



Scope 3 Footprinting:

How to Build & Improve Scope 3 Footprint Data

25th September 2025

Joe Rouse & Jon Burrow

[circularecology.com](https://www.circularecology.com)

Today's Webinar

- ⊖ Introduction
- ⊖ Establishing a Scope 3 Footprint: Where are You in Your Journey?
- ⊖ Spend-Based Reporting: Benefits & Limitations
- ⊖ Selecting and Improving Your Scope 3 Data
- ⊖ Engaging with Your Supply Chain
- ⊖ Wider Considerations
- ⊖ Q&A

Your Presenters Today



Joe Rouse

Senior Consultant

- *4 years' experience in organisational and product carbon footprints*
- *Background in carbon removal and storage*



Jon Burrow

Head of Carbon Accounting

- *Over a decade working in carbon reporting and carbon reduction strategies*
- *Background in UK / EU carbon regulatory compliance*



Background & Introduction

Circular Ecology – Introduction



Environmental consultancy, founded in 2013

Offer a range environmental services:

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



Hosts the Inventory of Carbon & Energy (ICE) Database

Scaling Carbon Reduction Initiative (SCRI)

Introduction to our **Scaling Carbon Reductions 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>



Establishing a Scope 3 Footprint: Where are You on the Journey?

What is an Organisational Carbon Footprint?

Measures the total greenhouse gas emissions associated with an organisation's operations, including energy use, transportation, supply chain, and other activities

Typically expressed in **CO₂ equivalent (CO₂e)**

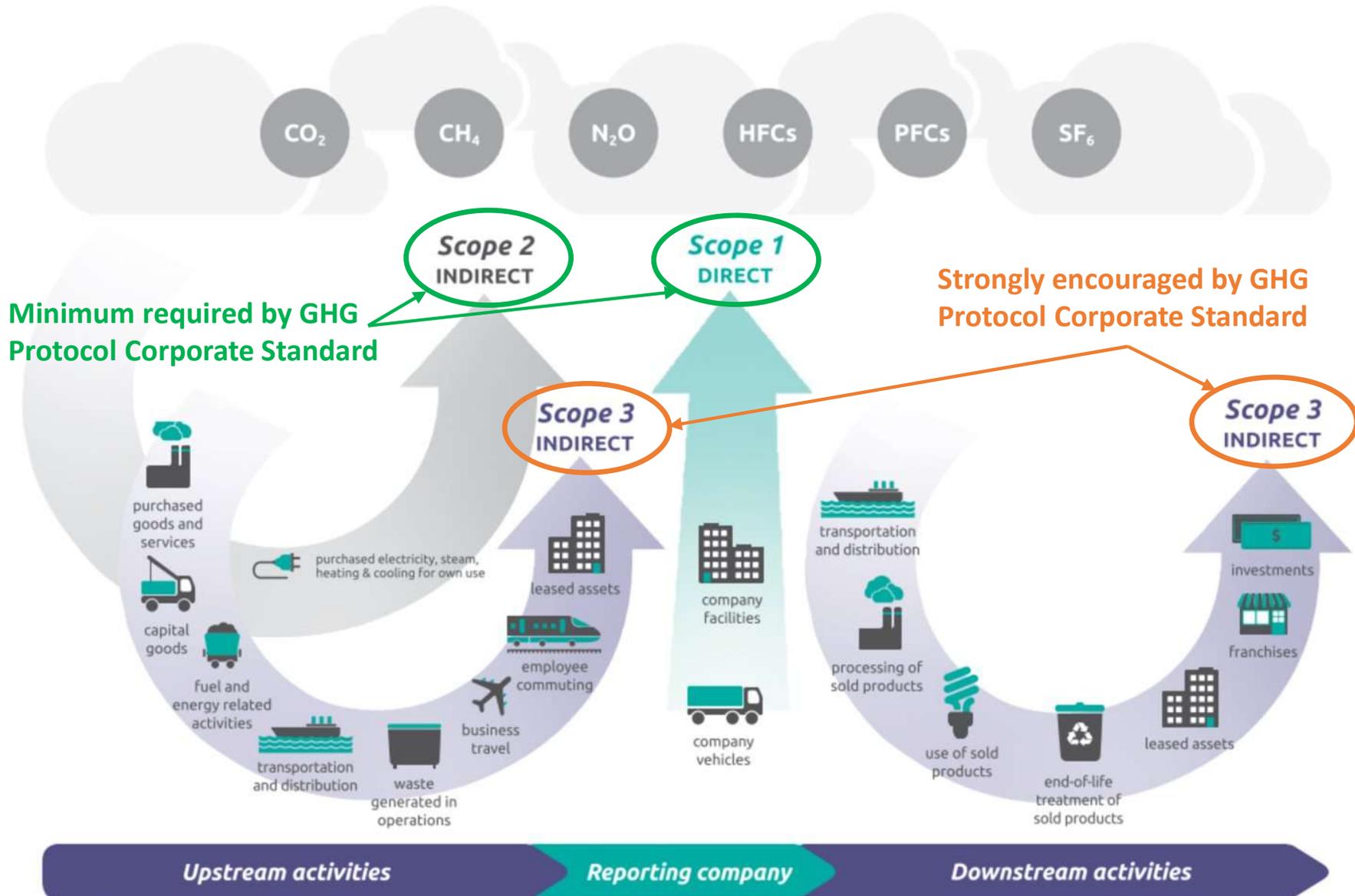
Underlying Reporting Standards

- GHG Protocol Corporate Standard (Revised Edition, 2015 amendment)
- GHG Protocol Scope 2 Guidance (2015)
- GHG Protocol Corporate Value Chain (Scope 3) Standard (2011)



Source: GHG Protocol (<https://ghgprotocol.org/>)

Scope & Boundaries



Scope 3 - At a Glance

Definition: All indirect GHG emissions across your value chain (upstream & downstream).

Why it matters:



Largest share of emissions: According to the SBTi, on average Scope 3 emissions are 11.4x higher than direct emissions from operations.



Credible net-zero targets: You can't hit net-zero without addressing value-chain emissions; Scope 3 sets the real decarbonisation priorities for design, sourcing and logistics.



Procurement & tenders: Public and private tenders increasingly considering Scope 3 coverage; robust data improves bid scores, preferred-supplier status, and compliance.

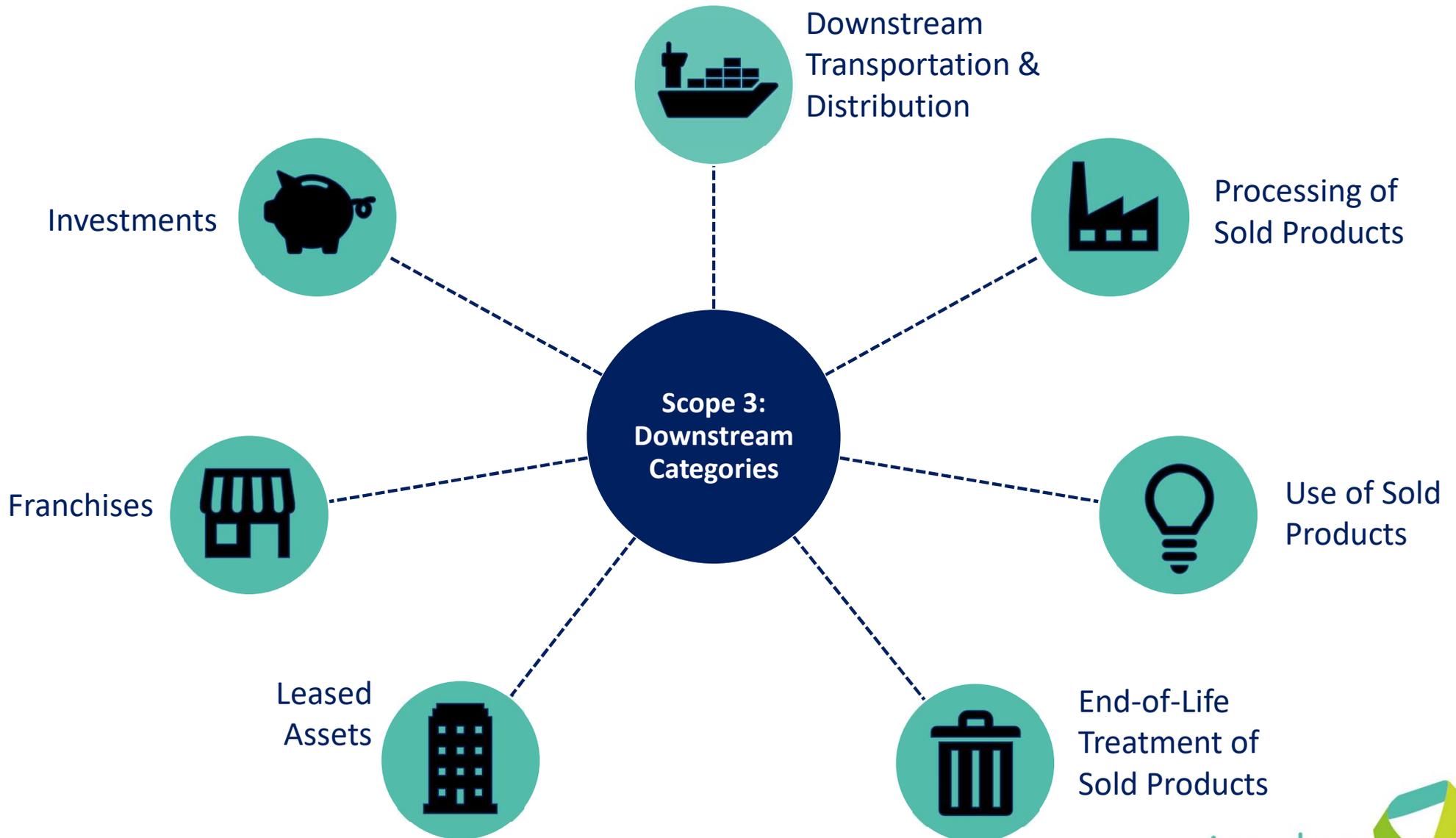


Investor & regulatory pressure: Investors and regulators increasingly making decisions more focused on value-chain coverage.

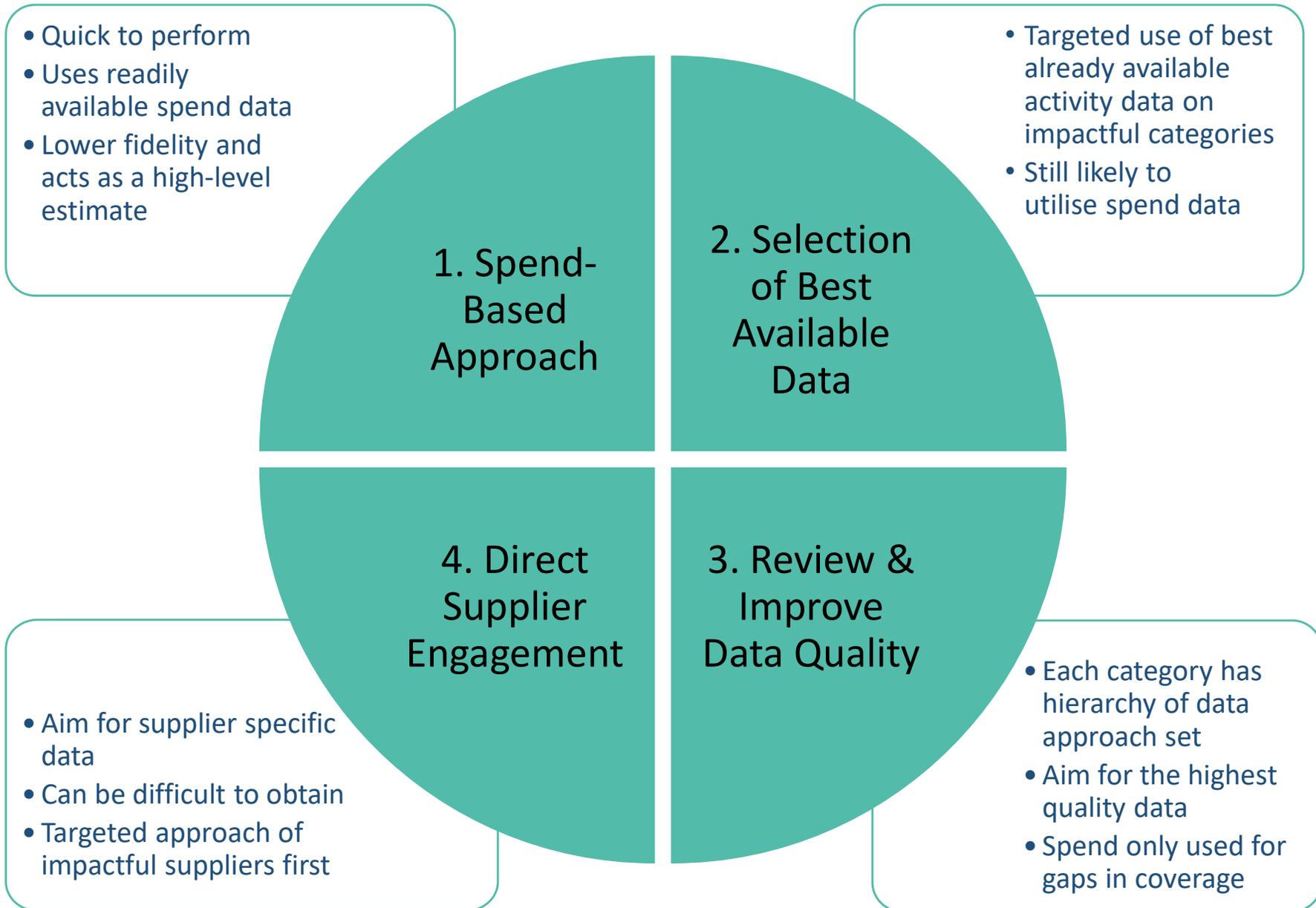
Scope 3: Upstream



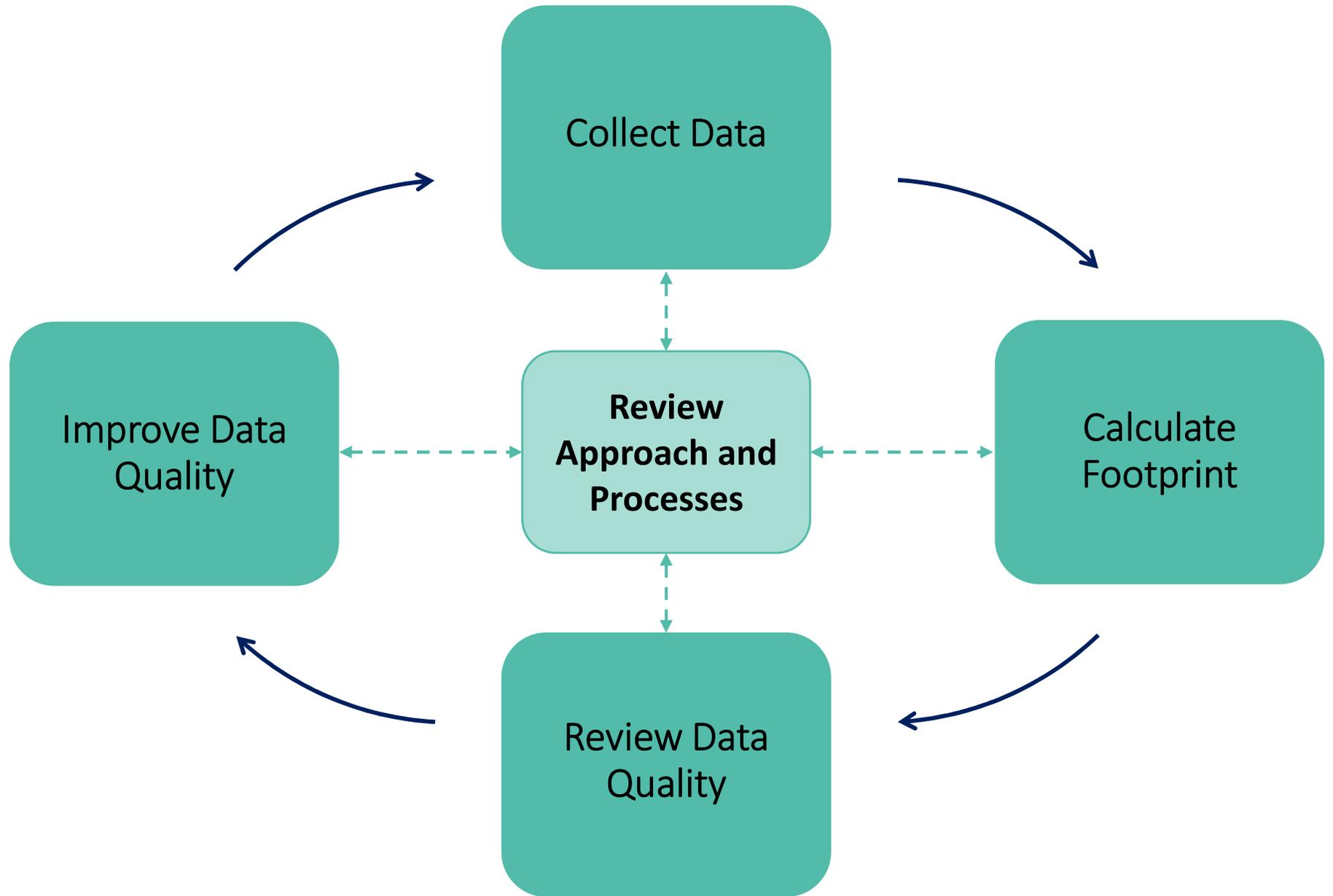
Scope 3: Downstream



Scope 3 Accounting Maturity Stages



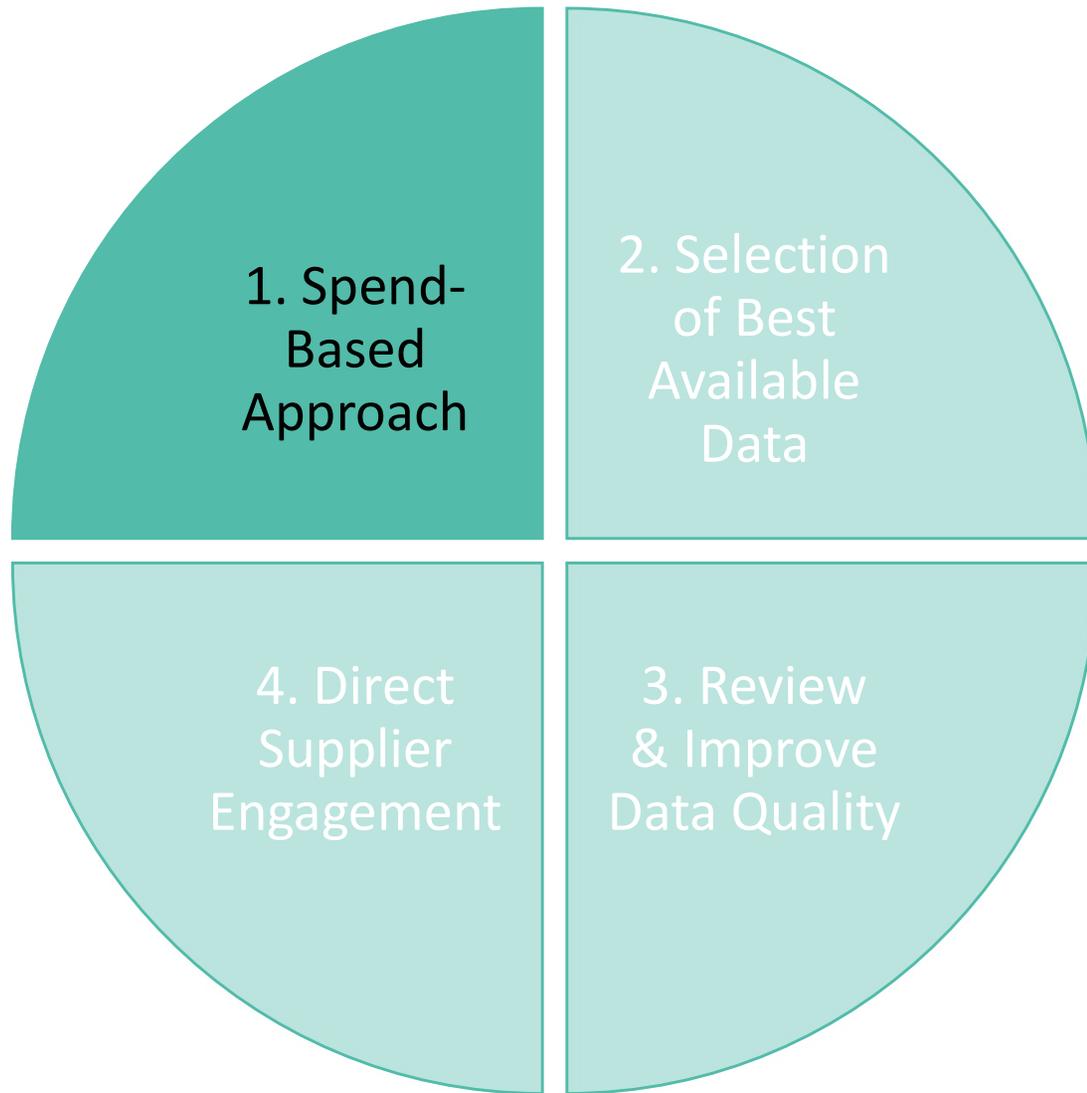
Scope 3 Accounting Journey





Spend-based Reporting: Benefits & Limitations

Scope 3 - Spend-Based Reporting



What is the 'Spend-Based' Approach?

Estimating emissions from the financial spend on value chain activities using a 'spend-based' emission factor.



Clean Spend Data: Categorise by activity, remove VAT, convert currency with period-average FX rate, deflate/inflate as needed...



Map Data: Pick an EEIO (Environmentally Extended Input-Output) model aligned to your geography and map to the relevant value chain activities.



Calculate & Aggregate: Spend (£/\$...) × EEIO Factor (CO₂/£/\$...). Aggregate by activity, sector, supplier and Scope 3 category to show carbon hotspots.



Quality Assurance: Reconcile coverage to total net spend, check variances. Check outliers, double-counting and inflation.

Spend-Based Approach: Pros and Cons

Advantages

- **Speed & Coverage:** You can get a higher-level understanding covering all Scope 3 very quickly.
- **Comparability:** Consistent and adjustable year-to-year method to allow fairer comparison between years.
- **Low Data Burden:** Does not require supplier engagement or complex emissions factor development.
- **Great First Step:** Great effort to value ratio tool, useful for identifying hotspots and areas to develop higher data fidelity.

Spend-Based Approach: Pros and Cons

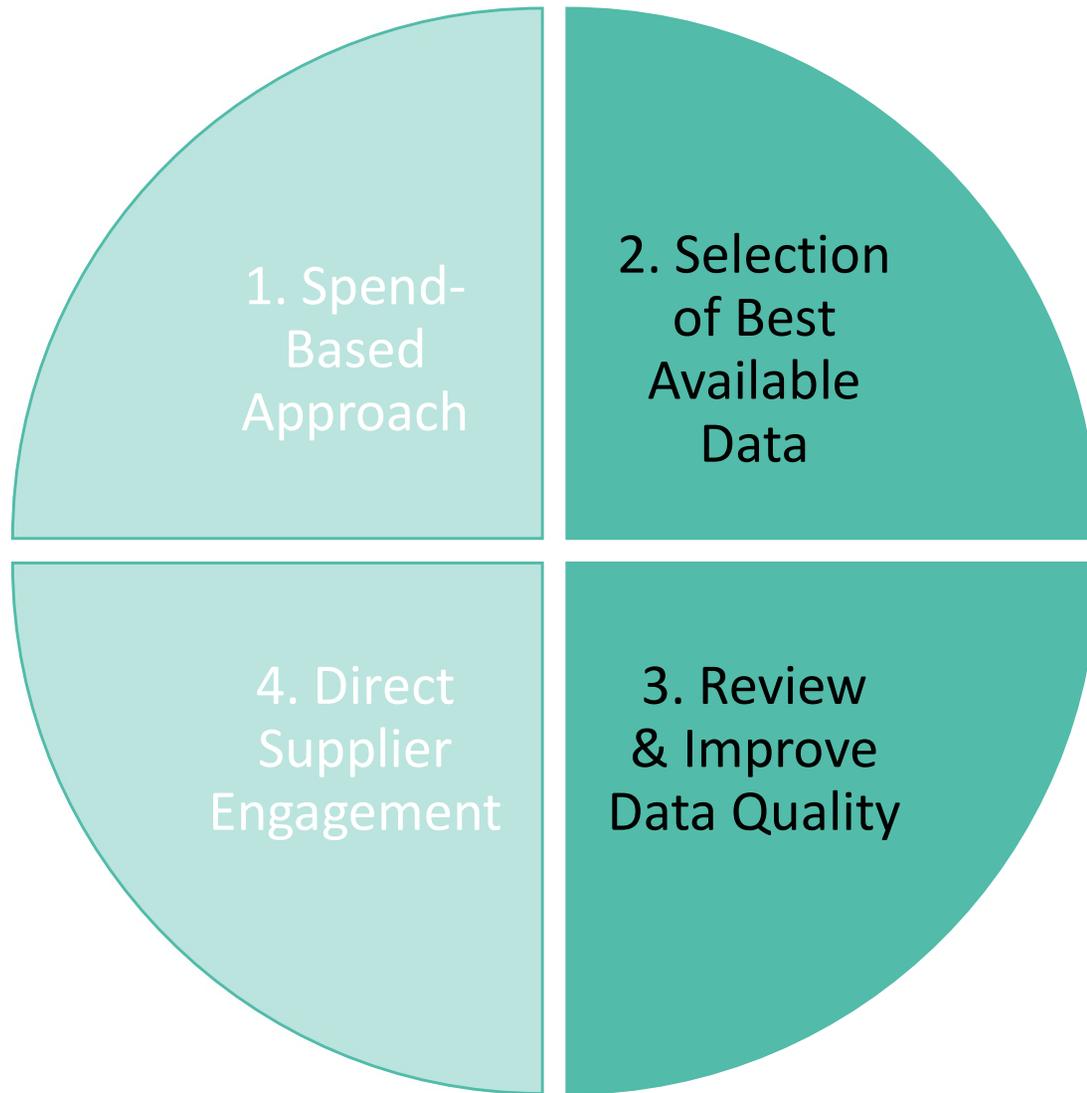
Disadvantages

- **Price ≠ Carbon:** Inflation, margins, and FX distort prices and thus distort emissions results.
- **Poor Actionability:** Spend-Based approach can highlight hotspots but gives poor fidelity on specific actions and processes to change.
- **Volatile:** Spend swings can move emissions without real operational change.
- **Temporal / Geo / Tech gaps:** factors may be old, from other regions, or may not adequately cover your technological areas.



Selecting & Improving Scope 3 Data

Scope 3 - Improving Your Data



Scope 3 - Post Spend-Based Approach

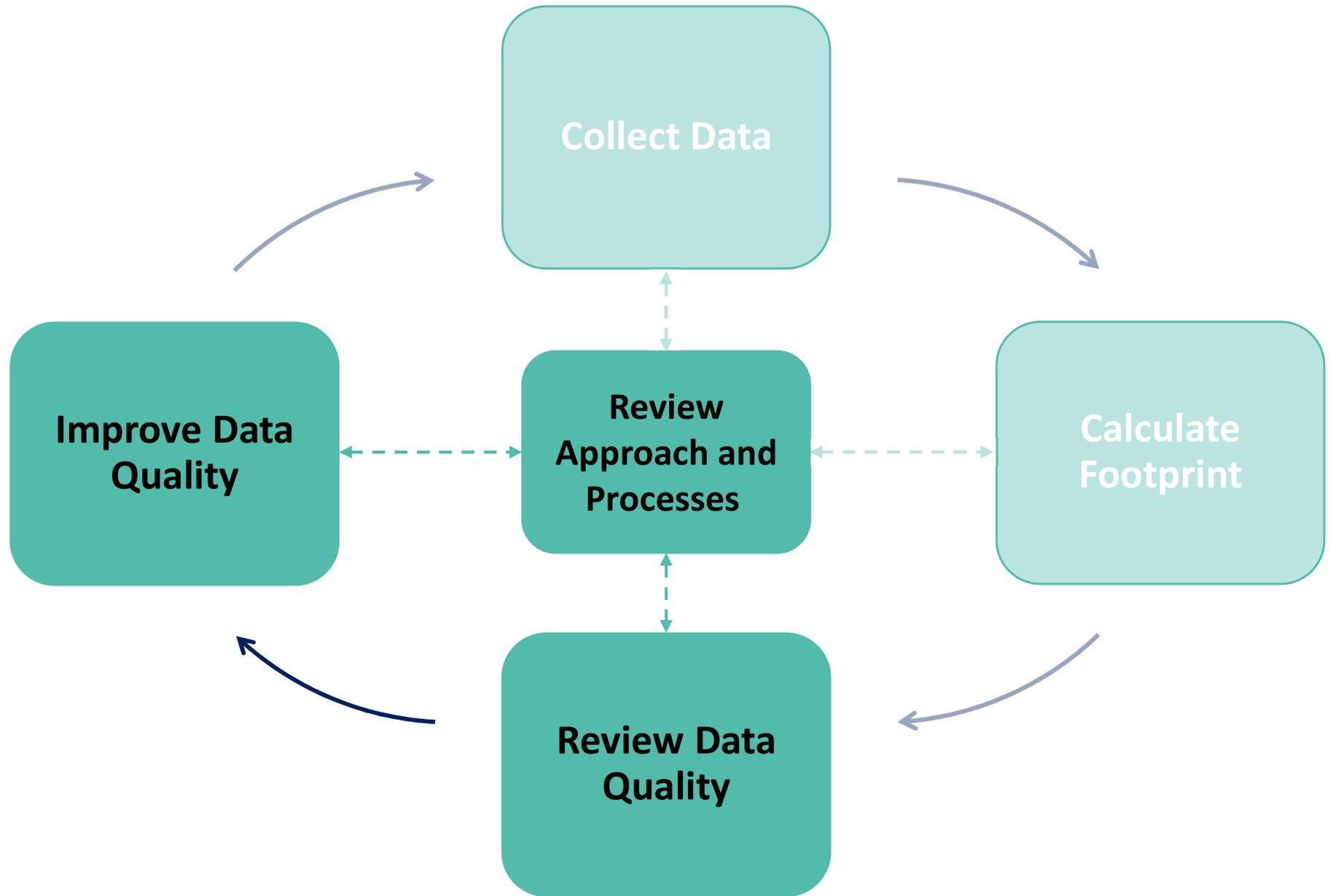
Completing a spend-based screening:

- Provides an initial **high-level** picture of your Scope 3 footprint.
- Allows identification of most material **categories, activities** and **suppliers**.

Next steps to take:

1. **Review:** Perform a 'sense-check' and identify your **significant emissions**.
2. **Selection:** Map your most significant categories and activities that could be replaced with better 'process-based' data.
3. **Collection:** Collect the best available process-based data you have already to replace spend for significant categories.
4. **Gap Analysis:** Were you able to get the data you wanted? Note lessons learnt at each stage to help improve the process for next time.

Scope 3 Accounting Journey



Data Selection



Inventory first: For significant categories, activities and suppliers; audit what data you already hold e.g., -

- Quantity Data - weights, volumes, material, POs / SKUs...
- Transport Data - distances, freight routes, freight type...
- Travel Data - locations, passengers, no 'nights' stay...
- Waste Data - collection reports, weight and disposal method
- Employee Data - commuting / homeworking habits



Factor search: Source the most appropriate emissions factor for each data stream, following a data quality hierarchy approach.



Ranking & Applying Factors: Prioritise by geographic fit, temporal vintage, technological relevance, transparency, and completeness. Use a simple Data Quality Index (DQI) to score / tie-break if needed.

Scope 3 – Data Maturity Ladder

1

Spend-Based Factors

2

Generic Process-Based Emissions Factors

3

Targeted (Proxy) Generic Process-Based Emissions Factors

4

Assumed Supplier-Specific Emissions Data

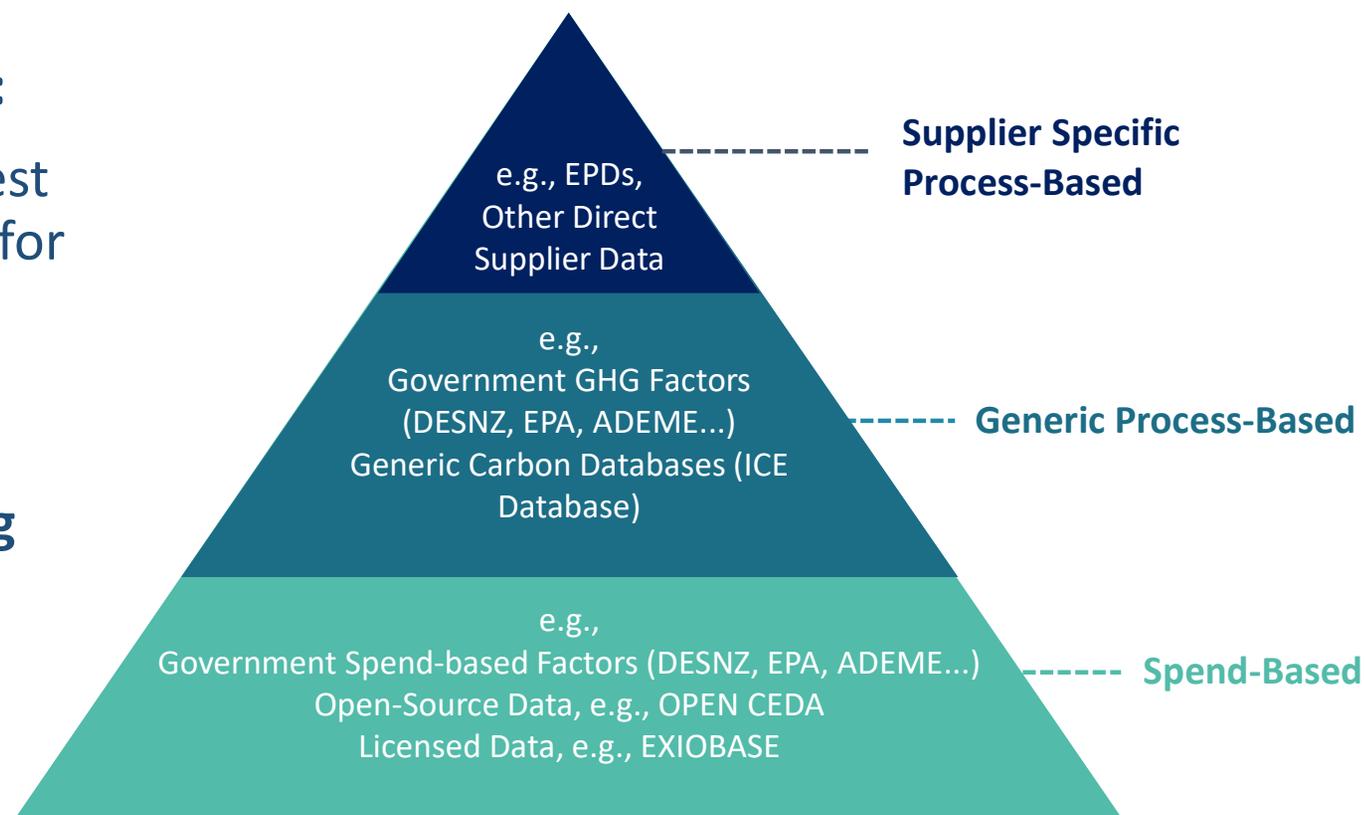
5

Verified Supplier-Specific Emissions Data

Data Improvement – Useful Resources

Data Quality Hierarchy:

- Always aim for the best possible data quality for significant emissions
- Higher accuracy data allows for better **planning** and **tracking** of carbon reductions



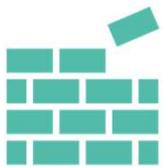
Hierarchy of Data Quality

Using DQIs to Track Improvements

Using a small number of Data Quality Indicators (DQIs) can track Scope 3 data quality over time and help focus on improvements.



Footprint DQIs: Emissions % by data type (supplier-specific / generic process-based / spend-based). Target decrease in spend-based share over time.



Category DQIs: Significant emissions % moved away from spend-based, or number of categories with improved DQI scores over time.

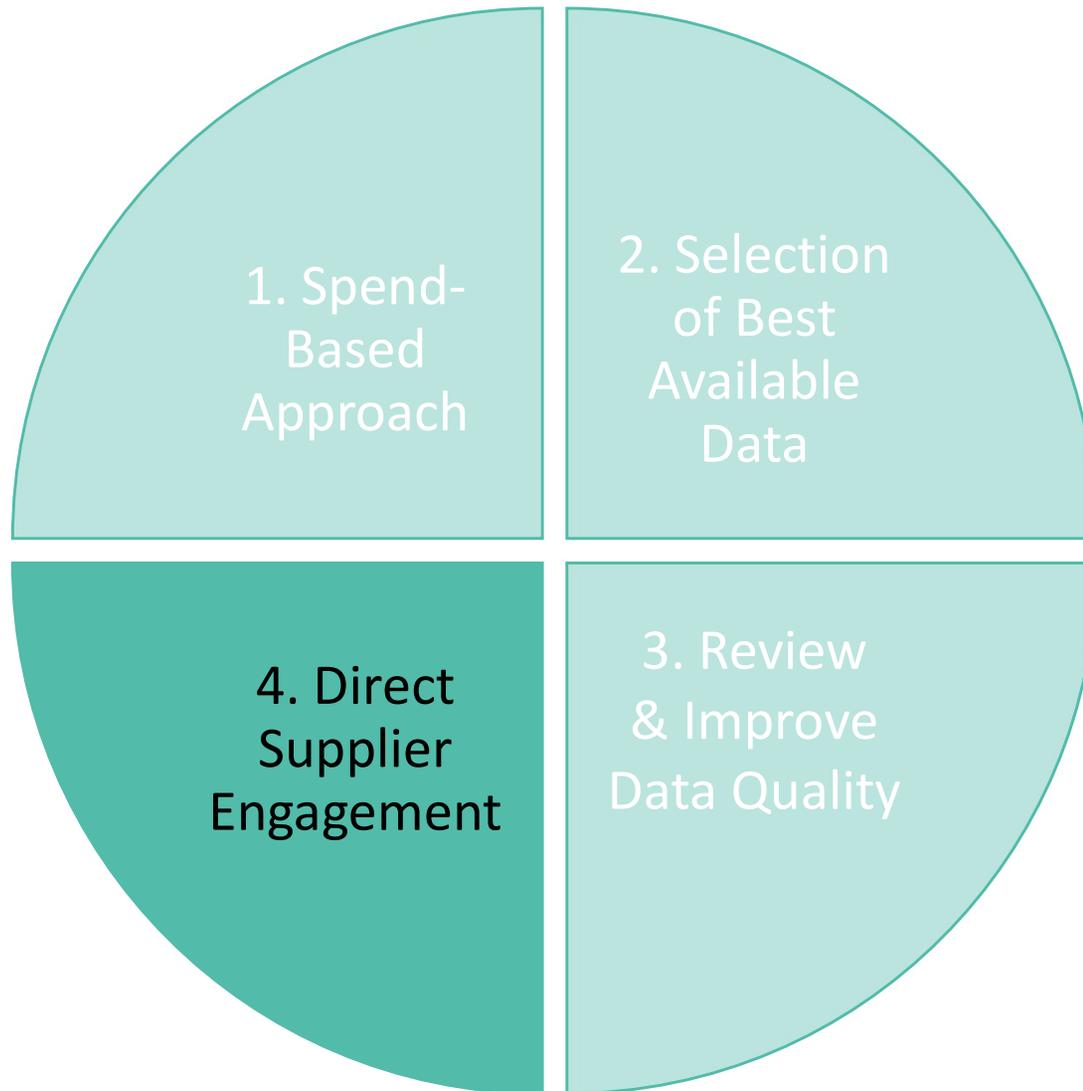


Factor DQIs: You can score data quality of individual factors used for geographical, temporal and technological relevance and aggregate the DQI scores as needed.

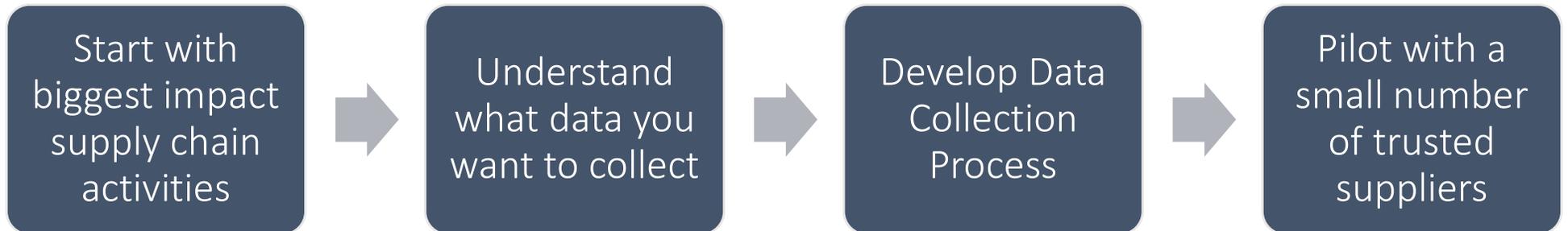


Engaging Your Supply Chain

Scope 3 - Direct Supplier Engagement



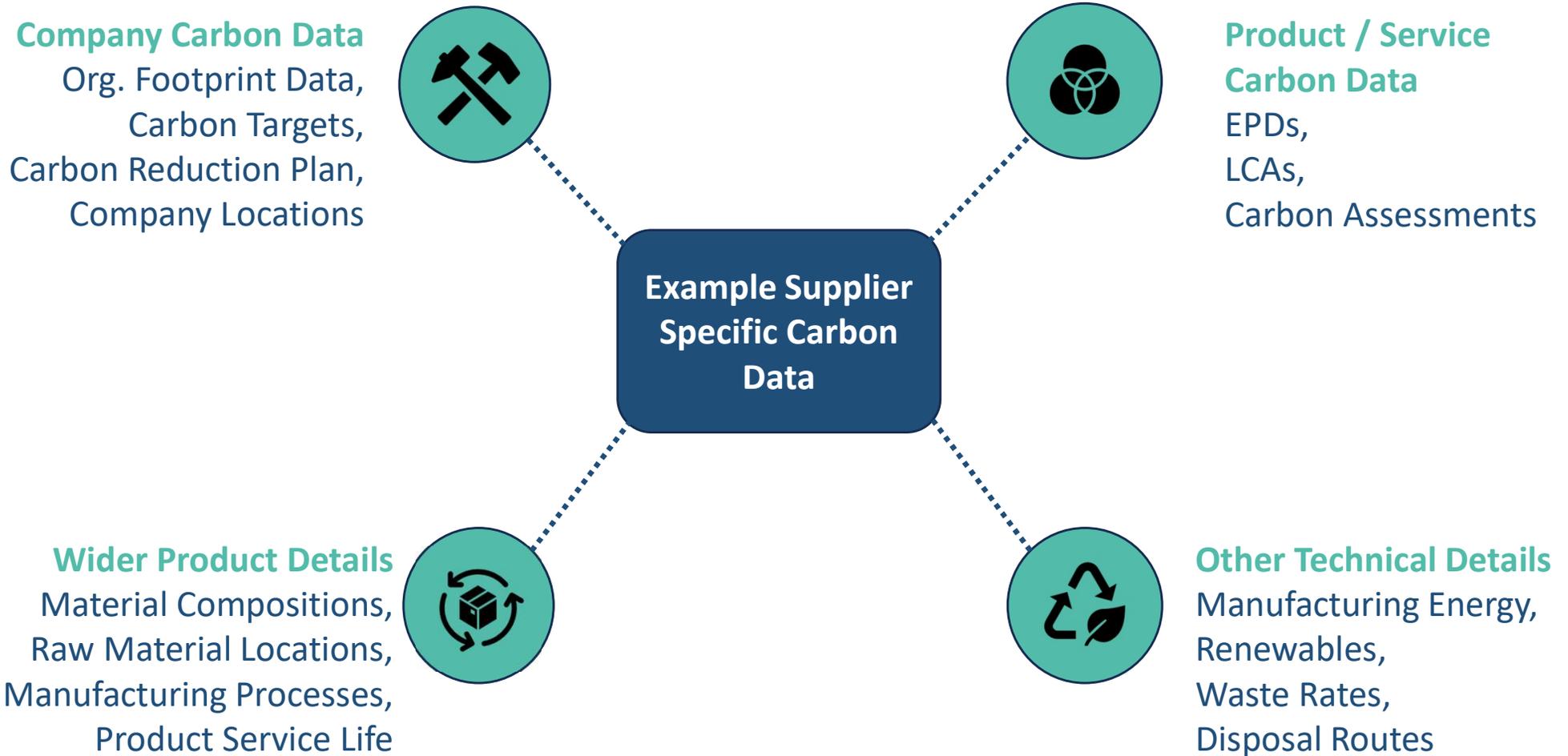
Supplier Engagement – Where to Start



Keep the process as simple as possible...

- Don't need to reinvent the wheel
- Align to industry standards / terminology
- Use straight forward language
- Provide additional guidance & support

Supplier Engagement – What to Collect



Where to go from here?

Start Simple.
Establish a baseline
and mature over
time.

Be transparent with
your objectives.

Try to understand
your suppliers own
carbon agenda and
strategy.

Understand your
own expertise levels
and resources
available.



Some Wider Considerations

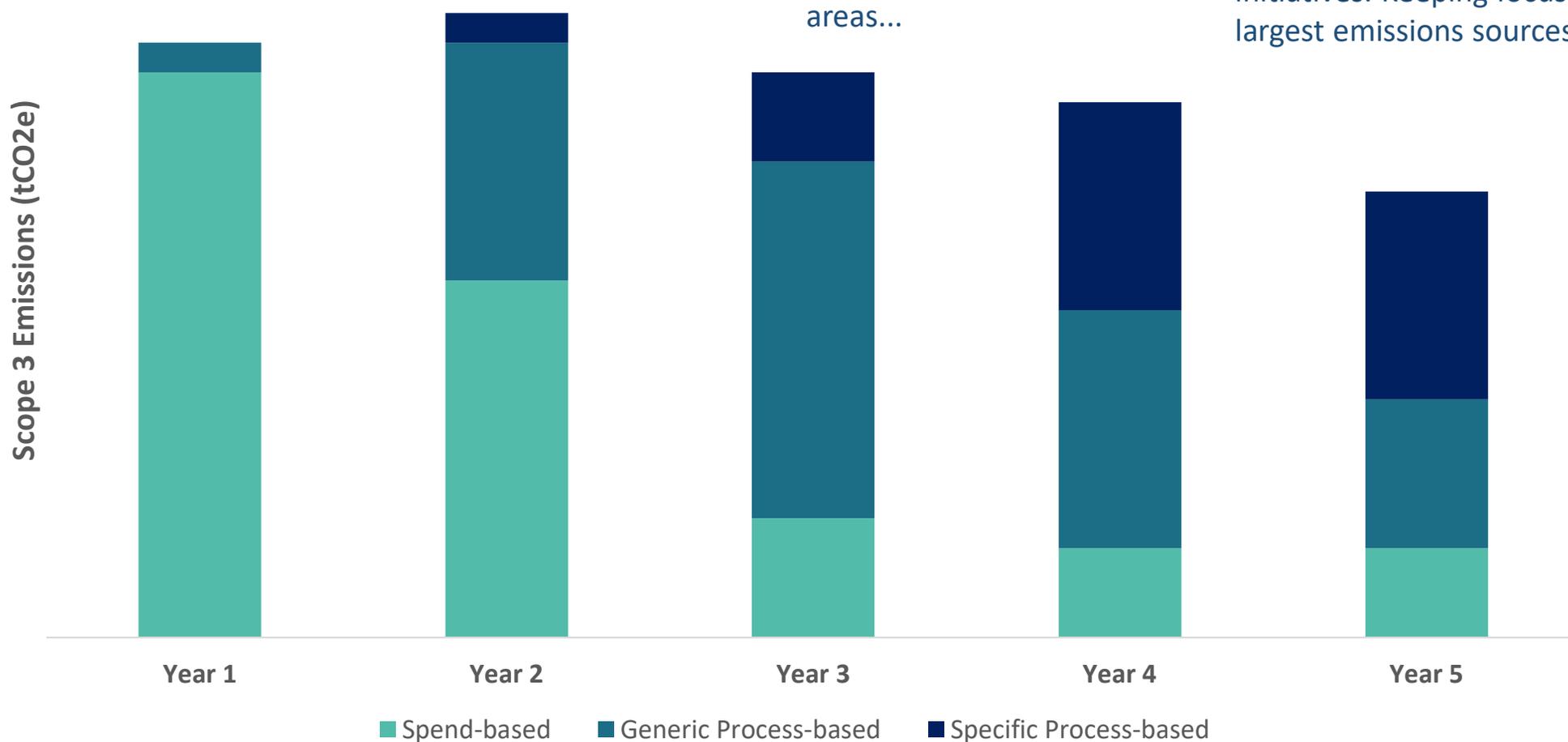
Illustrating Data Maturity Over Time

1. Mainly Spend-based. Initial hotspot review. Perhaps some process-based data already available.

2. Move to process-based data where information is already available. More likely to be "generic" in the first instance.

3. Try to improve data quality each year. Move from **spend to process**, and from **generic to specific**. Likely to still require some spend-based for trickiest areas...

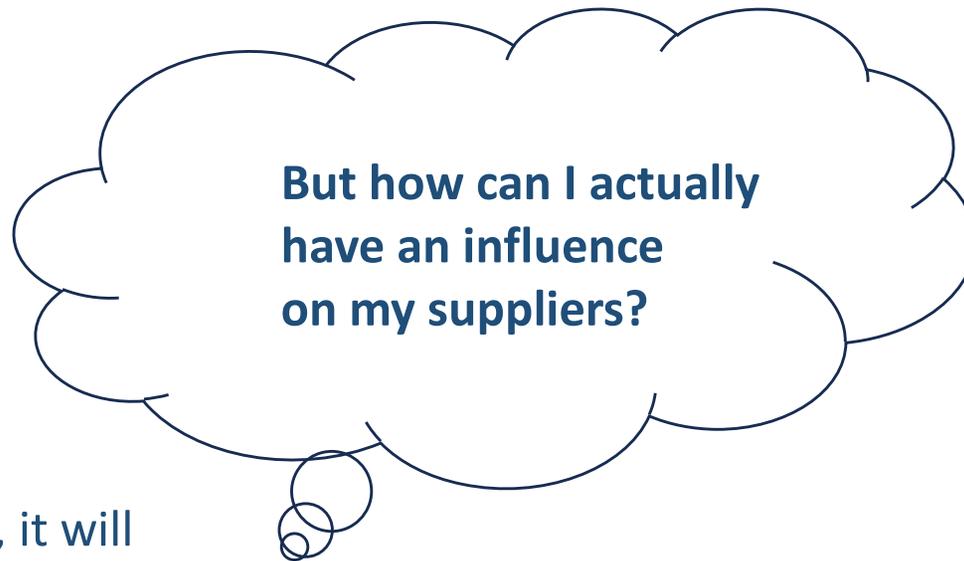
4. With more process-based reporting, comes better tracking of carbon reduction initiatives. Keeping focus on largest emissions sources.



Wider Considerations

You have more soft influence than you might think...

Benefits to working collaboratively. Especially when you can help them look good (and vice versa).



Positive engagement does not always have to be data...

Start discussing early, it will probably take longer than you think...

You will not be the only ones asking for this information...

Today's Webinar - Recap

- ✓ Understanding where you are on the Scope 3 journey
- ✓ The benefits & limitations of spend-based reporting
- ✓ How to select and improve your Scope 3 Data
- ✓ How to start engaging with your Supply Chain
- ✓ Wider considerations for Scope 3

Next Webinars

Next Webinars -

Carbon Offsetting, Neutrality, & Tree Planting – 9th October 2025

Recap of previous webinars in 2025 - Watch these again at on our website...

- **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 in 2025 on **Bespoke Carbon Libraries** and **EPDs...**

Keep an eye on our networks for more information

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

ICE Database v4.1 Announcement



We are now excited to announce an **ICE v4.1 update**, expected to launch in the **coming weeks**



This update will focus on two important materials, **Bitumen and GGBS** (Ground Granulated Blast Furnace Slag), both have **large changes in their GWPs** (changes in allocation methods)



This has consequential impacts on **asphalt**—owing to the inclusion of bitumen—and on **cement and concrete mixes** that incorporate GGBS as a supplementary cementitious material



Q&A

**Please use the Q&A interface to ask
your questions**



Thank you for watching

Sign up for more information on ICE and for future updates

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