Modular, parametrised life cycle inventories of transport of goods in need of atmosphere control

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Introduction and objectives

Introduction

- Increasing **global trade** (also of goods in need of **atmosphere control** - e.g. food)
- Complex interconnected system including different types of infrastructure and its operation

Objectives

- **Identification of key variables** with the biggest influence on the overall impacts of the transport of goods in need of atmosphere control
- **Creation of interconnected, parametrised datasets** representing an average global scenario of transport of goods with the key variables present as a parameters
Materials, methods and results

Materials and methods

- The datasets are built using the ecoSpold2 format which allows the use of parameters and mathematical formulas

Results

- The result of the project is the set of interconnected, parametrised datasets created where default values of parameters represent global averages
- The amount of energy needed for operation of the infrastructure is the most important variable

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<th>refrigeration</th>
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Figure 2 Comparison of normalized (production = 1) impacts of selected fruits and vegetables in the different stages of the supply chain
Conclusion

Many new datasets which are:

- parametrized -> easily adaptable
- use mathematical formulas -> transparency
- different technology levels -> different results in different system models

Will be available in the ecoinvent v3.2!

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Trust in Transparency!