

ECO-INNOVERA Workshop

‘Learning about quantitative tools or methodologies
for evaluating eco-innovation projects’

How to include social criteria and metrics ?



Bernard MAZIJN
Brussels, 6 februari 2012

The starting point: two recent UNEP publications.

- Benoit C. and Mazijn B. (Eds.), ***Guidelines for social life cycle assessment of products - A social and socio-economic LCA code of practice complementing environmental LCA and Life Cycle Costing, contributing to the full assessment of goods and services within the context of sustainable development.*** ISBN: 978-92-807-3021-0, UNEP-DTIE, Paris, 2009, 104 pp.
- Valdivia S., Ugaya C., Sonnemann G. and Hildenbrand J. (Eds.), ***Towards a Life Cycle Sustainability Assessment - Making informed choices on products.*** ISBN: 978-92-807-3175-0, UNEP-DTIE, Paris, 2011, 86 pp.

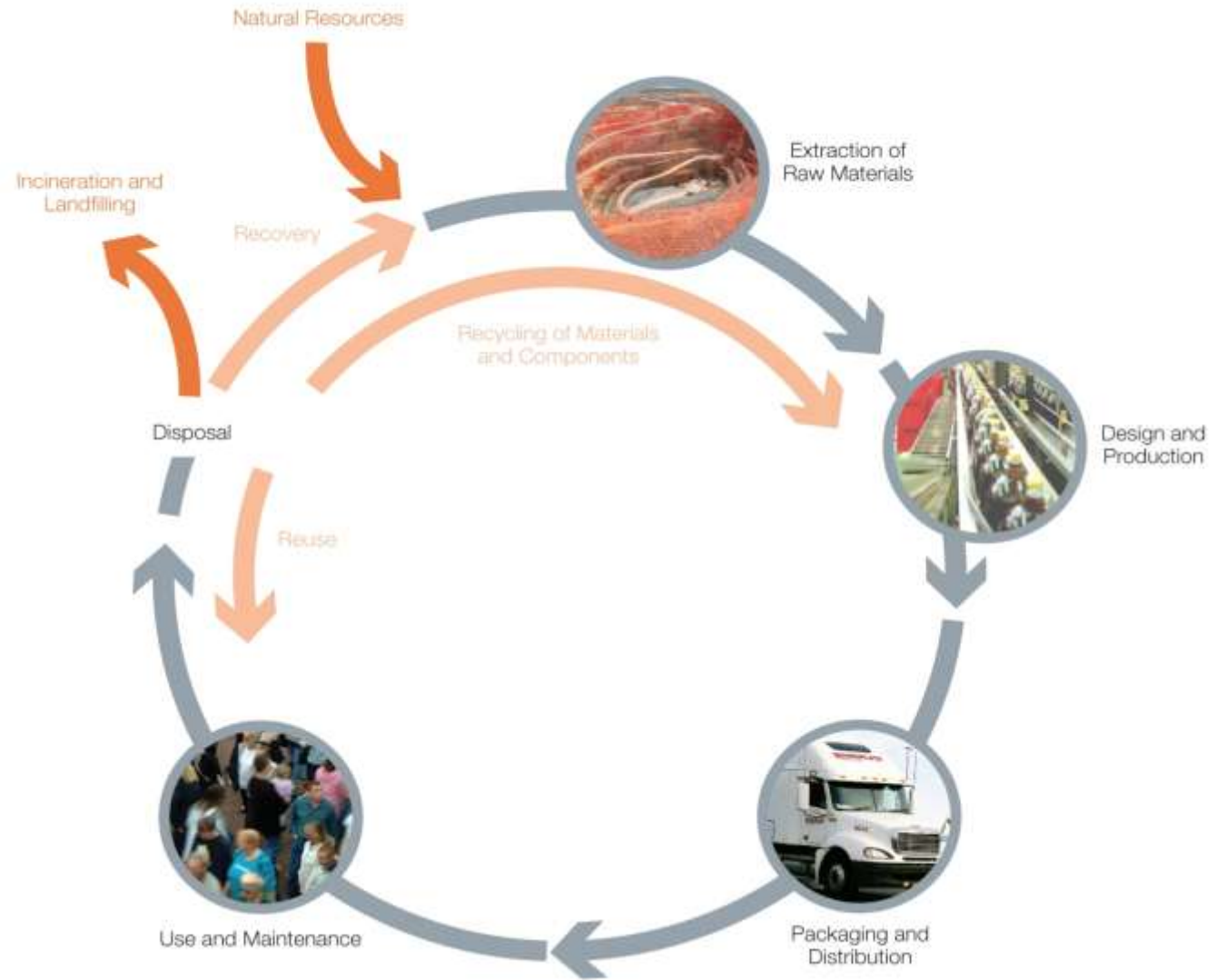
Content

1. What is a social LCA ?
2. Applying sLCA on a result of eco-innovation.
3. Similarities and differences between e-LCA and s-LCA.
4. Implications for evaluating eco-innovation projects ...

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Assessment of the entire life cycle



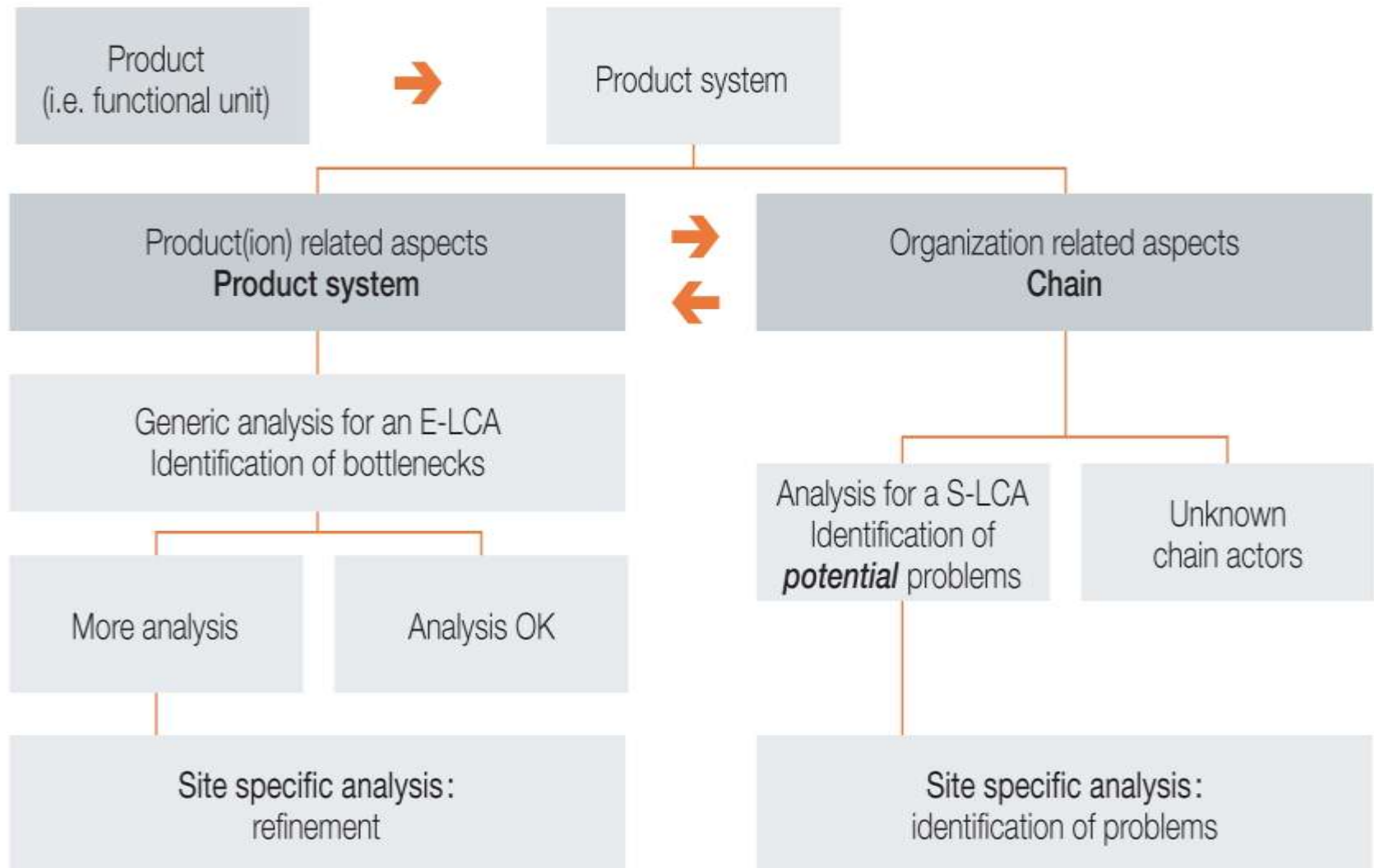
Source: Benoît C. and Mazijn B. (2009)

LCA. Within the context of sustainable development.

	Planet	People	Profit/Prosperity
Externalities (costs or benefits)			
Private costs or benefits			

Source: adapted from Valdivia S. et al. (2011)

A twofold analysis



Source: Benoît C. and Mazijn B. (2009)

Social Life Cycle Assessment (S-LCA)

A social and socio-economic Life Cycle Assessment (S-LCA) is a social impact (and potential impact) assessment technique that aims to assess the **social and socio-economic aspects** of products and their potential **positive and negative impacts** along their life cycle

- encompassing extraction and processing of raw materials, manufacturing, use, re-use, maintenance, recycling and final disposal.

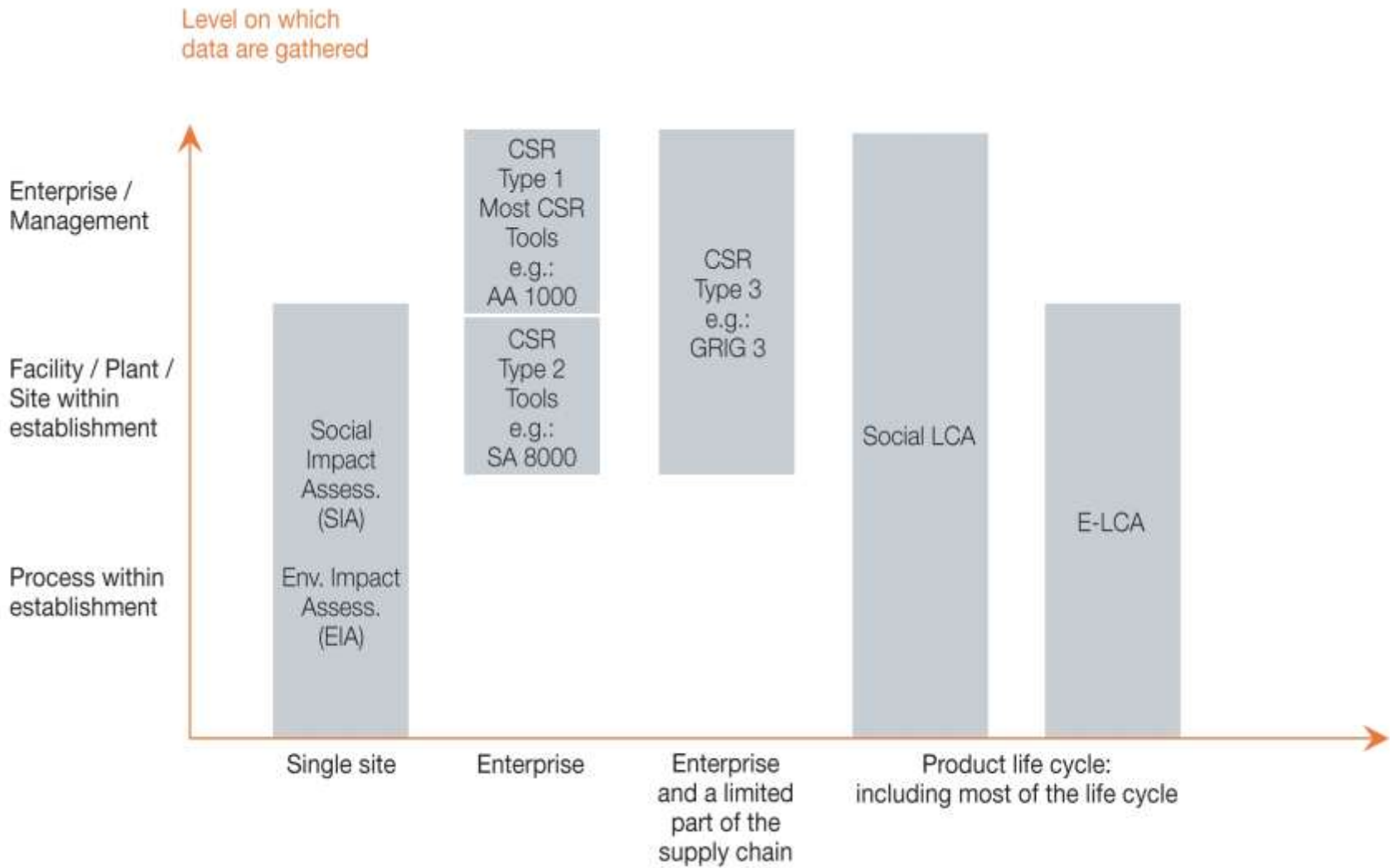


Social LCA conforms to ISO 14040, with some adaptations



Goal and scope
Inventory
Impact assessment
Interpret results

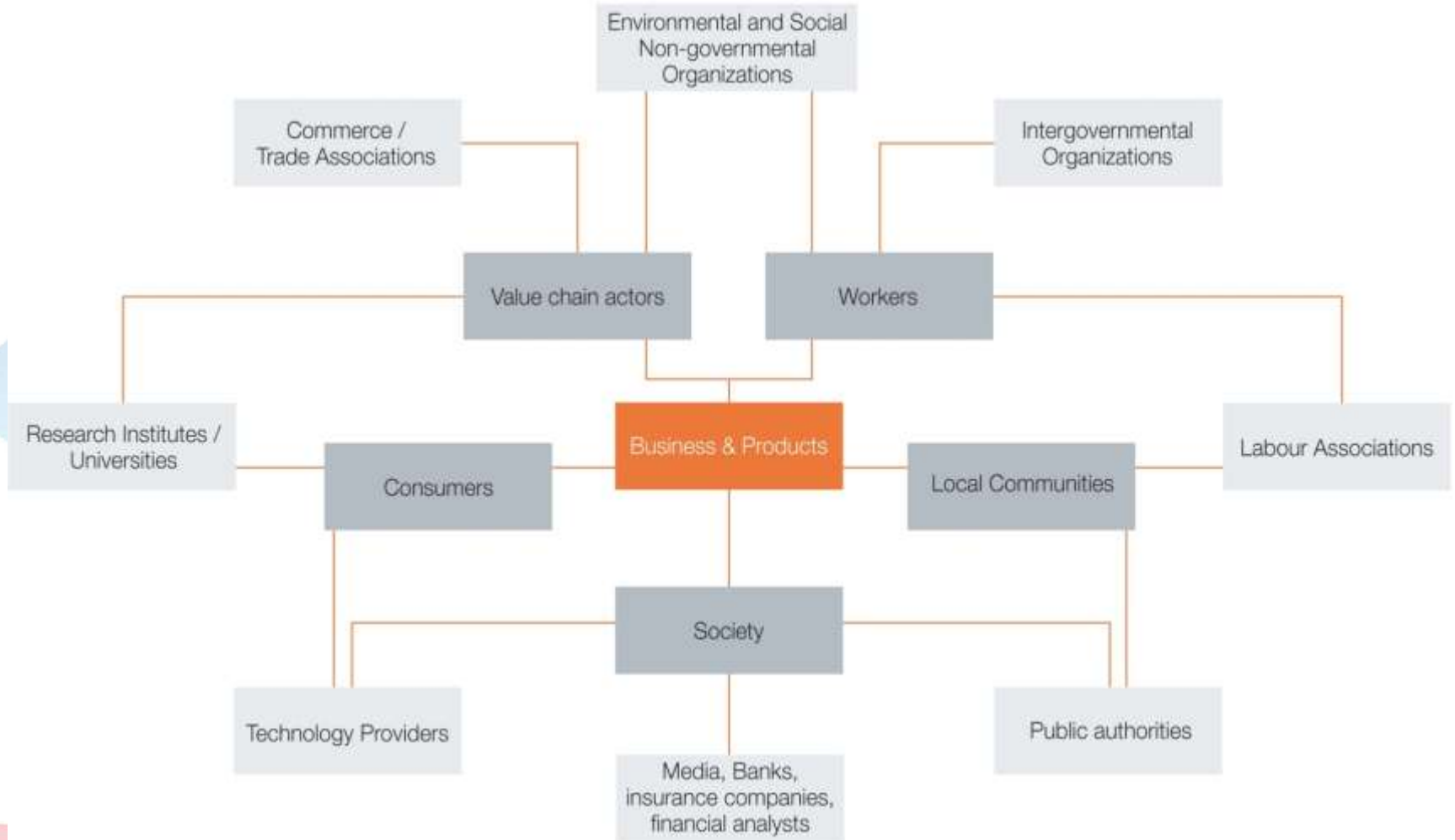
Level and scope of assessment



Scope of system over which results are gathered and reported in an assessment, possibly with aggregation



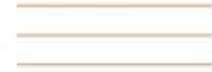





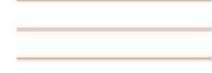







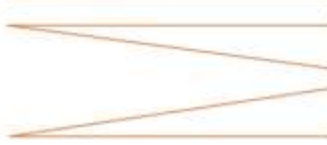
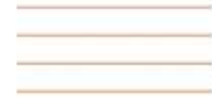
Source: Benoît C. and Mazijn B. (2009)

Stakeholder diagram




















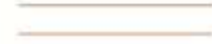
Source: Benoît C. and Mazijn B. (2009)

Assessment system

Stakeholder categories		Subcategories	Inv. indicators	Inventory data
Workers				
Local community				
Society				
Consumers				
Value chain actors				
				

























Source: Benoît C. and Mazijn B. (2009)

Assessment system

Impact categories	Subcategories	Inv. indicators	Inventory data
Human rights			
Working conditions			
Health and safety			
Cultural heritage			
Governance			
Socio-economic repercussions			

Source: Benoît C. and Mazijn B. (2009)

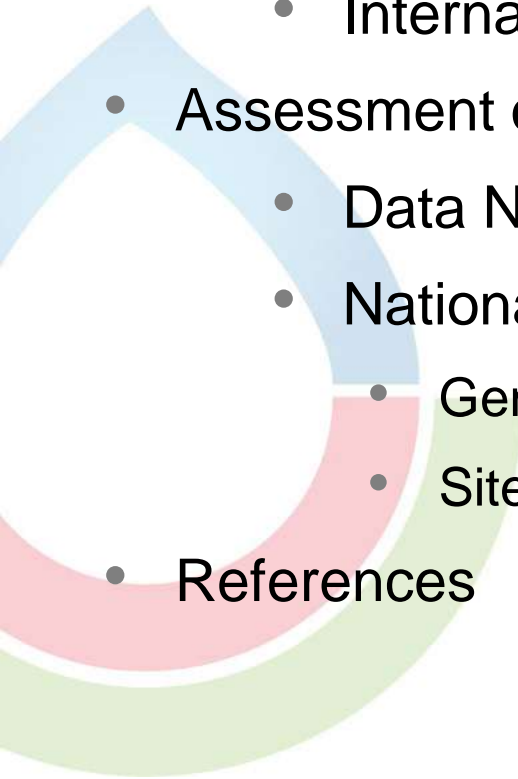
Assessment system

Stakeholder categories	Impact categories	Subcategories	Inv. indicators	Inventory data
Workers	Human rights			 
Local community	Working conditions			 
Society	Health and safety			 
Consumers	Cultural heritage			 
Value chain actors	Governance			 
	Socio-economic repercussions			 

Source: Benoît C. and Mazijn B. (2009)

Stakeholder categories	Subcategories
Stakeholder "worker"	<ul style="list-style-type: none"> Freedom of Association and Collective Bargaining Child Labour Fair Salary Working Hours Forced Labour Equal opportunities/Discrimination Health and Safety Social Benefits/Social Security
Stakeholder "consumer"	<ul style="list-style-type: none"> Health & Safety Feedback Mechanism Consumer Privacy Transparency End of life responsibility
Stakeholder "local community"	<ul style="list-style-type: none"> Access to material resources Access to immaterial resources Delocalization and Migration Cultural Heritage Safe & healthy living conditions Respect of indigenous rights Community engagement Local employment Secure living conditions
Stakeholder "society"	<ul style="list-style-type: none"> Public commitments to sustainability issues Contribution to economic development Prevention & mitigation of armed conflicts Technology development Corruption
Value chain actors* not including consumers	<ul style="list-style-type: none"> Fair competition Promoting social responsibility Supplier relationships Respect of intellectual property rights

Structure of the Methodological Sheets

- Definition
 - Policy relevance
 - Relevance to Sustainable Development
 - International Conventions and Agreements
 - International Targets/Recommended Standards
 - Assessment of data
 - Data Needed to Compile the Subcategory
 - National and International Data Availability and Sources:
 - Generic data source examples
 - Site-specific data source examples
 - References
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Content

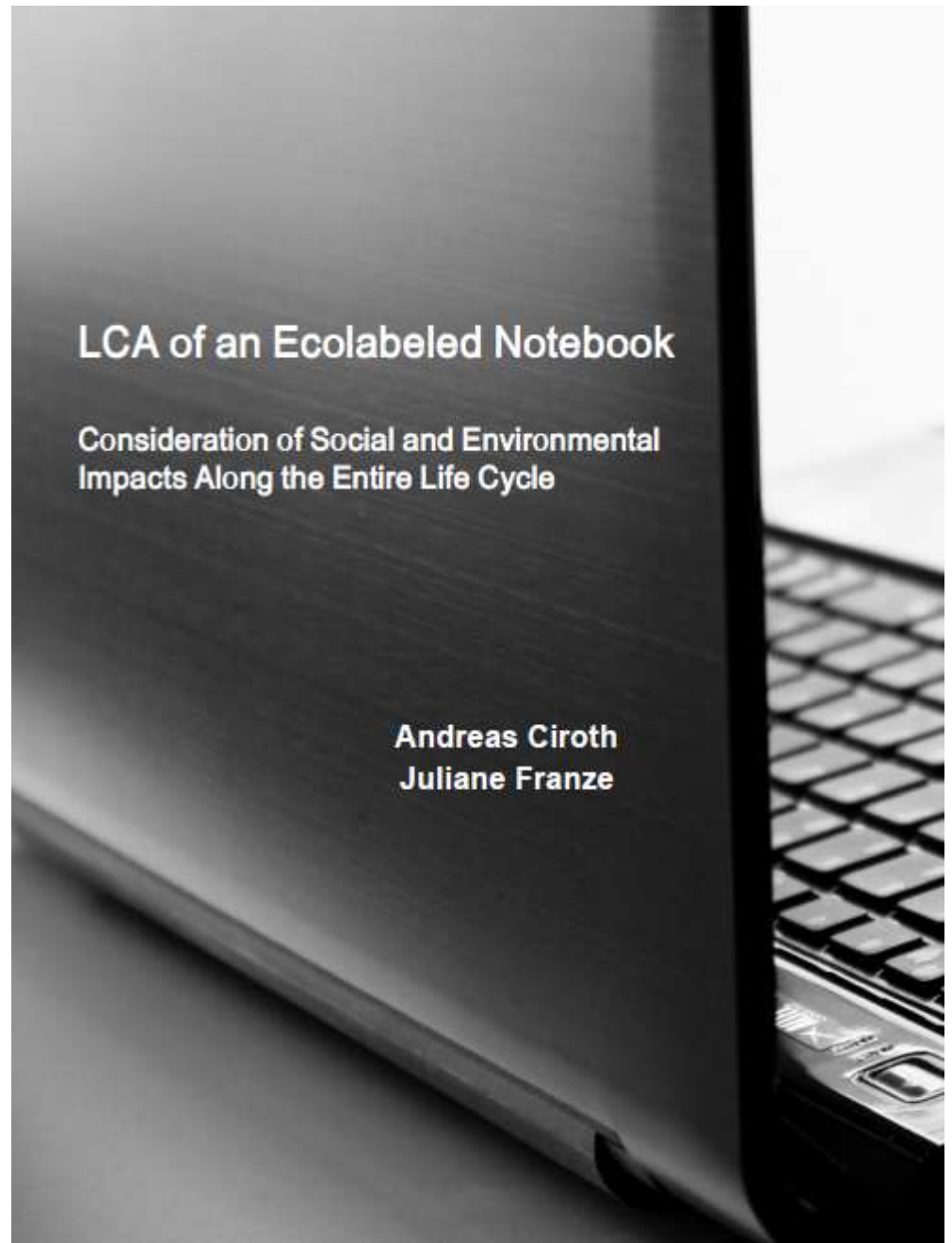
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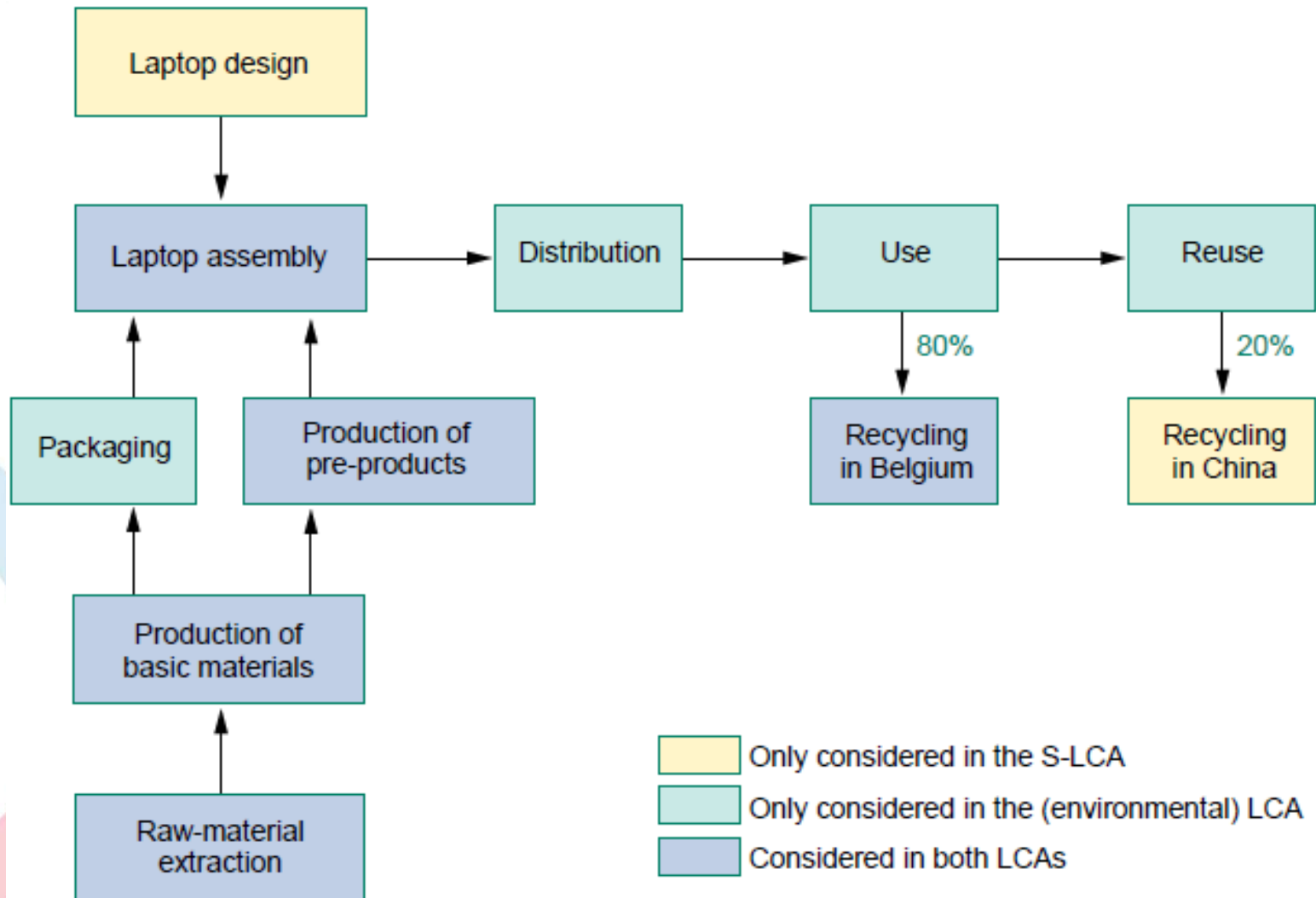
LCA of an Ecolabeled Notebook

Consideration of Social and Environmental
Impacts Along the Entire Life Cycle

Andreas Ciroth
Juliane Franze



Life cycle of the laptop

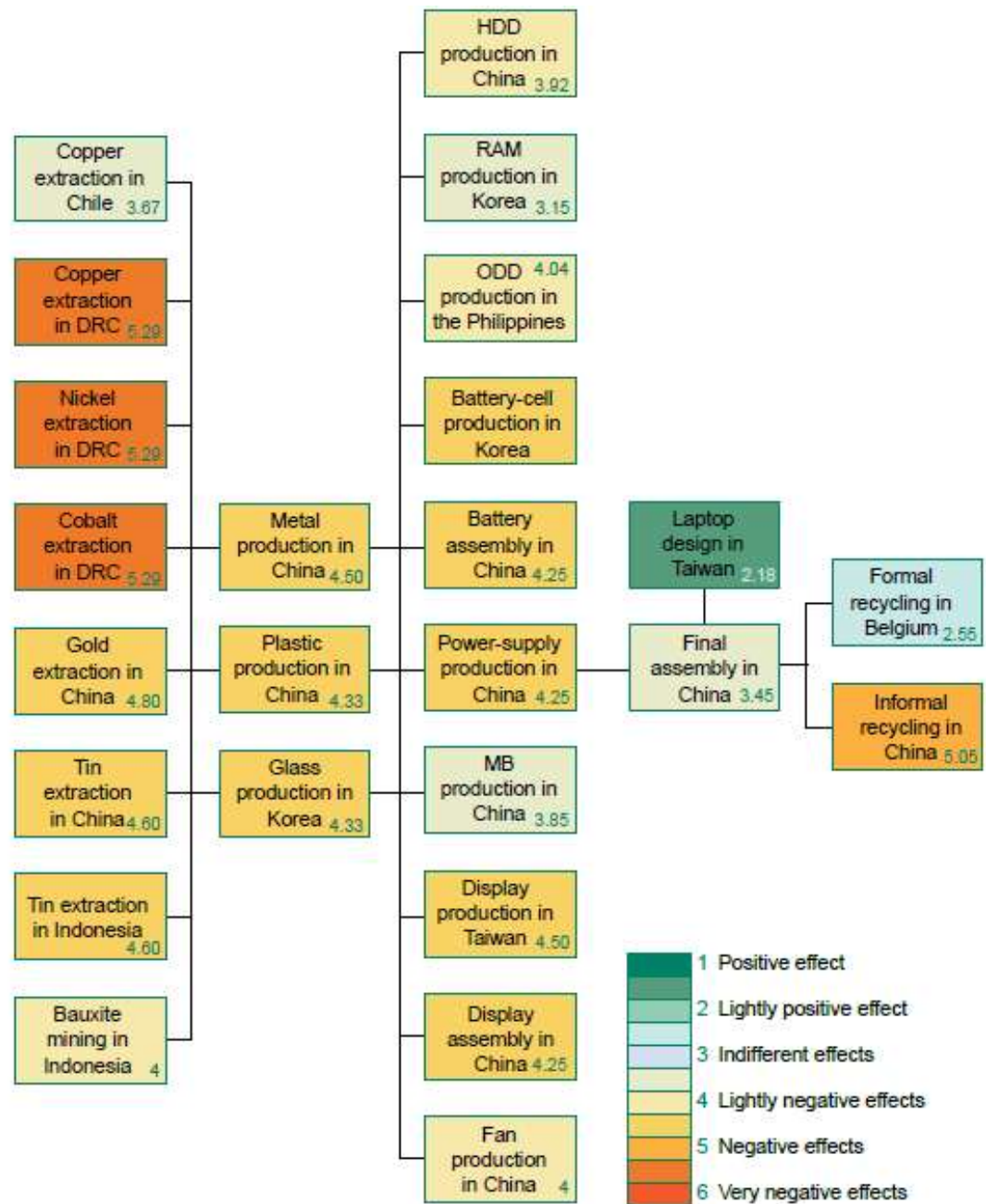


Source: Valdivia S. et al. (2011)

Method

- UNEP/SETAC guidelines as basis
- Determination of stakeholders, subcategories, and indicators
- Data sources for generic data:
 - governmental and non-governmental organizations
 - internet research and literature review
- Data sources for company-specific data:
 - corporate reports and websites
 - reports from NGOs
 - questionnaires
 - interviews with workers
 - internet research
- Application of a Social Life Cycle Impact Assessment method

Results of the sLCIA



Source: Valdivia S. et al. (2011)

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Similarities between e-LCA and s-LCA

- Share a common trunk: the ISO framework
- Have a huge need for data
- Work as iterative procedures
- Encourage and request peer review if appropriate
- Provide useful information for decision-making
- ~~Whether or not a product should be produced~~
- Conduct 'hotspot' assessments
- Conduct data quality assessment
- Do not generally express impacts by functional unit, if semi-quantitative or qualitative data are used.

Differences with an e-LCA

- More focus on organisational aspects (e.g. management behaviour)
- More focus on use phase impacts
- If impact subcategory is not included: justification
- Site-specific data more important
- Subjective data is sometimes the most appropriate information to use
- Benefits (negative damage) are often of importance
- Indicators are classified according to stakeholders

Linkages

with other environmental and social impact assessment tools from the CSR landscape



The world's first mainstream corporate accountability standard to be developed using a web-based wiki approach



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Let's look at it from another angle

- Within a context of sustainable development, it can be expected that (eco-)innovation projects are internalizing social responsibility.
- Environmental issues are dealt with (cf. 'eco'), but there are 6 other groups of societal concern: organizational governance, human rights, labour practices, fair operating practices, consumer issues, community involvement and development.
- There are two international standards which are incorporating these concerns:
 - ISO 26000 – Guidance on social responsibility
 - Global Reporting Initiative Guidelines
- ISO 26000 is meant for setting up a process towards internalizing SR, GRI is used for sustainability reporting.
- Both are stressing the importance of value chain responsibility.

ISO 26000

Core subject: Fair operating practices Issue 4: Promoting SR in the value chain

Related actions and expectations - To promote SR in its value chain, an organization should:

- in its purchasing, distribution and contracting policies and practices...
- encourage other organizations ...
- carry out appropriate due diligence ...
- consider providing support to SMOs ...
- actively participate in raising the awareness of organizations ...
- promote fair and practical treatment of the costs and benefits ...

Global Reporting Initiative Performance indicators

- **EC 6** - Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.
- **EC 9** - Understanding and describing significant indirect economic impacts, including the extent of impacts.
- **EN12** - Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.
- **HR 2** - Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and actions taken.

and almost all indicators related to 'Product Responsibility' !

How can a dossier be underpinned ?

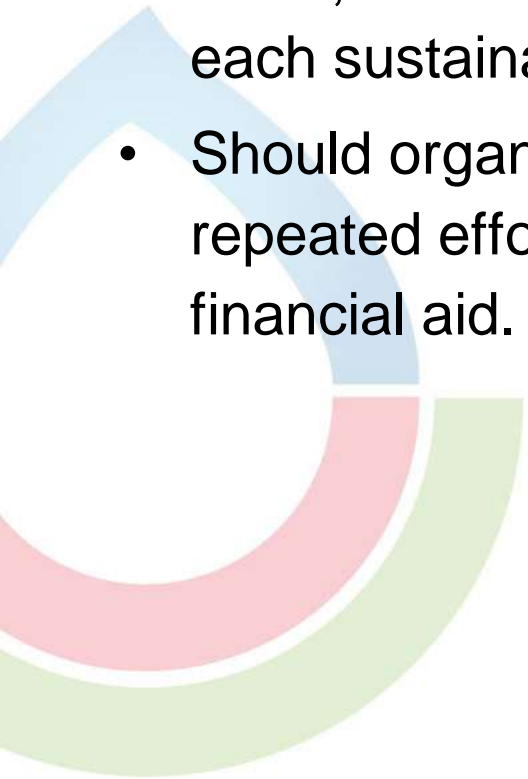
- The results of an *ex ante* social LCA could be added.
- But there are important hurdles:
 - it might be ‘a project’ for which the suppliers etc. are not contracted yet;
 - sLCA requires a site specific assessment of ‘the hotspots’;
 - ...
- Mazijn B., Devriendt S., Storme N. en Vandermeeren J., (2012), ***Making sustainable entrepreneurship visible and feasible in Flanders***. Research Report, Flemish Public Authority, Department of Work and Social Economy, 114 pp

Requirements for obtaining financial support for (eco-)innovation projects: different options

- Option 1: prior to requesting support, each organisation (including companies) should make a sustainability report according to the GRI guidelines, which has been published and independently tested.
- Option 2: a previously published (and independently tested) sustainability report according to GRI-guidelines will be taken into account in the evaluation of applications to receive financial aid. This document will receive a weighting factor of 1/5 during evaluation in a list of included criteria.
- ...

In addition.

- It should also be noted that the publication of a sustainability report (as a condition or otherwise) is not a one-time event but rather a repeated effort in time (annual or biannual).
- If financial support is obtained, progress in optimizing the value chain, based on a LCSA approach, should be documented in each sustainability report.
- Should organizations (including companies) fail to make this repeated effort, the government can reclaim the received financial aid.



By doing so, social criteria and metrics
can be taken into account
when evaluating (eco-)innovation projects.

