

# Sustainn Findings

Project Type: Life Cycle Sustainability Assessment

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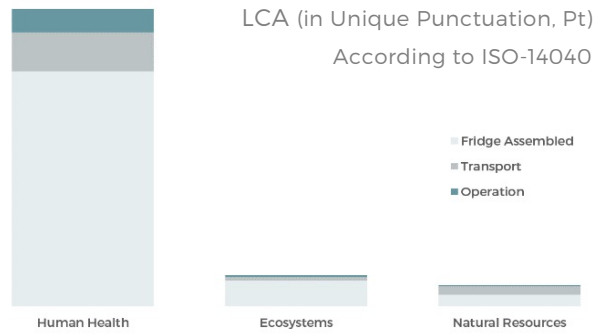


## Life Cycle Sustainability Assessment (LCSA) - FRIDGE – 4 Steps (\*)



### Step 1 Life Cycle Assessment (LCA) - Environment

- Environmental Impact Critical Parameters:**
- Transport of materials to factory (sea, road, train)
  - Electronic materials and steel parts environmental impact
  - Transport to distribution points

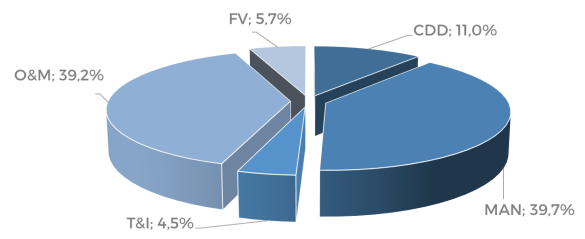


### Step 4 LCSA - Critical Parameters for Sustainability

- Sensitivity assessment to:**
- Costs volatility (raw materials, energy consumption)
  - Transportation distances variation
  - EPR financial guarantee increase
- Sustainability improvement opportunities:**
- Define DfS (Design for Sustainability) requirements related to:
    - Alternative materials utilization (recycled content, recyclable)
    - Incorporate renewable energy to the whole life cycle
    - Transportation means (i.e: EURO6)
    - Design for circularity (disassembly, repair, reuse, refurbish, remanufacture, recycle)
    - Universal design (Design 4 All)
  - PaaS business model development

### Step 2 Life Cycle Cost Assessment (LCC)

Life Cycle Cost Distribution & Critical Parameters Identification



### Step 3 Social Life Cycle Assessment (SLCA)

- Stakeholders identification & prioritization
  - Social impact indicators identified
  - Identification of actions contributing to SDGs
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(\*) LCSA methodology supported by UN Environment Programme (UNEP/SETAC Life Cycle Initiative)