Meta Mate

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Introduction: Mate, what's that?

- caffeinated, traditional infusion from South America
- Made of dryed and shredded leafs of the mate tree
- In europe often found in form of ice tea

Method

System boundaries: Cradle to gate
Functional unit: 1kg packaged final product
Impact categories:
- Global Warming Potential (100 years)
- Marine Aquatic Ecotoxicity Potential

Assumptions

- In reference to „Craft Mate (Raw Mate)“ of *Meta Mate*
- Harvest of leafs traditionally by hand, cultivated naturally by local farmers in Brasil
- Packaging: loose Mate, portions of 500g

Life cycle inventory

Procurement of data
- Contacting via voice-messages
- Use of provided data in terms of cultivation, processing, packaging and transport by Meta Mate
- Natural cultivation of Mate in Brasil, no use of fertilizer, pesticides or watering
- Cultivation, processing and packaging locally in Brasil, afterwards transport to Germany (and other destinations)

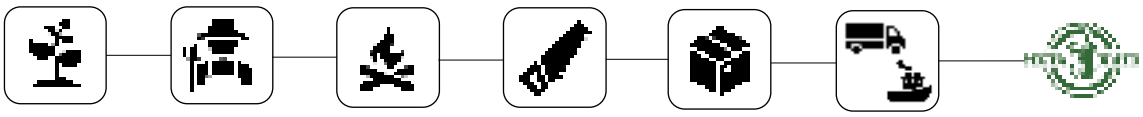

Illustration 1: Product Path

Results and Discussion

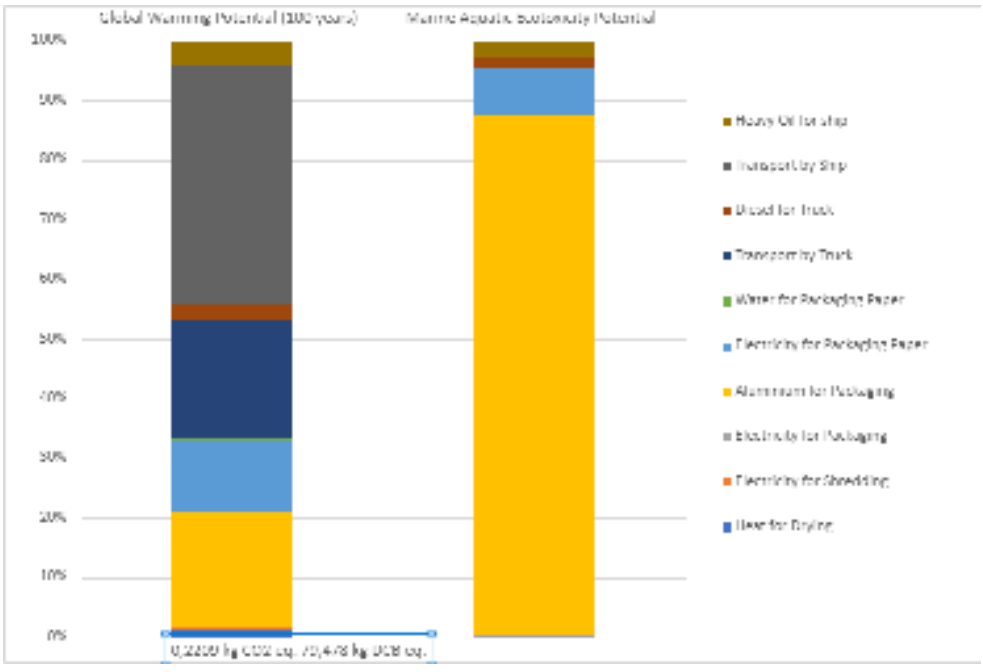

Illustration 2: Column charts GWP and MAETP

Summary

- 2 impact categories with biggest impact compared to the other ones
- Transport has the biggest impact on the GWP
- Aluminium-packaging is responsible for the biggest part of the MAETP
- Cultivation and processing cause very low emissions and resource consumption

Opportunities for improvement:
- Different packaging materials (recycable, composable, e.g. paper only)
- Use of alternate fuels

sources: picture: https://www.gesundheit.de/lexika/heilpflanzen-lexikon/mate,
Meta Mate Blog:https://www.metamateberlin.de/category/aktuelles/