
One Click LCA May 2021 release notes

Software update 26 May 2021



May 2021 compliance and tool updates



Compliance updates for building LCA:

- ✓ **GLA Whole Life-Cycle Carbon & Circularity** – all requirements are fulfilled, incl. Future discounting and easy import.
- ✓ **NMD 3.0 (Netherlands) ready to use** – compliance approved and data update processes are now in place
- ✓ **RE2020 methode dynamique BETA** – numerous method updates, incl. methode dynamique
- ✓ **Klimatdeklaration** – New tool meeting legal requirements is available and will be added to Swedish customer licenses
- ✓ **NEW Interior Design Carbon Tool, Net Zero Carbon Tool and new European infra carbon tool**
- ✓ **LEED ID+C** – Service life is now editable in all LEED tools, enabling so their use also for LEED ID+C credits
- ✓ **DGNB International 2020, Verde Edificios 2020 & Life Cycle Carbon - North America (Metric units)** – released previously

Compliance updates for EPD Generator:

- ✓ **One Click LCA EPD Generator** is now pre-verified for The International EPD System for all Construction Products and can be used for publish EPDs under the International EPD System as of now
- ✓ **New EPD tool categories** for Plastic-based & Ceramic, Clay, Gypsum, Limestone and Porcelain-based products
- ✓ **Compliance with ISO TS/14067** for Taxonomy and other associated regulatory needs supported

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May 2021 release functionality highlights



New features:

- ✓ **Quick Start Templates & updated project creation process** allow starting projects faster with standardized settings (Expert)
- ✓ **Import Quantity Updates Only** to support easy update of material quantities from same BIM model (Business)

Integration updates:

- ✓ **Autodesk Revit 2021 compatible plugin** – [New plugin](#) was released in March. New version upcoming for Revit 2022.
- ✓ **[Rhino](#) and [Grasshopper](#) plugins** – New plugins were released in March. Refresher update is upcoming.

Major database updates:

- ✓ **New databases** Boverket (SE), SYKE (FI), INSIDE/INSIDE (NL), Ecoleaf (JP), Plastics Europe (EU)
- ✓ **New datasets** 3200+ material datasets

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New tools for Interior design, Net Zero projects and Infrastructure carbon



Interior Design and Tenant Improvement Carbon Tool:

- ✓ Carbon reduction tool, customized for interior designers and architects
- ✓ 20k+ data of interior-relevant materials, including newly integrated database INSIDE/INSIDE

Net Zero Carbon tool:

- ✓ Accounting for biogenic carbon storage, carbon offsets, material recycling benefits & exported energy

Infrastructure Carbon tool (based on draft of new European infrastructure standard):

- ✓ According to n FprEN 15643 (based on EN 15804+A2 standard) and EN 17472 (not final version)
- ✓ Includes both EN 15804+A2 & EN 15804+A1 data

Overall user experience enhancements



- ✓ Main result tables can be downloaded in Excel as is
- ✓ Comment field is now expandable
- ✓ Improvements in loading time of design queries

- ✓ Additional functional units are enabled for private constructions: Unit, litre, kwh, kBtu (and Imperial equivalents)
- ✓ Site wastage percentage can be pre-defined for private constructions
- ✓ Private energy data creation is now enabled & same will be soon enabled also for A4 transportation profiles
- ✓ Fixed scientific formatting export in Detailed report

- ✓ Query name in tabs concatenate instead of showing the tabs in multiple rows
- ✓ Rounding of impacts in project level carbon cloud is improved for small results (beginning of Results page)
- ✓ Sorting materials in materials query based on impacts works also with mixed units (tnCO2 & kgCO2)

- ✓ Numerous API and import related fixes

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Quick Start Templates for faster project start with standard settings



Updated project creation process aims to offer clear steps & to enable users to use Quick start templates

Template settings can be mandatory or just editable default settings for the new projects that use them

A screenshot of the 'New project' form in the One Click LCA software. The form is divided into three steps: 1. Basic information, 2. Optional information, and 3. First design. The 'First design' step is currently active. The form includes fields for 'Link project to the following license', 'Name (mandatory)', 'Type (mandatory)', 'Country (mandatory)', and 'Address'. A red box highlights the 'Name (mandatory)' field, which contains the text 'Kostas (One Click LCA) Bionova Ltd 20/05/2021'. Another red box highlights the 'Type (mandatory)' dropdown menu, which is set to 'Office buildings'. A third red box highlights the 'Country (mandatory)' dropdown menu, which is set to 'Spain'. A fourth red box highlights the 'Template' dropdown menu, which is set to 'Standard LEED project set up'. A tooltip is visible on the right side of the form, showing the following information: Project name: Kostas (One Click LCA) Bionova Ltd 20/05/2021; Design name: Baseline; Tools: Carbon Heroes Benchmark (A1-A4, B4-B5, C1-C4) and LCA for LEED, Int'l (CML); Default building type: Office buildings; Apply default LCA parameters: checked.

Plan Availability

STARTER

BUSINESS

✓ EXPERT

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Custom Quick Start Templates creation



Users can now create quick start templates with custom settings in their company account, and link them to any of their licenses.

Linked templates are enabled for all the users of a license & appear as an option when a new project is created

Main > **Company account**

Bionova Ltd company account

Get more tools Save Cancel

General information Licenses and users Data management Brand and EPD visuals **Quick start templates** Sales and Administration

▼ Templates **Add**

Template name	Default names	Tools	Defaults	
Standard LEED project set up	Project name *USER* *ORG* *DATE* Design name Baseline	✓ Carbon Heroes Benchmark (A1-A4, B4-B5, C1-C4)	Default building type Office buildings Default country Spain Apply default LCA parameters ✓	Edit Delete

▼ Link templates to licenses

License	Apply templates	Default template	
Demo license (FI)	<input type="checkbox"/> Standard LEED project set up	Select	Save
Demo license (US)	<input type="checkbox"/> Standard LEED project set up	Select	Edit

New template

Template name: Standard LEED project set up

Project name: *USER* *ORG* *DATE*

Design name: Baseline

Default building type: Office buildings

Default country: Spain

Apply default LCA parameters:

Allow users to adjust settings:

Tools:

- BREEAM Mat 03 sourcing BREEAM Mat 03 Responsible Sourcing for BREEAM International RFO 2015 and NC 2016 as well as BREEAM U [See all](#)
- BREEAM Mat 05 Durability BREEAM Mat 05 Designing for durability and resilience
- BREEAM Wst 05 Adaptation to climate change Tool for BREEAM Wst 05 Adaptation to Climate Change.
- Bill of materials and data quality Bill of materials and data quality for Level(s) - macro-objective 2: Resource efficient and circular [See all](#)

Cancel Create

CUSTOMER REQUEST!

Import quantity updates only



The feature enables users to reupload an updated BIM model or Excel file, and the software will help them to simply update the quantities of the previous inputs.

To use the feature, select relevant option under Existing data preservation field in Settings tab.

Main > My project demo > 2 - Design 1 > Import data



i You are importing 17 rows

Settings

Cancel Download Excel Send data to another user Continue

Choose the project, design and calculation tool that you want to use for import. If you are unsure on what to do next, please visit our [Customer Support Center](#).

Choose the project or entity

My project demo

Choose or create a design

Design 1

Choose the tool

Level(s) life-cycle carbon

Filtering settings

Building without building techno

Existing data preservation ?

Replace existing data with impo

Replace existing data with imported data
Add import to the existing data

Only update the quantities from the import

Remove empty data ?

Convert all to metric unit system ?



Plan Availability

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Import quantity updates only

Updating step is breaking last imported data in 4 groups:

- ✓ **New data**
- ✓ **Unchanged data**
- ✓ **Updated data:** Datapoints that were identified to be re-imported and which have updated quantities
- ✓ **Updated data with ambiguities:** Includes cases where last imported data might match multiple existing datapoints in a design. In such cases, users needs to select which existing datapoints should be updated



Import updated quantities for existing materials

Cancel Download Excel Continue

Updated data with ambiguities (Please resolve update ambiguities to proceed)

Material	New quantity	CLASS	Comment	Change		
Insulation, EPS 100, 0.035 W/mK, 18-22 kg/m3 (100 kPa), without flame retardant (EUMEPS)	<input type="text" value="36.0"/> m3	SLAB	ERISTE		Show / Hide matches (2) ⚠	Delete
Insulation, EPS 100, 0.035 W/mK, 18-22 kg/m3 (100 kPa), without flame retardant (EUMEPS)	<input type="text" value="2.0"/> m3	SLAB	ERISTE		Show / Hide matches (2) ⚠	Delete
Material	Quantity	CLASS	Comment	Change	Select datapoint to update ?	
Insulation, EPS 100, 0.035 W/mK, 18-22 kg/m3 (100 kPa), without flame retardant (EUMEPS)	34.5 m3	PLATE	ERISTE	-94.2 %	<input type="radio"/>	
Insulation, EPS 100, 0.035 W/mK, 18-22 kg/m3 (100 kPa), without flame retardant (EUMEPS)	8.63 m3	PLATE	ERISTE	-76.8 %	<input type="radio"/>	

Updated data (Datapoints with a single direct match)

Material	Old quantity	New quantity	CLASS	Comment	Change	
Concrete beam, precast, reinforced, C32/40 (Skonto Prefab)	629.64 m3	<input type="text" value="700.0"/> m3	BEAM		+11.2 %	Show / Hide matches (1) ⚠ Delete
Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders	2.81 m3	<input type="text" value="3.0"/> m3	EXTERNAL WALL	KR	+6.8 %	Show / Hide matches (1) ⚠ Delete

New data

Material	Old quantity	New quantity	CLASS	Comment	Change
Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders	-	<input type="text" value="200.0"/> m3	FOUNDATION		

Unchanged data

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Other software user experience updates



- ✓ “Compare answers” feature improvements for sections other than the material query
- ✓ Data card does not open outside of screen in case of smaller screens
- ✓ LCA Checker gets correct unit for imperial area
- ✓ More material types get now default BREEAM Int’l and RICS classifications

Carbon Designer:

- ✓ Assumptions in the 2nd page, show now the selected Building type & any pre-applied scenarios
- ✓ Scenarios are available for the French Carbon Designer
- ✓ Multiple Carbon Designer regions got [up to 35 additional constructions](#) (April 2021)

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Standardizing import dictionary mappings for large organisations



One Click LCA can enable a list of predefined import mapping rules for the data import process on behalf of an organization.

Specifically, users can map in advance a range of predefined environmental profiles against standard organizational material naming conventions so that imported data with standard naming are always automatically mapped.

These mappings will be suggested to all the users of the relevant organization as alternatives or even be the default options as a last resort, without affecting the existing hierarchy on mapping suggestions (eg user's own choices).

Service charges apply for setup work.

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GLA tool updates: whole life carbon & circularity statement



GLA compliance requirements are completed:

- ✓ Discounted impact calculation is enabled through relevant new query in the GLA tool
- ✓ Average 2022-2082 electricity profile became available. Based on FES 2020 SP scenario & RICS requirements
- ✓ Building Circularity tool returns results according to GLA circularity requirements
- ✓ Result table now includes biogenic carbon per class & enables direct export for easier reporting.

▼ Results

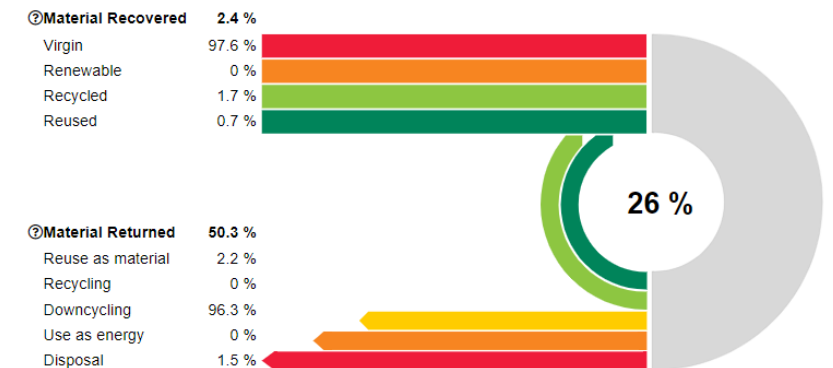
Whole life carbon assessment, Greater London Authority [Download Results Summary](#)

This is the project whole life carbon assessment according to RICS methodology, EN 15978 and Greater London Authority guidance for whole life-cycle carbon assessments. To see the details [More actions > Detailed report](#)

Biogenic carbon (kg CO2e)	A1-A3 Product Stage	A4 Transportation to site	A5 Site operations	B1 Use Phase	B2 Maintenance	B3 Repair	B4-B5 Material replacement and refurbishment	B6 Operational Energy use - Regulated	B6 Operational Energy use - Unregulated	B7 Operational Water use	C1 Deconstruction / demolition
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🏠 Circularity Assessment - Building Circularity, Greater London Authority (consultation) [Project basic information](#)

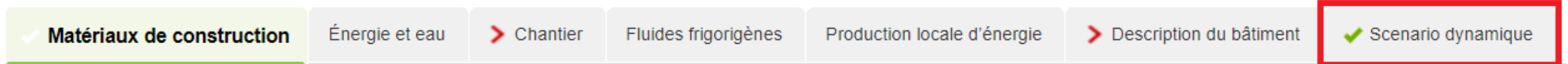
Building Circularity, Greater London Authority (consultation) ⓘ



Lancement de l'outil RE2020 (beta)



- ✓ Une version bêta de l'outil RE2020 est désormais disponible. Ce nouvel outil intègre les principes de l'ACV dynamiques pour le calcul de l'impact sur le réchauffement climatique.
- ✓ Les calculs s'appuient actuellement sur la méthode Energie Carbone mais la méthode RE2020 sera intégrée prochainement.
- ✓ Le choix du scénario d'analyse de cycle de vie (statique ou dynamique) se fait alors individuellement pour chaque conception depuis l'onglet « scénario dynamique »



Other smaller upcoming tool updates



LEED tools:

- ✓ B3 reporting to be enabled in the form of an annual repair rate %
- ✓ 2nd transportation leg to be enabled

Klimatdeklaration & YM tools: Get A4 & A5 scenarios for the generic data according to Boverket & SYKE database definitions

Building Circularity tool: Circularity score weighting factors can now be adjusted in the relevant query.

Life Cycle Carbon Global tool: 2nd transportation leg to be enabled

Levels tools: B3 and site waste reporting to be enabled as percentages of A1-A3 quantities & levels carbon gets additionally 2nd transportation leg

Verde 2020 and MB3: More accurate modelling of salvaged materials to be enabled (Reuse checkbox)

Green Star: More accurate material reuse modelling & biogenic carbon accounting will be enabled

EN15978: B3 and site waste reporting to be enabled as percentages of A1-A3 quantities

LCA tool compliant with US codes: Annual B3 repair rate & More accurate modelling of reused materials to be enabled (Reuse checkbox)



Plan Availability

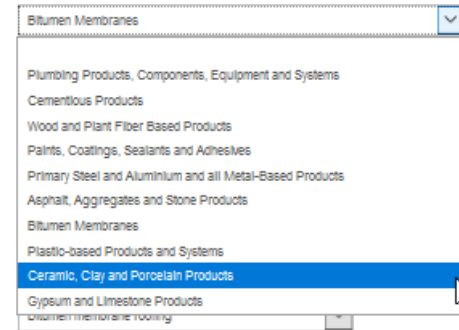
✓ STARTER

✓ BUSINESS

✓ EXPERT

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International EPD System compliance and new EPD Generator product categories



One Click LCA EPD Generator is now pre-verified for The International EPD System (IES) for all Construction Products and can be used for publish EPDs under the International EPD System as of now. EPD tool is now adapted to both International EPD System and RTS programs.

New EPD Generator product categories

Plastic-based products

Ceramic, Clay and Porcelain-based Products

Limestone & Gypsum-based products

New national impact categories for France and the Netherlands



All national impact categories for the Dutch and the French markets have now been updated in the software

ANNEX 2 : ENVIRONMENTAL IMPACTS – FRANCE NATIONAL COMPLEMENTARY INDICATORS - INIES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Abiotic depletion potential (ADP-elements) for non fossil resources	kg Sbe	2,28E-6	9,99E-7	3,21E-7	3,6E-6	3,63E-7	3,7E-7	MND	MND	MND	MND	MND	MND	MND	0E0	1,59E-7	3,81E-7	6,89E-8	-2,69E-7
Hazardous waste disposed	kg	8,29E-3	4,75E-4	1,54E-2	2,42E-2	1,46E-4	1,89E-3	MND	MND	MND	MND	MND	MND	MND	0E0	6,41E-5	1,19E-1	1,84E-4	-1,57E-3
Non hazardous waste disposed	kg	2,05E-3	4,54E-5	3,03E-2	3,24E-2	1,49E-5	1,35E-3	MND	MND	MND	MND	MND	MND	MND	0E0	6,53E-6	1,27E-4	6E-1	-2,32E-3
Air pollution	m3	2,84E1	5,49E0	3,91E0	3,78E1	1,62E0	6,62E0	MND	MND	MND	MND	MND	MND	MND	0E0	7,11E-1	2,28E0	9,44E-1	-2,59E1
Water pollution	m3	2,3E-1	1,56E-2	1,43E-2	2,6E-1	4,92E-3	5,76E-2	MND	MND	MND	MND	MND	MND	MND	0E0	2,16E-3	1,62E-2	5,8E-3	-1,24E-1

ANNEX 3 : ENVIRONMENTAL IMPACTS – BEPALIGSMETODE - NMD, NETHERLANDS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Shadow price	€	2,48E0	1,18E-1	2,91E-1	2,89E0	3,7E-2	5,53E-1	MND	MND	MND	MND	MND	MND	MND	0E0	1,62E-2	6,38E-2	7,29E-2	-1,29E0
Terrestrial ecotoxicity	DCB eq	3,35E-4	7,05E-5	1,3E-4	5,35E-4	2,13E-5	7,93E-5	MND	MND	MND	MND	MND	MND	MND	0E0	9,32E-6	4,41E-5	1,11E-5	-2,27E-4
Seawater ecotoxicity	DCB eq	5,74E1	6,09E0	1,9E1	8,26E1	1,81E0	1,17E1	MND	MND	MND	MND	MND	MND	MND	0E0	7,92E-1	6,51E0	2,21E0	0E0
Freshwater ecotoxicity	DCB eq	5,91E-3	5,09E-4	5,09E-4	6,83E-3	1,64E-4	1,39E-3	MND	MND	MND	MND	MND	MND	MND	0E0	7,2E-5	1,68E-3	8,49E-4	-2,11E-3
Human ecotoxicity	DCB eq	6,07E-2	1,58E-2	7,91E-3	8,44E-2	4,72E-3	1,35E-2	MND	MND	MND	MND	MND	MND	MND	0E0	2,07E-3	9,62E-3	2,31E-3	-4,47E-2
Exported energy output EEE	MJ	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Exported energy output ETE	MJ	0E0	0E0	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0

EPD tool exports Transport data source



The EPD-tool now exports the actual transport method resources for both 1st and 2nd leg as well as the inputs in the Additional transport section to the generated Background report

Product raw materials (Ecoinvent data) [Compare answers](#) [Create a group](#) [Move materials](#) [Add to compare](#)

Input here materials that go into the product itself, including water if part of product recipe. Packaging and ancillary production materials (e.g. oils and gases) are not inputted here.

Start typing or click the arrow

Resource	Quantity	CO ₂ e	Comment	Classification	Transport, kilometers	Transport, leg 2, kilometers
Acrylonitrile-butadiene-styrene copolymer production	0,044 kg	0,21kg - 15%	Bitumen additive, styrene-butadiene-styrene	SBS	336 Transport, freight	3480 Transport, freight, sea
Fleece production, polyethylene (Re)	0,041 kg	0,13kg - 9%	Polyester structure	Polyester structur	1422 Transport, freight	90 Transport, freight
Limestone production, crushed, wash	0,237 kg	~0kg - 0,3%	Filler material: ground limestone (typically	Ground limeston	121 Transport, freight	Market for transport
Gravel production, crushed (Referen	0,237 kg	0,02kg - 2%	Covering mineral granules, natural colour	Covering mineral	653 Transport, freight	22 Transport, freight, sea
Gravel and sand quarry operation (R	0,070 kg	~0kg - 0,1%	Covering sand	Sand	162 Transport, freight	Market for transport
Packaging film production, low dens	0,000043 kg	~0kg - ~0%	Protective thin film underlay (for weldable	Protective thin fil	6 Transport, freight	119 Transport, freight, sea
Pitch production, petroleum refiner	0,415 kg	0,17kg - 12%	Bitumen, hot bitumen supply (Neste Naant	Bitumen	145 Transport, freight	Market for transport

Product raw materials (EPDs from One Click LCA) [Compare answers](#) [Create a group](#) [Move materials](#) [Add to compare](#)

[Click to input data](#)

2. Ancillary and packaging materials - A3 0.01 kg CO₂e

Packaging materials [Compare answers](#) [Create a group](#) [Move materials](#) [Add to compare](#)

Input here packaging materials used to ship and protect the product, if any

Start typing or click the arrow

Resource	Quantity	CO ₂ e	Comment	Classification	Transport, kilometers	Transport, leg 2, kilometers
Containerboard production, linerboa	0,00143 kg	~0kg - 0,1%	Cardboard		6 Transport, freight	Market for transport
Packaging film production, low dens	0,00081 kg	~0kg - 0,2%	Packaging film		118 Transport, freight	Market for transport
Sawnwood production, softwood, drie	0,00004 m ³	~0kg - 0,3%	Pallets, 400 kg/m3		Market for transport	Market for transport

Table: List of processes included in A2

Resource name	Quantity	Distance (km)	Leg	Transport	Data source	Date	Comment	Data quality
Acrylonitrile-butadiene-styrene copolymer production	0.044 kg	336	1	Transport, freight, lorry, all sizes, euro5 to generic market for transport, freight, lorry, unspecified	ecoinvent 3.6	2019	Bitumen additive, styrene-butadiene-styrene (SBS)	
		3460	2	Transport, freight, sea, ferry	ecoinvent 3.6	2019		
Containerboard production, linerboard, kraftliner	0.00143 kg	6	1	Transport, freight, lorry, all sizes, euro5 to generic market for transport, freight, lorry, unspecified	ecoinvent 3.6	2019	Cardboard	
Fleece production, polyethylene	0.041 kg	1422	1	Transport, freight, lorry, all sizes, euro5 to generic market for transport, freight, lorry, unspecified	ecoinvent 3.6	2019	Polyester structure	
		90	2	Transport, freight train, electricity	ecoinvent 3.6	2019		

Verification points in the EPD tool



The EPD tool supports verification points which will help the user and the verifier to identify which section in the software correspond with which check in the programme operators verification checklist

Note. The verification point will look different depending on if it refers to a check outlined by the standard or if it is a programme operator specific check

leave out minor items with low impact.

1. Manufacturing materials - A1

<VP-EPD-003>

If you are using recycled or reused materials as inputs for your product, the 'polluter pays' principle of EN15804 is applied, which in practical terms means that product impacts are counted towards (see TR 16970 Guidance for the implementation of EN 15804, 6.2.2). If you use raw materials that are wastes, then their impacts are fully allocated to the previous product system and are zero for processing required for your products will still need to be accounted. To identify such materials in the database, you can set 'Characteristics' filter to 'Global Warming Potential is Zero'.

Product raw materials (Ecoinvent data) [⇌ Compare answers](#) [+ Create a group](#) [+ Move materials](#) [+ Add to compare](#) <VP-EPD-003>

Input here materials that go into the product itself, including water if part of product recipe. Packaging and ancillary production materials (e.g. oils and gases) are not inputted here.

Resource

Quantity

CO₂e

Comment

Classification

Transport, kilon