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Global GreenTag
International EPD Program

EPD™
Environmental Product Declaration
In accordance with ISO 14025 and EN 158042

HVG FACADES PTY LTD
MondoClad®

Company Address: 29 Henderson St, Turrella, NSW 2205

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1. Contents

1 General Information

Product Category Rules (PCR)	CEN standard EN 15804+A2 2019 serves as core Product Category Rules (PCR) Product Category Wall and Ceiling Linings Sub-PCR WCL:2023
Verification Statement	Independent verification of the declaration and data, according to ISO 14025:2010 ☐Internal ☒ External Independent external verification of the declaration and data, mandatory for business-to-consumer communication according to ISO 14025:2010

	Signature	Name	Details	Logo
Third Party Verifier		Lucas Pedro Berman	Senda – Consultoria Ambiental & Energetica Rauric 2, Barcelona, Spain info@sendaconsultorias.com www.sendaconsultorias.com	SENDA
LCA and EPD Producer		**ERKE Sürdürülebilir Bina Tasarım Dan. Ltd. Şti.**	Kısıklı Mah. Hanımseti Sok. No:5 Üsküdar/İstanbul/Türkiye info@erketasarim.com www.erketasarim.com	ERKE 'Delivering Sustainable Buildings'
Program Operator		Nana Bortsie-Aryee	Global GreenTag International Pty Ltd Level 38, 71 Eagle Street, Brisbane 4000 Australia epd@globalgreentag.com www.globalgreentag.com	Global GreenTag International green product certification trust brands
EPD Owner		Roger Brooks	HVG Facades 29 Henderson Street, Turrella, NSW, 2205 info@hvgfacades.com.au hvgfacades.com.au/	HVG façades

Communication	This EPD can be used for business-to-consumer (B2C) communication.
Comparability	EPD of construction products may not be comparable if they do not comply with EN 15804
Geographical Area	The product is produced in Changzhou, China. It is sold to different marketplace in the world.
Life Cycle Assessment (LCA)-method Cut-off Classification	Complies with EN 15804+A2:2019
Characterisation Factors Version	EF Reference Package 3.1
Electricity mix	Consumption mix

1 Product Information – Product Specific EPD

Figure 1 Product Image

EPD Data Type	This EPD is based on product specific information.	
Product Name	MondoClad	
Product Description	Non-combustible pre-finished aluminium panels, which has 3 benefits: non-combustible aluminium panels, recyclable material, low maintenance.	
Production Site	Changzhou, China	
Description of Manufacturing Processes	It mainly includes nine steps, starting with unwinding the aluminium coil, followed by surface preparation through pre-treatment. It continues with the application of a primer for adhesion, topped with a top coat for durability and appearance. After a quality inspection, a protective film may be added, and the coil is rolled up. It's then cut to specified lengths and packaged for distribution, ensuring a product ready for a variety of applications.	
Product Performance and Standard Compliance	**Standard**	**Result**
	AS 1530.1:1994 Fire testing (R2016)	Pass
	The CodeMark Scheme	Pass
	AWTA product testing	Pass
	Updated technical information can be found on the hvgfacades.com.au	
Candidate List of Substances of Very High Concern for Authorisation	Product does not contain substances on the “Candidate List of Substances of Very High Concern for authorisation” (2).	
Materials	**Material**	**Function**
	Aluminium sheet	Structure
	PVDF coating	Coating
	Wooden frame	Packaging
	Sulfate wrapper	Packaging
	Pallet	Packaging
	Plastic	Packaging

2 LCA Description and Rules

EPD Type	Cradle-to-gate with modules C1-C4 and module D
System Boundary	See Figure 2: Modules Included
Functional/Declared Unit	The declared unit is production of 1m^2 MondoClad solid aluminium cladding panel (mass excluding packaging). The painted weight of the product is 8.31 kg/m^2, the thickness is 3 mm.
Reference Service Life (RSL)	According to the producer, reference service life is not available.
Application of Cut-Off Criteria	According to PCR, the definition of cut-off criteria allows some data from the inventory to be disregarded when such data is considered irrelevant for the purposes of the study and would only represent an unnecessary burden in collecting data, without significantly altering the end result. Except for the exclusions listed in the PCR, no other specific cut-off criteria is applied. In this study, all inputs and outputs were included.
Excluded processes	•Production and disposal of the infrastructure and capital equipment (buildings, machines, transport media, roads, etc.) during MondoClad manufacturing, installation, and maintenance; •All phases of the use stage are excluded since there are no emissions during the use of the product; •Product losses due to abnormal damage such as natural disasters or fire accidents. These losses would mostly be accidental; • Handling operations at the distribution center and retail outlet are excluded due to small contribution and negligible impact. •Research and development activities; •Long-term emissions.
Allocations	Allocation of input is based on physical properties and is based on weight. Allocation of co-products: according to PCR, the aluminium scrap and steel scrap originating from Module A1-A3 is considered as co-product to be removed from the product system through co-product allocation. Allocation of waste: the allocation strategy for the waste per PCR follows the same strategy listed in the EN15804+A2. Thus, the “cut-off” strategy is applied. This scenario allocates the entire environmental impacts of waste treatment procedures (from deconstruction to the waste processing) to the producer. The recycled materials, on the other hand, are burden-free. An important note is that when materials have reached a so-called “end-of-waste” state, the coverage of the waste processing is thus terminated. Any inputs/flows related to refine gross recycled materials for actual applications are beyond the product system boundary.
Data Collection Period	Year 2023
Applied Software	SimaPro 9.5.0.0
Applied Background Database	Ecoinvent 3.9.1
Data Quality Assessment	See Figure 4 Data quality requirement and assessment

Applied Energy Datasets	Electricity, medium voltage {CN-ECGC}| market for electricity, medium voltage | Cut-off, U from Ecoinvent 3.9.1
Applied Electricity Mix Carbon Footprint	[0.852 kg CO2e/kWh.]

Figure 2: Modules Included

Information	**Construction Works Life Cycle Information**																**Supplementary Information**
Stages	Product			Construction Process		Use							End-of-Life				**Benefits & Loads Beyond the System Boundary**
Module Codes	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	**D**
Module Names	Raw Material Supply	Transport	Manufacturing	Transport	Construction Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water use	Deconstruction and Demolition	Transport	Waste Processing	Disposal	**Reuse Recovery and Potential**
Modules Declared	✓	✓	✓	ND	ND	ND	ND	ND	ND	ND	ND	ND	✓	✓	✓	✓	✓
Data	Based on Primary Information			Scenario													**Scenario**

✓ = Module Included , ND = Module Not declared

Figure 3: System Process Flow Chart

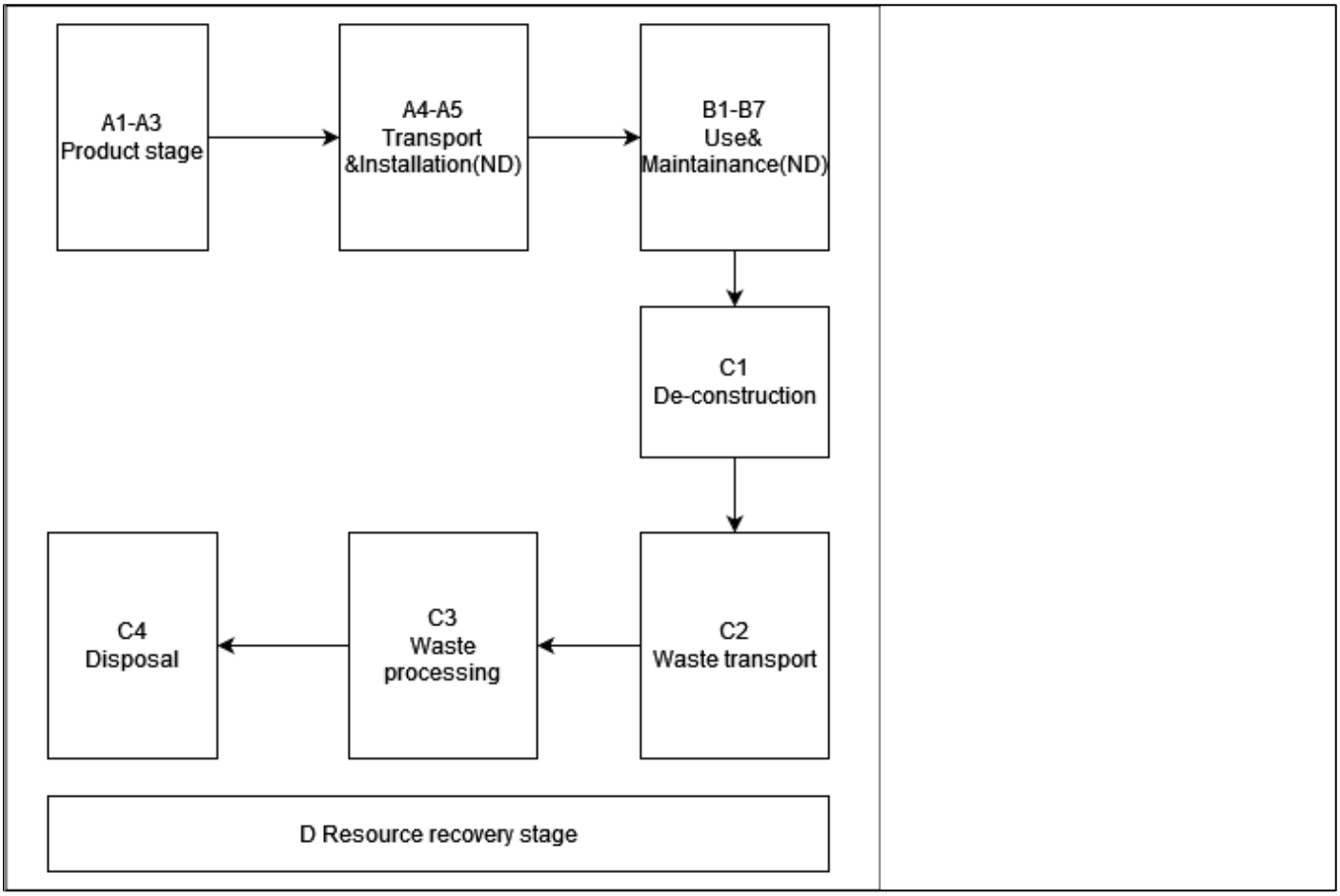


Figure 4 Data quality requirement and assessment

Quality requirement	Specific requirement	Data quality applied in this LCA	Result Met/not met
Time-related coverage (age of data and the minimum length of time over which data should be collected)	Generic datasets should be within ten years	Ecoinvent 3.9.1, <10 years	Met
	Newly collected LCI data were current or up to 5 years old and based on a 1-year average	2023.1-2023.12 production inventory	Met
Geographical coverage (the geographical area from which data for unit processes should be collected to satisfy the goal of the study):	Geographic coverage shall reflect the operational reality of the different life cycle stages;	All raw material data was collected from the manufacturer in China; Production data was collected and provided by HVG Facades.	Met
		Distribution, Use, and EoL are based on their respective geographical regions. The specific applied scenarios are supplied by HVG Facades, which is deemed to be representative.	Met
		Transportation and energy use data referring to Ecoinvent data with geographical coverage corresponding to the location.	Met

Quality requirement	Specific requirement	Data quality applied in this LCA	Result Met/not met
Technology Coverage	Specific technology or technology mix	For the most part, data are representative of the actual technologies used for processing, transportation, and manufacturing operations. Representative fabrication datasets, specific to the type of material, are used to represent the actual processes, as appropriate.	Met
Precision	Measure of the variability of the data values for each data expressed	Data collected for operations were typically averaged for one or more years over multiple operations, which is expected to reduce the variability of results.	Met
Completeness	95% percentage of flow is measured or estimated	All of the unit processes within the scope of the life cycle were included, with less than a 1% cut-off	Met
Representativeness	Qualitative assessment of the degree to which the data set reflects the actual population of interest, i.e., geographical coverage, period, and technology coverage	See geographical coverage, period, and technology coverage requirement above. These requirements are met.	Met
Consistency	Qualitative assessment of Whether the study methodology is applied uniformly to the various components of the analysis	The study methodology is applied uniformly to the different parts of the analysis.	Met
Reproducibility	Qualitative assessment of the extent to which information about the methodology and data values would allow an independent practitioner to reproduce the results reported in the study	Based on the description of data and assumptions used, this assessment would be reproducible by other practitioners. All assumptions, models, and data sources are documents.	Met
Sources of the data	The foreground data should be from the primary producer	Data representing energy use at Chinese factories represent an annual average and are considered of high quality due to the length of time over which these data are collected. For secondary LCI datasets, Ecoinvent v3.9.1 are used.	Met
Uncertainty of the information	Data, models, and assumptions should be verified	All the primary data and assumptions were confirmed with HVG Facades, and models were built following ISO 14040/44 and PCR requirements.	Met

3 Scenarios and Additional Technical Information

The results have been calculated based on the below information.

Module	Scenario and Additional Technical Information
A1-A3	In A3, after manufacturing, the aluminum waste are sold to other venders for recycling.
C1	Diesel in construction machines with a value of 0.043 MJ/kg.
C2	A distance of 50 km is assumed to transport the construction waste to the disposal site. The type of transport is modelled by ecoinvent dataset “Transport, freight, lorry 7.5-16 metric ton, EURO5 {RoW}| market for transport, freight, lorry 7.5-16 metric ton, EURO5	Cut-off, U.”
C3	Waste processing of materials flows intended for reuse, recycling and energy recovery are included in C3, ecoinvent dataset “Aluminium scrap, post-consumer, prepared for melting {RoW}| treatment of aluminium scrap, post-consumer, by collecting, sorting, cleaning, pressing	Cut-off, U” is used for modelling.
C4	After waste processing, 95% of the waste aluminium sheet are sent to recycling centre, 5% of the aluminium waste are sent for landfill, the other waste such as coating are sent to landfill centre.
D	The benefit of aluminium recycling calculated according to CFF formula in PEFCR

4 LCA Results – Definitions and Disclaimers

All results have been calculated and displayed as per EN15804. Units Methods and Anonyms are defined below. Results are reported in scientific notation.

Figure 5: Core Indicators

Impact Category	Indicator	Acronym	Unit
Climate change – total	Global Warming Potential total	GWP-total	kg CO_2 eq.
Climate change - fossil	Global Warming Potential fossil fuels	GWP-fossil	kg CO_2 eq.
Climate change - biogenic	Global Warming Potential biogenic	GWP-biogenic	kg CO_2 eq.
Climate change - land use and land use change	Global Warming Potential land use and land use change	GWP-luluc	kg CO_2 eq.
Ozone Depletion	Depletion potential of the stratospheric ozone layer	ODP	kg CFC 11 eq.
Acidification	Acidification potential, Accumulated Exceedance	AP	mol H^+ eq.
Eutrophication aquatic freshwater	Eutrophication potential, fraction of nutrients reaching freshwater end compartment	EP-freshwater	kg P eq.
Eutrophication aquatic marine	Eutrophication potential, fraction of nutrients reaching freshwater end compartment	EP-marine	kg N eq.
Eutrophication terrestrial	Eutrophication potential, Accumulated Exceedance	EP-terrestrial	mol N eq.
Photochemical ozone formation	Formation potential of tropospheric ozone	POCP	kg NMVOC eq.
Depletion of abiotic resources – minerals and metals[2]	Abiotic depletion potential for non-fossil resources	ADP- minerals & metals	kg Sb eq.
Depletion of abiotic resources - fossil fuels[2]	Abiotic depletion potential for fossil resources	ADP-fossil	MJ, net calorific value
Water use[2]	Water (user) deprivation potential, deprivation- weighted water consumption	WDP	m^3 world eq. deprived
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.			

Figure 6: Additional Indicators

Impact category	Indicator	Acronym	Unit
Particulate matter emissions	Potential incidence of disease due to PM emissions	PM	Disease incidence
Ionising radiation, human health[1]	Potential Human exposure efficiency relative to U235	IRP	kBq U235 eq.
Ecotoxicity (freshwater)[2]	Potential Comparative Toxic Unit for ecosystems	ETP-fw	CTUe
Human toxicity, cancer effects[2]	Potential Comparative Toxic Unit for humans	HTP-c	CTUh
Human toxicity, non- cancer effects[2]	Potential Comparative Toxic Unit for humans	HTP-nc	CTUh
Land use related impacts / soil quality[2]	Potential Soil quality index	SQP	dimensionless

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.

Figure 7: Resource Use, Waste and Output Flow Parameters

Parameter	Acronym	Unit
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE	MJ, net calorific value
Use of renewable primary energy resources used as raw materials	PERM	MJ, net calorific value
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PERT	MJ, net calorific value
Use of non-renewable primary energy excluding non- renewable primary energy resources used as raw materials	PENRE	MJ, net calorific value
Use of non-renewable primary energy resources used as raw materials	PENRM	MJ, net calorific value
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PENRT	MJ, net calorific value
Use of secondary material	SM	kg
Use of renewable secondary fuels	RSF	MJ, net calorific value
Use of non-renewable secondary fuels	NRSF	MJ, net calorific value
Net use of fresh water	FW	m^3
Hazardous waste disposed	HWD	kg
Non-hazardous waste disposed	NHWD	kg
Radioactive waste disposed	RWD	kg
Components for re-use	CRU	kg
Materials for recycling	MFR	kg
Materials for energy recovery	MER	kg
Exported thermal energy (ETE)	ETE	MJ
Exported electricity energy (EEE)	EEE	MJ

5 LCA Results

For more information about indicators see Section 6: LCA Results – Definitions and Disclaimers

Statement 1: the estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

Statement 2: A1-A3 results includes the "balancing-out reporting" of the biogenic CO2 of packaging released in module A5.

Figure 8: Core Indicator Results for 1m² MondoClad solid aluminium cladding panel

		Raw Material Supply	Transport	Manufacturing	Deconstruction and Demolition	Transport	Waste Processing	Disposal	Reuse Recovery and Potential
Indicator Acronym	**Unit**	A1	A2	A3	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq.	1.61E+02	7.74E-01	2.06E+00	3.55E-02	1.01E-01	2.46E+00	1.72E-02	-1.15E+02
GWP-fossil	kg CO_2 eq.	1.60E+02	7.74E-01	2.53E+00	3.55E-02	1.01E-01	2.64E+00	1.72E-02	-1.14E+02
GWP-biogenic	kg CO_2 eq.	-1.78E-01	0.00E+00	-1.68E+00	0.00E+00	0.00E+00	1.85E+00	0.00E+00	-3.34E-02
GWP-luluc	kg CO_2 eq.	4.60E-01	3.81E-04	1.45E-03	3.99E-06	5.07E-05	2.66E-03	1.78E-05	-3.41E-01
ODP	kg CFC 11 eq.	1.63E-06	1.21E-08	2.54E-08	5.64E-10	1.47E-09	1.82E-08	2.21E-10	-1.14E-06
AP	mol H^+ eq.	1.07E+00	2.80E-03	9.59E-03	3.29E-04	3.48E-04	1.13E-02	1.11E-04	-7.74E-01
EP-freshwater	kg P eq.	5.08E-02	6.29E-05	3.34E-04	1.09E-06	8.13E-06	6.43E-04	4.79E-06	-3.59E-02
EP-marine	kg N eq.	1.74E-01	9.30E-04	2.27E-03	1.52E-04	1.12E-04	2.13E-03	3.00E-05	-1.25E-01
EP-terrestrial	mol N eq.	1.81E+00	9.86E-03	2.41E-02	1.66E-03	1.19E-03	2.33E-02	3.20E-04	-1.30E+00
POCP	kg NMVOC eq.	5.59E-01	3.97E-03	7.87E-03	4.90E-04	4.59E-04	7.40E-03	1.07E-04	-4.01E-01
ADP- minerals&metals[2]	kg Sb eq.	1.34E-04	2.09E-06	2.20E-06	1.24E-08	3.17E-07	5.55E-05	3.36E-08	4.77E-04
ADP-fossil[2]	MJ, net calorific value	1.52E+03	1.13E+01	3.18E+01	4.64E-01	1.40E+00	1.77E+01	2.58E-01	-1.08E+03
WDP	m^3 world eq. deprived	2.07E+01	5.73E-02	1.28E+00	1.00E-03	5.84E-03	2.65E-01	7.27E-03	-9.06E+00

Figure 2: Additional Indicator Results for 1m² MondoClad solid aluminium cladding panel

		Raw Material Supply	Transport	Manufacturing	Deconstruction and Demolition	Transport	Waste Processing	Disposal	Reuse Recovery and Potential
Indicator Acronym	**Unit**	**A1**	**A2**	**A3**	**C1**	**C2**	**C3**	**C4**	**D**
PM	Disease incidence	1.33E-05	7.77E-08	1.42E-07	9.16E-09	7.01E-09	1.93E-07	1.78E-09	-9.74E-06
IRP[1]	kBq U235 eq.	2.90E+00	1.03E-02	1.67E-01	2.20E-04	1.21E-03	6.67E-02	1.01E-03	-1.68E+00
ETP-fw[2]	CTUe	4.85E+02	6.07E+00	5.73E+00	2.22E-01	7.99E-01	1.31E+01	3.37E+00	-2.04E+02
HTP-c[2]	CTUh	2.08E-07	3.34E-10	1.00E-09	1.09E-11	4.19E-11	1.63E-09	1.48E-11	-1.49E-07
HTP-nc[2]	CTUh	2.95E-06	8.20E-09	1.78E-08	7.55E-11	9.56E-10	6.68E-08	1.89E-10	-1.98E-06
SQP[2]	dimensionless	2.58E+02	1.14E+01	1.20E+02	3.13E-02	7.19E-01	1.74E+01	3.44E-01	-1.53E+02

Figure 10:Biogenic Carbon Content of 1m² MondoClad solid aluminium cladding panel at Factory Gate

Biogenic carbon content	**Unit (kg C/kg)**
Biogenic carbon content in product	**0**
Biogenic carbon content in accompanying packaging	**0.4576**
NOTE 1 kg biogenic carbon is equivalent to 44/12 kg of CO2.	

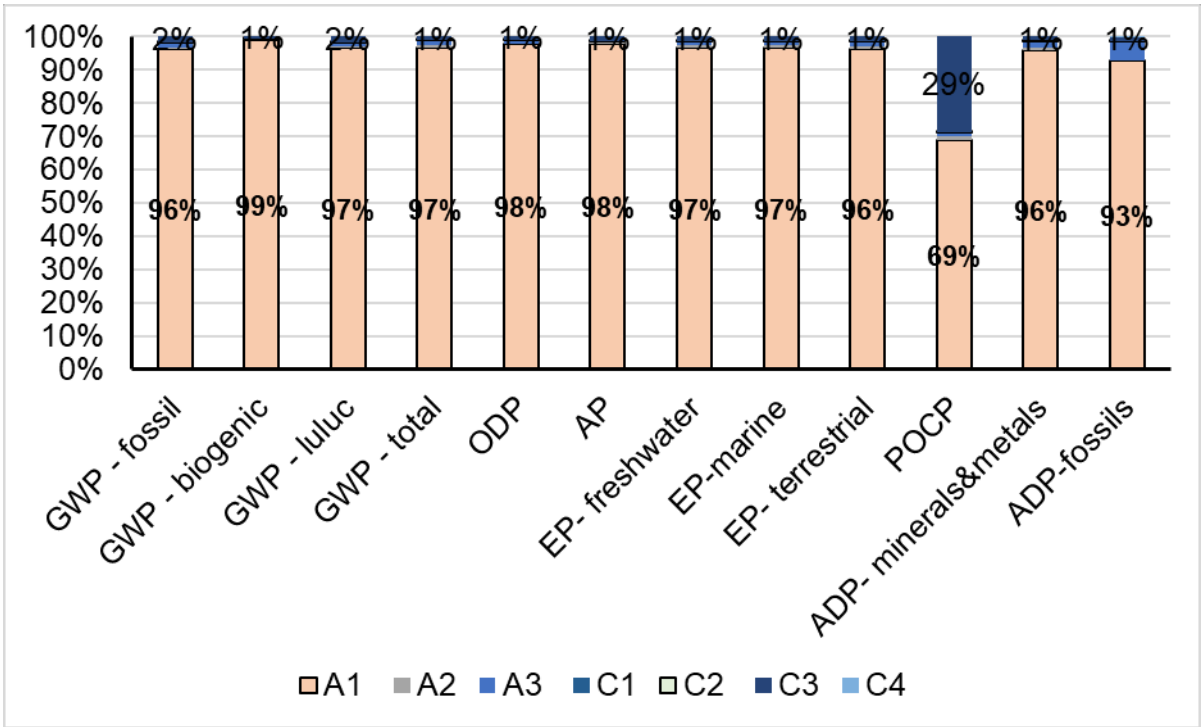
Figure 11: Resource Use, Waste and Output Flow for 1m² MondoClad solid aluminium cladding panel

		Raw Material Supply	Transport	Manufacturing	Deconstruction and Demolition	Transport	Waste Processing	Disposal	Reuse Recovery and Potential
Resource Acronym	**Unit**	**A1**	**A2**	**A3**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ, net calorific value	1.62E+02	1.43E-01	7.31E+00	2.65E-03	1.88E-02	1.91E+00	1.56E-02	-1.14E+02
PERM	MJ, net calorific value	0.00E+00	0.00E+00	3.96E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ, net calorific value	1.62E+02	1.43E-01	1.13E+01	2.65E-03	1.88E-02	1.91E+00	1.56E-02	-1.14E+02
PENRE	MJ, net calorific value	1.52E+03	1.13E+01	3.18E+01	4.64E-01	1.40E+00	1.77E+01	2.58E-01	-1.08E+03
PENRM	MJ, net calorific value	0.00E+00	0.00E+00	4.86E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ, net calorific value	1.52E+03	1.13E+01	3.18E+01	4.64E-01	1.40E+00	1.77E+01	2.58E-01	-1.08E+03
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, net calorific value	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, net calorific value	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	9.02E-01	1.76E-03	4.59E-02	0.00E+00	1.86E-04	0.00E+00	1.64E-04	-1.46E-01
HWD	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
NHWD	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.16E-01	0.00E+00
RWD	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
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	4.76E-01	0.00E+00	0.00E+00	7.89E+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
ETE	MJ per energy carrier	6.50E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EEE	MJ per energy carrier	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

6 Interpretation

For the MondoClad product, it can be concluded that, the production stage is the dominant source of the environmental impacts among various life cycle stages. The production stage A1 accounts for 97% of the total life cycle GWP impacts as well as 96% of the total fossil resource use. The high impact intensity of the production stage indicates that the use of materials for the MondoClad product is relatively significant.

Figure 12: Life cycle impact contribution analysis



7 Bibliography

1. EN 15804:2012+A2:2019 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.

2. ECHA. Inclusion of substances of very high concern in the Candidate List. *ECHA.* [Online] 07 02 2024b. https://echa.europa.eu/documents/10162/653a0781-6b4b-d085-5393-edc530459a4f.

3. Global GreenTag International Pty Ltd. General Program Instructions. Brisbane : s.n., 2023. Version 2.2.

4. ISO 14040 (2006): Environmental Management - Life Cycle Assessment - Principles and Framework

5. ISO 14044 (2006): Environmental Management - Life Cycle Assessment - Requirements and Guidelines

6. ISO 14025:2006, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

7. Product Environmental Footprint Category Rules (PEFCRs) Annex II Part C

8. The Department of Climate Change, Energy, the Environment and Water (2022) : National Waste report 2022, online at https://www.dcceew.gov.au/sites/default/files/documents/national-waste-report-2022.pdf

9. Ecoinvent, 2023. Swiss Centre for Life Cycle Assessment, version 3.9.1 (www.ecoinvent.ch).

10. PRé Consultants, 2021. Software SimaPro version 9.5.0.0 (www.pre.nl).

11. Wang T, Li K, Liu D, Yang Y, Wu D. Estimating the Carbon Emission of Construction Waste Recycling Using Grey Model and Life Cycle Assessment: A Case Study of Shanghai. Int J Environ Res Public Health. 2022 Jul 12;19(14):8507. Online at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9323168/

12. Product Category Wall and Ceiling Linings Sub-PCR WCL:2023