

Environmental Declaration



Figure 1: SAVO Soul

EPD

Norwegian Environmental Product
Declarations

Information about the producer:

Savo is a Norwegian group designing, manufacturing and marketing office chairs for staff or visitors and conference rooms to the private and public sectors domestically and internationally.

Carbon Footprint	123,76 kg CO ₂ Eqv.
Total Energy Consumption	2159,67 MJ
% of recycled materials	58 %
% of recyclable materials	93 %

Organisation number:	NO-848 385 492
EMAS reg.no.:	NO-000034
ISO-14001 reg.no.:	147

Product information:

Functional unit:	Seating maintained for 15 years
Scope of assessment:	This declaration covers environmental impacts from raw material extraction to use and maintenance. The declaration does not cover product disposal, and is therefore not comparable to declarations that cover the entire product life cycle.
Assumed lifetime:	15 years (see also "Additional information")
Assumed market area:	Europe

- Environmental declarations from different programmes may not be comparable -

Table 1: Product specification

A list over all materials used in the furniture.

Table 1: Product specification					
Material	Amount [kg]	Fraction of total	Fraction from suppliers with certified environmental management system	Fraction of components with environmental declaration	System boundaries (see also last page for more information)
Steel	3,26	22,8 %			BE
Aluminium	1,05	7,3 %			BE
Plastics	8,64	60,3 %			BE
Textiles	0,40	2,8 %			CE
PUR	0,97	6,8 %			
Total	14,32	100,0 %			

2.1 Renewable materials

Table 2: Resource consumption					
		1. Raw material production	2. Transport	3. Production	4. Use
Renewable, virgin	717,460	699,661	0,498	16,459	0,842
Air [kg]	154,314	146,121	0,124	7,677	0,393
Other biomass [kg]	0,080	0,080			
Water (fresh) [kg]	563,065	553,459	0,375	8,782	0,449
Wood [kg]	0,001	0,001	0,000	0,000	0,000

2.2 Recycled renewable materials

		1. Raw material production	2. Transport	3. Production	4. Use
Renewable, recycled	50,329	50,329			
Paper/cardboard [kg]					
Water [kg]	50,329	50,329			

2.3 Recycled non-renewable materials

		1. Raw material production	2. Transport	3. Production	4. Use
Non-renewable, recycled	56,955	56,955			
Aluminum [kg]	0,000	0,000			
Iron and steel [kg]	0,553	0,553			
Other metals [kg]					
Other unspecified [kg]	46,776	46,776			
Plastics [kg]	9,626	9,626			

2.4 Non-renewable materials

		1. Raw material production	2. Transport	3. Production	4. Use
Non-renewable	168,674	164,673	0,556	3,278	0,168
Aluminum [kg]	1,338	1,338	0,000	0,000	0,000
Barium sulphate [kg]	0,000	0,000	0,000	0,000	0,000
Calcium chloride [kg]	0,000	0,000	0,000	0,000	0,000
Chromium [kg]	0,006	0,006	0,000	0,000	0,000
Clay [kg]	0,004	0,003	0,000	0,001	0,000
Colemanite [kg]	0,139	0,139	0,000	0,000	0,000
Copper [kg]	0,000	0,000	0,000	0,000	0,000
Crude oil [kg]	2,901	2,420	0,445	0,034	0,002
Dolomite [kg]	0,040	0,040	0,000	0,000	0,000
Feldspar [kg]	0,001	0,001			
Fluorspar [kg]	0,037	0,037	0,000	0,000	0,000
Gypsum [kg]	0,002	0,002	0,000	0,000	0,000
Hard coal [kg]	7,411	7,198	0,002	0,202	0,010
Heavy spar [kg]	0,018	0,017	0,001	0,001	0,000
Inert rock [kg]	97,520	94,985	0,053	2,361	0,121
Iron [kg]	2,850	2,849	0,000	0,001	0,000
Kaolin [kg]	0,250	0,250	0,000	0,000	0,000
Lead [kg]	0,000	0,000	0,000	0,000	0,000
Lignite [kg]	3,241	3,229	0,001	0,011	0,001
Limestone [kg]	2,676	2,642	0,001	0,032	0,002
Magnesium [kg]	0,001	0,001			
Manganese [kg]	0,026	0,026	0,000	0,000	0,000
Mercury [kg]	0,000	0,000			
Minerals and ore [kg]	43,491	43,009	0,018	0,441	0,023
Molybdenum [kg]	0,000	0,000	0,000	0,000	0,000
Natural gas [kg]	3,609	3,479	0,033	0,092	0,005
Nickel [kg]	0,003	0,003	0,000	0,000	0,000
Olivine [kg]	0,000	0,000	0,000	0,000	0,000
Peat [kg]	0,146	0,053	0,000	0,088	0,005
Phosphorus [kg]	0,032	0,032	0,000	0,000	0,000
Potassium chloride [kg]	0,009	0,009	0,000	0,000	0,000
Quartz sand [kg]	0,565	0,565	0,000	0,000	0,000
Rhodium [kg]	0,000	0,000			
Slate [kg]	0,000	0,000	0,000	0,000	0,000
Sodium chloride (rock salt) [kg]	1,653	1,653	0,000	0,000	0,000
Soil [kg]	0,591	0,576	0,000	0,015	0,001
Sulphur [kg]	0,111	0,111	0,000	0,000	0,000
Talc [kg]	0,000	0,000	0,000	0,000	0,000
Titanium [kg]	0,000	0,000			
Uranium [kg]	0,000	0,000	0,000	0,000	0,000
Zinc [kg]	0,001	0,001	0,000	0,000	0,000

Table 3: Energy consumption

		1. Raw material production	2. Transport	3. Production	4. Use
Energi	853,293	777,425	22,804	51,607	2,581
Fossile energi	587,233	551,532	22,674	12,393	0,634
Coal [MJ]	255,216	248,994	0,077	5,846	0,299
Fossil oil [MJ]	145,126	122,615	20,868	1,563	0,080
Natural gas [MJ]	186,891	179,923	1,728	4,984	0,255
Miscellaneous	2,550	2,550	0,000	1,125	0,000
Miscellaneous [MJ]	2,550	2,550	0,000	1,125	0,000
Nuclear energy	159,915	139,255	0,103	19,557	1,000
Nuclear energy [MJ]	159,915	139,255	0,103	19,557	1,000
Renewable energy	103,594	84,087	0,027	18,533	0,948
Biomass [MJ]	1,289	1,288	0,000	0,000	0,000
Hydro [kg]	89,146	72,507	0,023	15,808	0,808
Wind and solar [kg]	13,159	10,292	0,004	2,724	0,139

Table 4: Environmental impact categories

		1. Raw material production	2. Transport	3. Production	4. Use
CML2001 - Dec. 07, Acidification Potential (AP) [kg SO ₂ -Equiv.]	0,286	0,263	0,019	0,004	0,000
CML2001 - Dec. 07, Eutrophication Potential (EP) [kg Phosphate-Equiv.]	0,020	0,018	0,002	0,000	0,000
CML2001 - Dec. 07, Global Warming Potential (GWP 100 years) [kg CO ₂ -Equiv.]	49,406	46,348	1,537	1,447	0,074
CML2001 - Dec. 07, Ozone Layer Depletion Potential (ODP, steady state) [kg R11-Equiv.]	0,000	0,000	0,000	0,000	0,000
CML2001 - Dec. 07, Photochem. Ozone Creation Potential (POCP) [kg Ethene-Equiv.]	0,024	0,022	0,001	0,000	0,000

Table 5: Wastes and emissions

		1. Raw material production	2. Transport	3. Production	4. Use
Avfall, Energigjenvinning [kg]	0,055	0,055			
Avfall, Materialgjenvinning [kg]	8,715	8,715			
Avfall, Spesialavfall [kg]	1,783	1,775	0,000	0,007	0,000
Avfall, Deponi og annet [kg]	99,949	97,397	0,052	2,378	0,122

5.2 Emissions to air

		1. Raw material production	2. Transport	3. Production	4. Use
Carbon dioxide [kg]	44,171	41,231	1,497	1,373	0,070
Carbon monoxide [kg]	0,177	0,173	0,003	0,001	0,000
Dioxins [kg]	0,000	0,000	0,000	0,000	0,000
Heavy metals [kg]	0,000	0,000	0,000	0,000	0,000
Methane [kg]	0,113	0,109	0,001	0,002	0,000
Nitrogen oxides [kg]	0,098	0,078	0,018	0,002	0,000
Nitrous oxide [kg]	0,003	0,003	0,000	0,000	0,000
NMVOC [kg]	0,015	0,014	0,001	0,000	0,000
Steam [kg]	102,841	98,375	0,044	4,207	0,215
Sulphur oxides [kg]	0,200	0,191	0,007	0,002	0,000

5.3 Emissions to water

		1. Raw material production	2. Transport	3. Production	4. Use
BOD [kg]	0,004	0,004	0,000	0,000	0,000
COD [kg]	0,039	0,039	0,000	0,000	0,000
Dioxins [kg]	0,000	0,000	0,000	0,000	0,000
Hydrocarbons [kg]	0,000	0,000	0,000	0,000	0,000
Nitrates [kg]	0,008	0,008	0,000	0,000	0,000
Particles [kg]	0,075	0,073	0,001	0,001	0,000
Phosphates [kg]	0,001	0,001	0,000	0,000	0,000
Waste water [kg]	28,878	28,878			