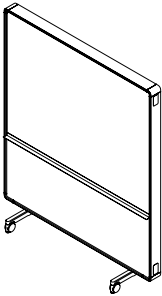


SENATOR

Adapt Wall - AW2016FFD

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PRODUCT SUMMARY

Scope of Assessment:

From extraction of raw materials through to production of the final desking 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 EcolInvent database, used in conjunction with SimaPro 7.3.2, using European data only.

Functional Unit:

A desking solution designed and manufactured to last for 15 years.

Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Fabric	1.62	2.33
Nylon (30% glass)	0.94	1.35
MDF	19.05	27.40
Plywood	22.28	32.04
Aluminium Castings	6.58	9.46
Aluminium Extrusion	16.98	24.42
Stainless Steel (304)	0.29	0.42
Steel	0.31	0.45
Zinc Castings	0.53	0.76
High Pressure	0.95	1.37

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	98.03
Recycled Content (% By Weight):	46.15
Total Energy Consumption (Mj):	3291.87
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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SUSTAIN

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In Use:

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End of Life:

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Group:

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

Upstream:

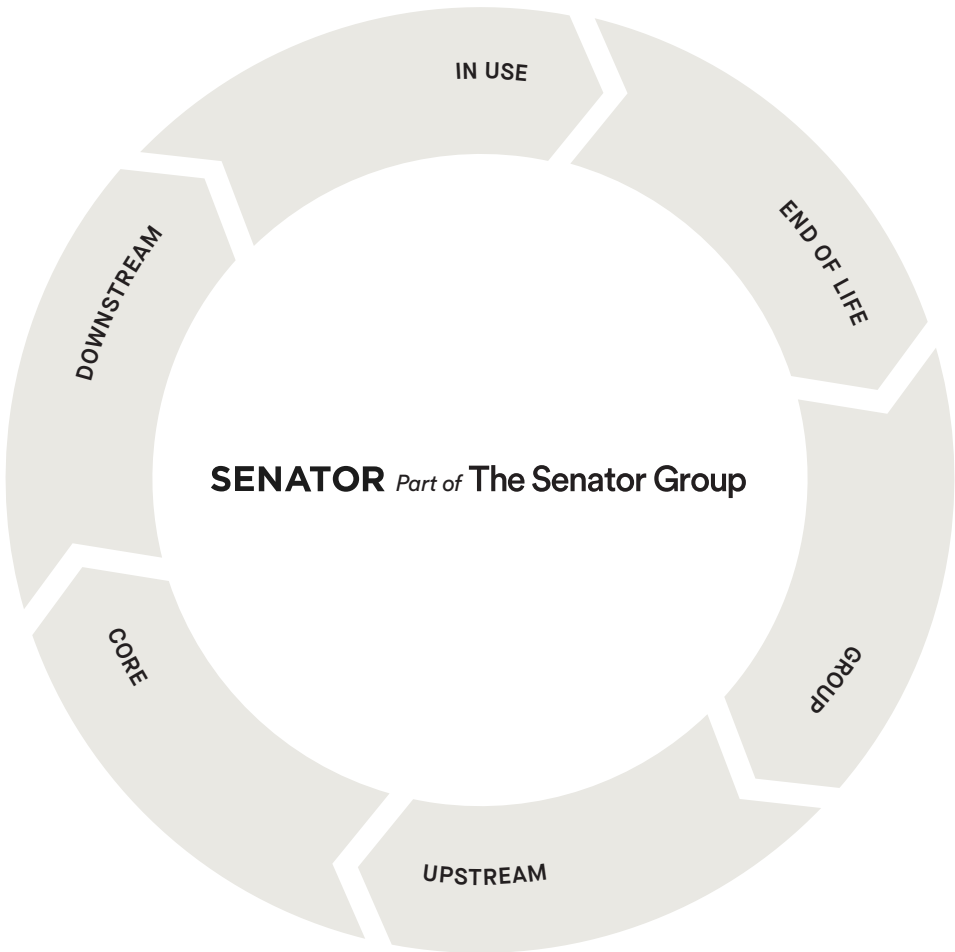
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Downstream:

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



SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	119.01	1.34	0.01	120.36
From the Ground	72.27	23.07	3.25	98.59
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	1310.62	14.77	0.07	1325.46
Hydro	64.80	4.88	0.40	70.08
Solar	0.08	0.00	0.00	0.08
Wind	5.51	1.43	0.02	6.96
Non-Renewable Energy (MJ)	1568.06	283.21	38.02	1889.29
Total	2949.07	304.29	38.51	3291.87

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	79.89	15.91	2.23	98.03
Acidification (Kg SO2 Equivalents)	0.48	0.06	0.01	0.55
Eutrophication (Kg PO43 Equivalents)	0.06	0.00	0.00	0.06
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.03	0.00	0.00	0.03

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	118.84	584.22	218.50	921.57
To the Ground	0.09	0.07	0.03	0.18
To the Water	13.16	9.85	3.25	26.25

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
Fabric	50.00	1.00
MDF	45.00	12.15
Aluminium Castings	100.00	9.00
Aluminium Extrusion	100.00	24.00
Total		46.15

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



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Environmental Management:

From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate).

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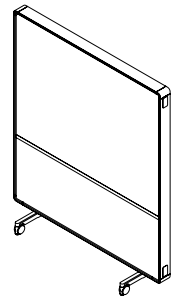
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PRODUCT SUMMARY

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Functional Unit:

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Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Fabric	13.50	17.38
Nylon (30% glass)	0.34	0.44
Plywood	39.44	50.77
Aluminium Castings	6.58	8.47
Aluminium Extrusion	16.70	21.50
Stainless Steel (304)	0.29	0.37
Steel	0.31	0.40
Zinc Castings	0.53	0.68

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	162.51
Recycled Content (% By Weight):	37.50
Total Energy Consumption (Mj):	5548.12
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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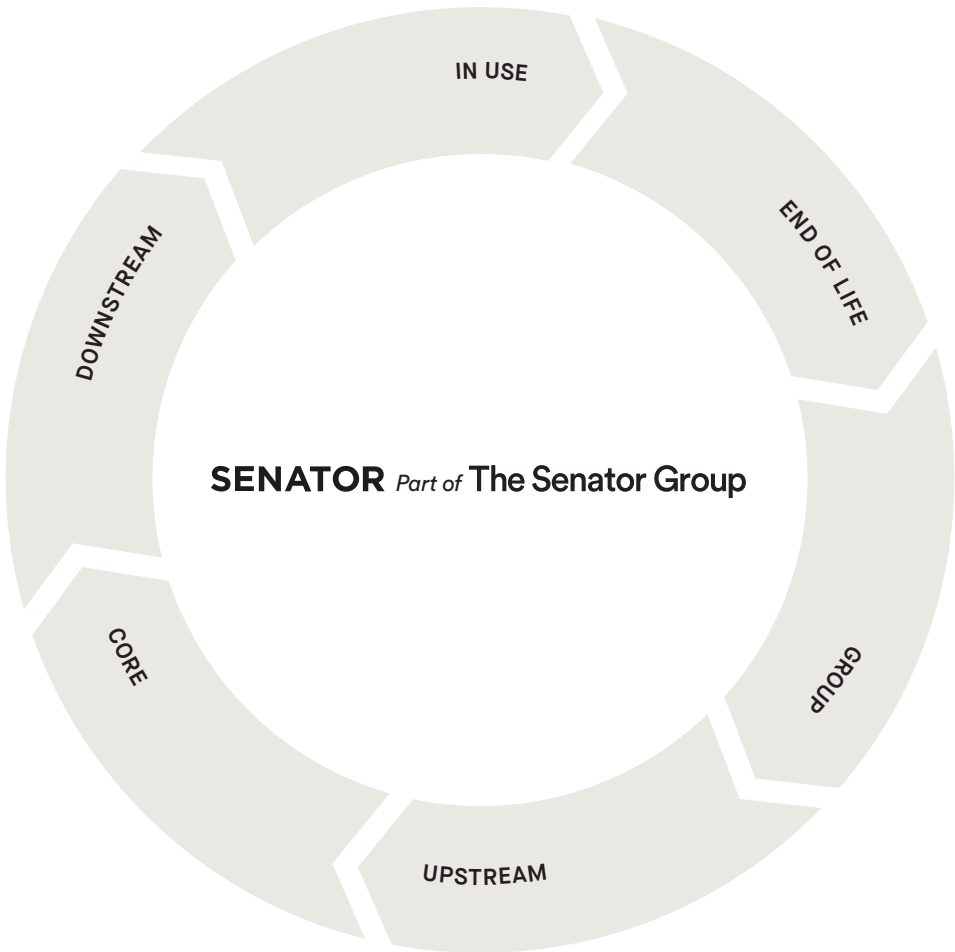
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Downstream:

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SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	214.61	1.34	0.01	215.96
From the Ground	156.28	24.02	3.63	193.93
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	2357.31	14.79	0.08	2372.18
Hydro	104.86	4.99	0.45	110.30
Solar	0.15	0.00	0.00	0.15
Wind	10.76	1.43	0.02	12.21
Non-Renewable Energy (MJ)	2716.44	294.36	42.48	3053.28
Total	5189.52	315.57	43.03	5548.12

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	143.45	16.56	2.50	162.51
Acidification (Kg SO2 Equivalents)	1.12	0.07	0.01	1.20
Eutrophication (Kg PO43 Equivalents)	0.09	0.00	0.00	0.09
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.06	0.00	0.00	0.06

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	247.56	648.29	244.13	1139.99
To the Ground	0.16	0.07	0.03	0.27
To the Water	22.18	10.80	3.63	36.61

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
Fabric	50.00	8.50
Aluminium Castings	100.00	8.00
Aluminium Extrusion	100.00	21.00
Total		37.50

CERTIFICATES

Description	Accreditation	First Certified
Quality Assurance	ISO 9001	Certified 1991
Environmental Management	ISO 14001	Certified 2001
Chain of Custody	FSC®	Certified 2003
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From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate).

See page 2 for more details.

THE THREE R'S

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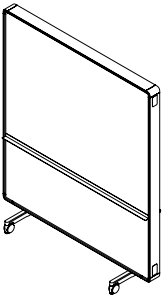
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Adapt Wall - AW2016FD

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PRODUCT SUMMARY

Scope of Assessment:

From extraction of raw materials through to production of the final desking unit (cradle to gate).

See page 2 for more details.

Data Used:

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Functional Unit:

A desking solution designed and manufactured to last for 15 years.

Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Fabric	4.50	5.40
Nylon (30% glass)	0.94	1.13
MDF	36.20	43.41
Plywood	14.88	17.84
Aluminium Castings	6.58	7.89
Aluminium Extrusion	17.16	20.70
Stainless Steel (304)	0.29	0.35
Steel	0.31	0.37
Zinc Castings	0.53	0.63
High Pressure	1.91	2.28

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	123.28
Recycled Content (% By Weight):	50.85
Total Energy Consumption (Mj):	4277.21
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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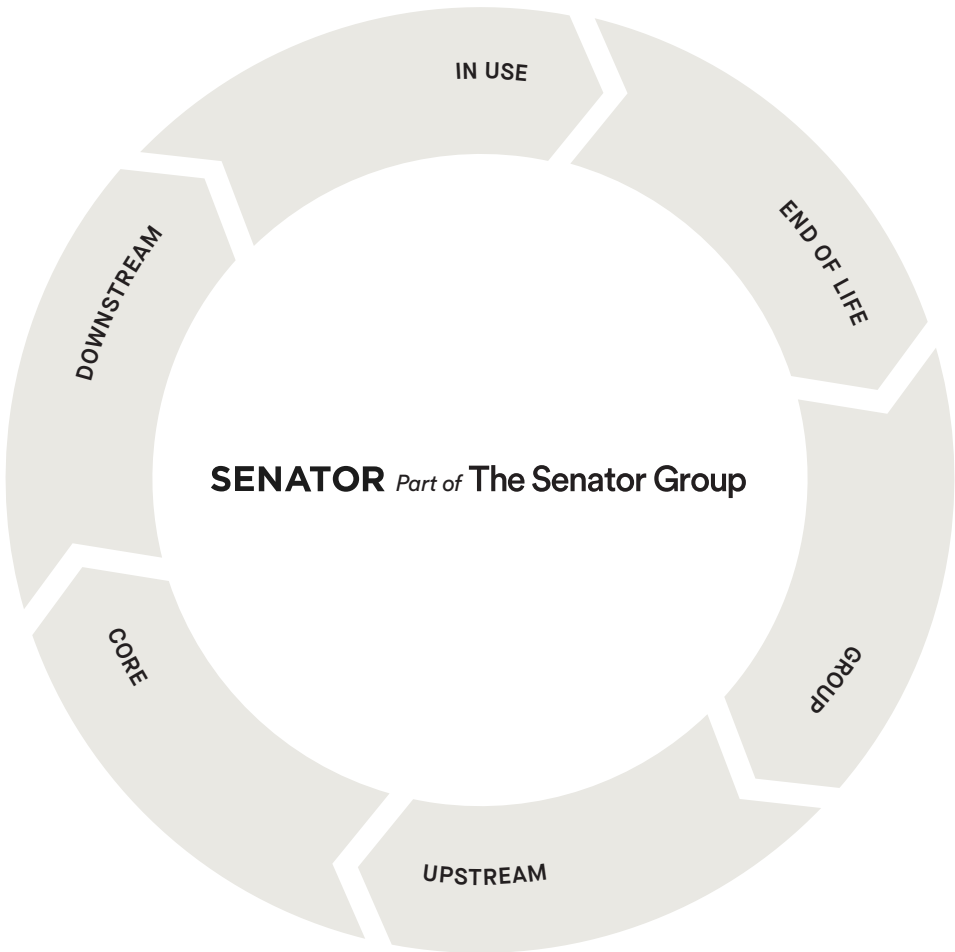
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Downstream:

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SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	161.42	1.34	0.01	162.77
From the Ground	86.99	24.69	3.90	115.58
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	1782.17	14.80	0.09	1797.06
Hydro	78.01	5.08	0.48	83.57
Solar	0.10	0.00	0.00	0.10
Wind	7.32	1.44	0.02	8.78
Non-Renewable Energy (MJ)	2039.95	302.15	45.60	2387.70
Total	3907.55	323.47	46.19	4277.21

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	103.58	17.02	2.68	123.28
Acidification (Kg SO2 Equivalents)	0.65	0.07	0.01	0.73
Eutrophication (Kg PO43 Equivalents)	0.07	0.00	0.00	0.07
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.04	0.00	0.00	0.04

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	152.92	693.09	262.05	1108.06
To the Ground	0.09	0.08	0.03	0.20
To the Water	15.93	11.46	3.89	31.29

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
Fabric	50.00	2.50
MDF	45.00	19.35
Aluminium Castings	100.00	8.00
Aluminium Extrusion	100.00	21.00
Total		50.85

CERTIFICATES

Description	Accreditation	First Certified
Quality Assurance	ISO 9001	Certified 1991
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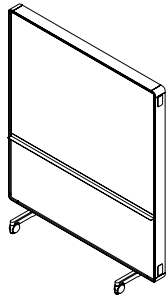
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Functional Unit:

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Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Fabric	2.66	3.71
Nylon (30% glass)	0.94	1.32
MFC	15.80	22.09
MDF	19.05	26.62
Plywood	7.44	10.40
Aluminium Castings	6.58	9.20
Aluminium Extrusion	16.98	23.74
Stainless Steel (304)	0.60	0.84
Zinc Castings	0.53	0.73
High Pressure	0.95	1.33

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	101.09
Recycled Content (% By Weight):	57.05
Total Energy Consumption (Mj):	3297.46
Recyclability (% By Weight):	99.00

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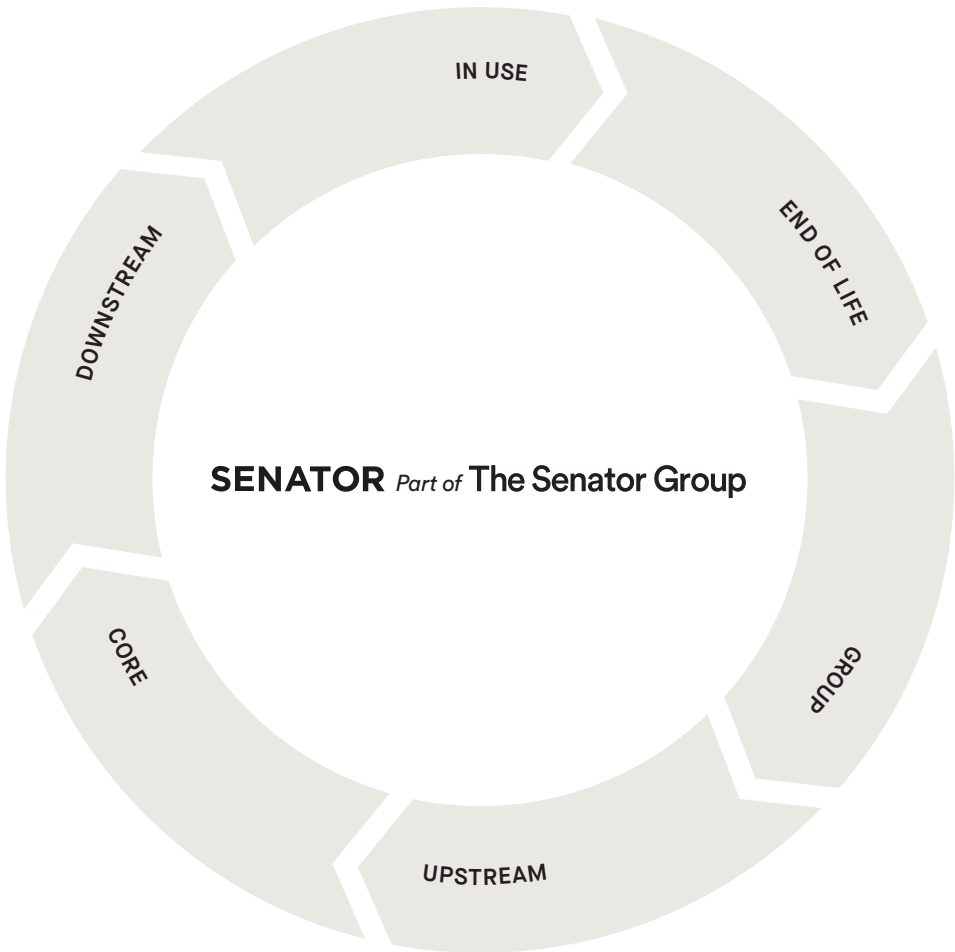
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SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	114.61	1.34	0.01	115.96
From the Ground	63.90	23.30	3.35	90.55
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	1126.73	14.77	0.07	1281.57
Hydro	67.83	4.90	0.41	73.14
Solar	0.08	0.00	0.00	0.08
Wind	5.67	1.42	0.02	7.12
Non-Renewable Energy (MJ)	1610.49	285.94	39.12	1935.55
Total	2950.80	307.04	39.62	3297.46

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	82.72	16.07	2.30	101.09
Acidification (Kg SO2 Equivalents)	0.50	0.06	0.01	0.57
Eutrophication (Kg PO43 Equivalents)	0.06	0.00	0.00	0.06
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.03	0.00	0.00	0.03

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	111.68	599.94	224.79	936.41
To the Ground	0.06	0.07	0.03	0.15
To the Water	13.74	10.08	3.34	27.16

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
Fabric	50.00	2.00
MFC	45.00	9.90
MDF	45.00	12.15
Aluminium Castings	100.00	9.00
Aluminium Extrusion	100.00	24.00
Total		57.05

CERTIFICATES

Description	Accreditation	First Certified
Quality Assurance	ISO 9001	Certified 1991
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From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate).

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ASSESSMENT CONSIDERATIONS

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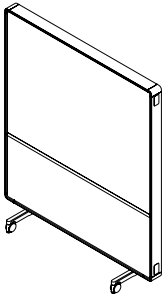
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SENATOR

Adapt Wall - AW2016MF

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PRODUCT SUMMARY

Scope of Assessment:

From extraction of raw materials through to production of the final desking 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 EcolInvent database, used in conjunction with SimaPro 7.3.2, using European data only.

Functional Unit:

A desking solution designed and manufactured to last for 15 years.

Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Fabric	9.00	12.05
Nylon (30% glass)	0.94	1.26
MFC	15.80	21.15
Plywood	24.56	32.88
Aluminium Castings	6.58	8.81
Aluminium Extrusion	16.70	22.35
Stainless Steel (304)	0.29	0.39
Zinc Castings	0.53	0.70
Steel	0.31	0.41

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	101.09
Recycled Content (% By Weight):	57.05
Total Energy Consumption (Mj):	3297.46
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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End of Life:

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Group:

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Upstream:

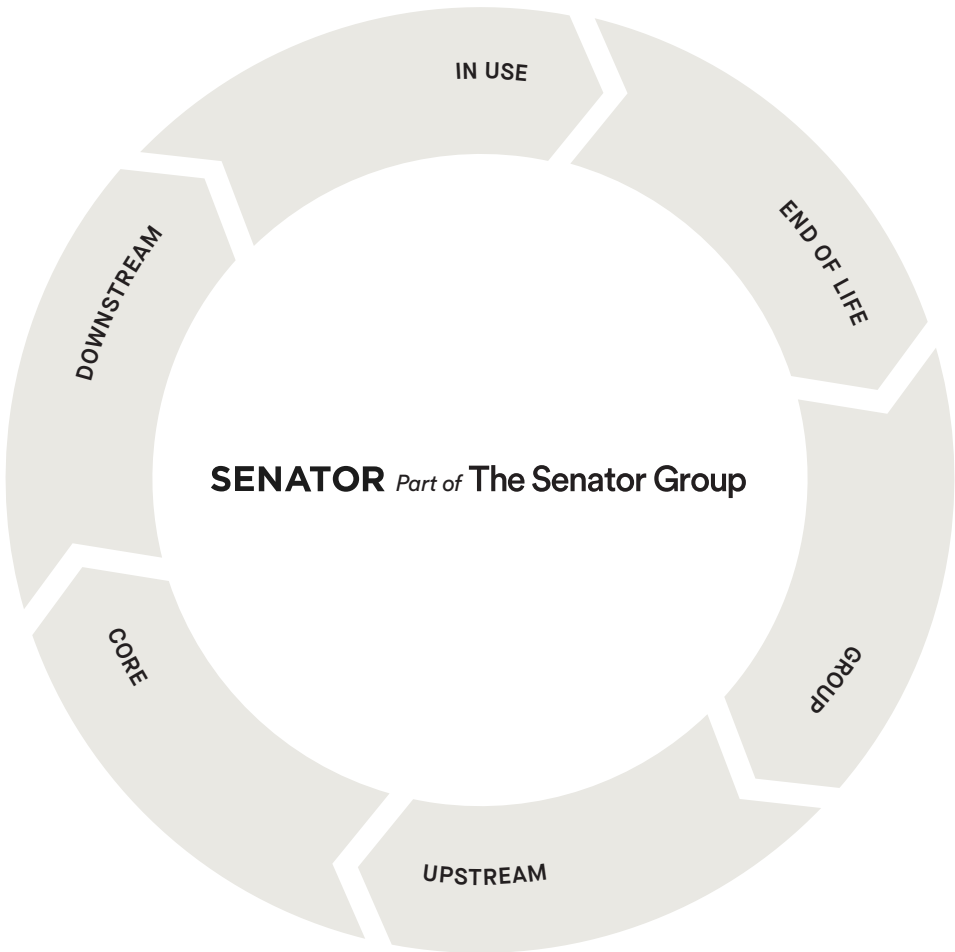
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Core:

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Downstream:

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



SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	166.51	1.34	0.01	167.86
From the Ground	115.38	23.68	3.49	142.55
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	1832.33	14.78	0.08	1847.19
Hydro	86.71	4.95	0.43	92.09
Solar	0.12	0.00	0.00	0.12
Wind	8.40	1.43	0.02	9.85
Non-Renewable Energy (MJ)	2230.39	290.29	40.86	2561.54
Total	4157.95	311.45	41.39	4510.79

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	117.39	16.32	2.40	136.11
Acidification (Kg SO2 Equivalents)	0.86	0.07	0.01	0.94
Eutrophication (Kg PO43 Equivalents)	0.07	0.00	0.00	0.07
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.05	0.00	0.00	0.05

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	186.73	624.90	234.77	1046.40
To the Ground	0.11	0.07	0.03	0.21
To the Water	18.35	10.45	3.49	32.38

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
Fabric	50.00	6.00
MFC	45.00	9.45
Aluminium Castings	100.00	9.00
Aluminium Extrusion	100.00	22.00
Total		46.45

CERTIFICATES

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Quality Assurance	ISO 9001	Certified 1991
Environmental Management	ISO 14001	Certified 2001
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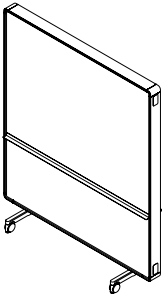
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PRODUCT SUMMARY

Scope of Assessment:

From extraction of raw materials through to production of the final desking unit (cradle to gate).

See page 2 for more details.

Data Used:

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Functional Unit:

A desking solution designed and manufactured to last for 15 years.

Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Nylon (30% glass)	0.94	1.18
MFC	15.80	19.80
MDF	36.20	45.35
Aluminium Castings	6.58	8.24
Aluminium Extrusion	17.26	21.63
Stainless Steel (304)	0.29	0.36
Steel	0.31	0.39
Zinc Castings	0.53	0.66
High Pressure	1.91	2.39

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	92.32
Recycled Content (% By Weight):	59.25
Total Energy Consumption (Mj):	3154.93
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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Upstream:

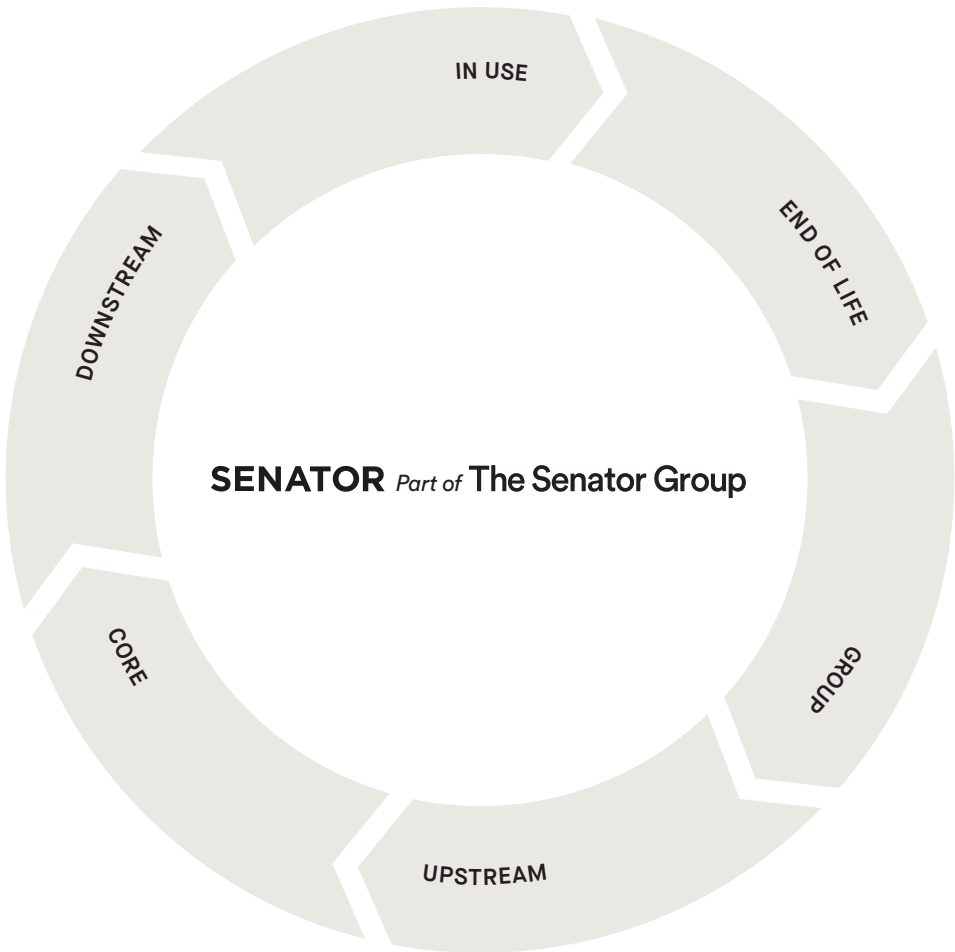
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Downstream:

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



SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	113.27	1.34	0.01	114.62
From the Ground	44.47	24.27	3.73	72.47
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	1256.29	14.79	0.08	1271.16
Hydro	59.22	5.02	0.46	64.70
Solar	0.07	0.00	0.00	0.07
Wind	4.89	1.43	0.02	6.34
Non-Renewable Energy (MJ)	1471.76	297.26	43.64	1812.66
Total	2792.23	318.50	44.20	3154.93

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	73.03	16.73	2.56	92.32
Acidification (Kg SO2 Equivalents)	0.37	0.07	0.01	0.45
Eutrophication (Kg PO43 Equivalents)	0.05	0.00	0.00	0.05
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.02	0.00	0.00	0.02

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	88.03	664.95	250.79	1003.77
To the Ground	0.03	0.08	0.03	0.14
To the Water	11.95	11.05	3.73	26.72

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
MFC	45.00	9.00
MDF	45.00	20.25
Aluminium Castings	100.00	8.00
Aluminium Extrusion	100.00	22.00
Total		59.25

CERTIFICATES

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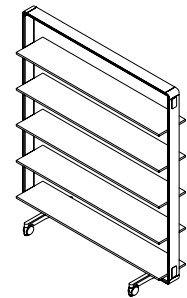
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Functional Unit:

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Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Nylon (30% glass)	0.60	1.14
Aluminium Castings	6.58	12.42
Aluminium Extrusion	15.67	29.57
Stainless Steel (304)	0.29	0.55
Steel	29.33	55.34
Zinc Castings	0.53	0.99

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	127.75
Recycled Content (% By Weight):	69.50
Total Energy Consumption (Mj):	2353.25
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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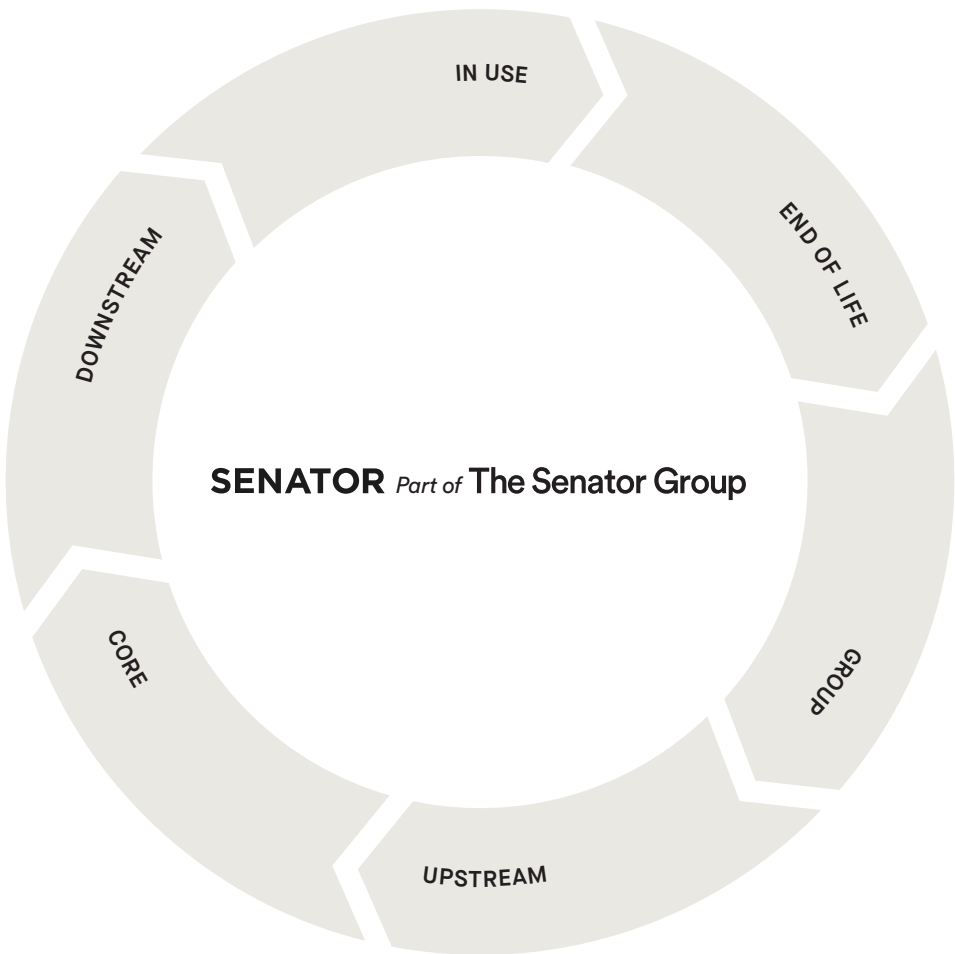
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Downstream:

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SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	3.62	1.33	0.01	4.96
From the Ground	114.43	21.14	2.48	138.05
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	37.63	14.72	0.05	52.40
Hydro	93.50	4.64	0.31	98.45
Solar	0.10	0.00	0.00	0.10
Wind	6.82	1.42	0.01	8.25
Non-Renewable Energy (MJ)	1904.47	260.60	23.98	2194.05
Total	2042.52	281.38	29.35	2353.25

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	111.47	14.58	1.70	127.75
Acidification (Kg SO2 Equivalents)	0.52	0.06	0.01	0.59
Eutrophication (Kg PO43 Equivalents)	0.07	0.00	0.00	0.07
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.03	0.00	0.00	0.03

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	114.51	454.28	166.53	735.31
To the Ground	0.09	0.05	0.02	0.17
To the Water	19.36	7.92	2.47	29.75

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
Aluminium Castings	100.00	12.00
Aluminium Extrusion	100.00	30.00
Steel	50.00	27.50
Total		69.50

CERTIFICATES

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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.

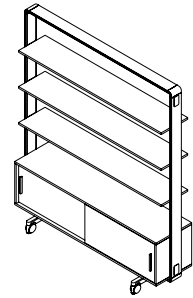
The transport of all materials, components and finished products was assumed to be via 16-32t Euro 6 lorries.

All LCA data was modelled using the IMPACT 2002+ (v2.06) method.

SENATOR

Adapt Wall - AW2016SH3SL

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PRODUCT SUMMARY

Scope of Assessment:

From extraction of raw materials through to production of the final desking 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 EcolInvent database, used in conjunction with SimaPro 7.3.2, using European data only.

Functional Unit:

A desking solution designed and manufactured to last for 15 years.

Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Nylon (30% glass)	0.60	0.78
MFC	34.60	44.72
Aluminium Castings	6.86	8.87
Aluminium Extrusion	16.80	21.71
Stainless Steel (304)	0.29	0.37
Steel	17.70	22.87
Zinc Castings	0.53	0.68

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	115.55
Recycled Content (% By Weight):	62.75
Total Energy Consumption (Mj):	2881.55
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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SUSTAIN

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In Use:

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End of Life:

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Group:

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

Upstream:

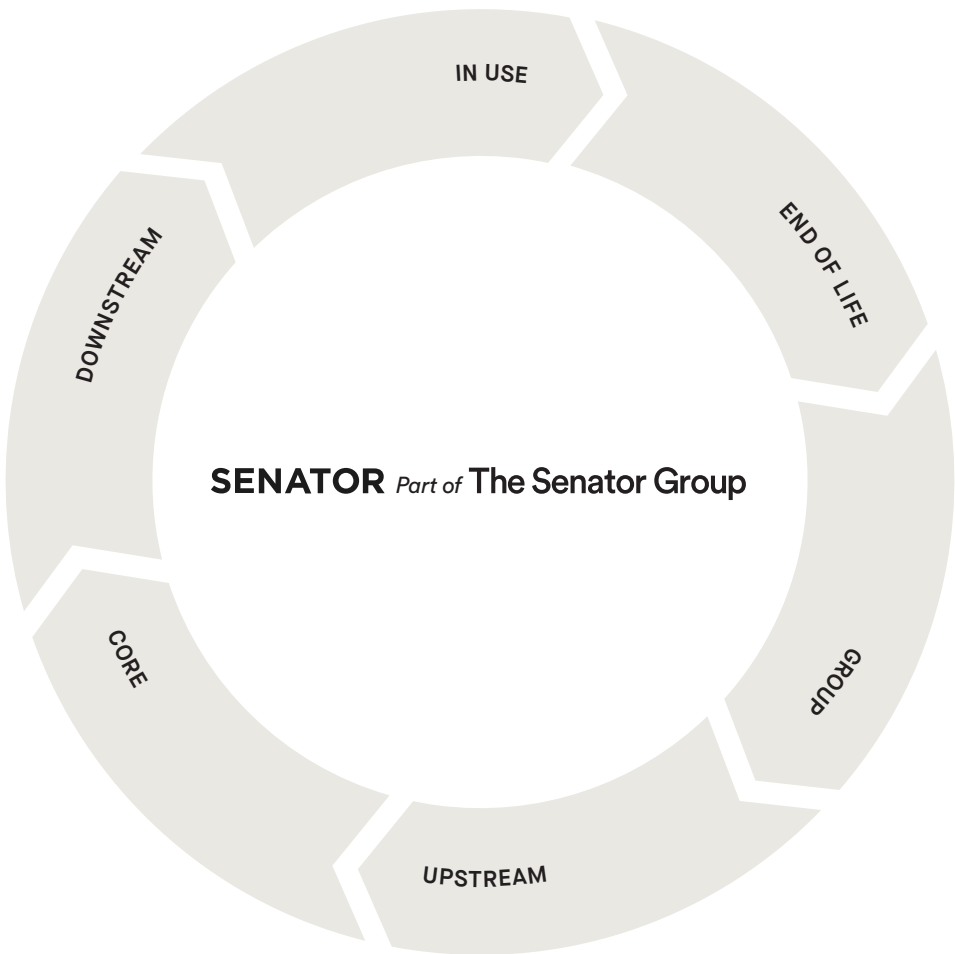
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Downstream:

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



SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	62.91	1.34	0.01	64.26
From the Ground	87.54	23.99	3.62	115.15
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	3696.31	14.79	0.08	711.18
Hydro	80.09	4.99	0.45	85.53
Solar	0.08	0.00	0.00	0.08
Wind	5.97	1.43	0.02	7.42
Non-Renewable Energy (MJ)	1741.10	292.93	42.31	2077.34
Total	2523.55	315.14	42.86	2881.55

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	96.52	16.54	2.49	115.55
Acidification (Kg SO2 Equivalents)	0.47	0.07	0.01	0.55
Eutrophication (Kg PO43 Equivalents)	0.06	0.00	0.00	0.06
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.03	0.00	0.00	0.03

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	103.28	645.82	243.14	992.24
To the Ground	0.07	0.07	0.03	0.17
To the Water	16.50	10.76	3.61	30.87

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
MFC	45.00	20.25
Aluminium Castings	100.00	9.00
Aluminium Extrusion	100.00	22.00
Steel	50.00	11.50
Total		62.75

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



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From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate).

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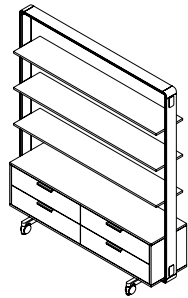
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Adapt Wall - AW2016SH3DW4

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PRODUCT SUMMARY

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Functional Unit:

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Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Nylon (30% glass)	0.86	0.86
MFC	35.38	35.11
Aluminium Castings	6.86	6.81
Aluminium Extrusion	15.67	15.55
Stainless Steel (304)	0.29	0.29
Steel	41.20	40.88
Zinc Castings	0.53	0.52

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	177.31
Recycled Content (% By Weight):	59.25
Total Energy Consumption (Mj):	3970.70
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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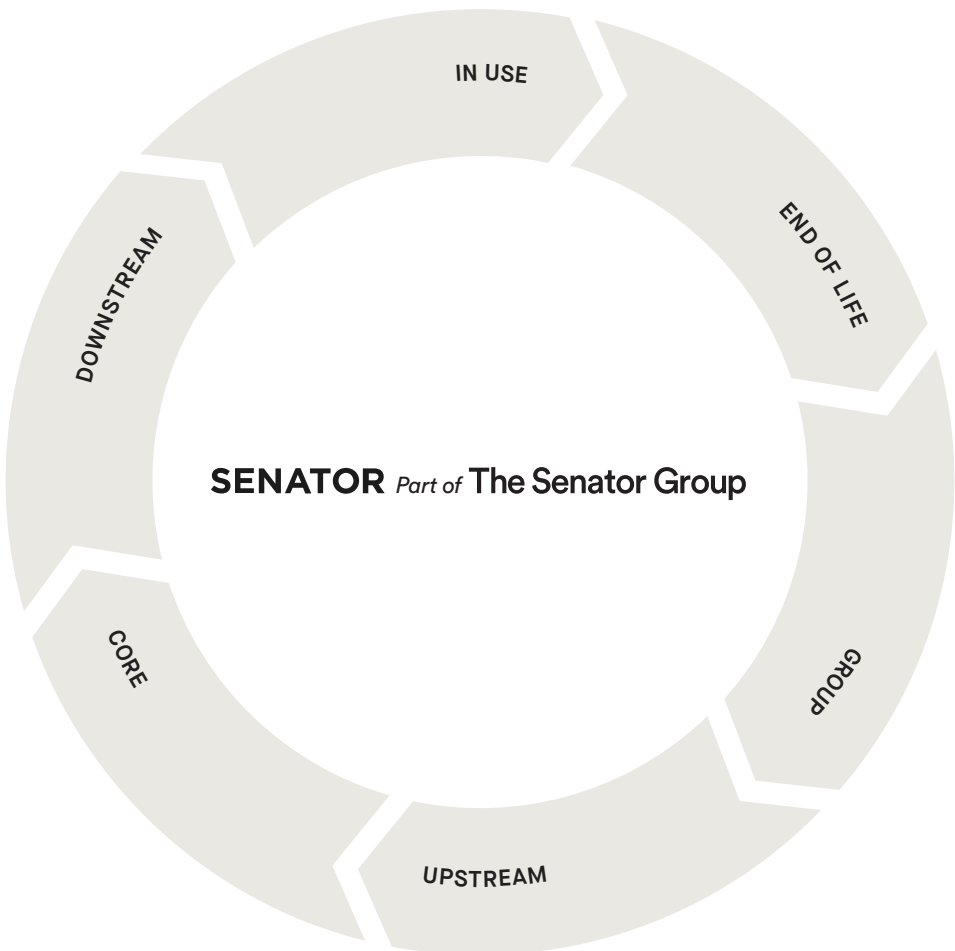
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Downstream:

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SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	65.26	1.35	0.01	66.62
From the Ground	160.66	26.72	4.71	192.09
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	721.17	14.85	0.10	736.12
Hydro	120.03	5.33	0.58	125.94
Solar	0.13	0.00	0.00	0.13
Wind	9.18	1.45	0.02	10.65
Non-Renewable Energy (MJ)	2716.82	325.93	55.11	3097.86
Total	3567.33	347.56	55.81	3970.70

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	155.65	18.42	3.24	177.31
Acidification (Kg SO2 Equivalents)	0.71	0.08	0.02	0.81
Eutrophication (Kg PO43 Equivalents)	0.08	0.00	0.00	0.08
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.05	0.01	0.00	0.06

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	164.77	829.74	316.71	1311.22
To the Ground	0.14	0.10	0.04	0.27
To the Water	24.58	13.49	4.70	42.78

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
MFC	45.00	15.75
Aluminium Castings	100.00	7.00
Aluminium Extrusion	100.00	16.00
Steel	50.00	20.50
Total		59.25

CERTIFICATES

Description	Accreditation	First Certified
Quality Assurance	ISO 9001	Certified 1991
Environmental Management	ISO 14001	Certified 2001
Chain of Custody	FSC®	Certified 2003
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From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate).

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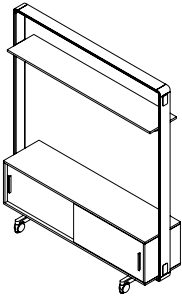
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PRODUCT SUMMARY

Scope of Assessment:

From extraction of raw materials through to production of the final desking unit (cradle to gate).

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Functional Unit:

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Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Nylon (30% glass)	0.60	0.90
MFC	34.60	51.64
Aluminium Castings	6.86	10.24
Aluminium Extrusion	16.80	25.08
Stainless Steel (304)	0.20	0.30
Steel	7.41	11.06
Zinc Castings	0.53	0.78

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	88.03
Recycled Content (% By Weight):	63.90
Total Energy Consumption (Mj):	2407.48
Recyclability (% By Weight):	99.00

Date of Production: 4th October 2021

ENVIRONMENTAL PRODUCT ANALYSIS

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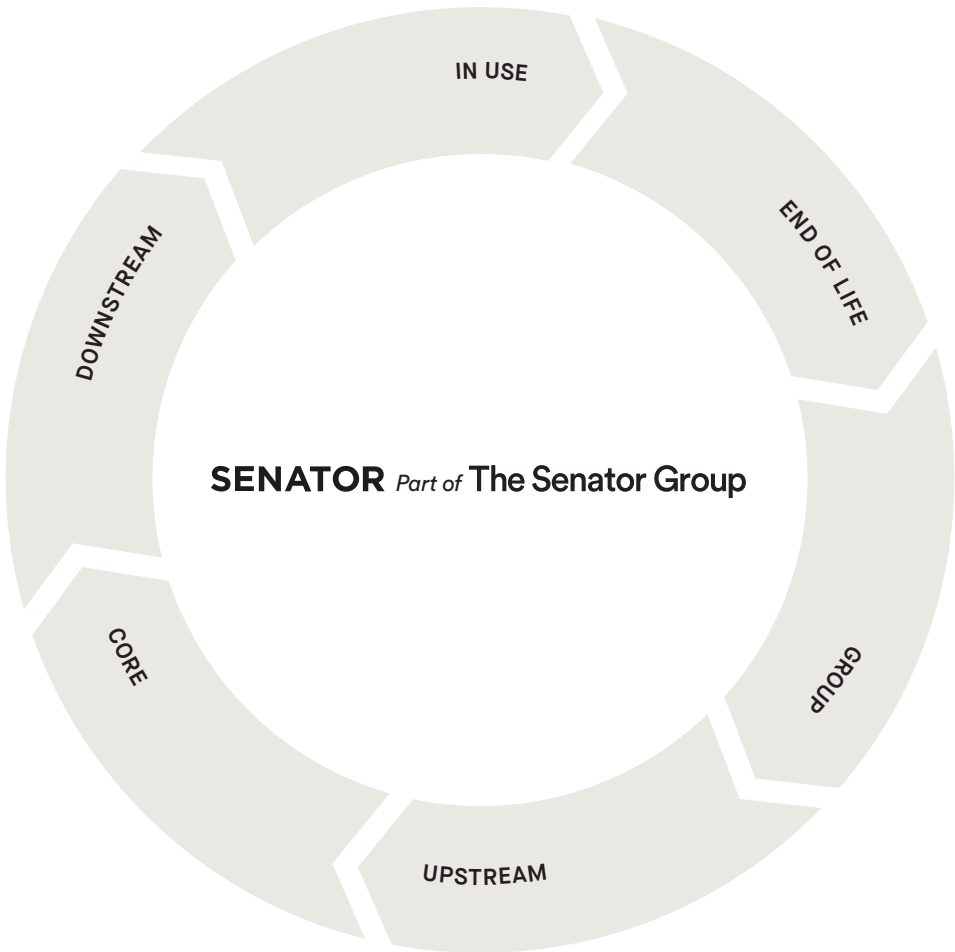
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Downstream:

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



SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	62.42	1.34	0.01	63.77
From the Ground	55.00	22.77	3.13	80.90
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	691.56	14.76	0.07	706.39
Hydro	61.06	4.84	0.39	66.29
Solar	0.06	0.00	0.00	0.06
Wind	4.51	1.43	0.02	5.96
Non-Renewable Energy (MJ)	1312.40	279.74	36.63	1628.78
Total	2069.59	300.77	37.12	2407.48

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	70.44	15.71	2.15	88.30
Acidification (Kg SO2 Equivalents)	0.36	0.06	0.01	0.43
Eutrophication (Kg PO43 Equivalents)	0.06	0.00	0.00	0.06
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.03	0.01	0.00	.003

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	76.13	564.31	210.54	850.97
To the Ground	0.04	0.06	0.02	0.13
To the Water	12.78	9.55	3.13	25.45

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
MFC	45.00	23.40
Aluminium Castings	100.00	10.00
Aluminium Extrusion	100.00	25.00
Steel	50.00	5.50
Total		63.90

CERTIFICATES

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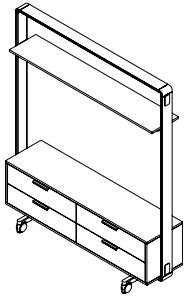
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Functional Unit:

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Regional Market:

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

ENVIRONMENTAL

Material Declaration Certificates

Material:	Amount (kg)	Total (%)
Nylon (30% glass)	0.86	0.95
MFC	35.38	39.10
Aluminium Castings	6.86	7.58
Aluminium Extrusion	15.67	17.32
Stainless Steel (304)	0.29	0.32
Steel	30.91	34.16
Zinc Castings	0.53	0.58

Environmental Summary

Global Warming Potential (Kg Co2 Eq):	150.54
Recycled Content (% By Weight):	59.55
Total Energy Consumption (Mj):	3504.84
Recyclability (% By Weight):	99.00

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ENVIRONMENTAL PRODUCT ANALYSIS

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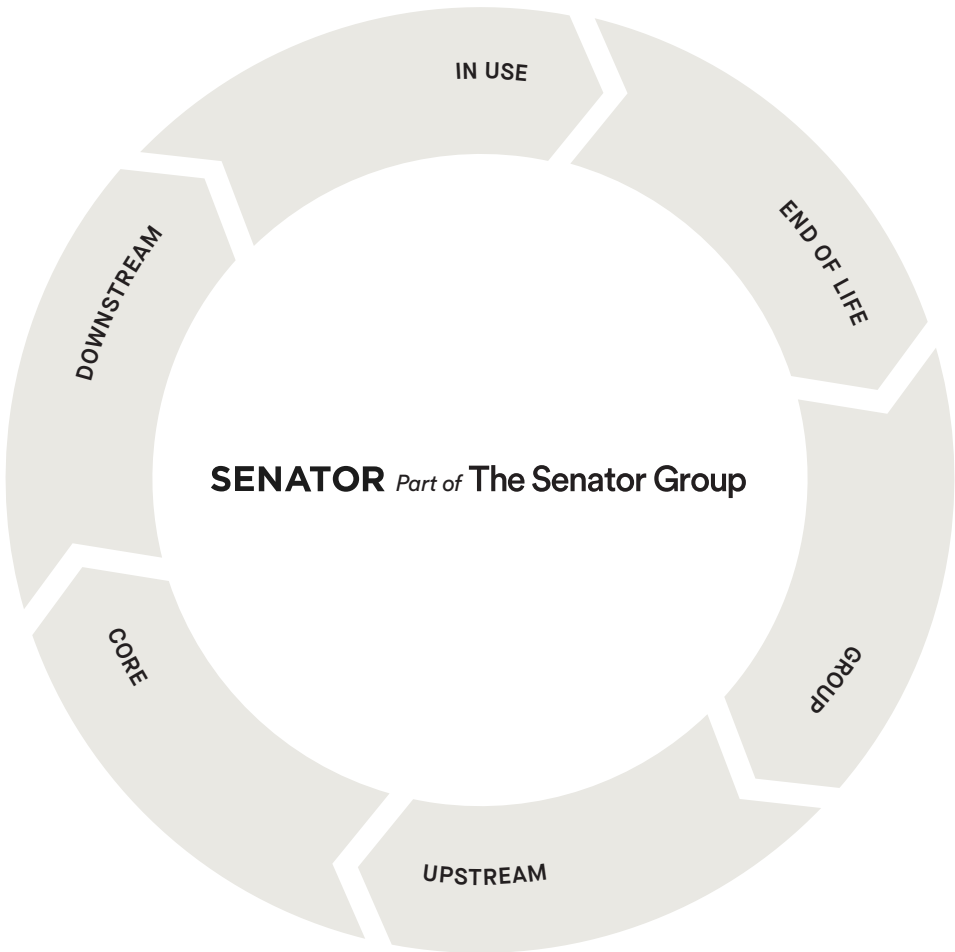
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Downstream:

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



SYSTEM BOUNDARIES

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	64.79	1.34	0.01	66.14
From the Ground	128.66	25.52	4.23	158.41
From the Water	0.00	0.00	0.00	0.00

ENERGY CONSUMPTION

Resource (Kg)	Upstream	Core	Downstream	Total
Biomass	716.49	14.82	0.09	731.40
Hydro	101.93	5.18	0.52	107.63
Solar	0.11	0.00	0.00	0.11
Wind	7.74	1.44	0.02	9.20
Non-Renewable Energy (MJ)	2295.14	311.87	49.49	2656.50
Total	3121.41	333.31	50.12	3504.84

ENVIRONMENTAL IMPACT POTENTIAL

Resource (Kg)	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	130.04	17.59	2.91	150.54
Acidification (Kg SO2 Equivalents)	0.60	0.07	0.01	0.68
Eutrophication (Kg PO43 Equivalents)	0.07	0.00	0.00	0.07
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.04	0.01	0.00	0.05

TOXIC EMISSIONS

Resource (Kg)	Upstream	Core	Downstream	Total
To the Air	138.09	748.93	284.39	1171.41
To the Ground	0.11	0.09	0.03	0.23
To the Water	20.96	12.29	4.22	37.48

ENERGY CONSUMPTION

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
MFC	45.00	17.55
Aluminium Castings	100.00	8.00
Aluminium Extrusion	100.00	17.00
Steel	50.00	17.00
Total		59.55

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 Global Headquarters is certified to Chain of Custody. We can provide FSC® certified products upon request ISO

Furniture Industry Sustainability Programme:

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.

Chain of Custody:

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

Energy Management:

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

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

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.

THE THREE R'S

Senator 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**.

–Reduce
–Reuse
–Recycle

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 modelled using the IMPACT 2002+ (v2.06) method.