## **Corporate Ecosystem Valuation Tool Review**

Ecosystem Services/Valuation Tools

### **TABLES Project 2012: Mini reviews**

#### Guidance

Using your experience and expertise, consider the following tasks in relation to the tool. It may not be possible to complete all tasks for each tool due to a lack of available information, the task not applying to the tool, etc. **Please note where this is the case by giving the reason in the space provided**. Please use a maximum of 6 pages of A4 (excluding diagrams and appendices). **Your responses are required in the white spaces**.

#### Task 1: Basic information

Name of the tool

Corporate Ecosystem Valuation (CEV)

Type of tool (list all that apply)

Valuation tools; futures tools; ecosystem service tools;

## Group members

- 1. Oliver Hölzinger
- 2. Tim Sunderland
- 3. Claudia Carter

# Please provide a brief synopsis of the tool

Corporate Ecosystem Valuation (CEV) is a new voluntary tool and has been developed and introduced by the World Business Council for Sustainable Development in 2011 (WBCSD 2011). CEV serves corporate decision-making by identifying and valuing ecosystem impacts by businesses; but also risks and opportunities businesses face from changes of ecosystem services. It aims to improve corporate performance including social and environmental goals.

This may include: background context, development (and ownership if appropriate), current use and applications etc.

This tool has been chosen because there is a high potential to incorporate ecosystem services into corporate decision-making and this can lead a better acknowledgement of (positive and negative) external effects and therefore a more sustainable economy. CEV is closely related to Corporate Ecosystem Services Review (ESR) introduced by the World Resource Institute (Hanson et al. 2012). Incorporating business risks, demands and opportunities related to ecosystem services into corporate decision-making is also highlighted in a recently published report by the Ecosystem Markets Task Force, even if CEV is not explicitly mentioned (EMTF 2012). The Task Force is a UK based business led review of the business opportunities arising from valuing nature correctly.

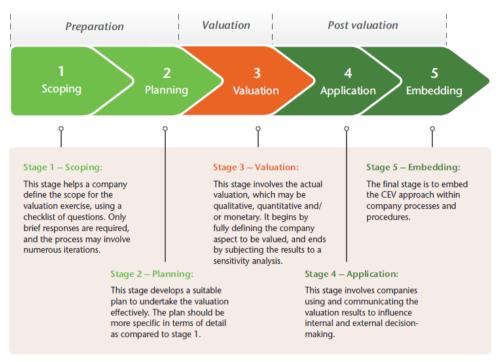
Please also note any desired outcomes of the tool so that you can make reference back to these in Task 7: SWOT analysis

In general CEV can be applied to a business as a whole, but also products, services, projects, assets, or an incident. Usually CEV has two main aims:

- On the one hand CEV shall provide corporate decision-makers with better information about
  the risks and opportunities depending on changing ecosystem services. It basically evaluates
  which ecosystem services are most important for the business performance and how such
  ecosystem services are projected to change in the future. The main question is how changes
  in ecosystem services provision will or can affect business success and how the enterprise can
  react.
- On the other hand CEV evaluates how business activities impact ecosystems and ecosystem services. Such an assessment reveals which ecosystem services are affected most (positively or negatively). This can e.g. help to target actions to mitigate negative impacts, to compensate for them, and/or to implement the value of affected ecosystem services into

accounting and reporting.

The guidance on CEV published by the WBCSD is divided into two parts. Part one is a screening process to answer the question if a CEV should be conducted, or not. Part two is a methodical framework to assist the CEV. The actual valuation is only one stage of this progress. Prior to the valuation a preparation stage takes place where the scope of the valuation exercise shall be defined and planned. The actual valuation can be qualitative, quantitative, monetary, or a combination of those techniques and depends on existing valuation techniques. This stage is followed by a post valuation phase where findings are communicated and CEV is embedded within corporate processes and procedures.



Adopted from WBCSD, Guide to Corporate Ecosystem Valuation: A framework for improving corporate decision-making (World Business Council for Sustainable Development, 2011, p. 30)

CEV depends on existing valuation techniques such as the revealed preferences method, the stated preferences method, the benefit transfer approach, or valuations based on expert judgement. It is a generic tool with different applications and much room for variation. The quality of a CEV and its outcomes depends on the appropriate application of such techniques. However, the flexible framework allows to adjust the scope and complexity of a CEV depending on available expertise, time, and budget. This allows for example to start with a 'quick and dirty' assessment with the option to apply more advanced and complex methods, if necessary. Within scope of the test-phase CEV has for example been used to assess the ecosystem impacts of a proposed extensions to a sand and gravel pit or to measure costs and benefits of replacing a storm-water management system with a constructed wetland.<sup>1</sup>

However, such high flexibility has also a downside. Businesses may try to apply the tool in-house even if the necessary expertise is not available. Furthermore businesses may have incentives to avoid independent assessments and try to shape an CEV in a way that findings picture a positive

<sup>&</sup>lt;sup>1</sup> Summaries of the CEV 'road tests' can be found here: <a href="http://www.wbcsd.org/work-program/ecosystems/cev/roadtesters.aspx">http://www.wbcsd.org/work-program/ecosystems/cev/roadtesters.aspx</a>
<a href="neat.ecosystemsknowledge.net">neat.ecosystemsknowledge.net</a>

environmental performance of the enterprise, even if that is not the case (green washing). Companies may e.g. only conduct a CEV for projects or processes with a very positive environmental impact rather than critically assessing negative impacts. Such potential misuses and shortcomings may partially be mitigated if a CEV is transparent and matches scientific standards which allows a critical review of the methods and findings.

Another impact of CEV is to raise awareness of the complex and often significant interdependencies between a company and ecosystems. One has to acknowledge that relevant knowledge of corporate decision-makers is often limited. Therefore CEV may cause an adjustment of business strategies and objectives benefiting ecosystems because 'what gets measured, gets managed'. Because the tool is comparatively new case studies are rare. One has to observe future applications to judge if the tool is applied sufficiently and how it impacts corporate decision-making.

#### Task 2: Use of the tool

Position / Use
If you can, please
indicate which
stage(s) of the
decision / policy
making process your
tool is / could be used
in (these stages were
identified in the
specification
document)

Stage	Currently used	Could be used
Ideas	Υ	Υ
Survey	Υ	Υ
Assess	Y	Υ
Policy / decision	Υ	Υ
Implement	Υ	Υ
Evaluate	Υ	Υ

Please add any further comments here:

#### Task 3: Existing literature about the tool

Are you aware of	Author & Date	Title Vol pages	Web link (if available)
any KEY policy and	WBCSD (2011)	Guide to	http://www.wbcsd.org/pages/edocument/ed
/ or academic		Corporate	ocumentdetails.aspx?id=104&nosearchcontex
literature evaluating your		Ecosystem	<u>tkey=true</u>
tool?		Valuation: A	
(e.g. reports, journal		framework for	
articles, books)		improving	
		corporate	
		decision-making.	

## Task 4: Your experience of working on the tool

Have you done any research/consulta ncy work on this tool in terms of its development, testing and/or evaluation?

Oliver Hölzinger in his role as consultant and in collaboration with Birmingham City Council and the Business Council for Sustainable Development (BCSD UK) is undertaking a Birmingham-specific CEV for some major businesses in the UK.

If so, please provide	
an outline.	
Guidance	For Tasks 5-7, please also try to consider the <b>future</b> development and application of this tool
	in the TABLES project in your answers.
Task 5: Incorporating	g the ecosystem approach (EA) and ecosystem services (ES)
**Please refer to the	summary text about ES for concept clarification at the end of this template (appendix)**
Using examples (from practice, research or consultancy), explain how EA and/or ES are currently incorporated in/by the tool	CEV has been tested by major companies worldwide. Further information is available here: <a href="http://www.wbcsd.org/work-program/ecosystems/cev/roadtesters.aspx">http://www.wbcsd.org/work-program/ecosystems/cev/roadtesters.aspx</a>
How <u>could</u> the ecosystem approach and/or ecosystem services be (further) incorporated within the existing tool?	The incorporation of ecosystem services is key for this tool. The flexible approach allows applying CEV for a broad range of businesses, processes, and projects with different scopes.

# Task 6: Situating the tool within priority questions/criteria arising from the scoping interviews

Explain how the tool can	Priority question/criteria	Does your tool address/implement this question/criteria? If yes, please explain how.	
be situated within the	Language and communication		
priority questions/cr iteria that arose in the scoping interviews	Contribution to aiding the development of shared vocabulary within which principles of EA and ES can be shared with multiple stakeholders across built and/or natural environment	Yes, applying CEV introduces the environmental- economic and ecosystem service specific terminology to corporate decision-makers.	
Complete as many boxes as required	2. Capacity of the tool to develop shared understandings of the many identities and values of places from the perspectives of multiple visitors, residents and businesses	Yes, the tool can be applied to calculate the TEV of environmental assets and stakeholder-specific distributional assessments.	
	Capacity of the tool to improve or enable engagement across different publics so avoiding the usual suspect problem  Learning from experience/pedagogy	High potential, especially within the business community and related institutions/communities.	
	4. Capacity of the tool to help	This is one main aim of the tool. The valuation	

	reveal and value 'hidden' assets	makes values related to ecosystem services
	that are not recognised by	explicit. Often the value of environmental goods
	communities or publics that	and assets are overlooked within businesses.
	use them	
5.	Extent to which tool is building	The tool is closely related to Corporate
	on other tools or EA/ES	Ecosystem Services Review (ESR) and requires
	progress	the implementation of other valuation tools and
		techniques such as the benefit transfer approach.
		The selection of (primary) valuation tools and
		methods to inform a CEV or to be conducted
		within scope of a CEV depends on the exact aim
		of the CEV (e.g. evaluating an incident or a
	Estant to subjek to alie legally	product).
ъ.	Extent to which tool is locally derived or grounded or can be	The tool is flexible enough to be applied to different contexts.
	•	
	adjusted to closely reflect 'local' context. Is the tool	Open source may be suitable for further develop and refinement.
		and reimement.
	suitable for an open source approach?	
7.	Extent to which the tool is open	CEV is very flexible. Cultural differences can be
7.	to interpretation and	captured within the 'primary valuation'.
	application in a variety of forms	However, especially if the benefit transfer
	(that reflect 'cultural'	approach is applied one should be careful when
	differences)	transferring benefits across different cultures.
De	veloping and selecting tools	transferring serients across unferent suitares.
8.	Is the tool dependent on a	There is no specific funding source but the tool
	specific funding source? How	demands a specific expertise, depending on
	onerous is the application	scope and accuracy of the CEV. Such expertise
	procedure? What are the	could be bought in externally, e.g. from a
	chances of success?	consultancy.
9.	Does skills development	The (World) Business Council for Sustainable
	(essential or optional?) and	Development as well as the World Resource
	support exist for the tool or is	Institute offer support but so far there is no
	there a body to ensure the	institution e.g. providing certificates for the
	optimal and correct use of it?	correct use. Considering that CEV is a very new
		tool such institutions might be established in the
10	Figure 12th and 1	future.
10.	Extent to which current	(International) corporate accounting and
	statutory hooks can be	reporting regulations may be revised to
	exploited by the tool or will benefit the quality or	implement CEV; e.g. by defining minimum reporting standards.
	application of the tool (e.g.	reporting standards.
	NNPF's duty to cooperate,	
	SUDS, ecol. networks)	
Info	orming resultant policies effective	ı elv
	Extent to which the tool	If applied sufficiently the tool can cover all
	informs or improves	impacts and trade-offs (considering general
	policies/decisions. What does	valuation caveats and limitations).
	the tool cover? (full range of	
	positive and negative	
	economic, social and	
	environment impacts /	
	tradeoffs?)	
12.	How does the tool link into the	Depending on its application the tool can for
		• 11

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i		
ı	planning system (applications	example be integrated in Environmental Impact
	and processes). At what cost /	Assessments.
	extra burden?	
	Delivering management objectives	
ı	13. Suitability or capacity of the	Some potential if environmental assets are
ı	tool to assist with managing	managed by the business.
	visitor needs and pressures	
	within protected areas / the	
	considered area? How?	
	Local ownership/new governance	
	14. To what extent can the tool	Some. However, there is a danger that CEV in this
	assist in developing statutory	context may be misused and shaped to enforce
	plans (local and management	business interests e.g. by providing selective or
	plans) and improve ownership	biased information about environmental impacts.
ı	and use by publics?	This may be avoided if a CEV is undertaken in
		collaboration with governmental institutions and
		e.g. Universities.
	15. To what extent does/could the	There is potential. However, it might be feasible
	tool contribute to a new form	to wait for further applications of the tool to
	of community governance in	allow a judgement.
	management of the	
	environment?	
	Improved tools: understanding flows	s, interconnections and spatial issues
	16. Capacity to improve spatial	High capacity.
	understandings of the flows	
	and interactions of various	
	ecosystem services between	
	sectors and at different scales	
	17. Capacity of the tool to reconcile	High capacity.
	assessments of options and	
	benefits across different scales	
	(and sectors)	
	18. Extent to which the tools is	High capacity.
	capable or can be manipulated	
	to work across sectoral and	
	administrative boundaries	
	19. Extent to which the tool can	Because CEV is not restricted to one valuation
	handle data shortages and gaps	method it can incorporate various valuation
	(or is effectiveness considerably	techniques and therefore handle data gaps.
	compromised?)	
	20. To what extent has/could the	High potential to make corporate decision-
	tool put landscape/nature	makers more aware of environmental and social
	conservation and designated	impacts which may cause corporate engagement
	species/sites on the radar	regarding nature conversation etc.
	(positively or resulting in	
	resentment?)	

# Task 7: A SWOT analysis of the tool

Referring back to the relevant policy and academic literature (listed in **Strengths** (of the tool in delivering intended outcomes)

Please add any further comments here:

- The high flexibility of CEV allows its application for many different contexts.
- The tool can reveal the TEV (including externalities) of business activities which can serve corporate decision-making.

Task 3), plus your own expertise (listed in Task 4) and the way in which the tool is situated within the priority questions/criteria (listed in Task 6), please complete a summary SWOT analysis ensuring that each point is well justified

Where possible, this analysis should reflect the tool's past and current application, as well as its effectiveness in policy and decision making processes

- The tool can reveal ecosystem services related business risks and opportunities.
- The tool can improve the recognition of environmental and social impacts of corporate activities and decision-making.
- The tool covers not only ecosystem valuation, but also its implementation into corporate decision-making.

**Weaknesses** (factors that detract from the tool's ability to deliver intended outcomes)

- The appropriate application of CEV demands expertise and a sufficient data basis.
- General limitations to ecosystem valuation and an insufficient data basis can lead to biased outcomes.
- The high flexibility and broad range of applications of the tool makes comparison between different CEV's difficult.
- Especially if primary valuation methods are conducted the costs of CEV can be substantial.
- At the moment there is no institution evaluating the correct use of the tool, even if support exists.

**Opportunities** (consider opportunities for application of the ecosystem approach and services)

- The ecosystem services approach is key when applying CEV.
- The tool is actually promoted within the business community and gains support from major institutions.
- Further developments and refinements of this 'young' tool may advance its appropriate application.

**Threats** (factors which negatively affect the tool and its outcomes)

Classify these by their "seriousness" and "probability of occurrence" in the table below, and pay particular attention to the threats associated with potential use of ecosystem approach/ecosystem services.

Seriousness (high, medium, low)	Probability of occurrence (high, medium, low)
Medium	High
High	Medium
Medium	Medium
	medium, low)  Medium  High

#### Guidance

Please now use the remainder of the document (box below) to make any general comments, observations or analyses of the tool

Further comments
comments

#### References

EMTF, 2012. *Ecosystem Markets Task Force Interim Report*, Available at: http://www.defra.gov.uk/ecosystem-markets/files/Ecosystem-Markets-Task-Force-Interim-Report.pdf.

Hanson, C. et al., 2012. *The Corporate Ecosystem Services Review: Guidelines for Identifying Business Risks and Opportunities Arising from Ecosystem Change*, Washington DC: World Resource Institute.

WBCSD, 2011. *Guide to Corporate Ecosystem Valuation: A framework for improving corporate decision-making*, World Business Council for Sustainable Development.