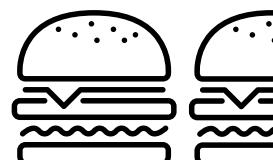


Impact Assessment

Carbon Footprint Normalization



1.5 Burgers
~4.5 kg CO₂e

Material	Classification	Characterization
Hydro 75R - Aluminum	Global Warming + Acidification	CO ₂ -eq, H+ -eq
Silicone		Si
FR4 Composite	Solid Waste	-
Copper	Abiotic Resource Depletion	Cu
Lithium	Abiotic Resource Depletion	Li
Lithium NMC Oxide	Abiotic Resource Depletion	Li, Ni, Mn, Co

Critical Review

Summary

Our Life Cycle Analysis to this point has focused on a more realistic product composition considering the constraints provided by the operation conditions in a CANDU6 reactor. Based on this research, the selection of CIRCAL 75R, a post-consumer scrap secondary aluminum has been thoroughly evaluated through the life-cycle stages of raw material extraction and disposal via NSDF. Further considerations have been made regarding the energy consumption, electricity required, carbon footprint, all in reference of a basis of 1 tonne of aluminum produced. Additional research represents flows of categorized impacts of environmental issues, displaying their damage pathways, and display higher aggregation of the impacts. The current impact assessment consists of the acquisition of materials, presenting a normalization factor based on the carbon footprint of significant components of the product.

Completeness Check

Something covered but not yet deeply dived into include the battery procurement and disposal. We believe that due to the environment it would likely be a better design decision to use a power delivery system provided by BRIMs, an existing tool delivery system used in CANDU reactors.