



Introducing the Circular Ecology EPD Programme

29th January 2026

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circularecology.com

Today's Webinar

- Introduction
- What is an EPD?
- What is the Role of Lifecycle Assessments (LCA)?
- What are the Benefits of EPDs?
- The Key Aims and Objectives of the Circular Ecology EPD Programme
- What Types of Products are Eligible for EPDs
- The Process of Developing and Publishing EPDs through the Programme
- Q&A

Your Presenters Today



Dr Craig Jones

Managing Director

- 20+ years' experience
- LCA, embodied carbon, WLCs
- Original author of the ICE Database



Edwin Lowe

Delivery Manager

- 9+ years' experience in the construction sector
- Worked for contractors, infrastructure clients and in sustainability consulting



Background & Introduction

Circular Ecology – Introduction



Environmental consultancy, founded in 2013, delivering evidence-based sustainability services

Our core areas of expertise include:

- Whole Life & Embodied Carbon Assessments for Construction Projects
- Organisational Carbon Footprinting (Scopes 1, 2 & 3)
- Product Carbon Footprints & Life Cycle Assessments (LCA)
- Carbon Footprint Verification & Assurance
- Net Zero & Carbon Reduction Strategy
- Carbon Footprint Database Development
- Online eLearning Training Courses
- Carbon Offsetting and Tree Planting



Hosts the Inventory of Carbon & Energy (ICE) Database

Celebrating 850,000 Trees Planted

- We have facilitated the planting of **over 850,000 trees**
- Through our partnerships with **Eden: People+Planet** (formerly Eden Reforestation) and **Ripple Africa**
- Tree planting available on our online store for **£1 (ex. VAT) per tree**
- **25%** of tree planting sales diverted to our **SCRI fund**





What is an EPD?

What is an EPD?



EPD = Environmental Product Declaration

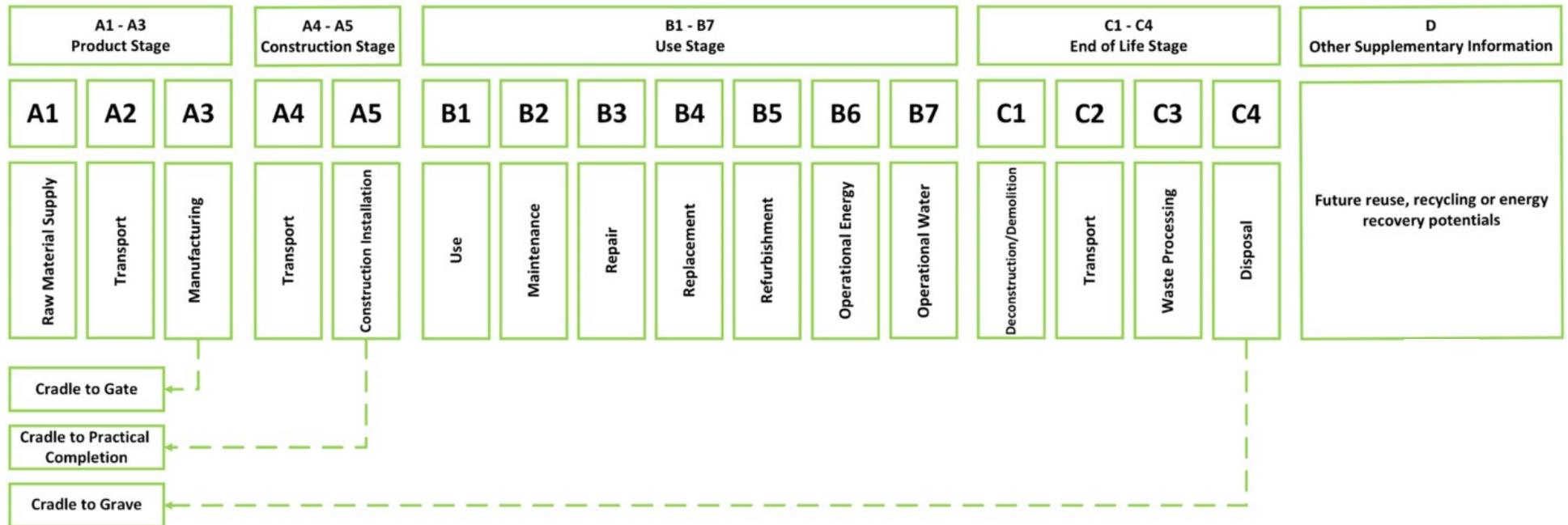


A document which makes a **declaration** about the **environmental impacts** of a defined **product** or **range of products**



However, to be called an EPD, the document must comply with: *ISO 14025 Environmental labels and declarations — Type III environmental declarations — Principles and procedures*

Scope & Boundaries



"Cradle to Gate" (modules A1-3) is mandatory for all EPDs, regardless of the product, or the core calculations rules used

"Cradle to Gate" plus C1-4 and D is the minimum mandatory scope when using EN 15804, unless exemptions apply

What is Included on an EPD?

Product or Product Range Name

EPD Information
(Manufacturer, LCA Producer, Verifier, EPD Programme)

Date of both publishing and expiry (5 years)

Declared Unit (of the study – e.g., 1kg, 1 tonne, 1m² or 1 litre of product)

Details of PCR used
(Product Category Rules)

Product Composition & Technical Description of Product and Process

LCA module details, including inclusions and exclusions

Results of each indicator by LCA module

Environmental Product Declaration

in accordance with ISO 14025 & EN 15804+A2

Programme Operator
Circular Ecology EPD Programme

EPD Registration Number
[EPD Number]

Publication Date
[DD-MM-YYYY]

Valid Until
[DD-MM-YYYY]

Product Information:
[Product Names(s)]
[Company Name]
[Company Address]

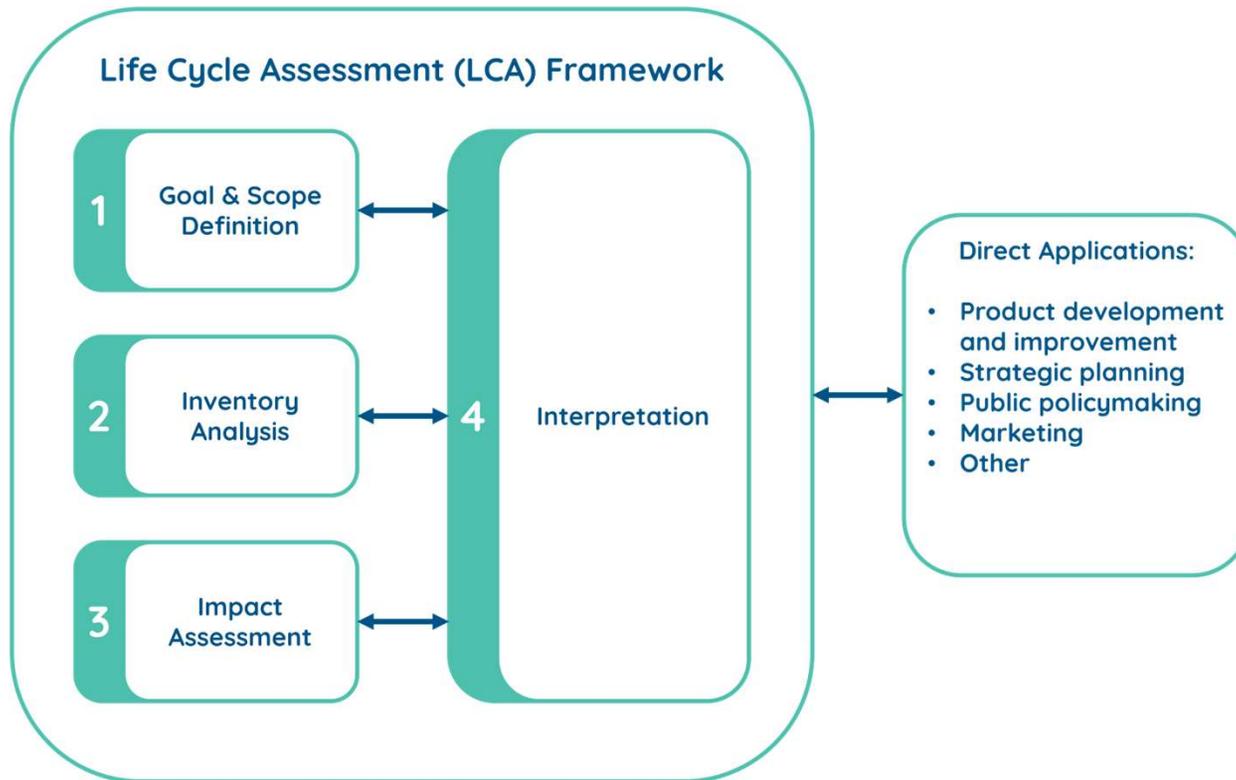
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The Role of Life Cycle Assessment (LCA)

- All EPDs are **underpinned** by a Life Cycle Assessment (LCA)



Life Cycle Assessment (LCA) Indicators

Environmental Indicators

- Climate change – total (GWP-total)
 - Climate change – fossil (GWP-fossil)
 - Climate change – biogenic (GWP-biogenic)
 - Climate change – land use & land use change (GWP-LULUC)
- Ozone depletion potential (ODP)
- Acidification potential (AP)
- Eutrophication – freshwater (EP-freshwater)
- Eutrophication – marine (EP-marine)
- Eutrophication – terrestrial (EP-terrestrial)
- Photochemical ozone formation (POCP)
- Abiotic resource depletion – minerals & metals (ADP-minerals & metals)
- Abiotic resource depletion – fossil fuels (ADP-fossil)
- Water use – water deprivation potential (WDP)

Life Cycle Assessment (LCA) Indicators

Additional Environmental Indicators

- Particulate matter emissions (PM)
- Ionising radiation – human health (IRP)
- Ecotoxicity – freshwater (ETP-fw)
- Human toxicity – cancer effects (ETP-c)
- Human toxicity – non-cancer effects (HTP-nc)
- Land use related impacts / soil quality (SQP)

Life Cycle Assessment (LCA) Indicators

Use of Natural Resources

- Renewable primary energy resources used as energy carrier (RPEE)
- Renewable primary energy resources used as raw materials (RPEM)
- Total use of renewable primary energy resources (TPE)
- Non-renewable primary energy resources used as energy carrier (NRPE)
- Non-renewable primary energy resources used as materials (NRPM)
- Total use of non-renewable primary energy resources (TRPE)
- Use of secondary materials (SM)
- Use of renewable secondary fuels (RSF)
- Use of non-renewable secondary fuels (NRSF)
- Use of net fresh water (W)

Life Cycle Assessment (LCA) Indicators

Waste Indicators

- Hazardous waste disposed (HW)
- Non-hazardous waste disposed (NHW)
- Radioactive waste disposed (RW)

Output Flows

- Components for reuse (CR)
- Materials for recycling (MR)
- Materials for energy recovery (MER)
- Exported electric energy (EEE)
- Exported thermal energy (ETE)

Life Cycle Assessment (LCA)

- What is the difference between an LCA and an EPD?
- EPDs are essentially a more **standardised** way to report verified LCA data

	LCA	EPD
Purpose	analysis for internal or external insight	verified disclosure in a standardised format
Scope	flexible	defined by PCRs
Verification	recommended	required
Application	improve product sustainability, compare to competing products	disclose product environmental impacts, support tender requests

Benefits of Producing EPDs



Baselining product impacts and identify areas for potential improvements



Confidence that presented results have been verified and approved



Competitive Advantage -
Increased possibility of specification on projects (and inclusion in assessment software)



Increased perception of brand's transparency & commitment to sustainability



Introducing the Circular Ecology EPD Programme

Circular Ecology EPD Programme

- Circular Ecology are now an EPD Programme Operator
 - This means we can **publish EPDs** in adherence with ISO 14025 (Type III environmental declarations)
- Our Objectives:
 - **Improve the transparency** of published EPD information
 - **Improve the use of primary data** in EPDs
 - **Produce higher quality LCAs**
 - **Implement a robust verification process** with increased focus on the review of the LCA results
 - **Comply with relevant international standards**, e.g., ISO 14025, ISO 14040, ISO 14044
 - **Encourage manufacturers and suppliers** to publicise their environmental declarations and reduce the environmental impacts of their products
 - **Encourage clients, buyers, specifiers, and other interested parties** to use environmental declarations

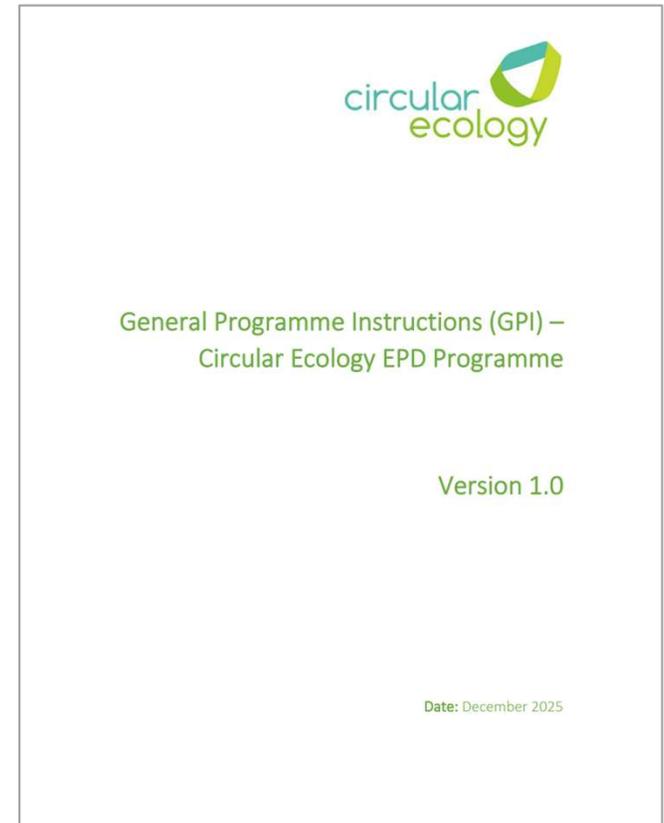
Circular Ecology EPD Programme

Key documents:

General Programme Instructions (GPI)

- Describes how the Circular Ecology EPD Programme is developed and operated in compliance with ISO 14025
- It outlines the rules and procedures that apply to all EPDs issued under the programme, including processes for EPD development, independent review, and verification

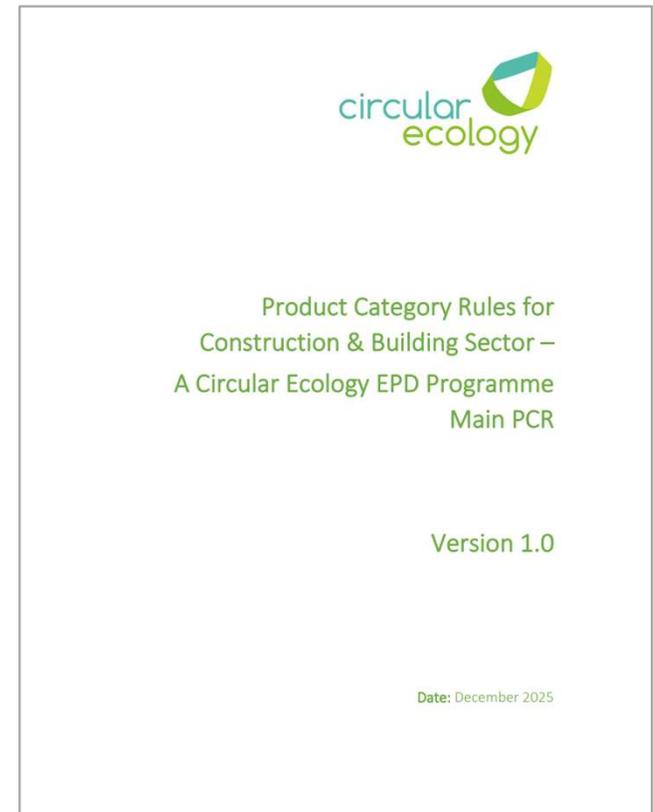
circularecology.com/epd-programme-key-documents.html



Circular Ecology EPD Programme

Product Category Rules for Construction Sector

- Defines the principles and methodological rules for developing EPDs for construction products and services within the Circular Ecology EPD Programme
- It is intended to **align with international best practice**, including lifecycle assessment calculation requirements from the ECO Platform (we intend to apply to join once we have enough published EPDs)
- Triple panel peer reviewed:
 - Dr Jane Anderson (Chair)
 - Dr Matthew Fishwick
 - Chloe McCloskey



Eligible Standards

- Our construction products PCR is aligned with:
 - **EN 15804:2012+A2:2019** – Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products
 - **ISO 21930:2017** – Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services
- Climate declarations (carbon only) are also permitted

Improving LCA Quality

- One of our core aims is to **improve overall quality** of the LCAs being used to produce EPDs
- We have therefore implemented the below requirements:
 - EPD **verifier is required to have access to the LCA model**, at a minimum through a screenshare call
 - Verifier is required to **check key emissions factors for plausibility**
 - **Evidence of primary data to be provided** as part of the verification process
 - **Most recent versions of background LCA databases** should be applied (with 1 year grace period for transition)
 - Various **reporting requirements for transparency around key assumptions**



What Types of Products are Eligible for EPDs?

Construction Products

- The Circular Ecology EPD Programme will initially focus on **Construction Products**, and the PCR has been developed to cover these, including (but not limited to):

Cements / Concretes

Drainage Products

Asphalts

Doors and Windows

Plastic Products

Aggregates

Insulations

Structural Components

And many, many more...

Other Products

- The Circular Ecology EPD Programme is **not limited to construction products**
- Outside of construction products covered by Circular Ecology's initial PCR, other products can still be published under the programme provided they are compliant with an approved PCR and the programme's **General Programme Instructions (GPI)**





What is the Process of Developing and Publishing an EPD?

Steps to Produce and Publish an EPD

1

Select EPD Programme *(can also be selected later in process, but you will know the requirements of the GPI and PCR if selecting early)*

2

Engage a competent LCA specialist to undertake the assessment *(e.g., inhouse LCA specialist, Circular Ecology Consultants, Other LCA Consultants)*

3

Produce an LCA and EPD following the requirements of the Programme's GPI and applicable PCR(s)

Steps to Produce and Publish an EPD

4 Have the LCA & EPD verified by a verifier approved by the EPD Programme

5 Provide the EPD, report, & verification statement to Circular Ecology

6 Ensure publishing fees have been covered

7 Circular Ecology undertake final checks & publish the EPD on their website

EPD Development: Roles



EPD Owner

The product manufacturer or brand owner that wants to make the declaration. They own the EPD, inline with the requirements of ISO 14025



LCA Practitioner

Conducts the LCA in accordance with respective standards, PCRs and GPI. May be internal to the EPD Owner, or external consultants



Verifier

A person independent of the LCA and EPD project, suitably qualified to verify the LCA and EPD



Programme Operator

Publisher of the verified EPD

Verification of EPDs

- In alignment with ISO 14025, verifiers shall not have been involved in the execution or development of the LCA or EPD and shall not have a conflict of interest (e.g., independent to the project)
- **Our definitions of verification types:**
 - **Internal verifier:** A verifier (person) internal to the EPD owner, e.g., they are an employee of the EPD owner
 - Recognised, but no current plans to allow internal verification
 - **External verifier:** A verifier (person) external to the EPD owner, e.g., they are not an employee of the EPD owner
 - **Third-party verifier:** A verifier (person) that is both external to the EPD owner and external to the LCA practitioner
 - This definition is stricter than ISO 14025
- Circular Ecology EPD programme intends to use a mix of external verification and third-party verification, but only approved verifiers may be used
- Qualified EPD verifiers are welcome to get in touch through our website

EPD Fees

- Cost for publishing EPDs vary considerably between EPD programmes
- Fees typically cover:
 - **LCA consultant fees:** Costs involved for an LCA consultant, or the cost of internal resource to conduct the LCA and liaise with the verifier
 - **Verification fees:** Costs for the verifier
 - **EPD programme fees:** Costs to the EPD programme for publishing and maintenance of the EPD
 - **No annual fees in our programme** - Many programmes have annual fees over 5 years
- The Circular Ecology EPD Programme aims to be competitive and keep costs simple and digestible
 - Analysing costs for many EPD programmes isn't simple with the various sub-costs involved
- Fees on our website circularecology.com/epd-programme-fees.html
 - **Large reductions in fees for multiple EPDs at once**
- **Currently discounting fees** for initial customers

EPD Fees

- **Currently discounting fees for initial customers**
- **Fees for 1 single EPD (not applicable to multiple EPDs):**

Where multiple EPDs are published together, the overall cost per EPD can be considerably lower than the cost for a single EPD. Please see below for more information.

Fee	Fees for 1st EPD
EPD Registration	£1,000
EPD Maintenance Fee*	£750
SCRI Contribution	£250
Total EPD Programme Fees	£2,000

**EPD Maintenance Fee: covers the 5-year validity period and is paid upfront.*

- **Fees come down very quickly per EPD for multiple EPDs**
- **Contact us more specific multi EPD fees**

Scaling Carbon Reductions Initiative (SCRI)

All EPDs include a contribution to our Scaling Carbon Reduction Initiative (SCRI)



Key to our purpose **to release impactful work, to enable scalable carbon reductions**



We will be diverting a specified amount from some of our sales into the SCRI



Funds will be used to **develop free carbon footprint data, tools and resources**



Publication of an annual impact report disclosing the amount raised and use of funds

<https://circularecology.com/scaling-carbon-reductions-initiative.html>

Next Steps

- The **Circular Ecology EPD Programme** is a new programme
- We are therefore initially focused on **registering** EPDs and **promoting awareness**
- We need to build a network of **third-party verifiers**
- Plan to join **Eco Platform** once we have enough EPDs



How to Get Started with the Circular Ecology EPD Programme

- Circular Ecology are the programme operator, but are also able to help with:
 - Conducting the Life Cycle Assessment
 - Verifying the EPDs
 - Arranging a third-party verifier
- If you are a manufacturer or brand owner, feel free to contact us to discuss your interest in producing EPDs
- If you are an LCA consultant, it is recommended to check out our PCR and GPI to assess suitability to publish through our programme, contact us for a quote for EPD programme fees
- If you are a verifier, we intend to build up our network of approved verifiers as the programme grows

Key Information

More information about the Circular Ecology EPD Programme can be found at:

circularecology.com/epd.html

Here, you can find:

- Key Programme Documents (GPI, PCR, Verification Template)
- The EPD Library (will publish first EPDs once verified)
- EPD Programme Fee Information
- Frequently Asked Questions (FAQs)

Today's Webinar - Recap

- ✓ Understanding EPDs, their purpose, and benefits
- ✓ Understanding which products can have EPDs
- ✓ The role of LCA in EPDs
- ✓ Walked through the process of publishing an EPD
- ✓ Key details of the Circular Ecology EPD Programme

Next Webinars

Next Webinars:

- Organisational Carbon Footprints – Thursday 26th February 2026
- Bespoke Carbon Datasets – Thursday 26th March 2026

Watch our 2025 webinars on-demand on our website:

- Carbon Offsetting, Neutrality, & Tree Planting
- Whole Life Carbon in Construction: What You Need to Know
- Product Carbon Footprints: What You Need to Know
- ICE Database Insights Series (5x webinars)

More webinars planned throughout 2026 on **Aligning Cost & Carbon Estimating and the ICE Database**

Keep an eye on our networks for more information

- Website - circularecology.com
- LinkedIn - linkedin.com/company/circular-ecology





Thank you for watching

Sign up for more information and future updates

<https://circularecology.com/newsletter.html>