



Carbon Footprint Calculation

NIT Naval Interior Team



CALCULATION SERVICE

More environmentally friendly solutions for ship interiors:

- Calculation of the environmental impact of ship interiors, based on design and materials
- Validated and comparable data to reduce the carbon footprint
- Calculating the carbon handprint and emission reduction potential
- Consultation for optimizing material solutions and lower emissions

CALCULATION REPORT

- **Comprehensive report** of the kg CO₂e calculation
 - By area and main material groups, based on the design and materials
 - Products examined at raw material level
- **Identify emission factors** and the reduction potential
 - Proposals for alternative materials
 - Comparison data

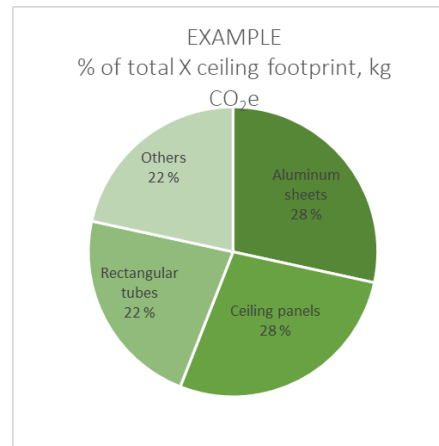
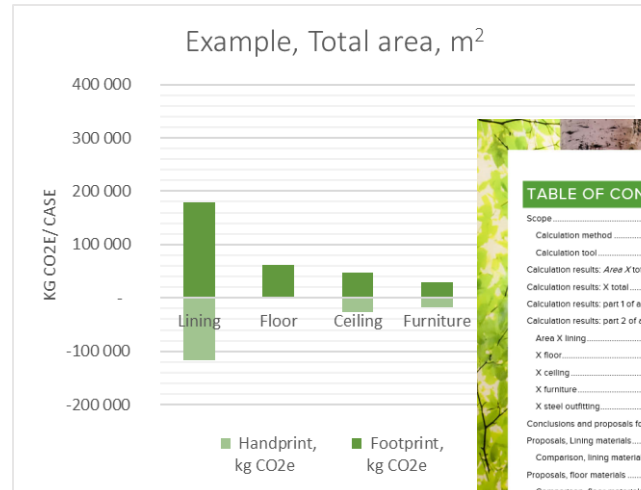


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- Calculation results: X total.....
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- Area X lining.....
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- X furniture.....
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- Conclusions and proposals for alteration.....
- Proposals, Lining materials.....
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Carbon Footprint Calculation

Customer X
Vessel / Area X
Customer logo

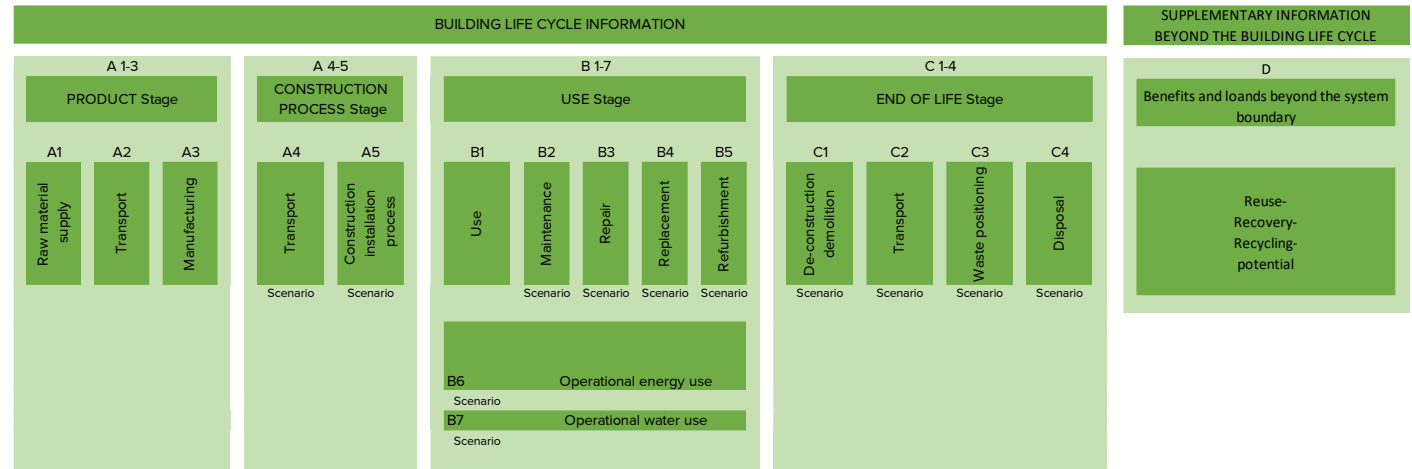
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CALCULATION METHOD

- Calculation tool created with Technical Research Center of Finland (VTT) and calculation is based on the **EN 15804 standard**

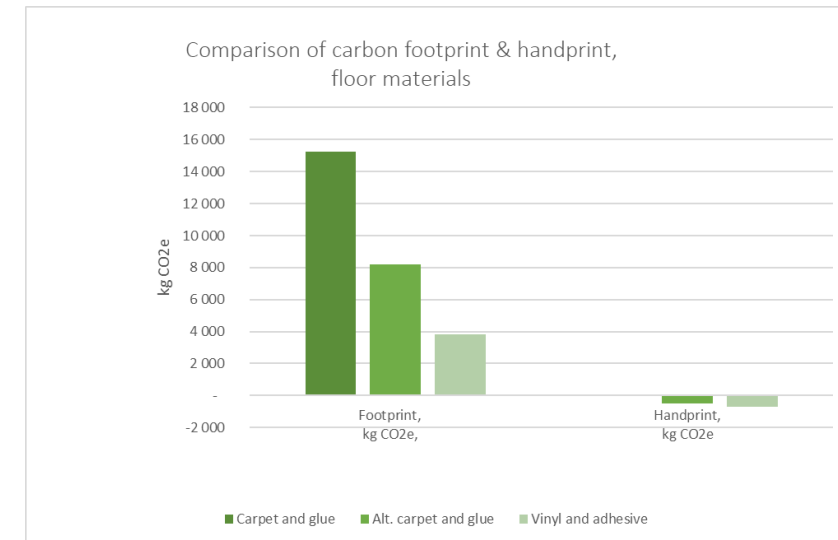
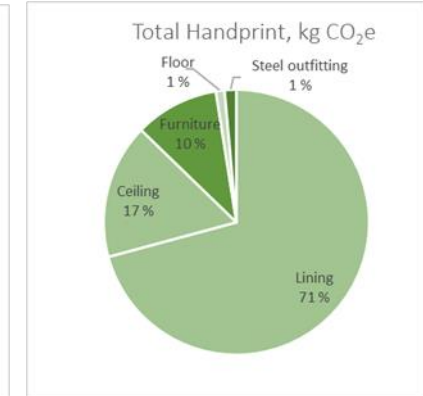
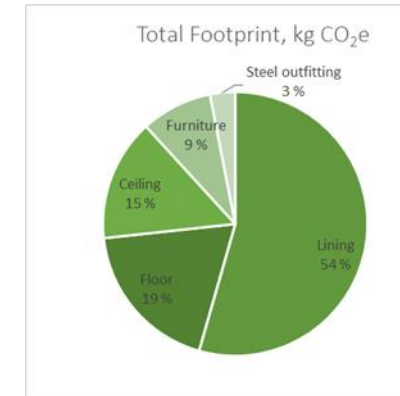
- Considering product life cycle in stages, including emission reduction potential



- The result of the carbon footprint calculation is expressed as the total amount of greenhouse gases, ie. carbon dioxide equivalent kg CO₂e
 - GWP (Global Warming Potential) values verified by database or EPD (Environmental Product Declaration) by material supplier

CASE: PUBLIC RESTAURANT AREA

- Carbon Footprint Calculation executed for **public restaurant area in cruise ship**
- Interior area divided into main material groups, also to smaller spaces based on functionality to create baseline information
 - Lining, floor, ceiling, furniture, steel outfitting
 - Restaurant area, service area, corridors and pax, offices, public stairs, public toilets, store, life vest lockers
- Calculation carried out with existing materials and part list of the area, pre-fabrication and interior drawings
- **Main factors for carbon footprint were identified** as well as emission reduction potential by carbon handprint
 - Alternative materials were researched and compared to original materials





Make sustainable ship
interiors with us!

