

GCCA EPD TOOL · GUIDE 2 OF 7

Your first EPD in Version 6

From first login to a self-declaration and background report ready for verification. Allow half a day once your plant data is to hand.

This guide follows the International version of the tool at **concrete-epd-tool.org**. The North American version has the same screens with its own PCRs and datasets. It is the short route through the workflow; Guide 4 explains each input section in detail, and the full user guide and LCA model report remain the reference.

Before you start

You need	Why
Login details	Issued with your licence. Version 6 uses your existing username and password.
The product you are declaring	One EPD record covers one product: clinker, cement, aggregate, concrete or precast. Declared units are 1 tonne for clinker, cement and aggregate, 1 m ³ for concrete, and a declared unit you define for precast.
Country of production	Sets the default electricity mix, transport, fuel mix and clinker factor. It cannot be changed later.
A 12-month data period	Manufacturing, energy and transport figures should be representative and evidenced. Guide 3 lists what to collect.
Reference year and "valid until" date	Both are required before the tool will export the digital EPD file.
Suppliers' EPDs, if you have them	Third-party EPDs, or GCCA tool background reports from a supplier, can be imported and used as input materials.

The seven steps

1 Log in and choose your version

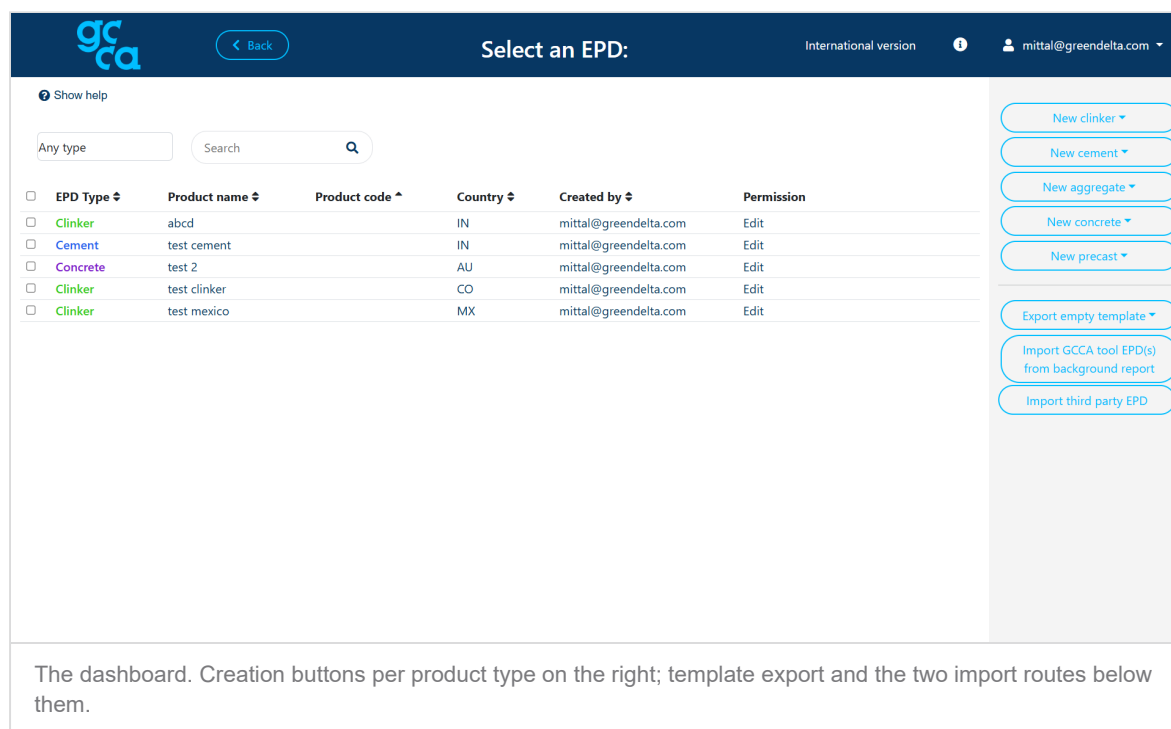
Log in, then pick **International version** or **North American version** and click OK. The two are separate instances: an EPD created in one is not visible in the other. The welcome screen also lists the reference documents: the **User Guide**, the **LCA Model** report, the **LCA Database** spreadsheet and the **Verification Report**, plus a link to the programme operator's EPD report template. Download them once and keep them with your EPD files; a verifier will ask which version of the model you used.

2 Create the EPD record from the dashboard

The dashboard lists every EPD you can see, with filter and search. Down the right-hand side sit the creation buttons: **New clinker**, **New cement**, **New aggregate**, **New concrete**, **New precast**. Each opens a small menu:

- **New empty ...** A blank record. You supply every figure. The only option for aggregate and precast, whose variability is too great for a default.
- **New default ...** Pre-filled with GCCA sector statistics and background datasets for the chosen country. Clinker, cement and concrete only. Useful for a first pass or a sanity check, but every default you leave in place weakens the EPD.
- **New ... from self-declaration.** Enter the published results of a self-declaration made with this tool, for example by your clinker supplier, so it can be used as an input material.

Below those sit three import routes: **Export empty template** and **Import GCCA tool EPD(s) from background report**, which let you fill an Excel template offline and load up to 400 EPDs at once; and **Import third party EPD**, which turns a published supplier EPD into an A1-A3 input material.



The screenshot shows the 'Select an EPD:' dashboard. At the top, there's a header with the GCCA logo, a 'Back' button, the title 'Select an EPD:', and user information 'International version' and 'mittal@greendelta.com'. Below the header, there's a 'Show help' link and a search bar. The main area contains a table of existing EPDs:

☐	EPD Type ↕	Product name ↕	Product code ^	Country ↕	Created by ↕	Permission
☐	Clinker	abcd		IN	mittal@greendelta.com	Edit
☐	Cement	test cement		IN	mittal@greendelta.com	Edit
☐	Concrete	test 2		AU	mittal@greendelta.com	Edit
☐	Clinker	test clinker		CO	mittal@greendelta.com	Edit
☐	Clinker	test mexico		MX	mittal@greendelta.com	Edit

On the right side, there are buttons for creating new EPDs: 'New clinker', 'New cement', 'New aggregate', 'New concrete', and 'New precast'. Below these are buttons for import/export: 'Export empty template', 'Import GCCA tool EPD(s) from background report', and 'Import third party EPD'. At the bottom, a text box explains: 'The dashboard. Creation buttons per product type on the right; template export and the two import routes below them.'

Pick the country carefully. It drives the default electricity mix, transport modes, fuel mix, clinker manufacturing energy and clinker factor, and it is fixed once the record exists. The only way to change it is to select the EPD and use the **Duplicate** icon, which asks for a new country.

3 Describe the product

The description section carries the identity of the EPD. **Product name** must be unique in your list; add a **product code** so you can find it among two hundred. Production site, capacity, manufacturer and address feed the self-declaration. Fill the **validity of the inventory data** (start and end dates): they set the reference year and are mandatory for a valid ILCD+EPD file.

Product-specific fields matter for the calculation, not just the paperwork:

- **Cement:** the constituents other than clinker, used in the recarbonation calculation.
- **Concrete and precast:** compressive strength class and density, used for recarbonation and for converting volume to mass in transport and end of life. The concrete record also asks for the strength class of the cement used.
- **Precast:** the concrete volume per declared unit, excluding insulation, void formers, finishes and inserts.

Leave **GWP is reported as net GWP** unticked unless the PCR you will declare under allows recarbonation to be netted off. Use the comments field generously; it is the only place to record why a figure is what it is.

4

Enter materials, manufacturing and the rest of the life cycle

Work down the left-hand menu in order. Each section is a set of banded tables; click **Add exchange** to add a material, fuel or waste, enter the amount per declared unit, then **Add transport** for its distance and mode. Guide 4 covers every section; the outline is:

Section	What goes in
A1-3 · Materials	Every input material with delivery distance and transport mode; packaging. Two supply locations for one material means two exchanges.
A1-3 · Manufacturing	Grid electricity and its mix, on-site generation, kiln and non-kiln fuels, kiln emissions, on-site transport, water and ancillary materials, co-products.
A1-3 · Waste management	Non-hazardous and hazardous waste by route, plus components for re-use, materials for recycling and for energy recovery.
A4-5 · Construction	Concrete and precast: delivery to site, mixing-truck fuel, installation losses and energy, packaging waste routes.
B · Use	Concrete and precast: recarbonation approach, service life, exposure.
C · End of life	Demolition and transport (fixed), waste processing rates, disposal, end-of-life recarbonation.
D · Benefits and loads	Calculated from what you entered upstream; read-only.

Watch the control indicators. Materials shows the **mass balance** and the biogenic carbon in product and packaging; Manufacturing shows the **electricity** and **fuels balance** per declared unit. A figure that looks wrong almost always means a unit error or a missing input. Fix it before you go further; a verifier will find it otherwise.

5 Read the results, then the breakdown

EPD results reports every indicator required by the PCR, per module, with an A1-A3 total. Start with GWP-GHG and GWP-fossil, then scan the additional categories for anything implausible.

Detailed breakdown shows the contribution of individual materials and processes. Use it as your quality check: if one admixture drives a whole indicator, that is usually a data error rather than a discovery.

EPD results

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The declared unit is: **1 m³ of ready-mix concrete**

Core environmental impact indicators

Indicator	A1	A2	A3	A1-A3 (Total)	A4-A5	B1-B7	C1-C4	Total	D	Unit
Global Warming Potential, GHG	300.1	15.13	10.06	325.3 **	31.63	-5.000	28.38	380.3	-30.75	kg CO ₂ eq.
Global Warming Potential, total	300.1	15.13	10.06	325.3 *	31.63	-5.000	28.38	380.3	-30.75	kg CO ₂ eq.
Global Warming Potential, fossil fuels	299.5	15.12	9.894	324.5 *	31.59	-5.000	28.35	379.5	-30.70	kg CO ₂ eq.
Global Warming Potential, biogenic	0.4546	1.921E-3	0.1575	0.6140 *	2.846E-2	0	1.004E-2	0.6525	-3.151E-2	kg CO ₂ eq.
Global Warming Potential, land use and land use change	0.1180	6.698E-3	1.236E-2	0.1370	1.145E-2	0	1.357E-2	0.1620	-1.893E-2	kg CO ₂ eq.
Depletion potential of the stratospheric ozone layer	1.180E-6	2.276E-7	4.918E-8	1.456E-6	4.272E-7	0	4.221E-7	2.306E-6	-1.880E-7	kg CFC 11 eq.
Acidification potential, Accumulated Exceedance	0.9859	7.081E-2	3.998E-2	1.097	0.1717	0	0.1951	1.463	-0.1467	mol H ⁺ eq.
Eutrophication potential, fraction of nutrients	1.962E-2	4.476E-4	2.001E-3	2.207E-2	1.526E-3	0	1.229E-3	2.483E-2	-3.344E-3	kg P eq.

EPD results: core indicators per module for 1 m³ of ready-mix concrete. The asterisks flag the A1-A3 total that a cradle-to-gate declaration would report.

6 Export

- **Background report (Excel).** Every input, assumption and result. Confidential. This is what the verifier works from, what you keep for the next update, and what a customer can import into their own tool record.
- **Self-declaration report (PDF).** An Environmental Data Sheet in GCCA format for internal use and communication. It is a draft output, not a verified EPD, and must never be presented as one.
- **ILCD+EPD format.** The machine-readable file for the ECO Portal and other platforms. Greyed out until reference year and "data set valid until" are filled in the product description.

opened concrete: India training sample - (IN)

Export

[Show help](#)

Export background report

Export self declaration report

Export in ILCD+EPD format

You should fill the inputs "reference year" and "data set valid until" in product description to export the EPD in the ILCD+EPD format.

Export. The digital format needs the validity dates first.

Export all three even if you only need one today; together they are the audit trail for this version of the EPD.

7 Reuse the record

Select an EPD in the dashboard to **edit**, **duplicate** (for another plant or country), **delete** or export it. Select two EPDs of the same type to **compare** them side by side; this is the fastest way to see what a change in electricity mix or clinker source does.

What comes next

A self-declaration is not a published EPD. To get there, the background report goes to an independent verifier and then to a programme operator for registration. **Guide 6** sets out that route, including the EPD document template, the verification pack and registration on the programme operator's portal.

Common first-time mistakes

- **Leaving defaults in place.** Defaults are a starting point, not an answer. In particular the default regional electricity mix is not acceptable for an EPD to be verified and published.
- **The wrong country.** Fixed after creation; duplicate the record to change it.
- **One exchange for two supply routes.** Transport is then wrong for both.
- **Ignoring the balance indicators.** They exist to catch unit and omission errors early.
- **Forgetting the validity dates.** No dates, no digital EPD export.
- **Calling the self-declaration an EPD.** It becomes an EPD only after independent verification and publication.
- **No comments.** Six months later, nobody remembers where a number came from.

Need a hand? Training material is included with every licence, and the GCCA team will walk your organisation through the workflow with your own products. Email epdtool@gccassociation.org or request a demonstration at gccaepd.org/get-a-demo.