EPD - ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

OWNER AND PUBLISHER	Bau EPD GmbH, A-1070 Wien, Seidengasse 13/3, www.bau-epd.at
PROGRAMME OPERATOR	Bau EPD GmbH, A-1070 Wien, Seidengasse 13/3, www.bau-epd.at
HOLDER OF THE DECLARATION	ALUKÖNIGSTAHL GmbH
DECLARATION NUMBER	BAU-EPD-ALUKÖNIGSTAHL-2024-1-ECOINVENT-Profil-Lager-EPD
ISSUE DATE	2024-08-15
VALID TO	2029-08-15
NUMBER OF DATASETS	1
ENERGY MIX APPROACH	MARKET BASED APPROACH

Aluminium profile
ALUKÖNIGSTAHL GmbH

ALUKÖNIGSTAHL

Content of the EPD

1 General information

Product name Aluminium profile	**Declared Product / Declared Unit** 1kg Aluminium profile **Number of datasets in EPD Document(s): 1** **Range of validity** This Environmental Product Declaration refers to 1kg of an average aluminium profile from the warehouse of ALUKÖNIGSTAHL GmbH in 2351 Wiener Neudorf, Austria. The declared profile is subsequently used for the production of façade elements and door and window systems.
Declaration number **BAU-EPD-ALUKÖNIGSTAHL-2024-1-ECOINVENT-Profil-Lager-EPD**	
Declaration data ☒ Specific data ☐ Average data	
Declaration based on: MS-HB Version 5.0 dated 2023-09-20: Windows, Doors, Façade elements PCR-Code: 2.21.1 Version 15 dated 2023-09-20 (PCR tested and approved by the independent expert committee) The owner of the declaration is liable for the underlying information and evidence; Bau EPD GmbH is not liable with respect to manufacturer information, life cycle assessment data and evidence.	
Type of Declaration as per EN 15804 From cradle to gate with the modules C1-C4 and module D. LCA-method: cut-off by classification	**Database, Software, Version** Database: ecoinvent v3.9.1 Software: SimaPro (Version 9.5.0.1) **Version Characterisation Factors:** Joint Research Center, EF 3.1
Author of the Life Cycle Assessment IBO GmbH Alserbachstraße 5/8 1090 Vienna Austria	**The CEN standard EN 15804:2019+A2 serves as the core-PCR.** **Independent verification of the declaration according to ISO 14025:2010** ☐ internally ☒ externally **Verifier 1:** Dipl.-Ing. (FH) Angela Schindler **Verifier 2:** DI Dr. Florian Gschösser
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DI (FH) DI DI Sarah Richter
Head of Conformity Assessment Body

Dipl.-Ing. (FH) Angela Schindler
Verifier

DI Dr. Florian Gschösser
Verifier

Note: EPDs from similar product groups from different programme operators might not be comparable.

2 Product

2.1 General product description

The declared aluminium profiles are semi-finished products used in the construction industry as part of the building envelope (façade, windows, doors, sun protection, balconies, conservatories, etc.) and in interior applications as interior elements (partition wall systems, fire protection systems, etc.). The profiles are made from aluminium alloys and thus consist of the light metal aluminium (Al) and various alloying elements (silicon, copper, manganese, magnesium, etc.). The bare aluminium profiles can be refined (according to customer requirements) in one or more processing steps before they are processed into the (end) product.

The results presented in the EPD refer to the stock mix of ALUKÖNIGSTAHL GmbH (warehouse location: IZ-NÖ Süd, Straße 1, Objekt 36, 2351 Wiener Neudorf). The profiles are purchased from various suppliers by the declaration holder. There is no in-house production at the warehouse location.

2.2 Application field

Aluminium profiles are used in a wide variety of applications/products. The profiles declared in this EPD are primarily used for the manufacture of façade elements as well as door and window systems.

2.3 Standards, guidelines and regulations relevant for the product

Table 1: Product-relevant standards

Standard	Title
EN 12020-1:2022-05	Aluminium and aluminium alloys - Extruded precision profiles in alloys EN AW-6060 and EN AW-6063 - Part 1: Technical conditions for inspection and delivery
EN 12020-2:2023-03	Aluminium and aluminium alloys - Extruded precision profiles in alloys EN AW-6060 and EN AW-6063 - Part 2: Tolerances on dimensions and form
EN 12206-1:2021-07	Paints and varnishes - Coating of aluminium and aluminium alloys for architectural purposes - Part 1: Coatings prepared from thermosetting coating powder
EN 12373-1:2001-10	ALUMINIUM AND ALUMINIUM ALLOYS - ANODIZING - PART 1: METHOD FOR SPECIFYING DECORATIVE AND PROTECTIVE ANODIC OXIDATION COATINGS ON ALUMINIUM
EN 573-3:2022-12	Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products

2.4 Technical data

The technical data listed are the physical specifications of the basic material aluminium, which are independent of the manufacturer. Performance values of specific products manufactured from the semi-finished products can be found in the corresponding declarations of performance or the relevant technical regulations (if no CE marking is available).

Table 2: technical data of the declared construction product(s)

Characterization	Value	Unit
Density	2700	kg/m³
Melting Point	660	°C
Electrical conductivity at 20°C	34 – 38	m/Ωmm²
Thermal conductivity	200 – 220	W/m °C
Coefficient of linear thermal expansion	23,4	µ/C°
Modulus of elasticity	69500	N/mm²
Shear modulus	26100	N/mm²
Specific heat capacity	0,898	kJ/kgK

2.5 Basic/auxiliary materials

Table 3: Basic and auxiliary materials in mass percentage

Components	Function	Mass fraction in percent
Aluminium*	Base material	approx. 98,5 %
Alloy metals (Si, Fe, Cu, Mn, Mg, Cr, Zn, Ti, others)	Alloy	approx. 1,5 %

*Under the framework conditions specified for the EPD, the aluminium used has an average recycled content of 77%.
No other auxiliary materials or additives are used.

2.6 Production

The production of aluminium billets involves the following process steps: metal mix preparation, melting, transferring, alloying, casting, testing, homogenising, sawing, and, if applicable, packaging.
The production of aluminium profiles from billets includes the following process steps: heating, extrusion, profile cooling, stretching, cutting to length, artificial ageing, and, if applicable, packaging.
The declared stock mix is purchased from various producers by the declaration owner. No in-house production of profiles takes place at the warehouse location.

2.7 Packaging

In the present EPD, packaging has not been considered, as the declared profiles are semi-finished products that are subsequently further processed. Packaging is therefore application-specific and, in some cases, tailored to customer requirements.

2.8 Conditions of delivery

The delivery process is not part of the system under study and has therefore not been considered. Module A4 is not declared in this EPD.

2.9 Transport

Outbound transport is not part of the system under study and has therefore not been considered. Module A4 is not declared in this EPD.

2.10 Processing/ installation

The installation (integration into the building) is not part of the system under study and has therefore not been considered. Module A5 is not declared in this EPD.

2.11 Use stage

The use stage is not part of the system under study and has therefore not been considered. Modules B1-B7 are not declared in this EPD.

2.12 Reference service life (RSL)

The reference service life (RSL) for aluminium profiles is not declared, as these are semi-finished products with a wide range of potential applications. The specific use and subsequent processing by the manufacturer of the final product are fundamentally decisive for this parameter.

2.13 Reuse and recycling

Aluminium profiles are 100% recyclable without any loss of material quality. Scrap from demolition, refurbishment, or renovation can be easily separated and fed into the recycling process via the recycling industry. This EPD includes a recycling scenario, accounting for total losses of 5% by mass during collection and processing.

2.14 Disposal

In accordance with the European Waste Catalogue (EWC), the waste code depends on the final product. Aluminium scrap, due to its high value as a raw material, is not disposed of but is instead fed into an established loop of reuse or recycling. Consequently, no disposal scenario has been declared.

2.15 Further information

Further information is available online at https://www.alukoenigstahl.com.

3 LCA: Calculation rules

3.1 Declared unit/ Functional unit

The declared unit is 1 kg of aluminium profile (unpackaged) from the stock mix of ALUKÖNIGSTAHL GmbH. The density provided in Table 4 refers to pure aluminium.

Table 4: Declared unit

Characterization	value	unit
Declared unit	1	kg
Density	2700	kg/m³

3.2 System boundary

This is a Type III EPD covering a cradle-to-gate system boundary, including Modules C1-C4 and Module D.

Table 5: Declared life cycle stages

PRODUCT STAGE			CON-STRUCTION PROCESS STAGE		USE STAGE							END-OF-LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Construction, installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction, demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
x	x	x	ND	ND	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x

X = included in LCA; ND = Not declared

A1–A3:
The production phase encompasses the manufacturing of aluminium profiles, including all upstream processes and delivery to the central warehouse location.

C1–C4:
For Module C, a recycling scenario is considered. The efforts for deconstruction (C1) are deemed negligible based on the assumption of a primarily manual process with low environmental impacts. This module includes transport to the recycling facility (C2), scrap processing (C3), and the landfilling of processing losses (C4). The end-of-waste stage is reached upon completion of scrap processing, prior to remelting. This also marks the transition between Modules C and D. Additional quantitative information for this module is provided in Section 4.4.

D:
Module D declares the burdens and benefits associated with the recycling scenario. This module includes the remelting of scrap to produce secondary aluminium and the corresponding substitution of primary aluminium. Quantitative details are available in Section 4.5.

3.3 Flow chart of processes/stages in the life cycle

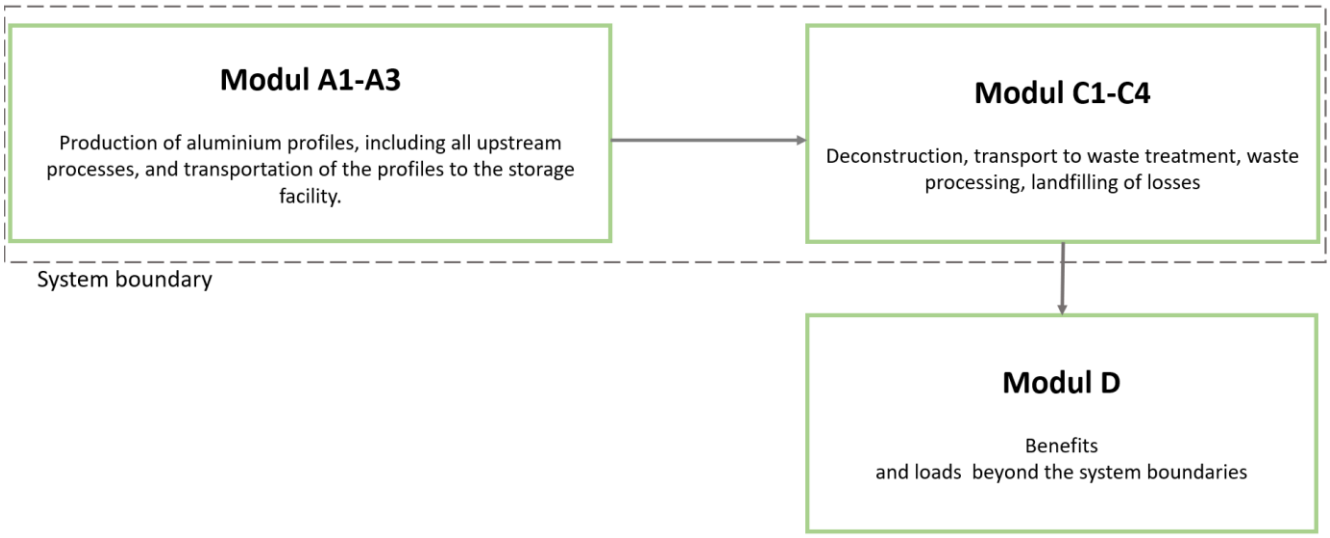

Figure 1:Flow diagram of processes in the life cycle

3.4 Estimations and assumptions

For the proportion of profiles without a specific Environmental Product Declaration, a default profile with 40% recycled content was used, based on generic ecoinvent data.
For end-of-life waste treatment (Module C), a material loss of 5% was assumed.

3.5 Cut-off criteria

In principle, all input and output flows in the production phase of the aluminium profiles were considered. The packaging of delivered profiles was also considered where details were available, although its disposal at the warehous location was neglected due to lack of information on quantities and fate, and the expected low relevance.

3.6 Data sources

The ecoinvent database version 3.9.1 was generally used for background data. Some specific datasets are based on ecoinvent v3.8.

3.7 Data quality

Foreground data collection was carried out using a data collection form adapted to ALUKÖNIGSTAHL GmbH and the declared products. Queries were clarified in an iterative process in writing via e-mail, by telephone or in person/in web meetings. Due to the intensive discussion on the most realistic representation of material and energy flows, a high quality of the collected foreground data can be assumed. When selecting background data, attention was paid to the technological, geographical and temporal representativeness of the data basis. In the absence of specific data, generic datasets or a representative average were used. The majority of the ecoinvent background datasets used are not older than ten years. According to the database documentation, these are usually either updated accordingly or extrapolated to current conditions. Older datasets are used as estimates for components with a low influence on the overall result. Estimates based on literature sources are oriented towards the most up-to-date data basis available and the technology-related state of the art.

3.8 Reporting period

The data refer to the year 2023.

3.9 Allocation

In the supply chain: The representation of upstream processes in the supply chain (A1-A3) is done by using ecoinvent background datasets as well as information from Environmental Product Declarations. The allocation rules applied here can generally be found in the respective dataset documentation or the corresponding declarations including project reports.

In the primary data regarding different products: Not relevant, as all profiles in stock are considered.
In the primary data regarding by-products: Not relevant, as no by-products are produced in the warehouse for the aluminium profiles.
Regarding recycling or thermal recovery: All benefits and burdens associated with the actual recovery process (remelting) of the profiles at the end of life were allocated to Module D.

3.10 Comparability

Basically, a comparison or evaluation of EPD data is only possible if all datasets to be compared were created according to EN 15804 in the same version, the same programme-specific PCR or any additional rules as well as the same background database were used, and furthermore the building context or product-specific performance characteristics are taken into account.

4 LCA: Scenarios and additional technical information

4.1 A1-A3 Product stage

According to ÖNORM EN 15804, no technical scenario information is required for modules A1-A3, as the assessment of these modules is the responsibility of the manufacturer and may not be altered by the user of the life cycle assessment.

4.2 A4-A5 Construction process stage

Modules A4 and A5 are not declared in this EPD.

4.3 B1-B7 Use stage

Modules B1 to B7 are not declared in this EPD.

4.4 C1-C4 End-of-Life stage

A recycling scenario is considered, in which after mechanical scrap processing (in C3) 95% of the material is actually fed into a recycling process (production of secondary aluminium by remelting scrap). The remaining 5% (losses during collection and processing before remelting) are landfilled in the assessment. A total of 100 km was assumed for the entire transport within the disposal phase.

Table 6: Description of the scenario „Disposal of the product (C1 to C4)“

Parameters for End-of-Life stage (C1-C4)	value	Quantity per m³ insulation material
Collection process specified by type	1,00	kg collected separately
		kg collected with mixed construction waste
Recovery system specified by type		kg for re-use
	0,95	kg for recycling
		kg for energy recovery
Disposal specified by type	0,05	kg product or material for final deposition

4.5 D Potential of reuse and recycling

Based on the assumptions in Module C, 0.95 kg of aluminium per kg of profile is recycled. As the input-side secondary content is 0.77 kg/kg, this results in a net flow of 0.18 kg/kg. For this proportion, Module D takes into account both the further burdens from the processing of the scrap (remelting) and the benefits from the substitution of primary aluminium.

Table 7: Description of the scenario „re-use, recovery and recycling potential (module D)“

Parameters for module D	value	unit
Materials for reuse, recovery or recycling from C1-C4	0,18	kg/kg
Energy recovery or secondary fuels from C1-C4	J0	MJ/t resp. kg/t

5 LCA: results

The following tables contain the life cycle assessment results for 1 kg of aluminium profile from the warehouse of ALUKÖNIGSTAHL GmbH. The indicator FW is not declared (ND) due to known problems in the calculation within the LCA software.

Table 8: Results of the LCA Environmental impacts: 1kg aluminium profile

Para-meter	unit	A1-A3	C1	C2	C3	C4	D from C3
GWP total	kg CO_2 eq.	2,70E+00	0,00E+00	2,33E-02	2,63E-02	7,56E-04	-1,15E+00
GWP fossil fuels	kg CO_2 eq.	2,65E+00	0,00E+00	2,33E-02	2,63E-02	7,56E-04	-1,12E+00
GWP biogenic[1]	kg CO_2 eq.	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP luluc	kg CO_2 eq.	4,15E-02	0,00E+00	1,07E-05	2,30E-05	2,20E-07	-3,02E-02
ODP	kg CFC-11 eq.	1,50E-07	0,00E+00	5,11E-10	4,04E-10	2,00E-11	-3,54E-08
AP	mol H^+ eq.	2,74E-02	0,00E+00	9,14E-05	1,43E-04	4,92E-06	-7,45E-03
EP freshwater	kg P eq.	7,72E-04	0,00E+00	1,62E-06	8,36E-06	9,23E-08	-6,79E-04
EP marine	kg N eq.	3,05E-03	0,00E+00	3,47E-05	5,40E-05	2,02E-06	-1,00E-03
EP terrestrial	mol N eq.	2,24E-02	0,00E+00	3,70E-04	4,47E-04	2,21E-05	-8,82E-03
POCP	kg NMVOC eq.	9,06E-03	0,00E+00	1,34E-04	1,41E-04	7,81E-06	-4,02E-03
ADPE	kg Sb eq.	1,65E-05	0,00E+00	7,48E-08	4,26E-07	3,35E-09	1,43E-05
ADPF	MJ H_u	3,63E+01	0,00E+00	3,30E-01	3,07E-01	1,58E-02	-1,79E+01
WDP	m3 Welt eq. entz.	1,19E+00	0,00E+00	1,25E-03	3,21E-03	8,04E-05	7,98E-02
Legend		GWP = Global warming potential; luluc = land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP = Eutrophierungspotenzial; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources WDP = Water (user) deprivation potential, deprivation-weighted water consumption					

Table 9: Additional environmental impact indicators: 1 kg aluminium profile

Parameter	Unit	A1-A3	C1	C2	C3	C4	D from C3
PM	disease incidence	2,47E-07	0,00E+00	1,64E-09	2,41E-09	1,09E-10	-8,96E-08
IRP	kBq U235 eq.	4,28E-01	0,00E+00	5,33E-04	2,78E-03	1,37E-04	-3,33E-01
ETP-fw	CTUe	3,65E+01	0,00E+00	1,67E-01	2,17E-01	4,11E-01	-5,82E-01
HTP-c	CTUh	7,31E-09	0,00E+00	9,82E-12	3,41E-11	1,38E-12	-3,86E-09
HTP-nc	CTUh	7,35E-08	0,00E+00	2,19E-10	6,74E-10	1,28E-11	-3,07E-08
SQP	dimension-less	1,44E+01	0,00E+00	1,69E-01	9,65E-01	3,14E-02	-3,10E-01
Legend		PM = Potential incidence of disease due to Partuculate Matter emissions; IRP = Potential Human exposure efficiency relative to U235; ETP-fw = Potential Comparative Toxic Unit for ecosystems; HTP-c = Potential Comparative Toxic Unit for humans – cancer effect; HTP-nc = Potential Comparative Toxic Unit for humans – non-cancer effect; SQP = Potential soil quality index					

[1] The biogenic greenhouse gas emissions identified as very low in the upstream chains were disregarded. The indicator is therefore declared with a value of 0 across all life cycle phases.

Table 10: Parameters to describe the use of resources: 1kg aluminium profile

Parameter	Unit	A1-A3	C1	C2	C3	C4	D from C3
PERE	MJ H_u	1,59E+01	0,00E+00	5,54E-03	2,90E-02	2,77E-03	-7,79E+00
PERM	MJ H_u	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ H_u	1,59E+01	0,00E+00	5,54E-03	2,90E-02	2,77E-03	-7,79E+00
PENRE	MJ H_u	3,64E+01	0,00E+00	3,30E-01	3,07E-01	1,58E-02	-1,79E+01
PENRM	MJ H_u	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ H_u	3,64E+01	0,00E+00	3,30E-01	3,07E-01	1,58E-02	-1,79E+01
SM	kg	7,70E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,80E-01
RSF	MJ H_u	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ H_u	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	ND	ND	ND	ND	ND	ND
Legend		PERE = Renewable primary energy as energy carrier; PERM = Renewable primary energy resources as material utilization; PERT = Total use of renewable primary energy resources; PENRE = Non-renewable primary energy as energy carrier; PENRM = Non-renewable primary energy as material utilization; PENRT = Total 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 fresh water					

Table 11: Parameters describing LCA-output flows and waste categories: 1kg aluminium profile

Parameter	Unit	A1-A3	C1	C2	C3	C4	D from C3
HWD	kg	5,86E-03	0,00E+00	2,10E-06	1,63E-06	6,79E-08	1,33E-03
NHWD	kg	8,68E-01	0,00E+00	1,36E-02	2,20E-02	5,26E-02	-3,37E-01
RWD	kg	1,94E-04	0,00E+00	2,39E-07	1,30E-06	5,69E-08	-1,59E-04
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	kg	1,42E-02	0,00E+00	0,00E+00	0,00E+00	9,50E-01	0,00E+00
MER	kg	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Legend		HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electric energy; EET = Exported thermal energy					

Table 12: Classification of disclaimers to the declaration of core and additional environmental impact indicators

ILCD-classification	Indicator	disclaimer
ILCD-Type 1	Global warming potential (GWP)	none
	Depletion potential of the stratospheric ozone layer (ODP)	none
	Potential incidence of disease due to PM emissions (PM)	none
ILCD-Type 2	Acidification potential, Accumulated Exceedance (AP)	none
	Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)	none
	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
ILCD-Type 3	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 water consumption (WDP)	2
	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 experienced with the indicator.		

6 LCA: Interpretation

It can be seen that Module A1-A3 has by far the highest relevance for all indicators considered (> 96%). A more detailed analysis of this module shows that the production of the profiles including the upstream chains is responsible for more than 95% of the impacts across all core indicators and PERT/PENRT. The rest is caused by the transport of the profiles to the warehouse.

7 Literature

ISO 14025
ÖNORM EN ISO 14025:2010-07-01: Environmental labels and declarations -Type III environmental declarations -- Principles and procedures

ISO 14040
ÖNORM EN ISO 14040:2021-03-01 Environmental management - Life cycle assessment -- Principles and framework (ISO 14040:2006 + Amd 1:2020)

ISO 14044
ÖENORM EN ISO 14044:2021-03-01 Environmental management - Life cycle assessment -- Requirements and guidelines (ISO 14044:2006 + Amd 1:2017 + Amd 2:2020)

EN 15804
ÖNORM EN 15804:2022-02-15: Sustainability of construction works - environmental product declarations. Core rules for the product category of construction products

MS-HB Kerndokument
Management-System Handbook: Quality Management and Verification. General Product Category Rules for EPDs. General LCA Calculation Rules for EPDs. for creation of Type III EPD (Environmental Product Declarations). Version 5.0, 20.09.2023

PKR-B
Product category rules for building related products and services as per ISO 14025 and EN 15804+A2: Part B: Requirements on the EPD for Windows, Doors and Façade Systems, PKR-Code: 2.21.1, Version 15.0, 20.09.2023

ecoinvent
ecoinvent Version 3.9.1 (2022) Database, ecoinvent Association, Zürich

8 Directory and Glossary

8.1 List of figures

8.2 List of tables

8.3 Abbreviations

8.3.1 Abbreviations as per EN 15804

EPD	environmental product declaration
PCR	product category rules
LCA	life cycle assessment
LCI	life cycle inventory analysis

LCIA	life cycle impact assessment
RSL	reference service life
ESL	estimated service life
EPBD	Energy Performance of Buildings Directive
GWP	global warming potential
ODP	depletion potential of the stratospheric ozone layer
AP	acidification potential of soil and water
EP	eutrophication potential
POCP	formation potential of tropospheric ozone
ADP	abiotic depletion potential

8.3.2 Abbreviations as per corresponding PCR

CE-mark	french: Communauté Européenne or Conformité Européenne = EC certificate of conformity
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals

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