

# Sustainable Indicators

## Intial Thoughts

Quels indicateurs pour évaluer la soutenabilité: pertinence, disponibilité, facilité de mise en œuvre; s'accrocher au territoire: analyse des enjeux du territoire (périmètre thèse pavlo) =>

interview des acteurs, collecte d'info sur le territoire => impact quels sont les enjeux? quels sont les indicateurs que l'on peut associer et les méthodes d'évaluation associée avec Nadège, Mauricio et Hakim

## Abstract

The development of short supply chain is becoming a topic of growing interest among consumers, researchers and public bodies in Europe. More than ever, the resilience of a territory relies in the capacity of becoming less dependant of outlier producers. However, the evaluation of pertinent sustainable indicators for this short supply networks is one the major topic of discussion in the scientific and practitioners communities. The complex issues relies in the trade-offs that need to be considered for a holistic evaluation and scope of the short supply chain. Also, depending of the material or product and their technological process associated to, this entails difficulties in terms of dependence of stakeholders beyond the scope of the short circuit.

The development of short recycling becomes a promising strategy to develop solution for tackling the plastic waste issue. More precisely, the development of distributing recycling approach via additive manufacturing (**CruzSanchez2020?**) can benefit of the advantage of advancement of additive manufacturing. The development of secondary raw materials is one of major pillar in the recycling strategy for the Circular economy in Europe.

Therefore, the research question is *how to evaluate the global sustainability dimension of short supply chains to foster the plastic recycling networks in a local territory?*. More precisely to this global question, one element to highlight the impact that third-spaces as innovation labs, fablabs and/or makerspace can play a role in order to appropriate agents of change the development of

(**Pavlo2021?**) identified a compounding indicators in order to evaluate the recycling networks considering than extended triple bottom line (economic, social, political, )

The context of this article is the development of a short plastic recycling network for distributing recycling purposes.

What are the 'pertinent' indicators to evaluate the local distributed recycling network in a perspective of relevance of and also in the quality and feasibility to obtain data.

## Rationale

### LCA and 3D Printing

- AM's environmental performance is seldom investigated (Saade, Yahia, and Amor 2020).

### LCA and Social practices

- Links social practices to the life cycle inventory of LCA (Suski, Speck, and Liedtke 2020).

- Saade, Marcella Ruschi Mendes, Ammar Yahia, and Ben Amor. 2020. “How has LCA been applied to 3D printing? A systematic literature review and recommendations for future studies.” *J. Clean. Prod.* 244 (January): 118803. <https://doi.org/10.1016/j.jclepro.2019.118803>.
- Suski, Paul, Melanie Speck, and Christa Liedtke. 2020. “Promoting sustainable consumption with LCA – a social practice based perspective.” *J. Clean. Prod.* 283 (November): 125234. <https://doi.org/10.1016/j.jclepro.2020.125234>.