Environmental Product Declaration





In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Alterna Basic Mirror Cabinet / Alterna Basic Spegelskåp

from

Saint-Gobain Distribution Sweden AB



Program: The International EPD® System, <u>www.environdec.com</u>

Program operator: EPD International AB

EPD registration

number:

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Valid until:

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2025-04-11

2030-04-10

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com







General information

Programme information

Programme:	The International EPD® System								
	EPD International AB								
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Website:	www.environdec.com								
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Accountabilities for PCR, LCA and independent, third-party verification								
Product Category Rules (PCR): Construction Products PCR 2019:14 version 1.3.4								
CEN standard EN 15804:2012+A2:2019/AC:2021 serves as the Core Product Category Rules (PCR)								
PCR review was conducted by: The Technical Committee of the International EPD System. See www.environdec.com for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact.								
Life Cycle Assessment (LCA)								
LCA accountability: Fanni Végvári, CarbonZero AB								
Third-party verification								
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:								
Third-party verifier: Stephen Forson, ViridisPride								
Approved by: The International EPD® System								
Procedure for follow-up of data during EPD validity involves third party verifier:								
□ Yes ⊠ No								

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.





Company information

Owner of the EPD	Saint-Gobain Distribution Sweden AB								
	Bryggerivägen 9								
	168 67 Bromma Stockholm								
Contact	SGDS - Beriar Maroof (beriar.maroof@saint-gobain.se)								
Description of the organisation	8 67 Bromma Stockholm GDS - Beriar Maroof (beriar.maroof@saint-gobain.se) int-Gobain Distribution Sweden AB - specialists in collaboration for one efficient business in construction and installation. Saint-Gobain stribution Sweden AB is the head company of some of Sweden's ading trading companies in construction, sheet metal, tiles and stallation. All the companies have long and solid industry experience diprovide most of Sweden's craftsmen with materials for various objects. Customers in different companies can also buy support items of the sister companies in the group, and in selected cases, we take not projects to facilitate the logistics of the supply of goods, which is not noten critical for a smooth construction project. Optimera - construction trade for professional carpenters Dahl - heat, plumbing and sanitary specialist Bevego - building sheet metal, ventilation and technical insulation Kakelspecialisten and Konradsson's Tiles - tiles, tiling and bathroom fittings								
	about 150,000 customers regularly.								
	Saint-Gobain Distribution Sweden AB is owned by Saint-Gobain with a presence in 64 countries and over 190 000 employees worldwide.								
Location of production site	Vaggeryd, Sweden								







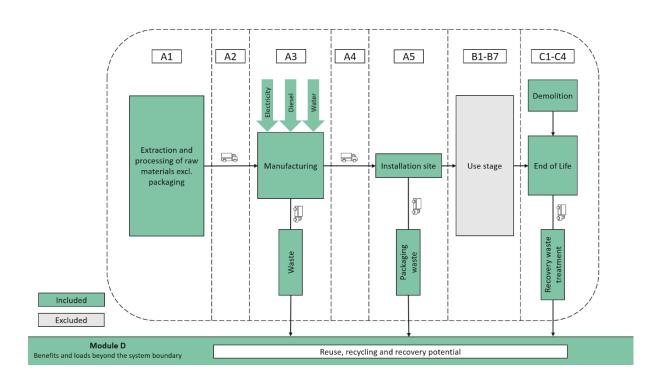


Product information

Product name	Alterna Basic Mirror Cabinet/ Alterna Basic Spegelskåp
Product identification	Bathroom furniture
UN CPC code	31432 Medium Density Fibreboard (MDF)
Product description	Alterna Basic Mirror Cabinet is a classic mirror cabinet with a width of 600 mm. The cabinet has mirrors on both sides, soft-closing doors, and two adjustable glass shelves. There is a power outlet inside the cabinet. The lighting strip is ordered separately.
Technical data	Please refer to the product pages for each specific product as the technical data differs for each product. https://alternabadrum.se/
Use	Alterna Basic Mirror Cabinet/ Alterna Basic Spegelskåp is a functional storage unit commonly used in bathrooms to combine a mirror with concealed shelving. It provides a convenient space to store toiletries, medications, and other essentials while keeping the bathroom tidy. The mirrored surface also enhances lighting and creates a sense of spaciousness in the room.

LCA information

Declared unit	1 kg of Alterna Basic Mirror Cabinet/ Alterna Basic Spegelskåp
Reference service life	Not applicable
Database(s) and LCA software used	Calculation completed in LCA for Experts v10.9.0.31 with an integrated ecoinvent database 3.9.1
System boundaries	Cradle to gate, with options. (A1-A3, A4-A5, C1-C4 & D)







More information

The EPD covers the following product in the table below.

Article number	Description
8947764	Alterna Basic spegelskåp 60 cm vit

A1, Raw material supply

This module considers the extraction and processing of all raw materials, energy, and transportation which occur upstream of the studied manufacturing process. The products are made of MDF, steel, polyethylene and glass.

A2, transport to the manufacturer

This module includes the transportation of raw materials to the manufacturing site and the transportation from the supplier in Sweden to Saint-Gobain's distribution center in Sweden. Specific information from the manufacturer was obtained regarding the transportation distance between the suppliers to the manufacturing factory.

A3, manufacturing

This module includes all resources used during the production of Alterna Basic Mirror Cabinet. The manufacturing processes include the production of components at several different suppliers, which are transported to the assembly factory where the components are assembled. This also includes packaging material which the products are transported out to the distribution centers. Data has been collected by the manufacturer from the production year of 2023, the full 12 months from January 2023 to December 2023.

A4, Transport

This module includes the transportation from Saint-Gobain's distribution center in Sweden, out to the average customer. The assumed transportation distance is 350 km by truck.

Scenario information	Unit (expressed per declared unit)					
Fuel type and consumption of vehicle or vehicle type	Average truck trailer with a 27 t					
used for transport e.g. long distance truck, boat etc.	payload 0,019 l/tkm diesel					
Distance	350 km					
Capacity utilization (including empty returns)	61% for truck					
Volume capacity utilization factor (factor: =1 or <1 or 1 for compressed or nested packaged products	Not applicable					

A5, Construction installation

This stage includes the waste management of the packaging materials and balancing of the biogenic materials that enter the system in module A3. The pallet and cardboard packaging are being incinerated. The pallet is being reused 10 times before going to incineration; hence the weight represents the wear factor and not the entire pallet. The installation of the product is assumed to have negligible impact, as the installation will be done manually.





Processes	Unit (expressed per declared unit)
Collection process	0,088307 kg collected separately
specified by type	0 kg collected with mixed construction waste
December existen enecified	0 kg for re-use
Recovery system specified	0,00819 kg for recycling
by type	0,0795 kg for energy recovery
Disposal specified by type	0,000617 kg product or material for final deposition

B1-B7 Use stage

This stage is not declared.

C1 Deconstruction/Demolition

This stage includes the de-construction of the Alterna Basic Mirror Cabinet. It is assumed that the deconstruction is done manually and therefore has a negligible impact.

C2 Transport

This module represents the transport distance to the waste processing facility. It is assumed that the transportation distance to the waste processing facility is 50 km.

C3 Waste processing

This module includes any waste treatment needed from recycling and incineration.

C4 Final disposal

This module includes any material that is landfilled.

Processes	Unit (expressed per declared unit)
Collection process	1 kg collected
specified by type	0 kg collected with mixed construction waste
Danasan anaifial	0 kg for re-use
Recovery system specified by type	0,53358 kg for recycling
by type	0,4276 kg for energy recovery
Disposal specified by type	0,03898 kg product or material for final deposition
Assumptions for scenario	The transportation is modelled with the same specifications as the
development, e.g.	truck transportation in module A2, except the transportation
transportation	distance is assumed to be 50 km to the waste processing.

D Benefits and loads beyond the system boundary

This module includes loads and benefits obtained from energy recovery and/or recycling materials.

Omissions of life cycle stages

The following flows were excluded from the system boundary:

- A1-A3: The plants, production of machines and transportation systems are excluded since the related flows are supposed to be negligible compared to the potential environmental impacts through the life cycle of the product
- **B1-B7**: The use phase of the products is not included





In addition, the following flows are excluded from the system boundaries:

Flows related to human activities, such as employee transport

Cut-off criteria

The following procedures were followed for the exclusion of inputs and output.

- All input and output flows in a unit process were considered i.e., taking into account the value of all flows in the unit process and the corresponding LCI where data was available
- Data gaps were filled by conservative assumptions with average or generic data. Any assumptions in such cases were documented
- The use of cut-off criterion on mass inputs and primary energy at the unit process level (1%) and at the information module level (5%)

All hazardous and toxic materials and substances are included in the inventory and the cut-off rules do not apply.

Allocation

Allocation criteria are based on mass.

Content declaration

Product composition	Amount (kg)	Post-consumer recycled material, mass-% of product	Biogenic material, mass- % of product	Biogenic material ¹ , kg C/declared unit			
MDF	4,16E-01	0	27,1	0,271			
Steel	3,95E-02	0	0	0			
Polyethylene	1,57E-02	0	0	0			
Glass	5,29E-01	0	0	0			
Total	1	0	27,1	0,271			

Packaging composition	Weight, kg	Weight-% (versus the product)	Biogenic material ¹ , kg C/declared unit			
Cellblock	8,81E-03	0,881	0			
Cardboard	6,57E-02	6,57	0,03			
Pallet	1,38E-02	1,38	0,007			
Total	0,08	8,04%	0,01			

¹ 1 kg biogenic carbon in the product/packaging is equal to 44/12 kg of CO₂ uptake

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Modules declared and geographical scope

	Product stage			Asse st	Use stage								End of l	ife stage		Benefits & loads beoyond system boundary	
	Raw materials Transport Manufacturing		Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling- potential	
Modules	A1	A2	A3	A4	A 5	B1	B2	В3	B4	В5	В6	В7	C1	C2	С3	C4	D
Modules declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	EU	SE	SE	SE	SE	-	-	-	-	-	-	-	SE	SE	SE	SE	SE
Specific data used		4,2%		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation products		0%		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation sites		0%		-	-	-	-	-	-	-	-	-	-	-	-	-	-

The specific data is based on the amount of impact that derives from the impact indicator GWP-GHG for modules A1-A3.





Environmental Information

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks. As module C is included in the EPD, it is discouraging the use of the results of modules A1-A3 without considering the results of module C.

Potential environmental impact – indicators according to EN 15804+A2, EF 3.1

			Results per declared unit: 1 kg						
Indicator	Unit	A1-A3	A4	A5	C1	C2	С3	C4	D
GWP-total	kg CO2 eq	4,65E-01	2,51E-02	1,30E-01	0,00E+00	1,15E-04	1,29E-03	6,95E-01	-2,16E-01
GWP-fossil	kg CO2 eq	1,23E+00	2,51E-02	2,66E-03	0.00E+00	1,15E-04	1,21E-03	5,10E-02	-2,11E-01
GWP-biogenic	kg CO2 eq	-7,62E-01	2,25E-06	1,27E-01	0,00E+00	1,32E-07	7,52E-05	6,44E-01	-3,00E-03
GWP-luluc	kg CO2 eq	2,29E-03	1,42E-06	3,70E-06	0,00E+00	3,41E-08	1,14E-06	2,23E-05	-2,44E-03
ODP	kg CFC-11 eq	2,04E-08	5,86E-09	7,77E-12	0,00E+00	1,76E-11	1,27E-11	8,53E-14	4,65E-10
AP	mole H+ eq	9,64E-03	7,42E-05	3,02E-05	0,00E+00	1,28E-06	5,23E-06	1,73E-04	-2,60E-04
EP-freshwater	kg P eq	1,56E-04	2,68E-07	2,08E-08	0,00E+00	8,30E-10	2,08E-07	1,67E-08	9,14E-07
EP-marine	kg N eq	2,29E-03	2,18E-05	1,08E-05	0,00E+00	3,23E-07	2,27E-06	6,26E-05	-6,42E-05
EP-terrestrial	mole N eq	2,48E-02	2,40E-04	1,36E-04	0,00E+00	3,55E-06	1,78E-05	7,85E-04	-6,72E-04
POCP	kg NMVOC eq	5,66E-03	5,45E-05	2,87E-05	0,00E+00	9,02E-07	6,29E-06	1,66E-04	-1,99E-04
ADP-minerals & metals ²	kg Sb eq	8,02E-06	4,54E-09	3,87E-10	0,00E+00	1,62E-11	5,44E-09	1,01E-09	-3,60E-07
ADP-fossil ²	MJ	2,17E+01	3,58E-01	3,57E-02	0,00E+00	1,61E-03	1,73E-02	1,97E-01	-4,08E+00
WDP ²	m3	4,54E-01	3,78E-04	1,40E-02	0,00E+00	3,38E-06	2,08E-04	7,65E-02	-1,35E-02
GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption									

Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

² The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator





Use of resources

			Results per declared unit: 1 kg						
Indicator	Unit	A1-A3	A4	A5	C1	C2	С3	C4	D
PERE	MJ	8,07E+00	9,36E-04	9,06E-03	0,00E+00	1,27E-04	7,17E-04	5,01E-02	-1,51E+00
PERM	MJ	9,04E+00	0,00E+00	-1,46E+00	0,00E+00	0,00E+00	0,00E+00	-7,58E+00	0,00E+00
PERT	MJ	1,71E+01	9,36E-04	-1,45E+00	0,00E+00	1,27E-04	7,17E-04	-7,53E+00	-1,51E+00
PENRE	MJ	2,17E+01	3,58E-01	3,57E-02	0,00E+00	1,61E-03	1,73E-02	1,97E-01	-4,08E+00
PENRM	MJ	7,22E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,88E-01	-5,34E-01	0,00E+00
PENRT	MJ	2,24E+01	3,58E-01	3,57E-02	0,00E+00	1,61E-03	-1,70E-01	-3,37E-01	-4,08E+00
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
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
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
FW	m3	1,21E-02	8,80E-06	3,30E-04	0,00E+00	1,23E-07	4,83E-06	1,80E-03	-8,40E-03
	PERE = U	se of renewable prim	ary energy excluding	g renewable primary	energy resources used	d as raw materials; Pl	ERM = Use of renev	vable primary energy	resources used as

Acronyms

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; **PERM** = Use of renewable primary energy resources used as raw materials; **PERT** = Total use of renewable primary energy resources used as raw materials; **PENRM** = Use of non-renewable primary energy resources; **SM** = Use of secondary material; **RSF** = Use of renewable secondary fuels; **NRSF** = Use of non-renewable secondary fuels; **FW** = Use of net fresh water





Additional voluntary indicators

			Results per declared unit: 1 kg						
Indicator	Unit	A1-A3	A4	A5	C1	C2	С3	C4	D
GWP-GHG ³	kg CO2 eq	1,23E+00	2,51E-02	2,67E-03	0,00E+00	1,15E-04	1,28E-03	5,11E-02	-2,17E-01
Acronyms	GWP-GHG = global warming potential - greenhouse gases								

Waste and output flows

Waste

		Results per declared unit: 1 kg							
Indicator	Unit	A1-A3	A4	A 5	C1	C2	С3	C4	D
HWD	kg	2,82E-09	0,00E+00	1,79E-11	0,00E+00	2,45E-13	0,00E+00	9,85E-11	-7,67E-09
NHWD	kg	9,86E-02	0,00E+00	6,17E-04	0,00E+00	1,67E-07	0,00E+00	3,90E-02	5,04E-03
RWD	kg	1,46E-03	0,00E+00	1,77E-06	0,00E+00	2,86E-08	0,00E+00	9,62E-06	-3,97E-04
Acronyms	Acronyms HW = Hazardous waste disposed; NHW = Non-hazardous waste disposed; RW = Radioactive waste disposed								

³ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO2 is set to zero





Output flows

			Results per declared unit: 1 kg						
Indicator	Unit	A1-A3	A4	A 5	C1	C2	С3	C4	D
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
MFR	kg	0,00E+00	0,00E+00	1,06E-01	0,00E+00	0,00E+00	5,34E-01	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
EEE	MJ	0,00E+00	0,00E+00	1,72E-01	0,00E+00	0,00E+00	0,00E+00	9,70E-01	0,00E+00
EET	MJ	0,00E+00	0,00E+00	3,12E-01	0,00E+00	0,00E+00	0,00E+00	1,76E+00	0,00E+00
Acronyms	Acronyms CRU = Components for reuse; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electric energy; ETE = Exported thermal energy								

Information on biogenic carbon content

Biogenic carbon content	Unit per DU	Amount
Biogenic carbon content in product	kg C	1,76E-01
Biogenic carbon content in packaging	kg C	3,48E-02

1 kg biogenic carbon is equivalent to 44/12 kg CO2.





Disclaimers

ILCD classification	Indicator	Disclaimer
	Global warming potential (GWP)	None
ILCD Type 1	Depletion potential of the stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
	Acidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)	None
ILCD Type 2	Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine)	None
	Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted	2
II CD Tyme 2	Water consumption (WDP)	2
ILCD Type 3	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	2
	Potential Comparative Toxic Unit for humans (HTP-c)	2
	Potential Comparative Toxic Unit for humans (HTP-nc)	2
	Potential Soil quality index (SQP)	2

Disclaimer 1 – This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

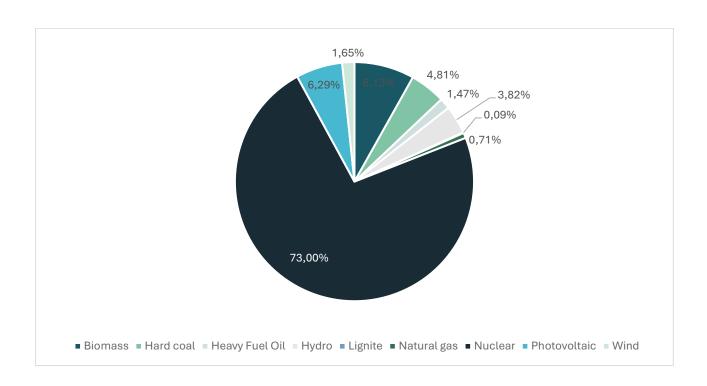




Additional information

Greenhouse gas emission from the use of electricity in the manufacturing phase.

Residual mix	Unit	Value
Location		Sweden
		Biomass: 8,13%
		Hard coal: 4,81%
		Heavy Fuel Oil: 1,47%
		Hydro: 3,82%
Electricity mix		Lignite: 0,09%
		Natural gas: 0,71%
		Nuclear: 73,00%
		Photovoltaic: 6,29%
		Wind: 1,65%
Reference year		2023
Source		Association of Issuing Bodies
GWP excl. Biogenic kg CO ₂ -eq. /kWh		0,076







References

Association of Issuing AIB. European Residual Mixes 2022. Version 1.0. Bodies (2023) https://www.aib-net.org/facts/european-residual-mix/2022

(Retrieved 2025-01-02)

EPD International (2024). PCR 2019:14 Construction products **Construction Products**

PCR 2019:14 version 1.3.4 and construction services, version 1.3.4

EN15804:2012+A2:2019/ Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction AC:2021

products

GPI 5.0 General Programme Instructions of the International EPD®

System. Version 5.

ISO 14020:2000 Environmental labels and declarations — General principles

ISO 14025:2010 Environmental labels and declarations - Type III environmental

declarations - Principles and procedures

International Standard ISO 14040: Environmental Management – ISO 14040:2006

Life cycle assessment – Principles and framework. Second edition

2006-07-01.

ISO 14044:2006 Environmental management - Life cycle assessment -

Requirements and guidelines

SCB Swedish Statistics (2020). Treated waste by treatment category

and waste category. Every second year 2010 - 2020

https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__MI_

MI0305/MI0305T003/ Assessed 2025-01-02.





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