EPD Environmental Product Declaration

Chair STAY

Ref. 910534R34

Report Data 27.05.2021

Certificates

ISO 9001:2008
ISO 14001:2004
ISO 14006. Ecodesign
PEFC. Cadena Custodia Productos Madera
FSC. Forest Stewardship Council
GBCe. Green Building Council España

1. Details of the system

Type	New Product	X	Redesign		Studied Year 2021

Declaration Scope:	From extraction of raw materials to complete desk solution, including end of life. The detail of each of the phases considered and its scope is included below

Materials	Production	Transport	Use	End of life
Including the extraction and processing of raw materials and component sourcing to its delivery at the Actiu Technological Park.	Consider the production and assembly processes used in Actiu.	Includes from the Actiu Technological Park to our customers facilities. Transport is provided through light commercial transport.	This stage has not environmentally relevance for life cycle analysis.	Any product can be disposed of in different ways, or become a resource. Drawing on national average dates, it is supposed that aluminium, wood and cardboard packaging is recycled, while the rest is treated as urban waste.

2. RAW MATERIALS USED FOR THE PRODUCT. Product specifications, including packaging

	KG of product solution	Percentage %	Quality of finishes	
			Production of raw materials	Processed
Plastic	4,940	30,19%	Bibliographic data	Bibliographic data
Aluminium	6,352	38,82%	Bibliographic data	Bibliographic data
Carton	1,824	11,15%	Bibliographic data	Bibliographic data
Steel	2,542	15,53%	Bibliographic data	Bibliographic data
Others	0,707	4,32%	Bibliographic data	Bibliographic data
TOTAL	**16,365**	**100,00%**		
% recicled materials		49,96%		
% reciclable materials		65,49%		

ACTIU product design is made to facilitate the separation of its components and recycling.

The product is designed to help companies LEED® certification. You can obtain LEED® credits with our product. On the one hand, contains a high percentage of recycled materials and is manufactured with low emissions to the atmosphere. On the other hand, has been designed with ergonomic standards. Finally, it can be easily recycled because it is designed for disassembly and identificacion of very simple components. This will help you achieve LEED® credits for employee health and innovation

The verification process life cycle analysis is performed by independent experts in Ecodesign (Consultant Business Area) and using the criteria of the standard UNE ISO 14006 "Ecodesign".

This product has been manufactured at the facilities of ACTIU BERBEGAL Y FORMAS, S.A.

EPD Environmental Product Declaration

Chair STAY

Ref. 910534R34

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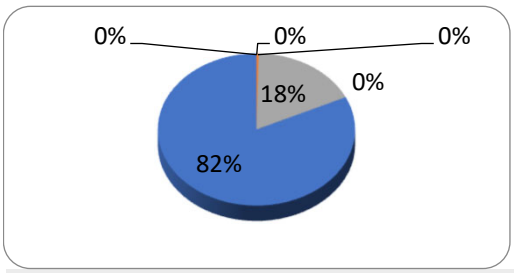
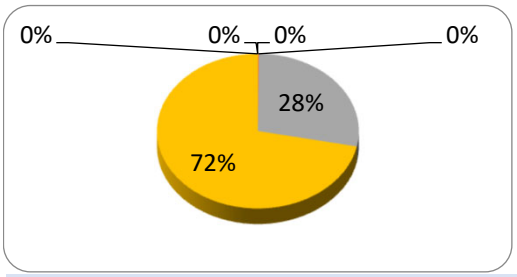
3. Impacts produced by category. Five substaces area included in each category have the greatest impact in each category

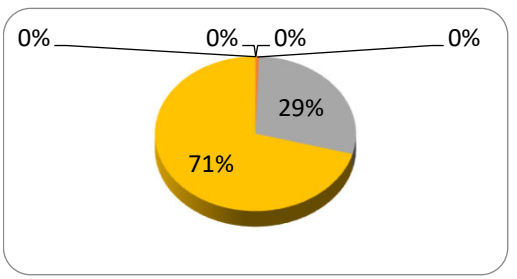
Impact category	Substance	Unit	Total
ACIDIFICATION	Remaining substances	kg SO2 eq	0
	Ammonia	kg SO2 eq	0,000698769
	Nitrogen dioxide	kg SO2 eq	0,033995801
	Nitrogen oxides	kg SO2 eq	0
	Sulfur dioxide	kg SO2 eq	0,158062597
	Sulfur oxides	kg SO2 eq	2,20E-260
	TOTAL	kg SO2 eq	0,057057



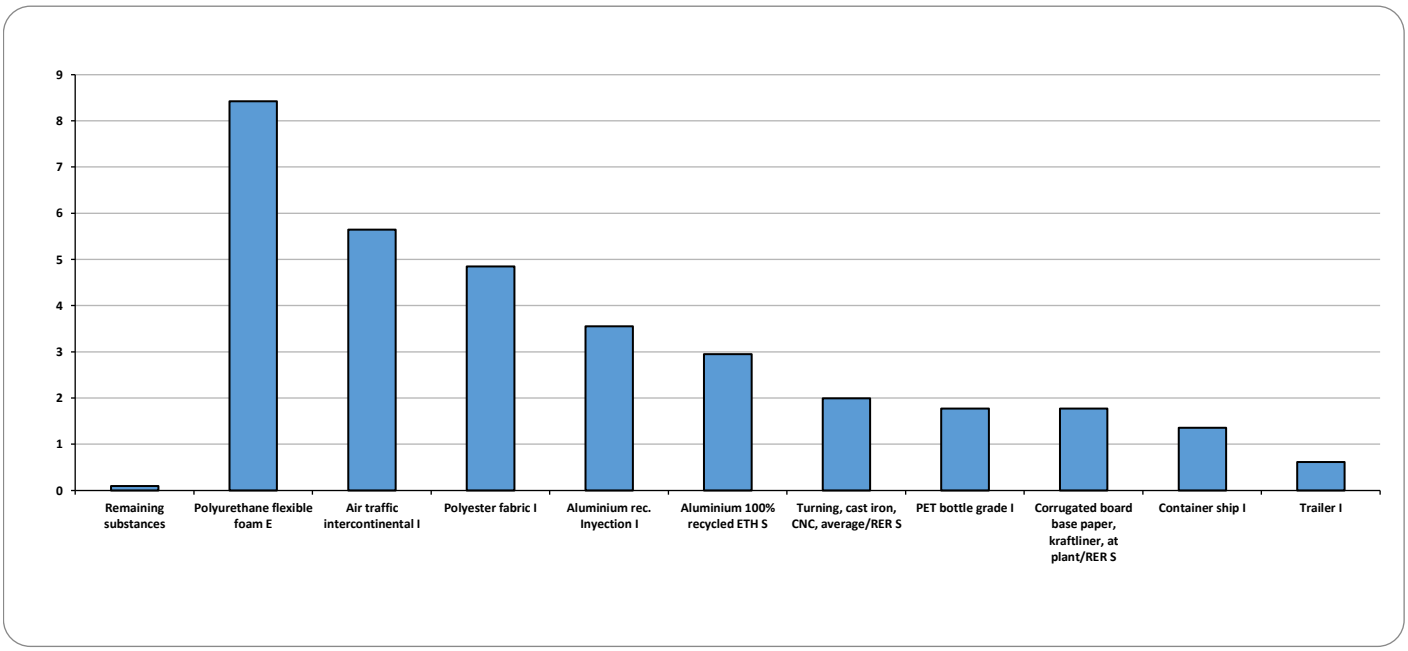
Impact category	Substance	Unit	Total
EUTROFIZATION	Remaining substances	kg PO4--- eq	0
	Ammonia	kg PO4--- eq	4,67E-05
	Dinitrogen monoxide	kg PO4--- eq	0,008034501
	Nitrogen oxides	kg PO4--- eq	0,020577326
	Ammonium, ion	kg PO4--- eq	2,20E-260
	Phosphorus, total	kg PO4--- eq	2,20E-260
	TOTAL	kg SO2 eq	0,00056784



Impact category	Substance	Unit	Total
GLOBAL WARMING	Remaining substances	kg CO2 eq	0
	Carbon dioxide	kg CO2 eq	0,169623892
	Carbon dioxide, fossil	kg CO2 eq	8,691329862
	Dinitrogen monoxide	kg CO2 eq	21,46210637
	Methane	kg CO2 eq	2,20E-260
	0	0	0
	TOTAL	kg SO2 eq	3,55371471



Impact of group elements (materials, processes, energy, use, transport and waste)



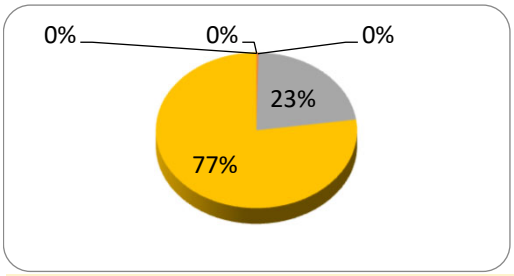
EPD Environmental Product Declaration

Silla STAY

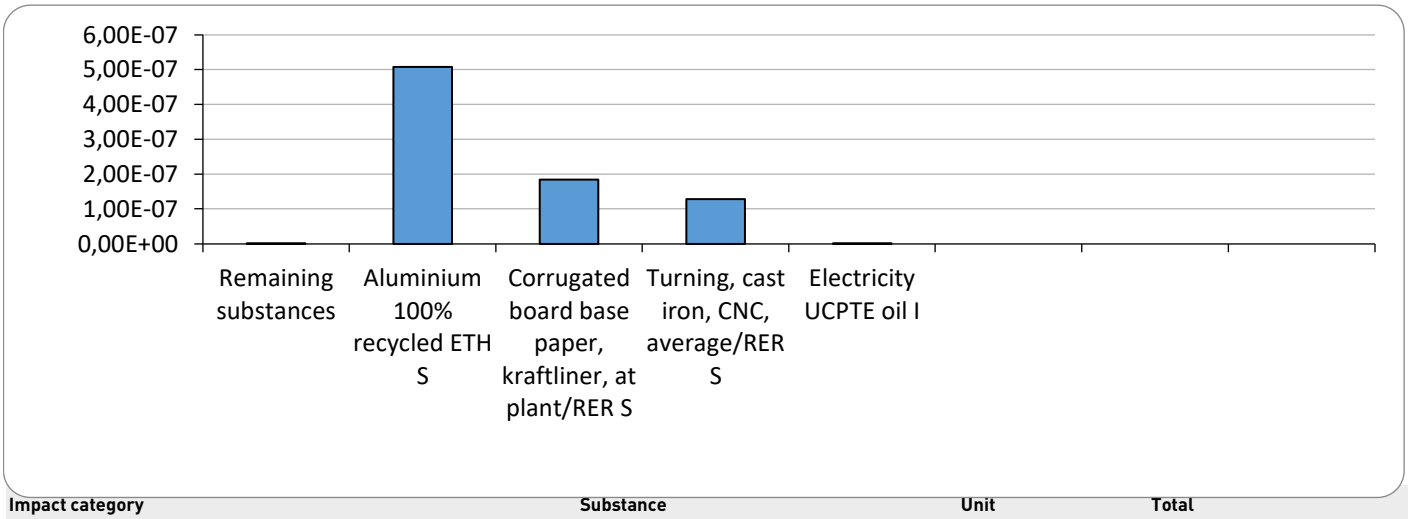
Ref. 910534R34 Report Data 27.05.2021

4. Impacts produced by category. Five substaces area included in each category have the greatest impact in each category

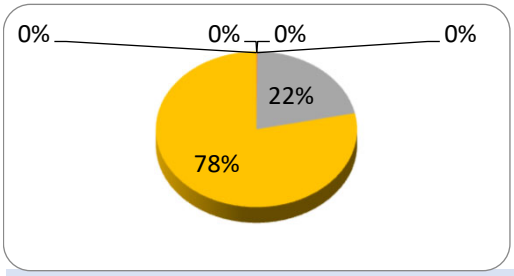
Impact category	Substance	Unit	Total
REDUCING OZONE	Remaining substances	kg CFC-11 eq	0
	Methane, bromochlorodifluoro-	kg CFC-11 eq	2,56E-09
	Methane, bromotrifluoro-, Halon 1301	kg CFC-11 eq	1,85E-07
	Methane, tetrachloro-, CFC-10	kg CFC-11 eq	6,37E-07
	Methane, trichlorofluoro-, CFC-11	kg CFC-11 eq	2,20E-260
	0	0	0
	TOTAL	kg SO2 eq	0



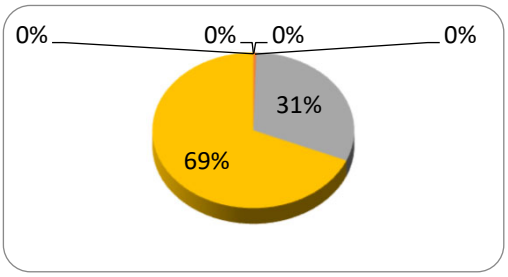
Impact of group elements (materials, processes, energy, use, transport and waste)



Impact category	Substance	Unit	Total
PHOTOCHEMICAL SMOG	Remaining substances	kg C2H4 eq	0
	Carbon monoxide	kg C2H4 eq	4,84E-05
	Carbon monoxide, fossil	kg C2H4 eq	0,007320284
	Methane	kg C2H4 eq	0,026650137
	Methane, fossil	kg C2H4 eq	2,20E-260
	0	0	0
	TOTAL	kg SO2 eq	0,00660933



Impact category	Substance	Unit	Total
NON-RENEWABLE RESOURCES	Remaining substances	MJ eq	0
	Coal, 18 MJ per kg, in ground	MJ eq	2,168749808
	Coal, 29.3 MJ per kg, in ground	MJ eq	143,0481103
	Coal, brown, in ground	MJ eq	318,1902308
	Coal, hard, unspecified, in ground	MJ eq	2,20E-260
	Gas, natural, 35 MJ per m3, in grou	MJ eq	2,20E-260
	TOTAL	kg SO2 eq	47,137545



WASTE	Total NO HAZARDOUS	KG	3,91
	Total HAZARDOUS	KG	0,0502

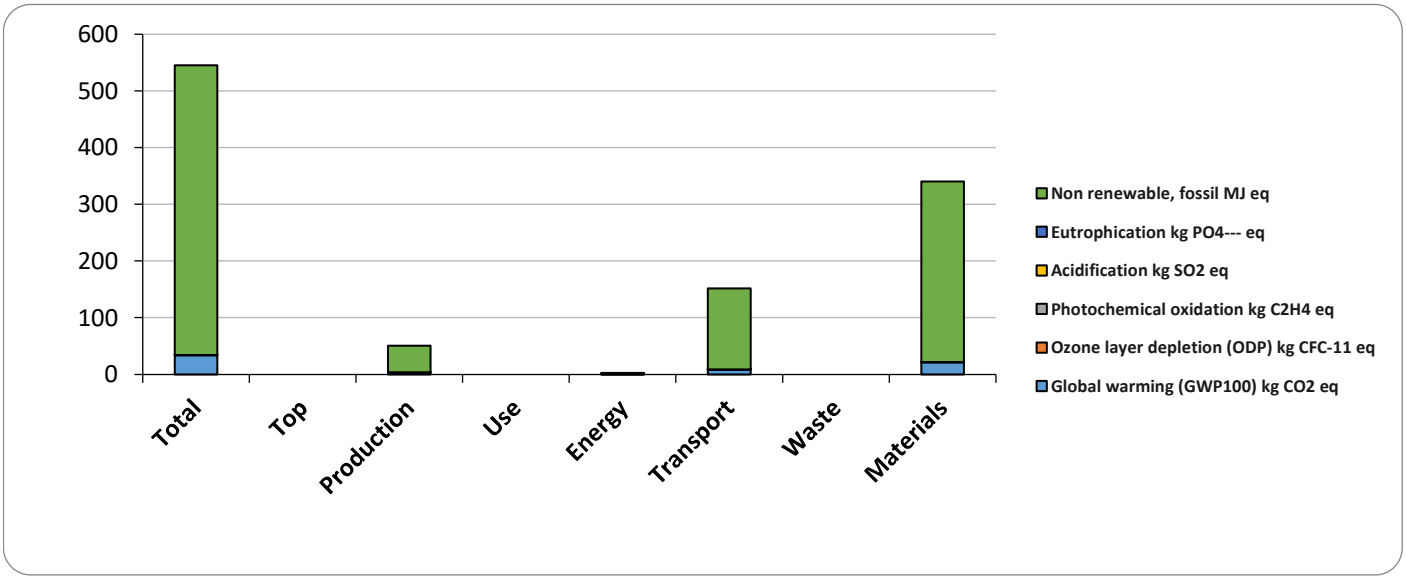
EPD Environmental Product Declaration

Silla STAY

Ref. 910534R34 Report Data 27.05.2021

5. Impact produced by life cycle stage. In includes six stages: Production, Use, Energy, Transport, Waste and Materials.

Impact Categry	Uts.	Total	Top	Production	Use	Energy	Trsp.	Waste	Mat.
Global warming (GWP100)	kg CO2 eq	33,87677483	0	3,55371471	0	0,169623892	8,691	0	21,46
Ozone layer depletion (ODP)	kg CFC-11 eq	8,25E-07	0	0	0	2,56E-09	###	0	###
Photochemical oxidation	kg C2H4 eq	0,040628134	0	0,00660933	0	4,84E-05	0,007	0	0,027
Acidification	kg SO2 eq	0,249814167	0	0,057057	0	0,000698769	0,034	0	0,158
Eutrophication	kg PO4--- eq	0,029226395	0	0,00056784	0	4,67E-05	0,008	0	0,021
Non renewable, fossil	MJ eq	510,5446359	0	47,137545	0	2,168749808	143	0	318,2



EPD Environmental Product Declaration

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Ref. 910534R34 Report Data 27.05.2021

6. Ecodesign improvements considered.

ACTIU products are designed considering different environmental strategies. According to their level of complexitiy, the strategies used are classified into one of the following. Here are some of the choices for ecodesign significant product.

ESTRATEGIA DE ECODISEÑO DE PRODUCTO	OPCIONES ELEGIDAS CON EL PRODUCTO
Low impact materials selection	Designed to be manufactured with 65% recycled materials
	100% recycled aluminium
	Powder paint with no VOC amissions
	Limitation on use of hazardous substances. Whithout chromium, mercury, cadmium
	Embalajes realizados en cartón reciclado.
Optimization of product techniques	Optimizing energy use throughout the production process
	Low manufacturing energy consumption. Minimum environmental impact.
	Painting processes of high technology systems.
	Recovery unused paint in the process. Zero emissions of VOCs.
	Closed water circuits. Heat recovery.
	Optimization of energy use in the manufacturing process: Heat recovery in the painting process, automated manufacturing systems to save energy.
Optimization of distribution system	Reducing energy. Removable systems. Low volume packaging. Spaces optimization.
	Saving energy and Flexibility. Modular system adaptable between diferent models.
Optimization of product life	15 years minimum product life
	Easy maintenance and cleaning of the product. It is easily cleaned with a damp cloth with water.
Optimization of the end of system life	Easy separation of product components
	High degree of recyclability of the product: 70%
	Packaging reuse system between ACTIU and its providers to avoid waste generation

Bibliography and references

ISO 14025 Environmental labels and declarations – Type III

UNE-EN-ISO ISO 14006 "Ecodesign".

ISO 14006 "Ecodesign"

UNE ISO 14006 "Ecodesign"

Environmental impacts methods

Data base: ETH-ESU System processes, Ecoinvent system processes, IDEMAT, EDIP, IPCC, Ecological Scarcity 2006.