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THE 11TH INTERNATIONAL CONFERENCE ON LIFE CYCLE MANAGEMENT

Integrating accounting data with Scope 3 emissions data for valorizing LCA results in a Life Cycle Management perspective

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PROPOSED APPROACH

Solving Challenges in Calculating Environmental Impacts of Purchased Goods and Services .

Table 1. Challenges and Strategies for Calculating Environmental Impacts of Purchased Goods and Services: A State-of-the-Art Analysis

Challenges						Strategies based on the analysis of the state of the art
The choice of emission factor types						Use of monetary emission factors.
Standardizing identification's approach						Use of accounting sheets (FEC) : Company id (SIREN), Activity id (APE), and Sector id (NACE).
Complexity and difficulty of gathering data from different suppliers					erent	Use of various methods (supplier-specific, hybrid, average data) and approaches (Macro, Meso, and Micro).
Limited transparency						Data are obtained from suppliers (invoices, FEC,).
Some emissions factors are unavailable for some suppliers					opliers	Use of Input-Output tables (IO), Supply and Use tables (SUT) and Leontief matrix.
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Accounting data :	5. Extraction of the amounts spent by supplier/APE from the FEC for each
FEC, Invoices	purshases of goods and services





PERSPECTIVES AND CONCLUSIONS

- Environmental Evaluation for Holistic Insight: Through a comprehensive assessment of environmental factors encompassing product and service purchases, organizations can attain a nuanced perspective of their ecological footprint. This entails a broader understanding of the environmental consequences associated with their operations.
- Strategic Implementation and Sustainability: The utilization of this methodology empowers organizations to enact targeted strategies and sustainable practices. This fosters a proactive approach to curbing greenhouse gas emissions and other environmental issues, demonstrating a commitment to long-term ecological sustainability across various sectors.
- Advancing Responsible Industry Practices: By embracing this approach, organizations can contribute to responsible resource management and the preservation of ecosystems. This holds true for any industry, highlighting the significance of minimizing environmental impact and promoting conscientious business practices.







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