



Canvas Wall[®]

Workspace



Environmental Product Declaration

Date of Issue: February 24th, 2021

Date of Expiration: February 24th, 2026

Product Category Rules

BIFMA PCR for Office Furniture Workspace Products, UNCPC 3814

ISO 14025/14040/14044 and EN 15804

Functional Unit

1 m² of workspace maintained for a 10-year period (panels in addition with other office components)

The reference product is a 4-pack covering 17.8 m² meaning 0.056 units is required to meet the functional unit.

This EPD was not written to support comparative assertions. EPDs based on different PCRs, or different calculation models, may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results, due to and not limited to, the practitioner's assumptions, the source of the data used in the study, and the software tool used to conduct the study.

HermanMiller




www.hermanmiller.com/contact



Certified
Environmental
Product Declaration
www.nsf.org

Environmental Product Declaration

Canvas Wall®

Program Operator	NSF Certification LLC 789 N. Dixboro, Ann Arbor, MI 48105 www.nsf.org	
Manufacturer Name and Address	Herman Miller 855 East Main Ave. PO Box 302 Zeeland, MI 49464-0302 USA	
Declaration Number	EPD10527	
Declared Product and Functional Unit	Canvas Wall (many configurations with components beginning with FM or FT) Functional Unit: 1 m ² of workspace maintained for 10 years (panels in addition with other office components)	
Reference PCR and Version Number	BIFMA PCR for Workspace	
Product's intended Application and Use	Workspace	
Product RSL	10 years	
Markets of Applicability	North/South America, EMEA, APAC	
Date of Issue	February 24, 2021	
Period of Validity	5 years from date of issue	
EPD Type	Product Specific	
Intended Audience	Business-to-Business, Business-to-Consumer	
Range of Dataset Variability	N/A	
EPD Scope	Cradle to Grave	
Year of reported manufacturer primary data	2019	
LCA Software and Version Number	GaBi 10.0.0.71	
LCI Database and Version Number	GaBi Database 2020.2 (Service Pack 41)	
LCIA Methodology and Version Number	TRACI 2.1 CML 2001-Oct 2012	
The PCR review was conducted by:	Review Panel Chaired by Dr. Thomas Gloria	
This declaration was independently verified in accordance with ISO 14025: 2006. The CEN Norm EN 15804 (2012), serves as the core PCR, with additional considerations from BIFMA PCR for Office Furniture Workspace Products. <input type="checkbox"/> Internal <input checked="" type="checkbox"/> External	Tony Favilla tfavilla@nsf.org	
This reference life cycle assessment was conducted in accordance with ISO 14044 and the reference PCRs:	Herman Miller Background Report for LCA/EPD Creation Tool v1.6 Matt Van Duinen - WAP Sustainability Consulting matt@wapsustainability.com	
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	Jack Geibig - EcoForm jgeibig@ecoform.com	
References	BIFMA PCR for Office Furniture Workspace Products: UNCPC 3814. ISO 14025/40/44; 2006 EN 15804:2012+A1; 2013 Herman Miller Background Report for LCA/EPD Creation Tool v1.6	
<p>Limitations: Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance of Products using EPD information shall be based on the product's use and impacts at the building level, and therefore EPDs may not be used for comparability purposes when not considering the building energy use phase as instructed under this PCR. Full conformance with the PCR for Products allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible". Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.</p>		

Product Description

Canvas Wall is an elegant space divider and power and data distributor. A variety of wall dividers keep things open or give privacy. Multiple material options allow organizations to reveal their character—all while harmonizing with the rest of the Canvas Office Landscape. The versatile design of Canvas Wall lets you place power and data access points wherever needed: above or below the work surface, at the base of a frame, or every 11 inches for convenience.



Canvas Wall offers a broad array of material options to meet many price points and express an organization's character. Tiles are available in painted metal, wood veneer, laminate, or fabric. Canvas Wall supplements the Canvas family with different yet complimentary arrangements. With heights and finishes that are consistent across products, the entire Canvas family blends seamlessly with Herman Miller's broad range of office and ancillary furnishings.

Company Description

Herman Miller creates inspiring designs to help people do great things at work, for learning, for wellness, at home, wherever people are. Our designs and the designers who work with us solve real problems for people and their organizations. This way of thinking about design has led us to be recognized as an innovator in furnishings, personal work accessories, and strategic services.

Our Sustainability Goals

We will be Resource Smart, Eco-inspired, and Community Driven.

Resource Smart

- Zero Waste
- Net Zero Water
- Net Zero Energy

Eco-inspired Design

- All products designed for the environment
- All products BIFMA level 3 certified
- Closed-Loop recycling of used product

Community Driven

- All employees engaged in Earthright
- All suppliers committed to being Resource Smart

Supplier Support

At Herman Miller, we are committed to working closely with our suppliers to reduce our collective impact on the environment. We encourage our suppliers to minimize their operations' environmental impacts and require they assist us in decreasing our facilities' environmental effects.

Manufacturing Location

10201 Adams St, Holland, MI 49423, United States

Warranty

Backed by Herman Miller's 12-year, 24/7 warranty

Design for the Environment Criteria

Our commitment to corporate sustainability naturally includes minimizing the environmental impact of each of our products. Our Design for the Environment team applies environmentally sensitive design standards to both new and existing Herman Miller products, and goes beyond regulatory compliance to thoroughly evaluate new product designs in key areas:

- **Material Chemistry and Safety of Inputs**
What chemicals are in the materials we specify, and are they the safest available?
- **Disassembly**
Can we take products apart at the end of their useful life, to recycle their materials?
- **Recyclability**
Do the materials contain recycled content, and more importantly, can the materials be recycled at the end of the product's useful life?
- **Life Cycle Assessment (LCA)**
Have we optimized the product based on the entire life cycle?

Product Environmental Data**

56% Recycled Content

14% Post-Consumer

42% Pre-Consumer

Up to 58% Recyclability *

*Based on availability of recycling facilities.

Environmental Certifications**

BIFMA level™ 3

Indoor Advantage™ Gold

Additional information, including installation and recycling instructions, can be found at <https://www.hermanmiller.com>

MATERIAL DECLARATION

Functional Unit

1 m² of workspace (panels in addition with other office components) for 4 individuals maintained for 10 years, including packaging materials used for the final assembled product.

Reference Flow and Product Specifications

This study modeled 0.056 4-pack workspace units with 17.84 m² of workspace and contains credenzas, privacy screens, panels, upper storage, worksurfaces, and integrated cables. This workspace unit is determined to be a representative product based on the sales of the variations.

System Boundary

Cradle-to-Grave

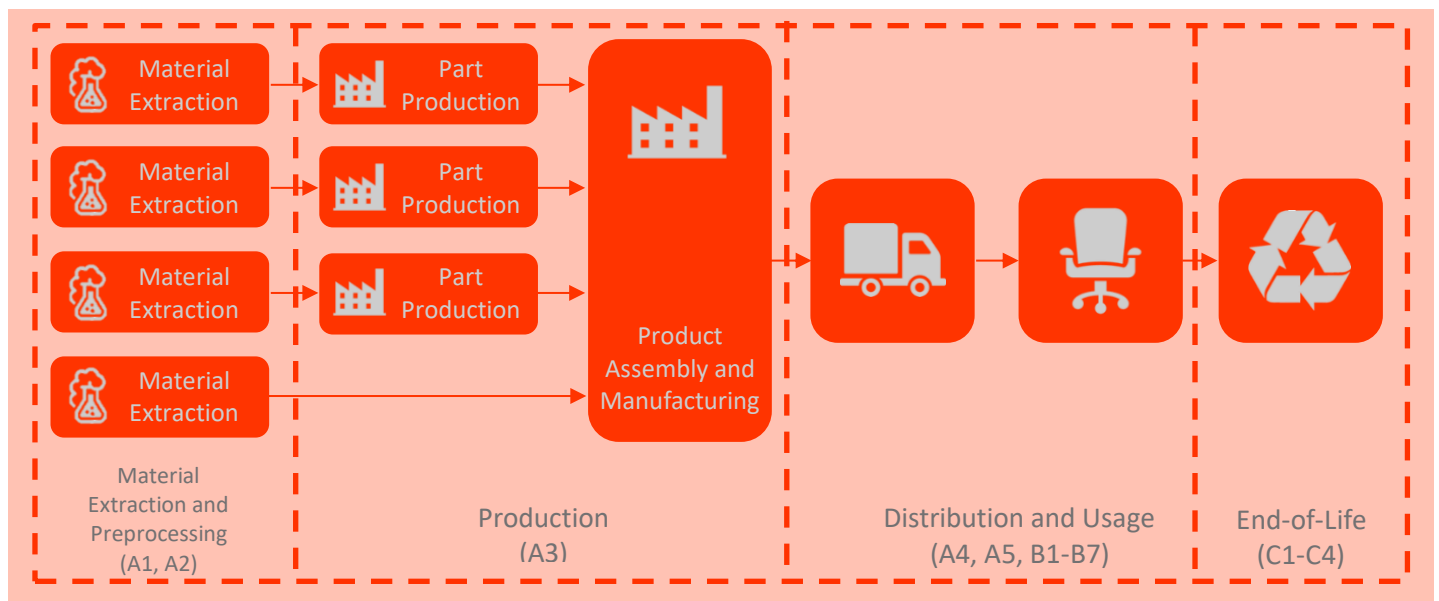
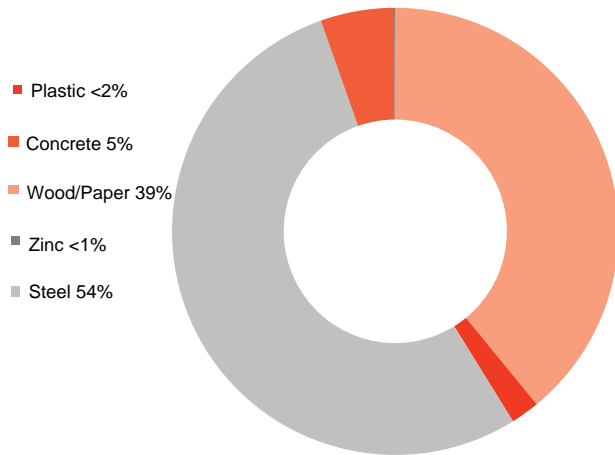
Content Declaration

The table to the right details the materials included in the product, summarized in the chart below. In order to achieve the functional unit, 0.056 workspace units is required.

Material	Mass (kg)	Mass (%)	Resource
Steel	437.10	51%	Virgin Non-Renewable and Recycled Content
Particle Board	313.03	37%	Virgin Renewable and Recycled Content
Concrete	43.55	5%	Virgin Non-renewable
Fiberglass	18.22	2%	Virgin Non-renewable
Aluminum	13.84	2%	Virgin Non-Renewable and Recycled Content
Polypropylene (PP)	6.90	<1%	Virgin Non-renewable
High Pressure Laminate (HPL)	6.46	<1%	Virgin Renewable
Acrylonitrile Butadiene Styrene (ABS)	3.36	<1%	Virgin Non-renewable
Polycarbonate (PC)	2.69	<1%	Virgin Non-renewable
Adhesive	2.11	<1%	Virgin Non-renewable
Polyethylene Terephthalate (PET)	1.82	<1%	Virgin Non-renewable
Other Materials	6.05	<1%	Virgin Non-renewable
Total	855.12	100%	

Packaging*	Mass (kg)	Mass (%)	Resource
Corrugate	145.4	90%	Recycled Content
Expanded Polystyrene	12.7	8%	Virgin Non-renewable
PET Band	1.39	1%	Virgin Non-renewable
PE Film	1.37	1%	Virgin Non-renewable
Total	160.9	100%	

*Returnable/reusable shipping blankets also available

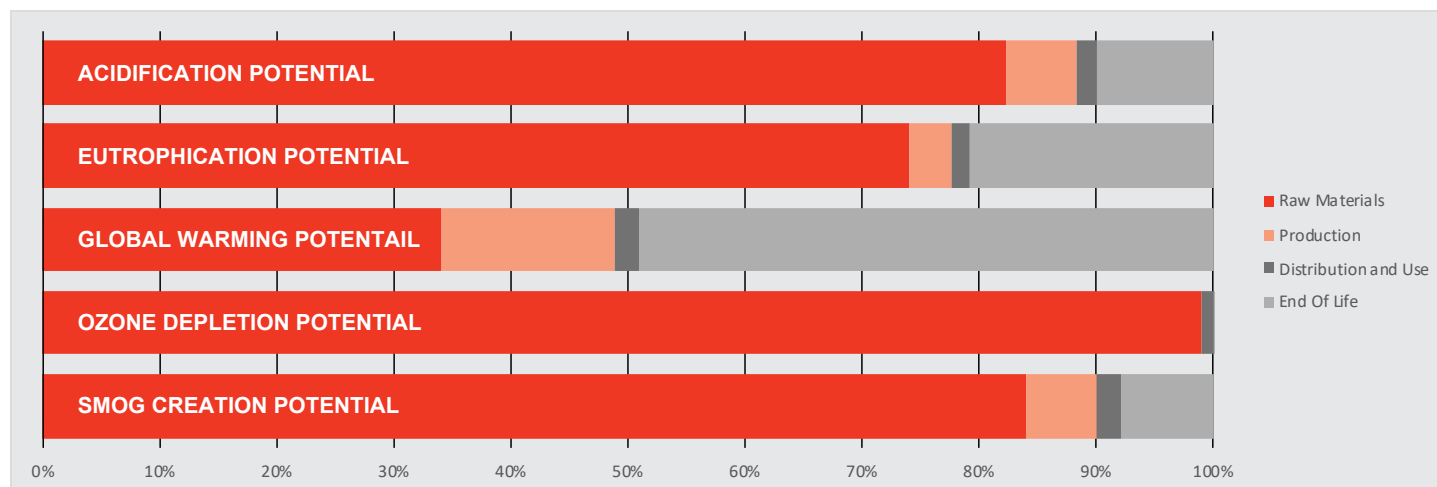


Life Cycle Impact Assessment – BIFMA PCR for United States Production

Environmental Impacts were calculated using the GaBi software platform. Impact results according to the BIFMA PCR have been calculated using TRACI 2.1 characterization factors, as well as LCI indicators for primary energy and water usage. Results presented in this report are for 1 m² of workspace maintained for 10 years. Additionally, the results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

LCIA Impact Category	Unit	Total	Raw Material Production	Product Production	Distribution and Retail	End of Life
 Acidification Potential	kg SO ₂ eq	3.18E-01	2.62E-01	1.95E-02	5.25E-03	3.16E-02
 Eutrophication Potential	kg N eq	4.07E-02	3.02E-02	1.46E-03	6.50E-04	8.47E-03
 Global Warming Potential	kg CO ₂ eq	6.77E+01	2.31E+01	1.00E+01	1.38E+00	3.32E+01
 Photochemical Ozone Creation Potential (Smog)	kg O ₃ eq	4.52E+00	3.80E+00	2.73E-01	9.20E-02	3.55E-01
 Ozone Depletion Potential	kg CFC-11 eq	2.14E-09	2.12E-09	6.13E-15	2.12E-11	6.81E-15
LCI Impact Category	Unit	Total	Raw Material Production	Product Production	Distribution and Retail	End of Life
 Primary Energy Demand (Renewable and Non-Renewable)	MJ (net cal value)	1.61E+03	1.37E+03	1.67E+02	2.64E+01	4.42E+01
 Fresh Water Consumption	kg	4.41E+02	3.83E+02	2.55E+01	6.26E+00	2.54E+01

Life Cycle Impacts of Canvas Wall



APPENDIX: EN 15804

In addition to the previous results, impact results according to EN 15804 have been calculated using CML characterization factors, as well as LCI indicators required. Results presented in this report are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

Modeling Assumptions

In order to comply with EN 15804, several modeling assumptions had to be altered from the previous BIFMA PCR-based results, as outlined here. The life cycle modules are aggregated differently according to the table below and Module D is included to calculate the benefits from the end-of-life scenarios including recycling materials, landfill gas capture, and waste-to-energy.

Functional Unit

Parameter	Value
Functional Unit	1 m ² of workspace for 1 individual maintained for a 10-year period (desking)
Reference Product Area	17.84 m ²
Number of Occupants	4
Number of Products Needed	0.056
Reference Service Life Required	10 years

Reference Service Life

Parameter	Value per functional unit
Reference Service Life	10 Years
Design Application Parameters	Use as indicated in product brochure and warranty
Declared Product Properties	Properties given in product description on page 4

End-of-Life

Parameter	Value per functional unit
Weight of Product Collected	57.0 kg
Weight to Recycling	17.6 kg
Weight to Energy Recovery	9.86 kg
Weight to Landfill	30.0 kg
Distance to Recycling	50 km
Distance to Energy Recovery	100 km
Distance to Landfill	50 km

A4: Transport to the Building Site

Parameter	Value per functional unit
Transportation Type	Diesel Truck
Fuel Consumption	0.197 kg
Distance	2253 km
Capacity Utilization	61%

A5: Installation in the Building

Parameter	Value per functional unit
Packaging Waste Produced	9.02 kg

Life Cycle Stages

The results are provided according to the following life cycle modules:

Module	Description	Module	Description	Module	Description
A1	Product Stage: Raw Material Supply	B1	Use Stage: Use	C1	EOL: Deconstruction
A2	Product Stage: Transport	B2	Use Stage: Maintenance	C2	EOL: Transport
A3	Product Stage: Manufacturing	B3	Use Stage: Repair	C3	EOL: Waste Processing
A4	Construction Process Stage: Transport	B4	Use Stage: Replacement	C4	EOL: Disposal
A5	Construction Process Stage: Installation	B5	Use Stage: Refurbishment	D	Benefits beyond system
		B6	Operational Energy Use		
		B7	Operational Water Use		

LCA Results – United States Production

CML Results – United States Production – 1 m² of workspace maintained for 10 Years

Impact Category	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
ADP-elements [kg Sb eq]	4.87E-04	1.22E-07	4.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	0.00E+00	1.04E-07	-2.36E-04
ADP-fossil fuel [MJ]	6.37E+02	9.18E+00	6.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.18E+00	0.00E+00	2.76E+01	-1.12E+02
AP [kg SO ₂ eq]	2.51E-01	1.56E-03	2.64E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-03	0.00E+00	9.95E-03	-4.08E-02
EP [kg Phosphate eq]	3.79E-02	4.18E-04	5.90E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.18E-04	0.00E+00	2.03E-02	-8.09E-03
GWP [kg CO ₂ eq]	3.30E+01	7.12E-01	6.69E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-01	0.00E+00	3.25E+01	-4.81E+00
ODP [kg CFC 11 eq]	2.12E-09	7.64E-17	2.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.64E-17	0.00E+00	6.73E-15	-1.83E-14
POCP [kg Ethene eq]	2.76E-02	-5.15E-04	3.29E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-5.15E-04	0.00E+00	6.27E-03	-3.83E-03

ADP=Abiotic Depletion Potential; AP=Acidification Potential; EP=Eutrophication Potential; GWP=Global Warming Potential; ODP=Ozone Depletion Potential; POCP=Photochemical ozone creation potential

Resource Use and Waste – United States Production – 1 m² of workspace maintained for 10 Years

Impact Category	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
RPR _E [MJ]	6.54E+02	4.22E-01	6.57E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-01	0.00E+00	2.10E+00	-1.07E+02
RPR _M [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RPR _T [MJ]	6.54E+02	4.22E-01	6.57E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-01	0.00E+00	2.10E+00	-1.07E+02
NRPR _E [MJ]	8.80E+02	1.01E+01	9.32E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E+01	0.00E+00	3.16E+01	-1.44E+02
NRPR _M [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRPR _T [MJ]	8.80E+02	1.01E+01	9.32E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E+01	0.00E+00	3.16E+01	-1.44E+02
SM [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW [m ³]	4.09E-01	1.90E-03	4.36E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-03	0.00E+00	2.35E-02	-4.82E-02
HWD [kg]	6.34E-06	1.74E-07	6.79E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E-07	0.00E+00	1.03E-07	-1.44E-07
NHWD [kg]	4.47E+00	7.08E-04	3.36E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.08E-04	0.00E+00	2.91E+01	-8.00E-01
RWD [kg]	3.13E-02	1.83E-05	3.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-05	0.00E+00	4.35E-04	-3.50E-03
CRU [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

RPR_E=Renewable Primary Energy from Non-Materials; RPR_M =Renewable Primary Energy from Materials; RPR_T =Total Renewable Primary Energy; NRPR_E=Non-Renewable Primary Energy from Non-Materials; NRPR_M =Non-Renewable Primary Energy from Materials; NRPR_T =Total Non-Renewable Primary Energy; SM=Use of Secondary Materials; RSF=Use of Renewable Secondary Fuels; NRSF=Use of Non-Renewable Secondary Fuels; FW=Net Use of Fresh Water; HWD=Hazardous Waste Disposed; NHWD=Non-Hazardous Waste Disposed; RWD=Radioactive Waste Disposed; CRU=Components for Reuse; MFR=Materials for Recycling; MER=Materials for Energy Recovery; EE=Exported Energy