POSITIVE IMPACTS IN S-LCA

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INTRODUCTION

SLCA is a social (real and potential) impact assessment method (Macombe et al. 2011) that aims to assess the social and socio-economic aspects of products and their **positive and negative impacts** along their life cycle (UNEP/SETAC, 2009).



- As opposed to E-LCA, S-LCA considers also positive impacts, which are the basis of any social-related policy and intervention, and their quantification can play a major role in S-LCA (Benoît et al., 2010).
- Positive impacts are meant to encourage performance beyond compliance (with laws, international agreements, certification standards, etc.) as, for example, in the sustainable development goals (UN 2015a, b).

THE EARLY MOVERS

- Norris (2006) questions the issue of how to measure, aggregate, compare and stimulate society wide improvement of context-dependent attributes within and across product, service, or organisation life cycles in LCA.
- Grießhammer et al. (2006) state that the quantification of negative impacts is more difficult than positive ones.

IN MORE RECENT YEARS

- Jørgensen et al. (2010b) consider the child labour indicator as generating a context-related positive impact in some situations. These could include helping children to develop discipline, responsibility, self-confidence and independence, teaching them how to manage money, and providing them with working skills.
- Ekvall (2011) suggests accounting for the social performance of governments and countries in an S-LCA, by using a positive indicator related to the degree of civil liberties and political rights guaranteed in each country.
- Norris (2013) coined the term "Handprint", in opposition to the term "Footprint", to address "the beneficial environmental and social impacts that we can achieve".
 - It is possible to have a "net positive impact" such as compensation between Handprint and environmental footprint.

IN MORE RECENT YEARS

- Neugebauer et al. (2014) built two pathways to describe the cause-effect relation between the midpoints fair wage and level of education which may affect the area of protection of social well-being both positively and/or negatively.
- The authors included three endpoints to address social well-being: economic welfare, damage to human health and environmental stability.
- In particular, the midpoint "level of education" affect the economic welfare by the direct impacts of job and working situation via inventory categories like finished apprenticeships or literacy rate. All of this positively influenced social well-being.
- In addition, participation on sport or cultural events may have a direct impact on job security and working conditions and positively influence the level of education and finally well-being.

POSITIVE IMPACT ASSESSEMENT IN CASE STUDIES

- Since the aim of a S-LCA is to contribute to improve current living conditions, it will probably, in most cases, be reasonable to include negative impacts rather than positive ones. As consequence, the motivation for improving positive impacts can be expected to be lower (Jørgensen et al., 2012) and the focus on positive impacts may be weaker. Conversely, focusing on positive indicators is interesting as it improves the completeness and the relevance of S-LCA.
- 25% of the analysed papers considered the issue of positive impact, likely due to the difficulty to evaluate them, in addition to the lack of a clear definition of what is a positive social impact (Di Cesare et al. 2018)



WHEN AN IMPACT COULD BE CONSIDERED AS POSITIVE?

- Petti et al. (2014) → questionnaire filled in by authors of papers and experts in the field of S-LCA
- Positive impact definition:
 - I. a net positive effect of an activity on a community and the well-being of individuals and families
 - 2. a performance that goes beyond compliance
- Is a positive social impact merely an improvement related to the previous situation?
 50% agreed, 39% did neither agree nor disagree, and 11% did not agree

- For 76 % of them, the classification of an impact as "positive" could be regarded as a subjective issue, whereas the 90 % considered it to be context related.
- The 84 % affirmed that positive social impacts should be assessed as in the case of negative ones, 11 % disagreed, and 5 % had no opinion on this.

| Traverso et al., 2011 | Yu et al., 2015 | Ciroth and Franze, 2012 | Present study | |
|-----------------------|---|---|---------------|----------------------|
| Advanced performance | 4 (extremely positive) 3 (very positive) | 1 (positive effect) | +2 | Advanced performance |
| Good performance | 2 (positive) 1 (lightly positive) | 2 (lightly positive effect) | +1 | Good performance |
| Basic performance | 0 (indifferent) | 3 (indifferent) | 0 | Basic performance |
| Low performance | -1 (lightly negative) -2 (negative) | 4 (lightly negative effect) | -1 | Low performance |
| Bad performance | -3 (very negative) -4 (extremely negative) | 5 (negative effect) 6 (very negative effect) | -2 | Bad performance |

THE USE PHASE

- Some authors consider the utility of goods as a positive impact
- The satisfaction of consumer desires or needs is the goal of each economic activity and consumption is the sole end and purpose of product/service production
- The concept of positive impacts could not refer merely to the utility of the product (meant as benefit from its use), but in a broader sense, to the so called "win-win" situations.
- A "win-win" situation is defined as a situation in which all parties involved in the initiative have a benefit (or are not damaged) in terms of value created in their favour (Molteni 2007).

CONCLUSION

- Regarding the assessment of positive impacts, it would be necessary to dwell more on conceptualisation of theoretical roots and, subsequently, to test these through the development of case studies.
- The Taskforce did not develop a universal indicator set as a basis for all further S-LCA applications. Besides, current discussion on indicators for measuring sustainable development goals (UN 2015b) may benefit from a more structured, rigorous and agreed approach to the assessment of positive impacts along supply chains.
- Identify social evaluation criteria to establish what is to be considered as "positive", together with a deep analysis
 of the context: in what way might the context evolve after an improvement has occurred? These interrogatives
 are of fundamental importance especially considering possible application of SLCA in contexts such as policy
 impact assessment.
- Jointly discuss on how S-LCA can be used to promote collaboration along the supply chain for the benefits of all the actors, while guaranteeing a fair competition.

THANK YOU!

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