

Joint assessment of environmental and social impacts for electronics

Chiara Sandionigi, Emma Complido, Cyril Laurié, Maxime Péralta University Grenoble Alpes, CEA, F-38000 Grenoble, France Contact: chiara.sandionigi@cea.fr

Context

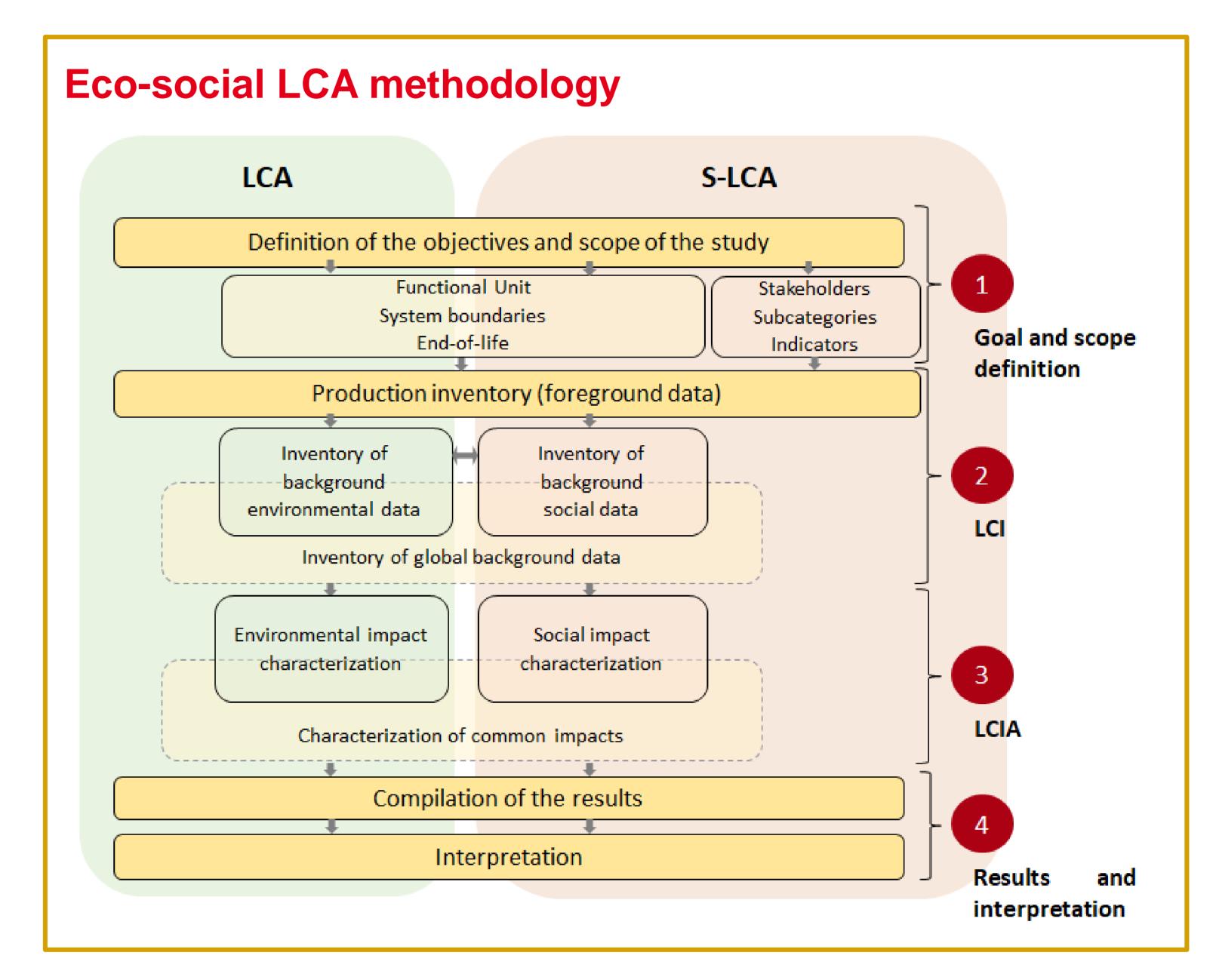
- ☐ Environmental and social assessment carried out separately
 - Time consuming
 - Eco-design and social design as separate strategies
- ☐ In LCSA
 - Separate LCA, S-LCA, LCC
 - Integration for compilation of the results and interpretation only

Common or separate models?

- ☐ Possibility of choice between
 - Separate models and databases
 - LCA models based on physical flows and ecoinvent environmental data
 - S-LCA models based on monetary flows and PSILCA social data
 - Common model and joint database
 - Eco-social LCA model based on physical flows and ecoinvent-soca environmental and social data

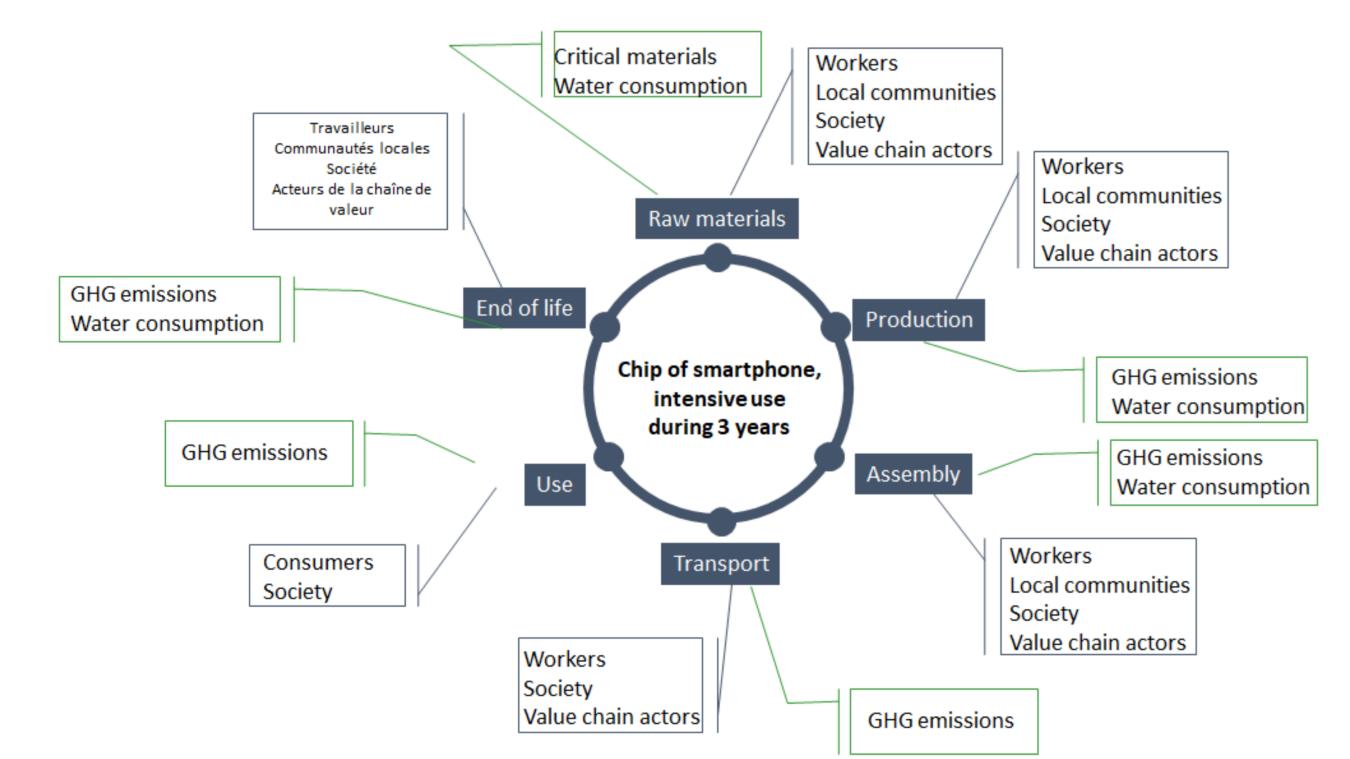
Objectives

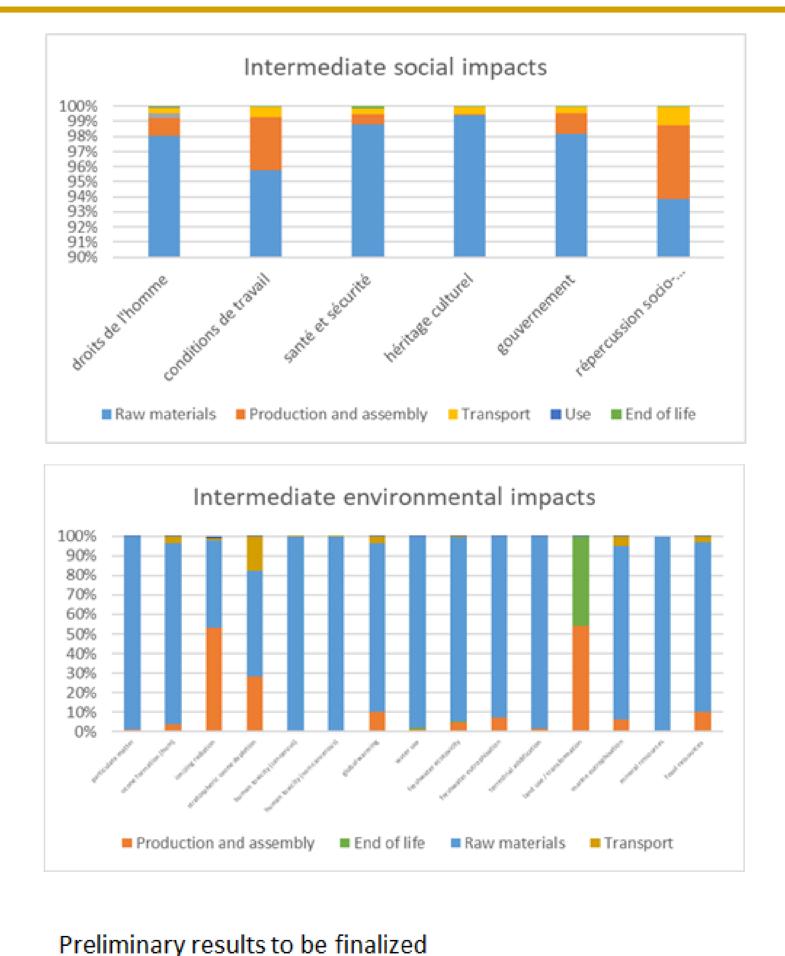
- ☐ Combination of environmental and social LCA in a single methodology
 - Sharing of analyses and data
 - Open the way to eco-social design
- ☐ Application of the methodology in the electronics domain

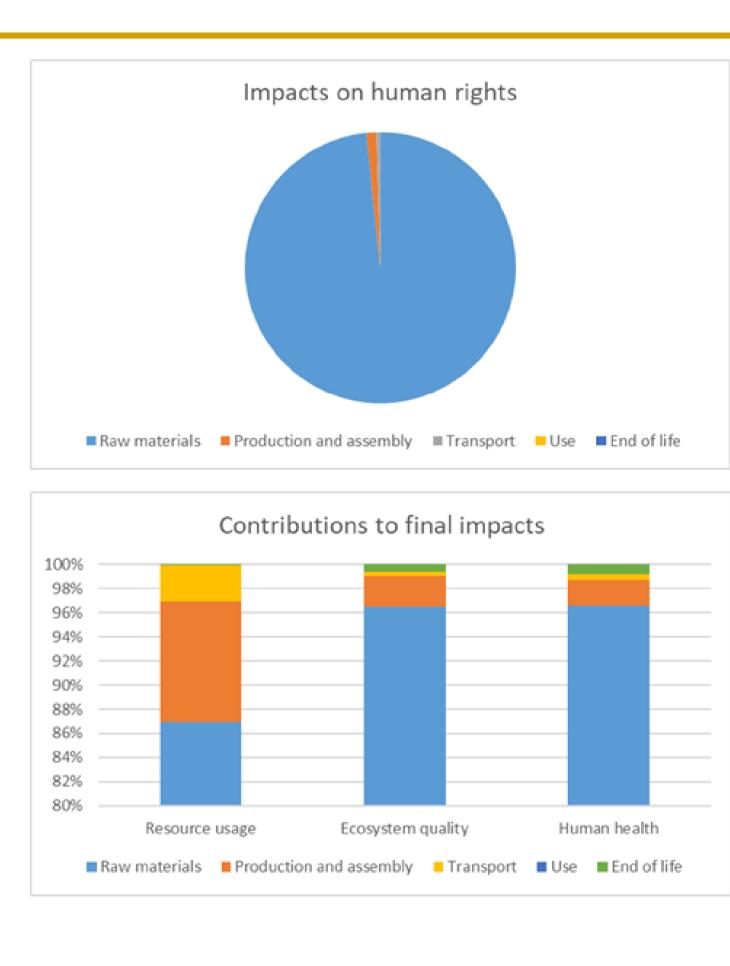


Eco-social LCA for electronics

☐ Case study: Integrated Circuit of a smartphone









Symposium pour l'électronique pour l'électronique

& le numérique durables

Le 12 décembre 2024, Grenoble