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Integrating Urban Metabolism, Material Flow Analysis and Life Cycle Assessment in the environmental evaluation of Santiago de Compostela

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Highlights:

- The MFA-LCA method assessed the environmental profile of Santiago de Compostela.
- Five environmental impact categories, uncommon in UM studies, have been accounted.
- A simplified MFA-LCA provides results similar to those of more complete studies.
- Fossil fuels are the main contributors in all impact categories, followed by food and beverage production.
- The MFA-LCA method allows the development of a broad environmental strategy plan.

Abstract

Achieving urban sustainability has become imperative. The combination of Material Flow Analysis (MFA) and Life Cycle Assessment (LCA) could be considered an attractive method to assess the sustainability of a city's metabolism. However, the need for exhaustive data

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