

Quantifying Corporate Social Responsibility in the value chain¹

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Corporate social responsibility (CSR) is defined as “the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life” (Holme & Watts 2000, p. 10). Among the key issues covered by this concept are human rights, employee rights, community involvement and supplier relations. It also covers an open information policy, including issues as disclosure, transparency, consumer education and anti-corruption measures. Depending on how much emphasis is placed on supplier and consumer relations, the concept of CSR comes close to that of Ethical Trade, which can also extend throughout the value chain. Ethical trade is defined as “the array of different initiatives that seek to add social and environmental as well as financial value added through trade” (Burns & Blowfield 1999) or as a trade in which “the behaviour of the traders is regulated by a value system on which consensus has been reached through an open and rational dialogue involving all parties that are affected by the trade” (Pedersen 1991). When these concepts are extended to the entire value chain, the relationship to Life Cycle Management (Weidema 2001) becomes obvious.

How far does CSR extend in the value chain?

To answer this question, we may look at the parallel question in Life Cycle Assessment (LCA): “What processes to include in the product system?” Since in principle, it is not possible to find any sharp borders between environmental and social responsibilities, it is reasonable to conclude that the system boundaries for LCA can also be applied to social responsibility issues. Thus, the methodology of ISO standard 14041 (on Life Cycle Inventory) provides the objective answer to system delimitation in CSR/Ethical trade.

Continuous improvement and site certification

Linking CSR to Life Cycle Management implies a commitment to continuous improvement, as expressed in the ISO 14001 and 14040 standards on environmental management. This further implies that any attempt at quantification of CSR should focus on marginal improvements rather than average performance.

When seeking to quantify social influences in the value chain, a fundamental problem occurs: It is very difficult to find any consistent differences between different technologies or production routes involved in the production of any given product, simply because the social impacts are so site specific that the variation between sites exceed the variation between technologies or production routes. In LCA, a parallel problem has been described for emissions of toxic substances. However, this has not lead to the conclusion that toxic releases should not be included in LCA, but rather to the conclusion that it may be necessary to ensure site certification with respect to this issue.

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In parallel, we may conclude that the quantification of social influences may in general require site certification of suppliers.

The need for harmonisation

Already, there are a number of initiatives that seek to improve reporting and certification of social responsibility issues. The Ethical Trade Initiative (www.ethicaltrade.org), Rugmark (www.rugmark.org), SA8000 (www.cepaa.org), all focus on human rights issues for employees (notably forced labour, child labour, rights to organize in unions), in some cases also covering wage issues. Indigenous people's rights are included in the standards of the Forest Stewardship Council (www.fscoax.org), while Business in the Community touch upon the issue of income distribution effects (www.bitc.org.uk/communities.html). The WHO/UNICEF code of marketing for baby-milk substitutes (www.babymilkaction.org/regs/thecode.html), the Caux Roundtable principles (www.cauxroundtable.org), the Wolfsberg principles on anti-money-laundering (www.wolfsberg-principles.com), and a number of initiatives coordinated by Transparency International (www.transparency.org), including a draft "Business principles for countering bribery", all deal with specific aspects of an area that can be defined as "openness of information exchange," an area also covered by the AA1000 standard (www.accountability.org.uk/aa1000/). Initiatives that cover a wider range of issues include the Fair Trade associations (www.ifat.org) and the Global Reporting Initiative (www.globalreporting.org). However, these broader initiatives typically do not seek to quantify or certify the issues involved.

The above paragraph is not intended to provide a complete listing of relevant initiatives. For a more complete discussion, many excellent reviews can be found, e.g. Burns & Blowfield (1999). However, what this array of initiatives does demonstrate is that social responsibility is not a new issue, and that there is a large need for harmonisation and standardisation in this area.

A coherent framework for quantification

As part of my Ph.D. work (Pedersen 1991, Weidema 1993), I have suggested a coherent framework for quantifying social influences in the value chain. For each of the areas in table 1, units of measurement are suggested that facilitate standardised and reproducible data collection.

Table 1. Areas of social influence with units of measurement (based on Weidema 1993, Pedersen 1991). See the text for further explanations.

Area of influence	Units of measurement
Employee rights	Working hours / conditions
Indigenous people's rights	Value of materials sourced in violation of aboriginal claims
Income distribution	Wages / average wages
Regionalisation	Size of perverse subsidies
Occupational opportunities for women	Female/male ratio
Pension schemes	Pension/wage ratio
Openness of information exchange	Conditions

The unifying concern for all the areas in table 1 is that of *social justice*. The rights of employees and indigenous peoples are specified in a number of International conventions, and are therefore the least contested of the areas mentioned. Perverse subsidies and unequal distribution of income both work counter to social justice and quality of growth as defined by the Brundtland Commission (World Commission on Environment and Development 1987). Occupational opportunities for women and pension schemes are crucial for keeping a low birth rate, which is a prerequisite for sustainable development.

It is interesting to note that all of these areas can be related to the added value and/or number of working hours per product. Obviously, some of the parameters do not translate easily to an interval scale. Especially, the fulfilment of employee rights and the openness of information exchange, will typically be described in nominal terms of yes/no or presence/absence of each particular condition (e.g. the right to organise in unions, the transparency of price policy), although some conditions may be classified into a number of states on an ordinal scale (it has, for example, been argued that child labour may be judged more or less abusive, depending on the particular circumstances such as simultaneous access to education). However, for impact assessment (see below) it is adequate that each condition on the nominal or ordinal scales can be described and related to the added value produced and/or number of working hours performed under each condition.

Filling data gaps

Any assessment that attempts to include the entire value chain will encounter the problem of missing data and lacking completeness. In the LCA methodology this problem is solved by filling any data gaps with default data, preferably based on environmentally extended Input-Output tables (see e.g. Nielsen & Weidema 2001). In the same way, Input-Output tables can be extended with social parameters. Interoperability between site specific data and the more generic data from Input-Output tables are ensured by the uniform data basis which express social influence either in “Social value added” and/or “Quality classified working time”. Such default (average) data on social parameters are currently being integrated into LCA software (Wolf et al. 2002).

Social impact assessment

What has been described above is a framework for making an inventory of social influences. In some decision situations this will be adequate to perform an interpretation and make a decision. However, in some situations – especially when different parameters point in different directions - it may be necessary to assess the social impact of these influences. For this, the impact assessment framework of LCA (described in ISO 14043) may be applied: Impact chains can be described (in terms of social mechanisms and endpoints) and quantified, geographical differentiation may be applied when needed, and endpoints may be defined in the same terms as endpoints for environmental mechanisms, quantified for example in Quality Adjusted Life Years (QALYs).

Conclusions

From the above, I wish to extract some important conclusions:

- The system boundaries of life cycle inventory analysis (ISO 14041) are also applicable to CSR in the value chain
- It is important to focus on improvements rather than average performance
- Current initiatives on CSR show need for standardisation
- Techniques for quantification of social influences in the value chain are available
- A certification approach is needed, but default data are available for a start, and to ensure completeness
- The principles of life cycle impact assessment (ISO 14043) are also relevant for social impact assessment

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