## RUDDERSTOCK REFURBISHMENT

Environmental improvements from life extension

## OBJECT OF ASSESSMENT

Wencon Rapid & Coating application



→ CURRENT LIFE CYCLE (RUDDERSTOCK - 9,000 KG)

CARBON FOOTPRINT

71,172 KG CO<sub>2</sub>eq

CURRENT

**BASED ON SCENARIO 1** 

**SDG POTENTIAL** 







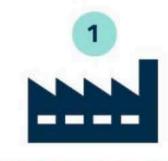
MANUFACTURING 62,820 KG CO2eq

USE O KG CO₂eq

RECYCLING 8,352 KG CO2eq

REFURBISHMENT LIFE CYCLE (RUDDERSTOCK - 9,000 KG)

BASED ON SCENARIO 2



MANUFACTURING 62,820 KG CO2eq



USE O KG CO₂eq



WENCON REFURBISHMENT -62,100 KG CO2eq

USE

O KG CO2eq

RECYCLING 8,352 KG CO2eq **NEW CARBON FOOTPRINT** 

9,072 KG CO<sub>2</sub>eq

TOTAL CO2EQ SAVINGS 87.2%

## COMPARATIVE LIFE CYCLE ASSESSMENT

SCENARIOS POTENTIAL SAV		SAVINGS		200k	
<b>51</b> Bu	ısiness-as-usual	0%	ted	150k	
<b>52</b> Re	furbishment	87.2%	emit	100k	
<b>53</b> Re	furb. w. oceanic transportation	80.1%	D <sub>2</sub> eq	TOUK	
<b>54</b> Re	furb. w. aerial transportation	-127.8%	(G C)	50k	
S5 Re	furb. w. ReCiPe modelling framework	87%	-	Ok	
<b>56</b> Re	furb. w. geographical location	87.4%		UK	



## \* RECOMMENDATIONS

- Reduction potential from life extension Wencon refurbishment significantly lowers CO<sub>2</sub> footprint
- Rudderstocks may be transported by ship for refurbishment Wencon refurbishment lowers CO<sub>2</sub> footprint even when transported over large distances via oceanic freight
- Rudderstock aerial transportation should be avoided

Wencon refurbishment may not reduce CO2 footprint if transported over large distances via air freight

Rudderstock refurbishment may change geographical location Benefits may be obtained although refurbished in China

