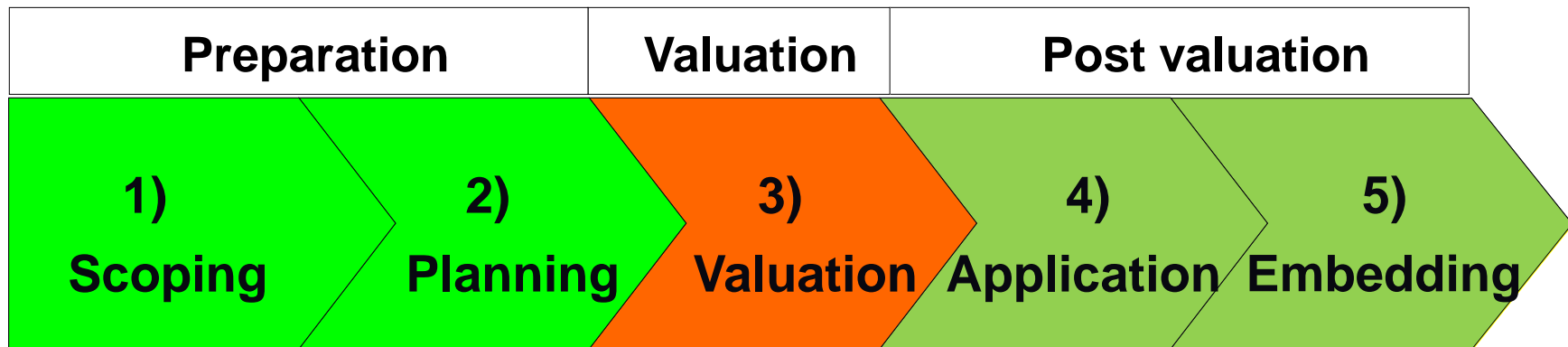
Do you need to conduct a CEV at all?

Before using the 5-stage methodology, the Guide asks a number of questions to ensure there is a need for a CEV study, e.g.

- Are your impacts & dependence on ecosystem services “material” / significant?
- Is there a mandatory requirement to value them?
- How will valuation help make your decision?



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



Reports & guide

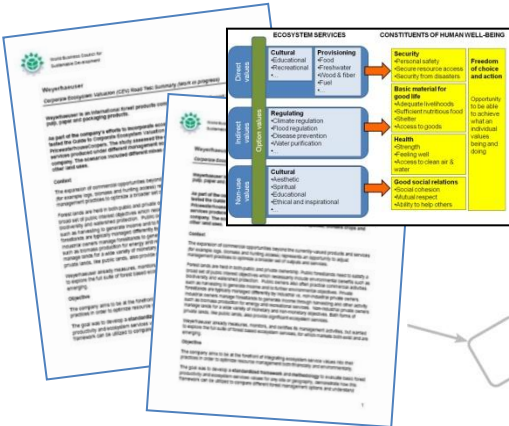
Additional resource notes

- Concepts
- Selection & application of techniques

PPT packs

FAQ

Road tester summaries



In summary

- Business **depends** on biodiversity & ecosystem services
- Business **impacts** on biodiversity & ecosystem services
- CEV can help business **manage risk** and consider new business **opportunities**
- 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. ESIAAs, LCAs)



www.wbcasd.org/web/cev.htm

