
Modeling approaches of an industrial symbiosis: state-of-the-art

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Résumé

The linear economy model ("Take-Make-Dispose") used until now by economic activities has severe consequences on the environment. In response to this alarming situation, the emergence of the circular economy (CE) model aims to reduce environmental impact while reconciling economic and social aspects. Among the pillars of the CE, industrial ecology (IE) seeks to foster collaboration between local industries with the goal of valorizing their waste through industrial symbioses (IS). IE and IS are not simple to implement and operate, and the study of these domains is increasingly present in the literature. Therefore, we propose a state-of-the-art review on the work carried out in this field. In particular, we study the various modeling approaches for industrial symbiosis to highlight the gaps in this area and propose perspectives for future work.

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