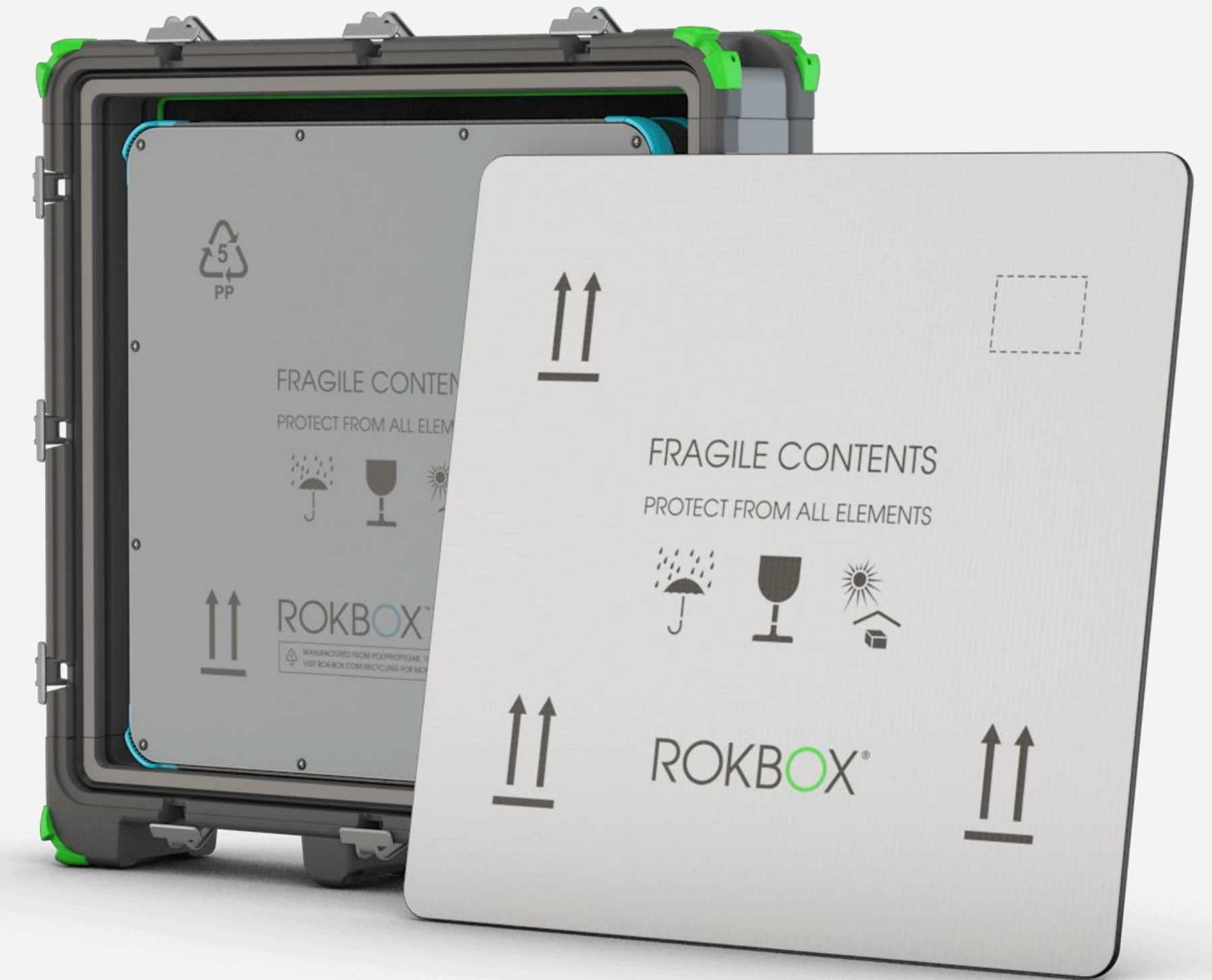


ROKBOX[®]

Protection by Design

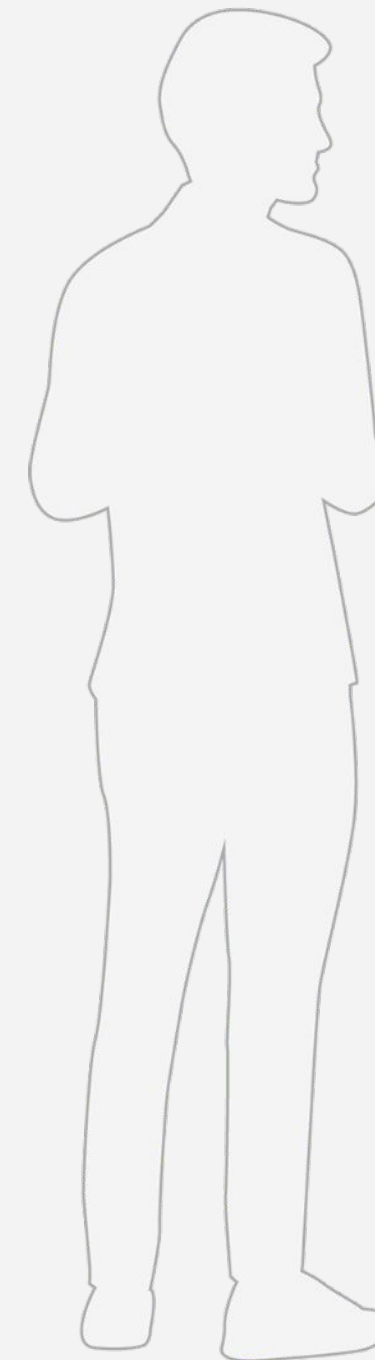


VS



ROKBOX[®]

Product Range



Cost Benefit Analysis

Case study

ROKBOX Original: If 1 x ROKBOX Original 1.6x2.0 is used once a fortnight for one year instead of making wooden crates, the cost saving is £10,000. If each usage was for road freight between NY & Miami, the CO2e saving for using this ROKBOX instead of wooden crates would be 3 tonnes CO2e. It would take 120 trees to absorb this CO2e over the course of one year.

	Lite 1.2 x 1.2	Lite 1.2 x 1.6	Original 1.1 x 1.1 (full aluminium)	Original 1.6 x 1.6 (slats)	Original 1.6 x 2.0 (slats)	Original 1.6 x 2.4 (slats)	Original 2.0 x 2.0 (slats)	Original 2.0 x 2.4 (slats)
RRP (GBP)*	£950	£1,200	£1,495	£2,995	£3,495	£3,995	£4,495	£4,995
Wooden crate cost	£300	£400	£250	£350	£500	£550	£625	£700
Breakeven usage	3.2	3.0	6.0	8.6	7.0	7.3	7.2	7.1
Savings after max recommended uses**	£2K	£3K	£24K	£32K	£47K	£51K	£58K	£65K

*RRP for crate shells only, not including hardware. Please note that volume discounts apply for sales over certain thresholds, maximum discount applicable is 20%.

**Recommended number of uses for ROKBOX Original <100 times, and ROKBOX Lite <10 times

ROKBOX outperform wooden crates in a variety of real world safety tests:

- vibration
- topple, shock & drop
- water exposure, rain and submersion
- forklift impact
- fire
- temperature & humidity fluctuations



Mechanical performance

ROKBOX vs. wooden 'museum' case

	ROKBOX Lite	ROKBOX Original	ROKBOX Nest	Wooden Museum case
Vibration: peak resonance 0-200Hz with 0.5g input	<2.0g	<2.0g	<1.5g	>2.0g
Shock: corner drop from 30cm	<30g	<30g	<25g	>30g
Shock: full topple from upright	<30g	<80g	<60g	>95g
Water: sprinkler (British Standards EN 60529: 1992+A2:2013 IPX3)	Pass	Pass	Pass	Fail
Impact: forklift 5mph	Pass	Pass	Pass	Fail

All testing carried out under the supervision of TÜV SÜD, an independent testing facility with 150 years of product, process, safety and quality expertise; providing technical consultancy, testing and certification services. g = G force



Climatic performance

ROKBOX vs. wooden 'museum' case

	ROKBOX Lite	ROKBOX Lite + poly-wrap	ROKBOX Original	ROKBOX Original + poly-wrap	ROKBOX Nest	ROKBOX Nest + poly-wrap	Wooden 'museum' + poly-wrap
Temperature half time (mins)*	32	53	82	137	118	195	170
Humidity % change**	<10%	<1%	<10%	<1%	<1%	<1%	<1%

*Time taken for temperature within the crate to reach the midpoint between changing external conditions; tested from 22°C (ambient) to 40°C (18 hours) and 22°C (ambient) to 2°C (18 hours).

**Response to change in humidity of +/- 30°C over 24 hour period.

Representative data from testing ROKBOX Lite 1.2x1.2, ROKBOX Original 1.6x1.6 and their combined ROKBOX Nest.

All testing carried out under the supervision of TÜV SÜD



ROKBOX products are significantly better for the environment than traditional wooden equivalents.

Zero Waste - Low CO2



Sustainability: CO2e

ROKBOX Original vs. wooden 'museum' case

	Distance	No. of Cases	CO2e kg Saved	% Saved	CO2e saving is equivalent to:		
					Cups of tea	Tree CO2 absorption per year	Leaving 100w light bulb on in years
Road Freight (NY to Miami)	2060 km	10	1,160	83%	15,676	46	1.5
Airfreight (LHR to JFK)	5543 km	20	5,321	41%	71,900	213	7.1
Sea Freight (UK Port to NY Port)	3150 nautical miles	30	3,232	89%	43,674	129	4.3

Crate data has been calculated in collaboration with STiCH (Sustainability Tools in Cultural Heritage), a team of cultural heritage professionals, engineers, and conservation graduate students providing a clear path to reducing the carbon footprint from cultural heritage activities worldwide.



Sustainability: CO2e

ROKBOX Lite vs. wooden 'commercial' crate

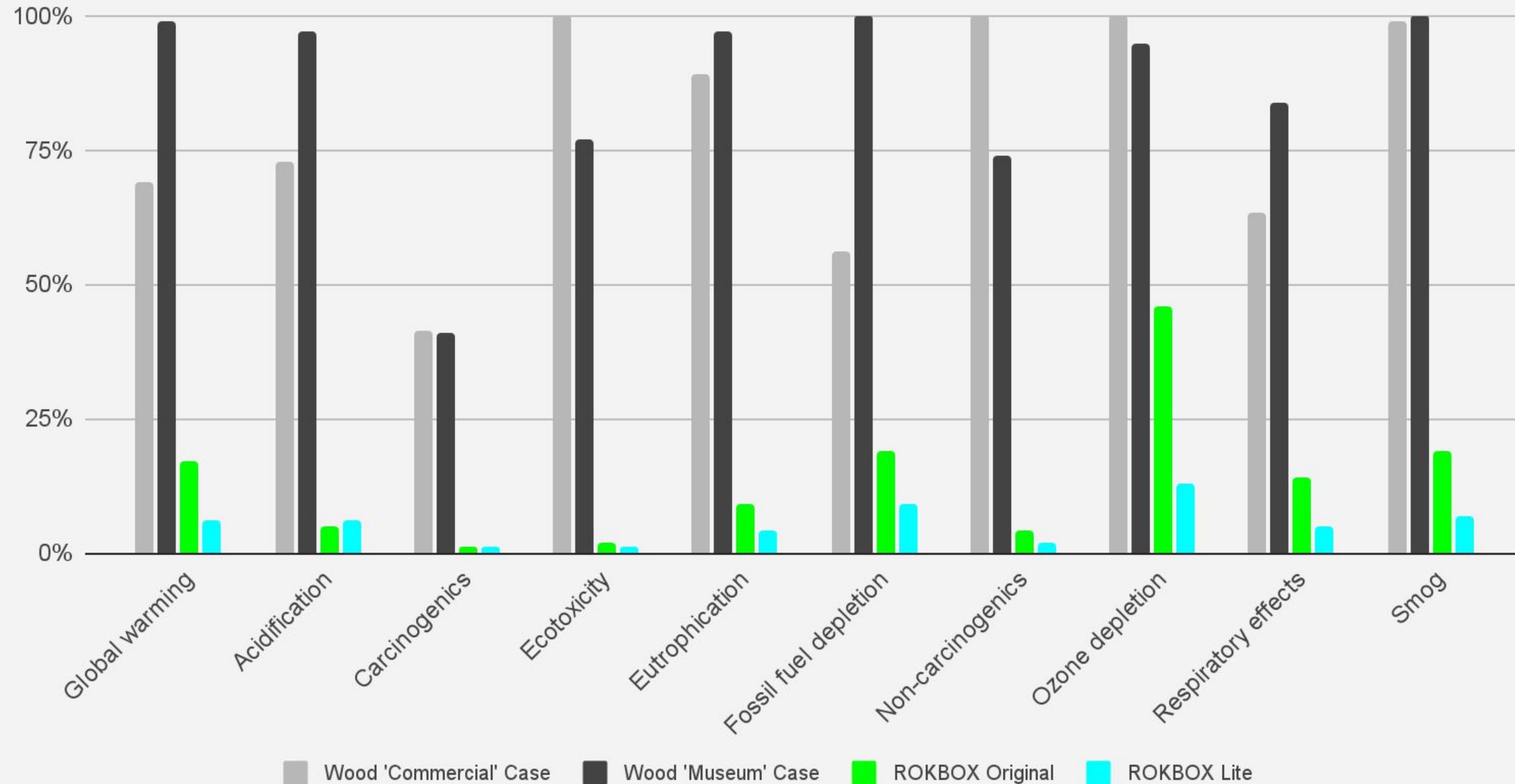
	Distance	No. of Cases	CO2e kg Saved	% Saved	CO2e saving is equivalent to:		
					Cups of tea	Tree CO2 absorption per year	Leaving 100w light bulb in years
Road Freight (NY to Miami)	2060 km	10	887	91%	11,986	35	1.2
Airfreight (LHR to JFK)	5543 km	20	7,328	79%	99,027	293	9.8
Sea Freight (UK Port to NY Port)	3150 nautical miles	30	2,313	93%	31,257	93	3.1

Crate data has been calculated in collaboration with STiCH (Sustainability Tools in Cultural Heritage).



Sustainability: Environmental Impacts

Additional environmental impacts include the following:



All data has been calculated in collaboration with STiCH (Sustainability Tools in Cultural Heritage)
Pollutants expressed as a % ratio of the highest impact case measured (not all cases shown)



Sustainability: Environmental Impacts

Additional environmental impacts include the following:

Relative results	Wood 'Commercial' Case	Wood 'Museum' Case	ROKBOX Original	ROKBOX Lite
Global warming	69%	99%	17%	6%
Acidification	73%	97%	5%	6%
Carcinogenics	42%	41%	1%	1%
Ecotoxicity	100%	77%	2%	1%
Eutrophication	89%	97%	9%	4%
Fossil fuel depletion	56%	100%	19%	9%
Non-carcinogenics	100%	74%	4%	2%
Ozone depletion	100%	95%	46%	13%
Respiratory effects	63%	84%	14%	5%
Smog	99%	100%	19%	7%

All data has been calculated in collaboration with STiCH (Sustainability Tools in Cultural Heritage).
Pollutants expressed as a % ratio of the highest impact case measured (not all cases shown)



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