

Circular Economy Effects			Seats				Cabin Linings		Bins	Cabin Floor	
R Value	Parameter	Units	i. Metallic Structure	ii. Composite Structure	iii. Comfort Interfaces	iv. Misc.	v. Sidewall Panel	vi. Insulation Blankets	vii. Overhead bins	viii. Carpet	ix. Floor Panel
R1: Refuse	Product weight proportion addressed	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Product lifetimes avoided	loops	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R2: Rethink	Product weight addressed	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	Product lifetimes combined	loops	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R3: Reuse	Product weight proportion addressed	%	0%	0%	33%	0%	100%	0%	100%	0%	100%
	D-Factor	score	0	0	5	0	6	0	6	0	8
	Product lifetimes restarted	loops	0.0	0.0	1.0	0.0	1.5	0.0	1.5	0.0	3.0
R4: Repair	Product weight proportion addressed	%	0%	100%	0%	0%	100%	0%	100%	0%	0%
	Repair efficiency	score	0	4	0	0	8	0	8	0	0
	D-factor	score	0	3	0	0	4	0	4	0	0
	Product lifetimes restarted	loops	0.0	1.0	0.0	0.0	1.5	0.0	1.5	0.0	0.0
R5: Remanufacture	Product weight proportion addressed	%	0%	0%	34%	0%	0%	0%	0%	0%	0%
	Remanufacture efficiency	score	0	0	6	0	0	0	0	0	0
	D-factor	score	0	0	8	0	0	0	0	0	0
	Product lifetimes restarted	loops	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
R6: Recycle	Product weight proportion addressed	%	100%	0%	0%	98%	18%	0%	0%	100%	0%
	Recycling efficiency	score	10	0	0	5	8	0	0	4	0
	D-factor	score	10	0	0	6	10	0	0	6	0
	Product lifetimes restarted	loops	3.0	0.0	0.0	1.0	2.0	0.0	0.0	1.0	0.0
R7: Recover	Product weight proportion addressed	%	0%	100%	33%	2%	82%	100%	100%	0%	0%
R8: Reject	Product proportion unable to recycle	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cumulative DL Effect	Total weight usedn (correctness check)	100%	100%	200%	100%	100%	300%	100%	300%	100%	100%
	Importance of Sustainability effects	%	50%	80%	80%	20%	60%	80%	60%	80%	40%
	Importance of Strategy considerations	%	50%	20%	20%	80%	40%	20%	40%	20%	60%
	Total Product DL Effect due to CE	+ loops	1.20	0.43	0.60	0.15	2.15	0.14	2.08	0.12	2.41

R type	Meaning <i>(The best available option)</i>	Sustainability Effect (a)	Justification	Strategic Benefit (b)	Justification
R1: Refuse	Reject the need	5.00	Reduced impact w.r.t. baseline	2.50	Cost cutting vs. revenue opportunity loss
R2: Rethink	Revise the application	4.85	Several impacts reduced into one	5.00	Retain revenue sources at reduced cost
R3: Reuse	Return directly into primary use	4.65	Original impact unchanged	4.50	Retain revenue sources at small added cost
R4: Repair	Update and return into primary use	4.30	Minor impact due to maintenance	3.00	Large cost recovery vs. large repair cost
R5: Remanufacture	Retrieve components for reproduction	3.50	Shortened resupply chain impact	3.50	Medium cost recovery vs. small disassembly cost
R6: Recycle	Secondary use of purified raw materials	1.50	Extended resupply chain impact	2.50	Small cost recovery from recyclers and/or users
R7: Recover	Recover material energy content	0.50	Minimum impact recovery	1.50	No cost recovery from incinerators
R8: Reject	Dispose without circular action	0.00	No impact recovery	1.00	Cost impact due to waste management fees

Material	Recycling Route (available and viable for cabin interiors)
Aluminium	Raw material recovery (secondary)
Brass	Raw material recovery (secondary)
Cu wiring	Raw material recovery (secondary)
Stainless Steel	Raw material recovery (secondary)
Cotton	Incineration (partial energy recovery)
Synthetic Leather	Incineration (partial energy recovery)
Silicone Rubber	Raw material recovery (secondary)
CFRP	Incineration (partial energy recovery)
GFRP	Incineration (partial energy recovery)
Epoxy Adhesive	Chemical Removal
Latex	Raw material recovery (secondary)
NOMEX HC	Incineration (partial energy recovery)
PA	Raw material recovery (secondary)
PC	Raw material recovery (secondary)
PEI	Raw material recovery (secondary)
PET Film	Raw material recovery (secondary)
PMMA	Raw material recovery (secondary)
PU Flexible Foam	Incineration (partial energy recovery)
PU Rigid Foam	Incineration (partial energy recovery)
PVC Film	Raw material recovery (secondary)

