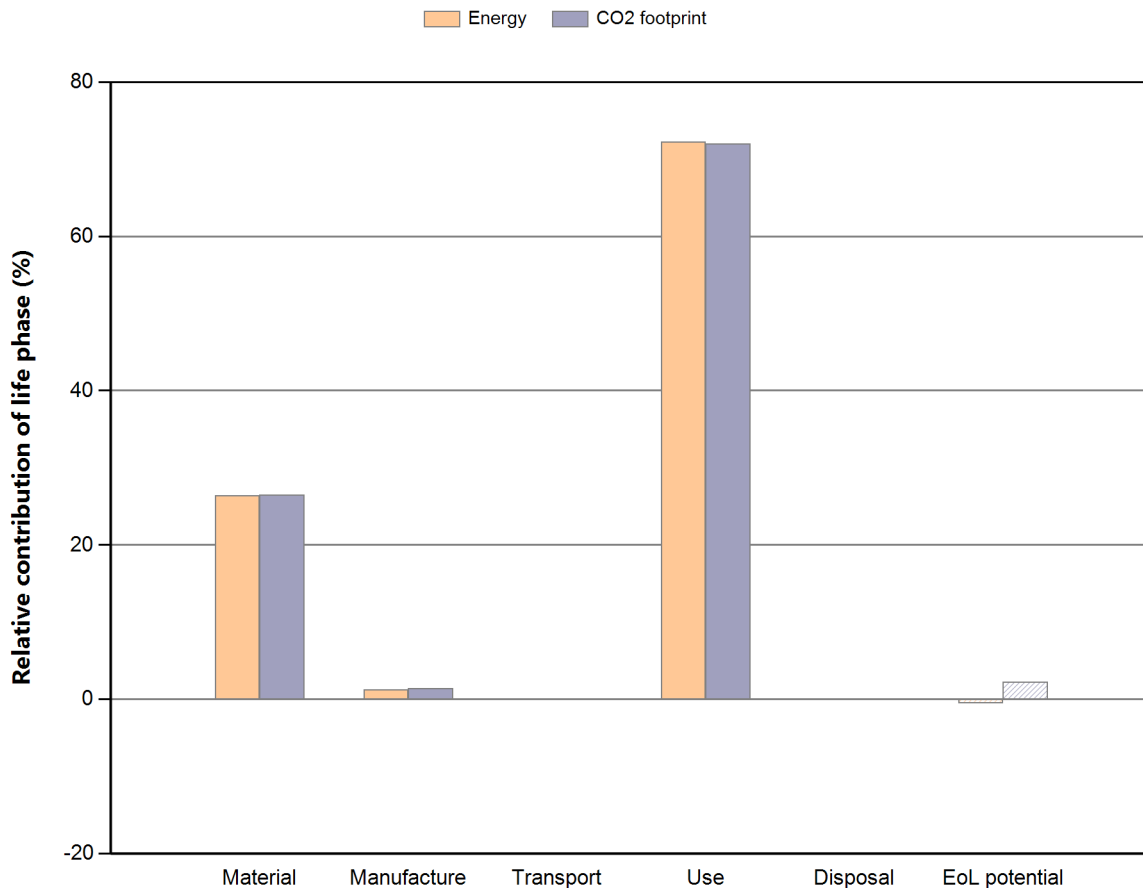


Eco Audit Report

Product name Coast guard boat comp
Country of use Sweden
Product life (years) 20

Summary:



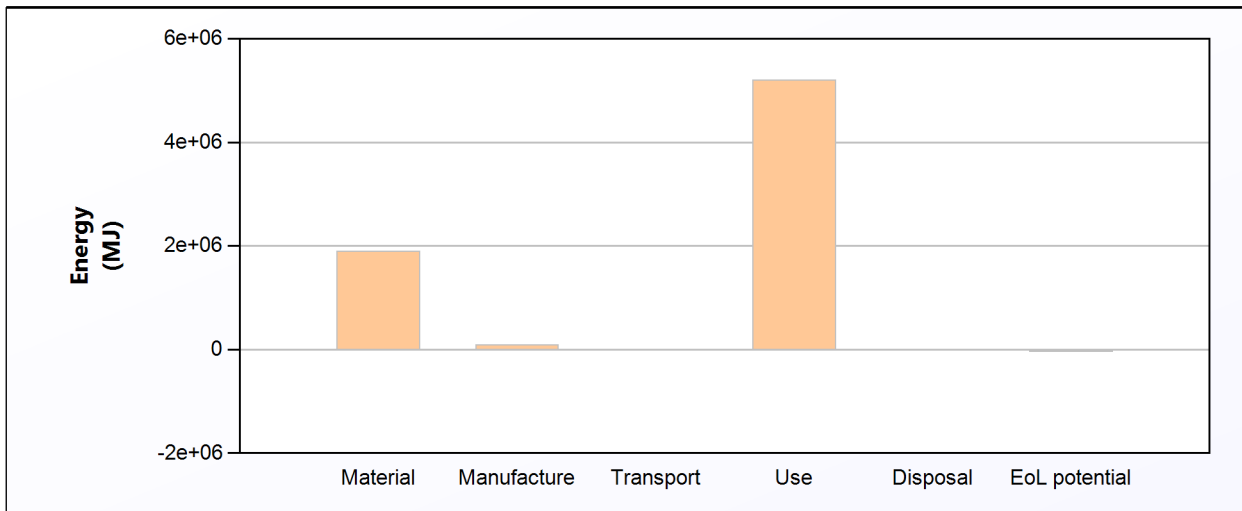
[Energy details](#)

[CO2 footprint details](#)

Phase	Energy (MJ)	Energy (%)	CO2 footprint (kg)	CO2 footprint (%)
Material	1,91e+06	26,4	1,36e+05	26,5
Manufacture	9,1e+04	1,3	7,24e+03	1,4
Transport	1,67e+03	0,0	119	0,0
Use	5,21e+06	72,2	3,7e+05	72,0
Disposal	2,99e+03	0,0	209	0,0
Total (for first life)	7,22e+06	100	5,14e+05	100
End of life potential	-3,63e+04		1,16e+04	

Energy Analysis

[Summary](#)



	Energy (MJ/year)
Equivalent annual environmental burden (averaged over 20 year product life):	3,61e+05

Detailed breakdown of individual life phases

Material:

[Summary](#)

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass (kg)	Energy (MJ)	%
Composit	CFRP, epoxy matrix (isotropic)	Virgin (0%)	3,8e+03	1	3,8e+03	1,8e+06	94,8
Core materail	Polyvinylchloride (tpPVC)	Virgin (0%)	1,3e+03	1	1,3e+03	7,6e+04	4,0
Insulation	Soda-lime glass	Virgin (0%)	2,2e+03	1	2,2e+03	2,3e+04	1,2
Total				3	7,3e+03	1,9e+06	100

*Typical: Includes 'recycle fraction in current supply'

Manufacture:

[Summary](#)

Component	Process	Amount processed	Energy (MJ)	%
Composit	Autoclave molding	3,8e+03 kg	8,3e+04	91,5
Core materail	Polymer extrusion	1,3e+03 kg	7,7e+03	8,5
Total			9,1e+04	100

Transport:

[Summary](#)

Breakdown by transport stage

Stage name	Transport type	Distance (km)	Energy (MJ)	%
Transport to stockholm	32 tonne truck	5e+02	1,7e+03	100,0
Total		5e+02	1,7e+03	100

Breakdown by components

Component	Mass (kg)	Energy (MJ)	%
Composit	3,8e+03	8,7e+02	52,1
Core materail	1,3e+03	3e+02	17,8
Insulation	2,2e+03	5e+02	30,1
Total	7,3e+03	1,7e+03	100

Use:

[Summary](#)

Mobile mode

Fuel and mobility type	Diesel - coastal shipping
Country of use	Sweden
Product mass (kg)	7,3e+03
Distance (km per day)	1,1e+03
Usage (days per year)	1,3e+02
Product life (years)	20

Relative contribution of static and mobile modes

Mode	Energy (MJ)	%
Static	0	
Mobile	5,2e+06	100,0
Total	5,2e+06	100

Breakdown of mobile mode by components

Component	Energy (MJ)	%
Composit	2,7e+06	52,1
Core materail	9,3e+05	17,8
Insulation	1,6e+06	30,1
Total	5,2e+06	100

Disposal:[Summary](#)

Component	End of life option	Energy (MJ)	%
Composit	Combust	1,9e+03	63,5
Core materail	Combust	6,5e+02	21,7
Insulation	Landfill	4,4e+02	14,7
Total		3e+03	100

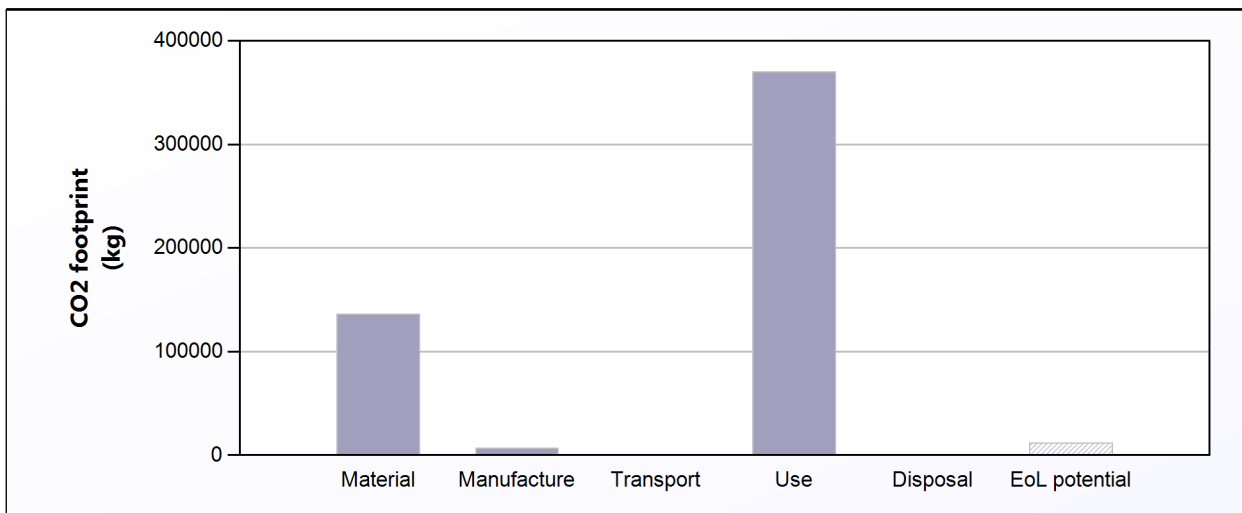
EoL potential:

Component	End of life option	Energy (MJ)	%
Composit	Combust	-3e+04	83,9
Core materail	Combust	-5,8e+03	16,1
Insulation	Landfill	0	0,0
Total		-3,6e+04	100

Notes:[Summary](#)

CO2 Footprint Analysis

[Summary](#)



	CO2 (kg/year)
Equivalent annual environmental burden (averaged over 20 year product life):	2,57e+04

Detailed breakdown of individual life phases

Material:

[Summary](#)

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass (kg)	CO2 footprint (kg)	%
Composit	CFRP, epoxy matrix (isotropic)	Virgin (0%)	3,8e+03	1	3,8e+03	1,3e+05	96,4
Core materail	Polyvinylchloride (tpPVC)	Virgin (0%)	1,3e+03	1	1,3e+03	3,2e+03	2,4
Insulation	Soda-lime glass	Virgin (0%)	2,2e+03	1	2,2e+03	1,7e+03	1,2
Total				3	7,3e+03	1,4e+05	100

*Typical: Includes 'recycle fraction in current supply'

Manufacture:

[Summary](#)

Component	Process	Amount processed	CO2 footprint (kg)	%
Composit	Autoclave molding	3,8e+03 kg	6,7e+03	92,0
Core materail	Polymer extrusion	1,3e+03 kg	5,8e+02	8,0
Total			7,2e+03	100

Transport:

[Summary](#)

Breakdown by transport stage

Stage name	Transport type	Distance (km)	CO2 footprint (kg)	%
Transport to stockholm	32 tonne truck	5e+02	1,2e+02	100,0
Total		5e+02	1,2e+02	100

Breakdown by components

Component	Mass (kg)	CO2 footprint (kg)	%
Composit	3,8e+03	62	52,1
Core materail	1,3e+03	21	17,8
Insulation	2,2e+03	36	30,1
Total	7,3e+03	1,2e+02	100

Use:

[Summary](#)

Mobile mode

Fuel and mobility type	Diesel - coastal shipping
Country of use	Sweden
Product mass (kg)	7,3e+03
Distance (km per day)	1,1e+03
Usage (days per year)	1,3e+02
Product life (years)	20

Relative contribution of static and mobile modes

Mode	CO2 footprint (kg)	%
Static	0	
Mobile	3,7e+05	100,0
Total	3,7e+05	100

Breakdown of mobile mode by components

Component	CO2 footprint (kg)	%
Composit	1,9e+05	52,1
Core materail	6,6e+04	17,8
Insulation	1,1e+05	30,1
Total	3,7e+05	100

Disposal:[Summary](#)

Component	End of life option	CO2 footprint (kg)	%
Composit	Combust	1,3e+02	63,5
Core materail	Combust	46	21,7
Insulation	Landfill	31	14,7
Total		2,1e+02	100

EoL potential:

Component	End of life option	CO2 footprint (kg)	%
Composit	Combust	1e+04	87,8
Core materail	Combust	1,4e+03	12,2
Insulation	Landfill	0	0,0
Total		1,2e+04	100

Notes:[Summary](#)