

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025

Owner of the declaration

Program holder and publisher

Declaration number

Scandinavian Business Seating AS

The Norwegian EPD Foundation

General information

Product

RBM ANA 4340

General Information

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Manufacturer

Scandinavian Business Seating AB

Product

Product Description and Application

RBM Ana is one of our most popular chairs and furnishes assembly halls, canteens, meeting rooms and cafeterias throughout the Nordic region. The simple minimalistic design in combination with the ergonomically designed seat makes the chair a clear favourite. The chairs are easy to position in rows and easy to stack. RBM Ana 4340 comes in different shell colors and can be ordered with matching frame. Design: Tias Eckhoff

Technical Data

Total Weight: 3,8 kg (packaging excluded)
EN 16139 tested & approved
GREENGUARD and Möbelfakta certified

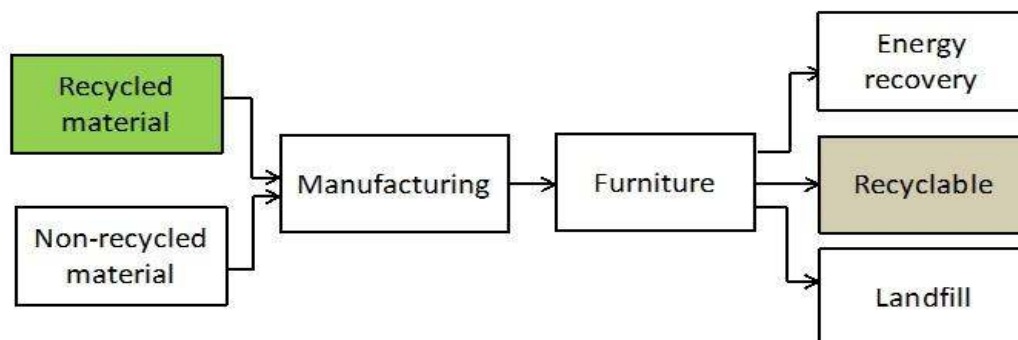
Market

Worldwide

Reference Service Life

15 years

Materials			Recycled share in product		Recyclable potential of product	
<i>Unit</i>	<i>g</i>	<i>%</i>	<i>%</i>	<i>g</i>	<i>%</i>	<i>g</i>
Metal - Steel	1963	48%	20%	391	100%	1963
Plastic - Polypropylene	1775	43%	0%	0	100%	1775
Plastic - Polyethylene	9	0%	0%	0	100%	9
Total product	3747		10%	391	100%	3747
Packaging - Cardboard	335	8%	76%	255	100%	335
Total product with packaging	4082		16%	645	100%	4082



Product manufactured from 16% recycled material (packaging included)
At end of life product contains 100% recyclable material

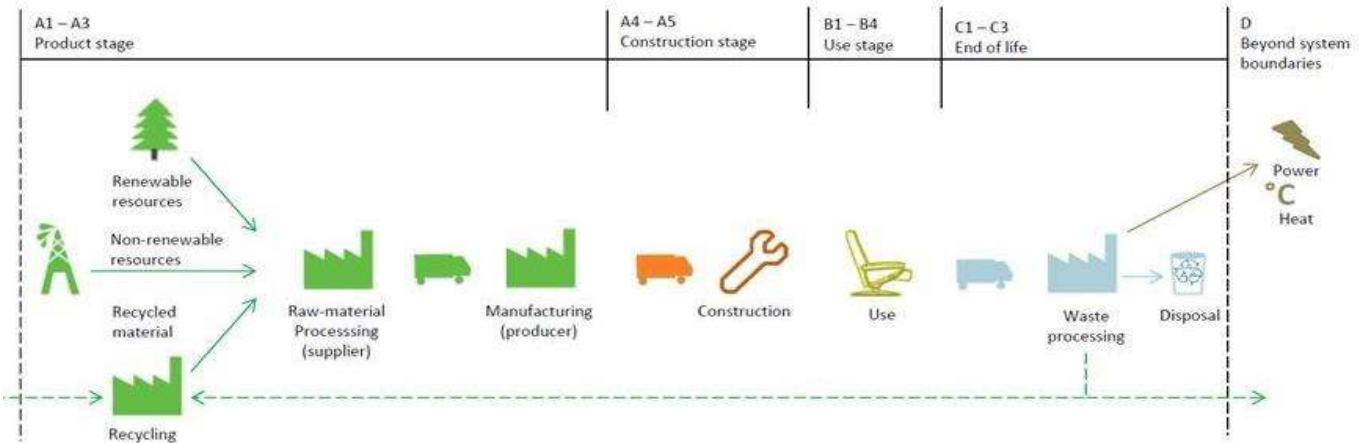
LCA: Calculation rules

Declared unit:

Production of one seating solution provided and maintained for a period of 15 years.

System boundary:

Life cycle stages included are described in figure and through the corresponding letter and number designations in the declaration (see figure below)



Data quality:

Specific manufacturing data from 2014 are used. Data from Ecoinvent 3.0.1. and Østfoldforskning databases are used as the basis for raw materials and energy carrier production. See [6].

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows that are included with very small amounts (<1%) are not included. This cut-off rule does not apply for hazardous materials and substances

Allocation:

Where virgin materials are used, emissions and energy consumption connected with extraction and production are included.

Where recycled materials are used in the product, emissions and energy consumption related to the recycling process are included.

Emissions from incineration are allocated to the product system that uses the recovered energy.

Emissions from incineration of waste are allocated to the product system that uses the recovered energy.

LCA: Scenarios and additional technical information

Transportation to an average customer in Copenhagen is 360 km (A4: average European lorry > 32 tonnes)

In the end of life stage, the transport distance for waste to waste processing is 72 km (C1). The reuse, recovery and recycling stage is beyond the system boundaries (D).

It is assumed that the solution is dismantled and the materials recycled or combusted according to the general Norwegian treatment of industrial waste (see the table below). The transport distance to reuse, recovery or recycling is varying for each material, but the average distance is 373 km. The vehicles used and associated data are described in detail in [5].

	Material recovery	Energy recovery	Disposal
Aluminium	70,1 %	0,0 %	30 %
Steel	70,1 %	0,0 %	30 %
Plastic	64,3 %	30,8 %	5 %
Cardboard	94,5 %	5,5 %	0 %

LCA: Results

System boundaries (X=included, MND=modul not declared, MNR=modul not relevant)

Product stage	Construction stage			Use stage			End of life			Beyond the system boundaries
Raw materials				Maintenance	Replacement	Operational	Disposal			
A1	A2	A3	A3	B1	B1	B4	C2	C3	C3	D
x	x	x	x	MNR	MNR	MNR	x	x	x	x

Environmental impact (INA=Indicator Not Assessed)

Parameter	A1	A2	A3	B1	C1-C3	D
GWP				INA	4,1	
ODP	6,2E-07	2,8E-08		INA	INA	
POCP				INA	INA	
AP				INA	INA	
EP				INA	INA	
ADPM*						
ADPE						

* Some processes use Ecoinvent 3.0.1. and thus data on renewable resources is omitted. The true ADPM, RPEE, RPEM and TPE may be higher than indicated. This issue will be addressed in a new version of Ecoinvent 3, data from which was not available when this declaration was prepared.

Resource use (INA=Indicator Not Assessed)

Parameter	A1	A2	A3	B1	B2	B3	B4	C1-C3	D
RPEE*									
RPEM*									
TPE*									
NRPE									
NRPM	70,8	0,0	3,8E-04	70,8				INA	
TNRPE	232,0	2,3		234,4	2,2			INA	
SM							INA	INA	
RSF					0,0		INA	INA	0,0
NRSF							INA	INA	
W								INA	

RPEE Renewable primary energy resources used as energy carrier (MJ); **RPEM** Renewable primary energy resources used as raw materials (MJ); **TPE** Total use of renewable primary energy resources (MJ); **NRPE** Non renewable primary energy resources used as energy carrier (MJ); **NRPM** Non renewable primary energy resources used as materials (MJ); **TNRPE** Total use of non renewable primary energy resources (MJ); **SM** Use of secondary materials (kg); **RSF** Use of renewable secondary fuels (MJ); **NRSF** Use of non renewable secondary fuels (MJ); **W** Use of net fresh water (m3);

End of life - Waste and Output flow (INA=Indicator Not Assessed)

Parameter	B1	C2	C1-C3	D
HW	INA			
NHW	INA	INA	INA	
RW	INA		INA	
CR	INA		INA	
MR			INA	
MER			INA	
EEE	INA		INA	
ETE	INA		INA	

Specific Norwegian requirements

Electricity

Dangerous Substances

Indoor environment

[Greenguard certificate](#)

Climate declaration

Not relevant

Bibliography

Program holder and publisher

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