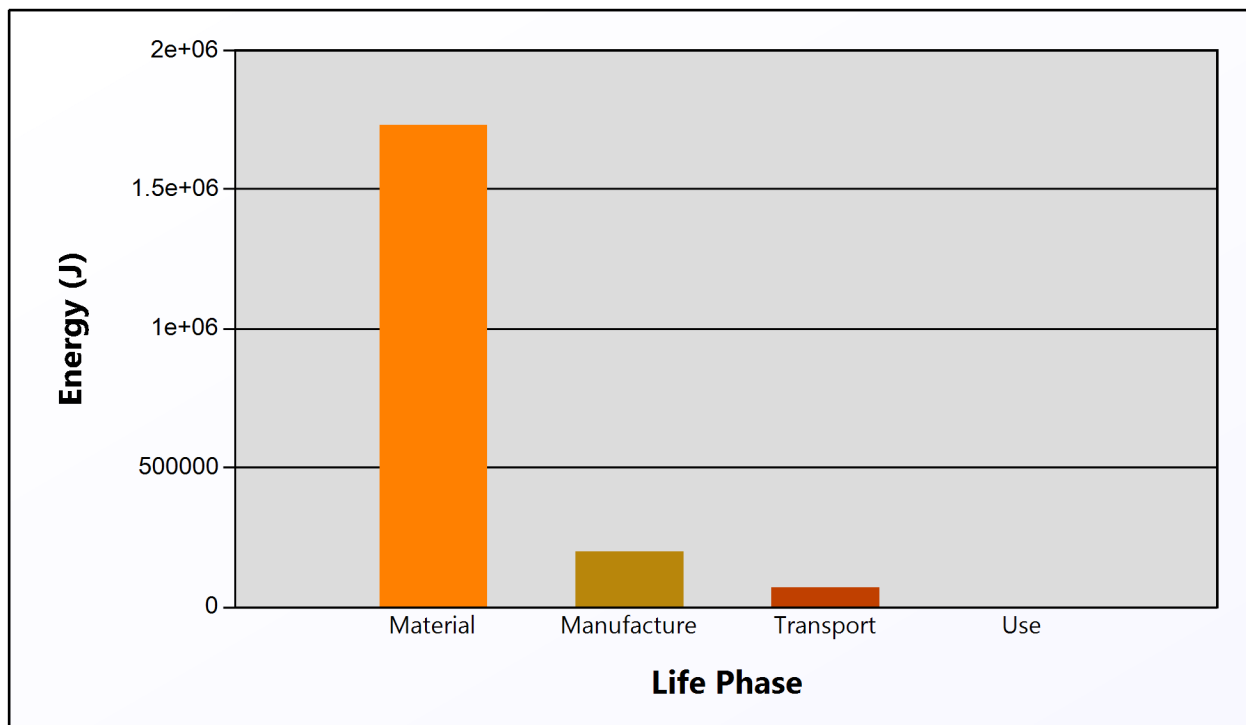


Product Name Plastic Bottle
 Product Life (years) 0
 Includes Recycled Fraction? No
 Analysis: Energy efficiency

Summary of Life Phases:

[Detailed Breakdown](#)



Phase	Energy (J)	Energy (%)
Material	1.7e+06	86.5
Manufacture	2e+05	9.9
Transport	7.2e+04	3.6
Use	0	0.0
Total	2e+06	100

Equivalent annual energy (averaged over 0 year product life): Infinity J

Detailed Breakdown of Individual Life Phases

[Summary](#)

Material:

Analysis includes recycled fraction? No

Component	Material	Primary Production Energy * (J/kg)	Mass (kg)	Energy (J)	%
Bottle	Polyethylene terephthalate (PET)	8.4e+07	0.018	1.5e+06	86.9
Cap	Polypropylene (PP)	9.4e+07	0.0024	2.3e+05	13.1
Beverage		0	0.37	0	0.0
Total			0.39	1.7e+06	100

* When applicable, primary production values account for recycle fraction in supply

Manufacture:

Component	Process	Processing Energy (J/kg)	Mass (kg)	Energy (J)	%
Bottle	Polymer molding	9.8e+06	0.018	1.8e+05	89.6
Cap	Polymer molding	8.6e+06	0.0024	2.1e+04	10.4
Beverage		0	0.37	0	0.0
Total			0.39	2e+05	100

Transport:

Breakdown by transport stage Total product mass = 0.39 kg

Stage Name	Transport Type	Transport Energy (J/kg.m)	Distance (m)	Energy (J)	%
Transport	32 tonne truck	0.46	4e+05	7.2e+04	100.0
Total			4e+05	7.2e+04	100

Breakdown by components Total transport distance = 4e+05 m

Component	Mass (kg)	Energy (J)	%
Bottle	0.018	3.3e+03	4.6
Cap	0.0024	4.4e+02	0.6
Beverage	0.37	6.8e+04	94.8
Total	0.39	7.2e+04	100

Use:

Static Mode

Energy Input and Output Type	Electric to mechanical
Energy Conversion Efficiency	0.28
CO2 Emission (kg/J)	4.6e-08
Power Rating (W)	1.2e+02
Usage (hours per day)	24

Mobile Mode

Fuel and Mobility type	
Energy Consumption (J/kg.m)	0
CO2 Emission (kg/kg.m)	0
Product Mass (kg)	0.39
Distance (m per day)	0

Usage (days per year)	2	Usage (days per year)	0
Product Life (years)	0	Product Life (years)	0
Total Life Usage (hours)	0	Total Life Distance (m)	0

Relative contribution of static and mobile modes

Mode	Energy (J)	%
Static	0	
Mobile	0	
Total	0	100

Breakdown of mobile mode by components

Component	Mass (kg)	Energy (J)	%
Bottle	0.018	0	
Cap	0.0024	0	
Beverage	0.37	0	
Total	0.39	0	100

Notes: