

LETTER PRESENTATION

Dehydration case study

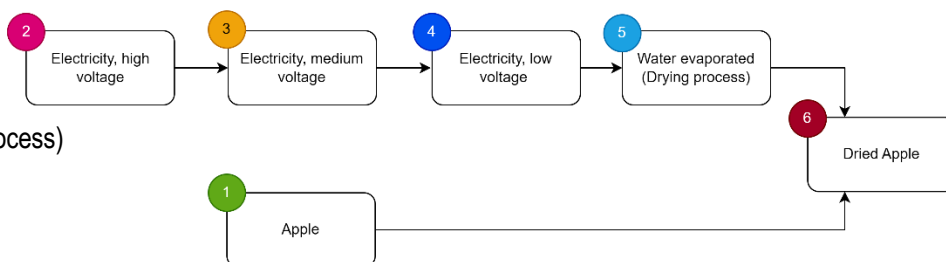
The “Interlaboratory Collaborative Study on Life Cycle Assessment: food and packaging sector” aims to define factors that cause variability in LCA results, establish a reference value for LCA results, determine measurement uncertainty, evaluate the performance of LCA practitioners (ensuring the complete anonymity of participants in all the proposed tests based on a PIN code protocol), and investigate the impact of software and databases, allocations, and energies on LCA results. The objective of this second test, on the dried apple case study, is to explore and evaluate the incidence of electricity country mix creation as a variability factor.

Each participating LCA practitioner will receive a test procedure that will guide the practitioner in the creation and analysis of LCA case study samples. At the end of the collaborative test, each LCA practitioner will receive a report in compliance with ISO 17043 and ISO 13528. Participation in the interlaboratory is free of charge.

We are delighted with your collaboration in this study and we extend our invitation to your LCA colleagues as well.

The LCA study covers five specific samples as proposed in the flowchart below:

1. Apple
2. Electricity, high voltage
3. Electricity, medium voltage
4. Electricity, low voltage
5. Water evaporated (Drying process)
6. Dried Apple



Apparatus and Equipment

Participants are required to have the following documents and equipment to complete the study:

- **Operational instruction**
- Excel data collection file **Results_Dehydration case study.xlsx**
- **Test procedure_Dehydration case study**
- **Computer** with LCA Software installed
- **LCA Software:** any LCA software can be used
- **Database:** Ecoinvent (any version) and any other database can be used
- **LCIA method:** CML-IA baseline 3.09 and (if available) Environmental Footprint 3.1



Time required

The estimated time to perform the test is one hour. The duration to obtain test results will vary based on the delivery times of all participating practitioners. For optimum coordination and data synchronization, we strongly recommend conducting all tests on the same day.

Anonymity and Participation

We assure complete anonymity for all participants throughout the study. Unlike traditional interlaboratory circuits, this study is open to both public entities and control structures. However, strict adherence to the instructions provided is essential to maintain the traceability of your work and ensure reliable results.

IN CASE OF DOUBT, OR IF YOU NEED ADDITIONAL INFORMATION, DO NOT HESITATE TO CONTACT US AT andrea.casson@unimi.it