Tarry

Design by Wolfgang C R Mezger

The luxurious wing back lounge chair has a versatile style that is the perfect accompaniment to both modern and vintage interiors, whilst the acoustic properties of the seat's wing panels make the piece ideal for breakout areas and executive lounges, or hotel and hospitality environments.

Product Summary

Scope of Assessment:

From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate). See page 2 for more details.

Data Used:

Primary data was used wherever possible including for energy use during the core module.
All secondary data was obtained from the EcoInvent database used in conjunction with SimaPro 7.3.2, using European data only.

Functional Unit:

A Seating solution designed and manufactured to last 15 years.

Regional Market:

The primary market for our Office Furniture products is Europe. The scope of this declaration reflects that.

Material Declaration

Material	Amount (kg)	Total (%)
Fabric	1.22	4.08
PU Foam	9.60	32.09
Steel	19.10	63.84

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	168.73
Recycled Content (% By Weight):	34.00
Total Energy Consumption (Mj):	3787.23
Recyclability (% By Weight):	99.00

Date of Production: June 2017

Environmental Product Analysis

This Environmental Product Analysis has been created in accordance with, and following the principles of ISO14025 and ISO14044.
All the Life Cycle Analysis data has been compiled, processed and verified by Oakdene Hollins Ltd.

Compilation and processing of LCA data performed by
Dr. Dan Skinner (Oakdene Hollins Ltd.)

Verification of LCA and environmental data performed by
Dr. Adrian Chapman (Oakdene Hollins Ltd.)

Sustain

The Senator Group has for many years acknowledged that the key word upon which to focus our attention is Sustainability rather than Recyclability in pure isolation.

Our business takes a truly holistic approach to the design, manufacture, supply and reclamation of our products. We see this as a cyclical process.

From design to manufacture, use and reclamation we aspire to minimise all environmental impacts of The Senator Group's products and processes.

We harvest the resources back from the retired products then remanufacture or reintroduce the materials into our component manufacturers supply chain.

We believe in taking responsibility for our own actions ourselves, wherever possible, rather than relying on third parties, or abdicating

our responsibilities by offsetting. The process of Sustainability is a cyclical one we understand this and we actively pursue this in everything that we do.

In Use

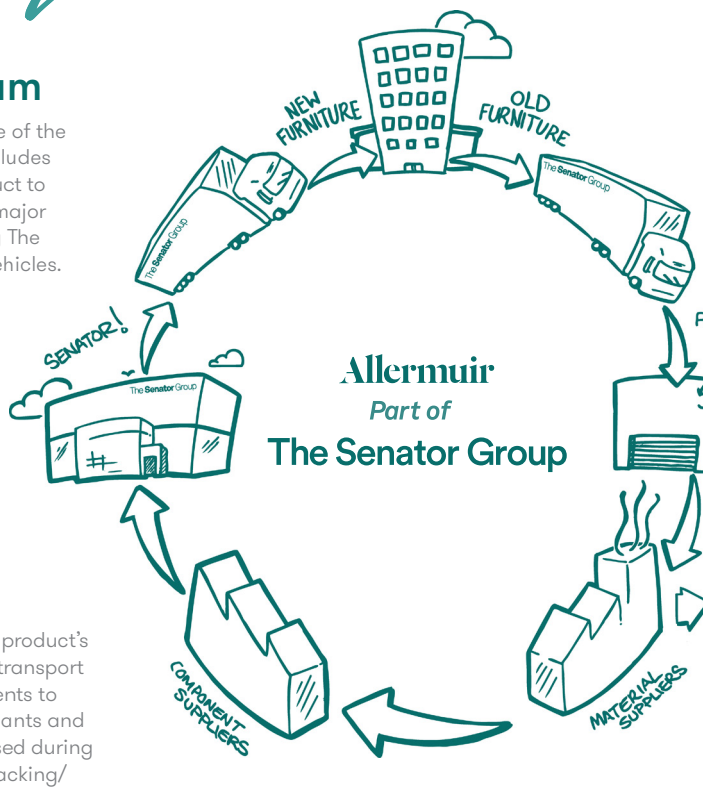
No relevant environmental exchange occurs during the "in use" phase and is not considered in this Life Cycle Analysis.

End of Life

End of life (recycling) is not considered in this Life Cycle Analysis however all of The Senator Group's products are considered to be 99% recyclable.

Downstream

The Downstream module of the product's life-cycle includes transport of the product to The Senator Group's major market regions, using The Senator Group's own vehicles.



Core

The core module of the product's life-cycle includes the transport of funiture components to The Senator Group's plants and the energy resources used during product assembly/packing/ loading and transport.

The Senator Group offers a full recycle service for all it's customers and clients, to close the recycling loop.

Upstream

The upstream module of the product's life-cycle includes the extraction and treatment of raw materials, transport of the new material to the component suppliers and the manufacture of usable components from those materials.

System Boundaries

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	17.18	0.16	0.03	17.37
From the Ground	150.29	5.62	13.03	168.94
From the Water	0.00	0.56	0.00	0.56

Energy Consumption

Resource (MJ)	Upstream	Core	Downstream	Total
Biomass	210.02	1.58	0.29	211.89
Hydro	79.31	3.60	1.61	84.52
Solar	0.10	0.01	0.00	0.11
Wind	7.13	0.21	0.07	7.41
Non-Renewable Energy (MJ)	3237.89	93.08	152.33	3483.30
Total	3534.45	98.48	154.30	3787.23

Environmental Impact Potential

Resource	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	154.18	5.60	8.95	168.73
Acidification (Kg SO2 Equivalents)	0.71	0.06	0.04	0.81
Eutrophication (Kg PO43 Equivalents)	0.04	0.00	0.00	0.04
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.08	0.00	0.01	0.09

Toxic Emissions

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	163.69	389.88	875.38	1428.95
To the Ground	0.10	0.04	0.10	0.23
To the Water	27.82	6.40	13.00	47.22

Recycled Content

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
Material	**Amount**	**Percent of Total**
Steel	50.00	2.00
Fabric	50.00	32.00
Total		34.00

Certificates

Description	Accreditation	First Certified
Quality Assurance	ISO 9001	Certified 1991
Environmental Management	ISO 14001	Certified 2001
Chain of Custody	FSC®	Certified 2003
Sustainability	FISP	Certified 2006
Occupational Health & Safety Management	ISO 45001	Certified 2021

All UK manufacturing Sites are accredited to ISO standards, 9001, 14001 and 45001. In addition to this the Global Headquarters is also accredited to Chain of Custody. We can provide FSC ® certified products upon request

FISP (Furniture Industry Sustainability Program)

Awarded by FIRA, this sustainability certificate is designed to monitor all sustainability aspects of a company's facilities and operations. The Senator Group achieved one of the first sustainability certifications within the furniture industry – a public declaration of our commitment to improving our performance in every possible way.

Environmental Management

From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate). See page 2 for more details.

Chain of Custody

Independent certification to prove The Senator Group only purchases TFL/MDF/Chipboard from manufacturers who can prove they purchase their raw wood from sustainable sources.

Energy Management:

External proof that The Senator Group has implemented a robust system to monitor all energy usage and have a process to continually minimize energy usage.

We believe The Senator Group was the first company in the furniture industry to achieve this standard.

The Three R's

The Senator Group is committed to continually improving the sustainability of all environmental aspects within our business.

To meet both international standards and our own environmental targets we apply the three R's principle–

Reduce, Reuse and Recycle.

Whilst recycling is the element which receives the most exposure it is actually the last option available and should never be the prime target in anyone's battle to reduce waste.

It is our duty as individuals and as a company to initially attempt to Reduce usage. Then we should look to Reuse wherever possible and finally, only after these two processes have been exhausted, should we consider Recycling.

Assessment Considerations

The following necessary assumptions and considerations were made during the course of the Life-Cycle Analysis:

- Manufacture of the furniture components was assumed to take place in the same factory in which the raw materials were processed, due to a lack of case-specific data.
- The transport of all materials, components and finished products was assumed to be via 16-32t Euro 6 lorries.
- All LCA data was modeled using the IMPACT 2002+ (v2.06) method.