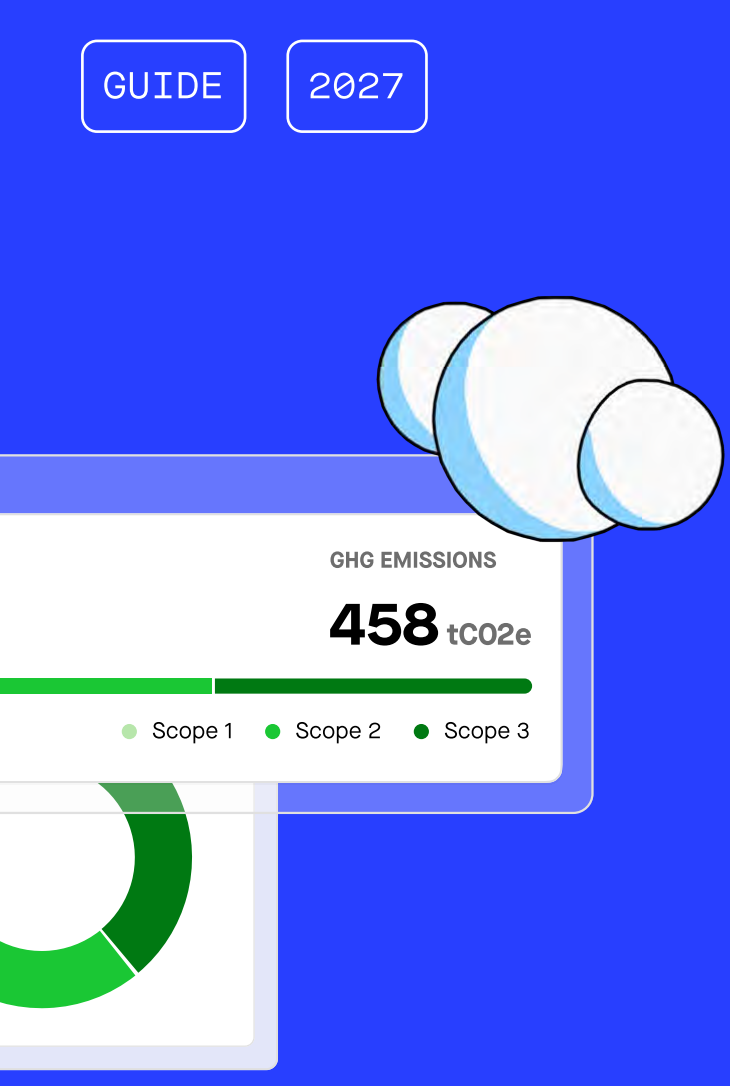
4 steps to calculate your Scope 3 emissions

SWEEP

The 2027 Scope 3 emissions guide.

GUIDE 2027



We'll cover:

01 You don't need perfect data to get started

02 Why is Scope 3 still so difficult to measure?

03 A four-step approach

04 How Swisscom scaled supplier engagement

05 Manage your entire Scope 3 journey in one platform

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01 You don’t need perfect data to get started

For many companies, most emissions occur outside their direct operations. These Scope 3 emissions come from purchasing, transportation, product use, and other activities across the value chain.

Measuring them remains complex. Data is spread across financial systems, procurement tools, suppliers, and external databases. Its quality also varies depending on each supplier’s level of maturity.

This guide presents a four-step approach to help you make progress quickly.

Four steps to move forward

01 **Estimate**
emissions across the value chain

02 **Enrich**
estimates with published data

03 **Engage**
strategic suppliers directly

04 **Act**
on the largest sources of emissions

Start with broad coverage. Improve accuracy where it matters. Act where your impact is greatest.

Go deeper with Product Carbon Footprints

Product carbon footprints offer the most detailed view of emissions. They are most useful when decisions are made at product level:

- comparing suppliers of the same product
- replacing a material or component, redesigning a product or its packaging
- or setting a product-level baseline to measure a specific change.

02 Why is Scope 3 still so difficult to measure?

The challenge comes from the volume of data to collect, as well as the diversity of suppliers, calculation methods, and systems involved.

Three obstacles come up repeatedly:



Fragmented data



Supplier maturity gap



Limited resources



Fragmented data

The required information is spread across several sources:

- Purchase orders and invoices
- ERP systems and procurement tools
- Suppliers
- Physical volumes and units
- Emission factor databases
- Product carbon footprints
- Questionnaires and supporting documents

Teams must clean, structure, and reconcile this information before they can use it.



Suppliers at different levels of maturity

Your Scope 3 emissions are, in large part, based on your suppliers' emissions, so you depend on their data. But suppliers are not equally equipped to provide it. Some large companies already publish their emissions and targets. Others don't publish but are mature enough to provide detailed questionnaires. The rest are just getting started: they may have energy bills or fuel records but don't know how to convert them into emissions.

This means a one-size-fits-all approach won't work. Most companies segment their suppliers by emissions impact and maturity, then use primary data where it's available and spend-based or average-data estimates for the rest. Over time, the aim is to move your most significant suppliers up that maturity curve.



Limited resources

It’s often not possible to chase data for every supplier and product in your value chain. The work is deciding where better data is worth the effort.

They should consider:

- Which suppliers account for the most emissions
- Where data is particularly uncertain
- Which suppliers are likely to respond
- Which products require more detailed analysis
- Where better data could change a decision

The key is to collect the data that will change what you do, whether that’s choosing a supplier, setting a reduction target, or redesigning a product.

03 A four-step approach

A Scope 3 calculation rarely rests on a single data source. It typically starts with spend-based and physical activity estimates, then replaces them with supplier-published data, questionnaire responses, and product carbon footprints (PCFs) where it’s impactful.

These methods complement one another and serve different purposes.

01 Estimate

Data used
Spend, physical quantities, and emission factors

Purpose
Cover the value chain and identify the largest sources of emissions

02 Enrich

Data used
Company disclosures and third-party databases

Purpose
Improve accuracy without contacting every supplier directly

03 Engage

Data used
Questionnaires and supplier data

Purpose
Collect primary emissions data directly from suppliers

04 Act

Data used
Hotspots, targets, and scenarios

Purpose
Prioritize initiatives and track their impact

The best method depends on the supplier's impact, maturity, and how you plan to use the data.

An estimate may be sufficient for a low-impact supplier. Published data can improve the calculation for a large supplier that is difficult to engage. A detailed questionnaire may be appropriate for a strategic partner.

The required level of accuracy can therefore vary depending on the supplier and the decision at hand.



Improve data where it can increase confidence, support reporting, or influence a decision.

Step 1: Estimate emissions

Start with the data you already have

Your financial and procurement systems already contain much of the information needed to build an initial Scope 3 footprint.

At this stage, focus on coverage. An initial estimate helps you understand how emissions are distributed and identify the areas that require further analysis.

Spend-based estimates

A spend-based method multiplies the amount spent on a good or service by a sector-average emission factor.

It can be applied quickly across a large number of transactions. It provides an initial footprint and helps identify the purchasing categories likely to generate the most emissions.

The result remains an estimate. The factors are based on industry averages, and price changes can affect the result even when purchasing volumes remain stable.



Emission Factors

Coefficients that convert an activity into its GHG emissions, for example kg CO_2e per kWh of electricity, per litre of diesel, or per money spent.

Physical activity-based estimates

When volumes are available, such as kilograms of material, liters of fuel, or tonne-kilometers of freight, they can be matched with relevant emission factors.

Physical data can provide a more stable estimate than spend, since it isn't affected by price changes. Its quality depends on the accuracy of the categories, units, and emission factors used.

Data to gather

Start by centralizing:

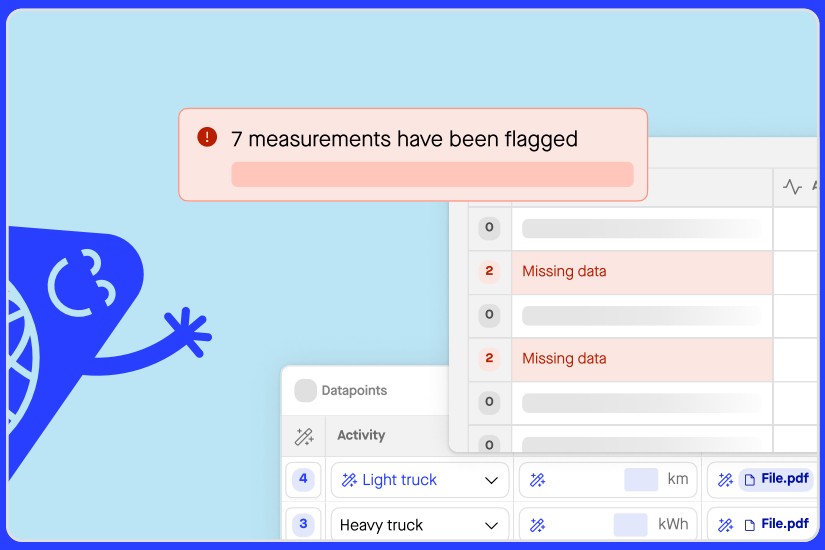
- Spend by supplier and category
- Supplier names and identifiers
- Available quantities and units
- Countries of purchase, production, or delivery
- Product or service categories
- Existing carbon data
- Existing product carbon footprints

Procurement data is rarely ready to use as is. The same supplier may appear under several names. A subsidiary and its parent company may be recorded separately. Product descriptions may be incomplete, and units may be inconsistent.

Left uncorrected, these issues lead to double counting, missed suppliers, and emissions assigned to the wrong category.

How Sweep helps

Sweep centralizes procurement, supplier, and activity data in one place. Our AI, Sweepy, cleans data files, identifies duplicates and errors, matches activities with emission factors, and flags missing information...so you spend your time reviewing the results rather than formatting the data.



A complete estimate provides an actionable first view of the entire value chain.

Step 2:
Enrich estimates

Use information that is already available

Many companies publish their emissions, climate targets, and methodology in annual reports, CDP responses, and other specialized databases.

This information can improve generic estimates, particularly for large suppliers that already report on their climate performance.

Why enrich your data?

Enrichment is particularly useful for companies that already publish detailed information but may not respond to every questionnaire sent by their customers.

It reduces the gap between an industry average and data directly linked to the supplier.

Available information may include:

- Scope 1, 2, and 3 emissions
- The reporting year
- The organizational boundary
- Revenue or another allocation metric
- Reduction targets
- The methodology used
- Verified or audited data
- Progress compared with previous years

Third-party databases such as S&P Global can provide company-level emissions data and other published information to enrich supplier records.

Apply an allocation method

A supplier's total emissions should be allocated proportionally to your purchases.

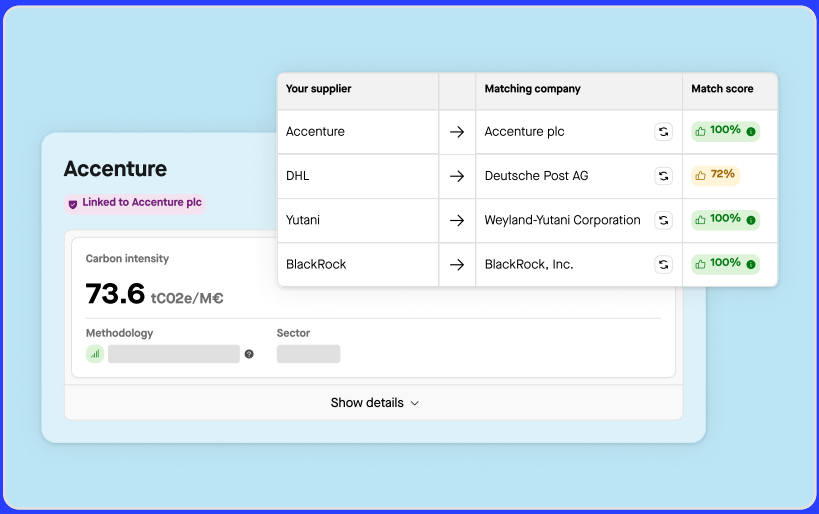
The allocation method may be based on:

- Revenue
- Purchase volume
- Product mass
- Number of units
- Another relevant activity metric

Document the selected method and apply it consistently over time.

How Sweep helps

Sweep can enrich supplier records with published information and third-party data. The platform then lets you apply a documented allocation method, retain the source of each data point, and compare the results with existing estimates.



Enrichment improves accuracy while freeing up your team's time for the suppliers that need direct engagement.

Step 3:
Engage strategic suppliers

Tailor each request to the supplier

Supplier engagement takes time for both the company collecting the data and the supplier providing it.

Overly broad or too frequent campaigns can create survey fatigue, incomplete responses, and a large volume of data that is difficult to verify.

Start with the suppliers that matter most.

How should you identify priority suppliers?

The Pareto principle can provide a useful starting point: a relatively small share of suppliers or purchases often accounts for a large share of estimated emissions.

Carbon impact should be considered alongside other criteria:

- The supplier's strategic importance
- The quality of existing data
- Reduction potential
- The availability of lower-carbon alternatives
- Exposure to regulatory or geopolitical risks
- The supplier's relevance to your climate targets

What should you ask in a questionnaire?

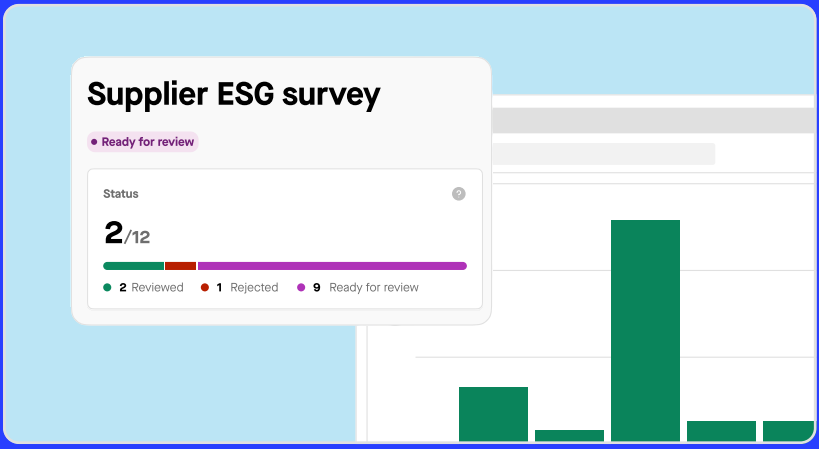
Depending on your objective, a campaign may cover:

- Scope 1, 2, and 3 emissions
- The reporting boundary and year
- Energy and activity data
- The emission factors used
- Climate targets
- Progress achieved
- Supporting documents
- A metric for allocating emissions to your purchases

How Sweep helps

Sweep lets you segment suppliers by impact and maturity, then launch targeted questionnaires. Teams can track responses, send reminders, review supporting documents, and approve data in one place.

Suppliers access their request through a private portal without seeing any other data in the buyer's account.



Targeted, proportionate requests lead to higher-quality engagement.

Step 4:
Take action

Turn data into decisions

Once you have identified the largest sources of emissions, three questions can guide your analysis:

- Where are emissions concentrated?
- What can the company or supplier change?
- Which actions offer the best combination of carbon impact, cost, feasibility, and business value?

Key reduction levers

Depending on the industry, initiatives may include:

- Reducing volumes or the amount of material used
- Replacing carbon-intensive materials
- Increasing recycled content
- Changing product or packaging design
- Switching suppliers to renewable electricity
- Improving energy efficiency
- Optimizing routes and transport modes
- Reducing waste
- Extending product life
- Changing suppliers where appropriate

Compare several scenarios

Modeling helps estimate how different initiatives could affect emissions and the company's climate trajectory.

For example, you can compare:

- Two suppliers using different energy sources
- A conventional material and a recycled alternative
- Several modes of transport
- A change in product design or weight

A simulation relies on assumptions. Document them, test several outcomes, and update them as new data becomes available.

Bring procurement into decision-making

Carbon criteria can be integrated into:

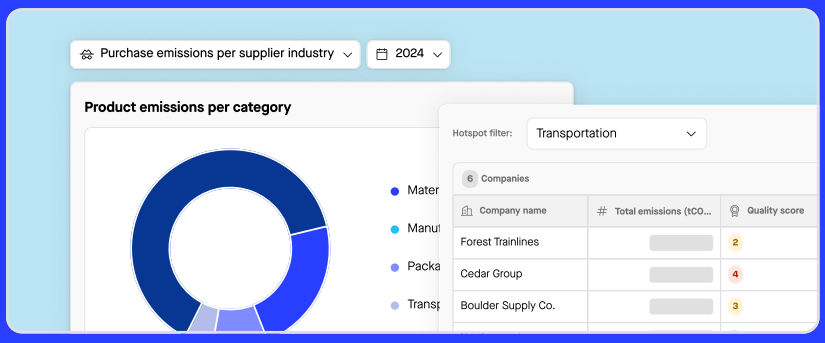
- Requests for proposals
- Onboarding processes
- Category strategies
- Contract renewals
- Performance reviews
- Preferred supplier programs

Climate performance can then be assessed alongside cost, quality, availability, delivery times, and resilience.

How Sweep helps

Sweep helps identify hotspots by supplier, purchasing category, product, or business unit. You can create and compare reduction scenarios, build decarbonization initiatives at all levels of your company, and track progress against targets.

Sweepy also makes it easier to analyze data and query the inventory to surface key risks and opportunities.



Scope 3 data creates value when it informs a purchasing, design, or investment decision.

Go deeper with product carbon footprints

Collect product carbon footprints where they add value

Once you know your priority suppliers and products, you may need more detailed data to support specific decisions. The right level of detail depends on the decision. For many companies, allocated supplier emissions, site-level energy data, or a supplier's reduction plan will be enough to compare suppliers or track progress. Product carbon footprints offer the most detail, and are most useful when decisions are made at product level.

When should you request a product carbon footprint?

A PCF is particularly useful when:

- A top-emitting product needs more than spend-based or supplier-average data
- Procurement is comparing suppliers of the same product
- A raw material or component could be replaced
- The product design or packaging could change
- A reduction initiative requires a product-level baseline
- The company wants to measure the impact of a specific change

Structure PCF data collection

Set clear requirements before launching a PCF request. This makes results easier to compare across suppliers and ensures they can be added to your Scope 3 inventory without additional rework.

Define:

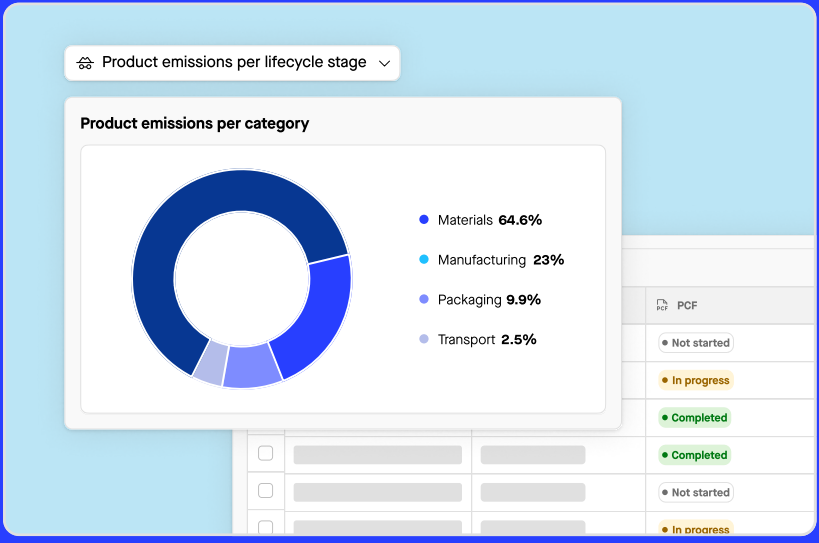
- **Products and system boundaries:** Specify the products covered and the life cycle stages to include. For purchased goods, this will usually be cradle-to-gate.
- **Methodology:** Select the standard suppliers should follow, such as the PACT Methodology or ISO 14067.
- **Declared unit:** Define how the footprint should be expressed, for example per kilogram or per unit. This allows you to multiply the PCF by the quantities purchased.
- **Evidence and verification:** List the supporting documents required and specify whether third-party verification is expected.

Review each PCF before adding it to your Scope 3 inventory. Confirm that it follows the required methodology and that its underlying data is complete and traceable.

How Sweep helps

Sweep lets you launch a single survey campaign to collect PCFs from a supplier for all the products they supply. Suppliers can submit an existing PCF they calculated or use a guided workflow to calculate and respond with a PACT-aligned one.

Procurement and sustainability teams can then review the data, request additional information, approve the result, and add it directly to the Scope 3 inventory.



Product data should answer a specific question related to purchasing, design, or emissions reduction.

Track progress and make data quality visible

A credible strategy starts with a clearly defined baseline.

Document:

- The baseline year
- The organizational boundary
- The Scope 3 categories covered
- Calculation methods
- Significant exclusions
- Key assumptions

Absolute targets

An absolute target focuses on reducing total emissions.

Example:

Reduce Scope 3 emissions from purchased goods and services by 40% by 2030, compared with 2025.

Intensity targets

An intensity target measures emissions against an activity metric, such as revenue, production volume, or units sold.

Example:

Reduce Scope 3 emissions per product sold by 50% by 2030.

Intensity targets track improvements in efficiency. Absolute targets show changes in total emissions. Tracking both provides a more complete view of progress.

Measure data quality too

Complement total emissions with indicators that reflect the quality and coverage of your inventory:

- Share of emissions covered by supplier-specific data
- Share of strategic suppliers that have responded
- Share of priority products with a PCF
- Breakdown of spend-based, physical, company-level, and product-level data
- Average age of the data

Data quality depends on methodology, boundaries, traceability, and available supporting evidence. A well-documented estimate can provide a stronger foundation than a supplier figure with limited context.

Explain changes over time

An increase or decrease in Scope 3 emissions can have several causes:

- A real-world reduction in emissions
- A change in business activity
- A change in reporting boundaries
- An acquisition
- A new calculation method
- Replacing an estimate with more accurate data

Separate these factors in your reporting to provide a transparent view of progress.

Regulatory reporting

Requirements vary by jurisdiction, company size, and industry. They also continue to evolve.

A governed, traceable dataset can support several frameworks, including CSRD, CSDDD, and CDP, as well as customer and investor requests.

- **CSRD/ESRS:** Companies within scope need to disclose material Scope 3 emissions under ESRS E1, together with their methodology, targets, and progress.
- **California SB 253:** Companies meeting the applicable criteria and doing business in California will be required to report Scope 3 emissions, with reporting expected to begin in 2027.
- **UK Sustainability Reporting Standards:** The UK SRS are expected to shape future sustainability disclosure requirements, including the reporting of material Scope 3 emissions.

Trust comes from transparency around the sources, methods, and limitations of each data point.

04 How Swisscom scaled supplier engagement

A significant share of Swisscom's emissions comes from purchased components and equipment, making Scope 3 central to its climate strategy.

With around 3,000 suppliers, collecting and consolidating data required significant coordination.

The challenge

Swisscom initially relied on a complex Excel file created by a consultancy. The process was difficult to maintain, prone to manual errors, and accessible to only a limited number of employees.

Collecting information from thousands of suppliers also required numerous emails, meetings, and follow-ups.

The solution

Swisscom chose Sweep to centralize its carbon inventory and automate part of its supplier data collection.

The platform helps Swisscom:

✓ Bring carbon data together in one place

✓ Import historical data

✓ Launch and track supplier questionnaires

✓ Use benchmarks when supplier-specific data is unavailable

✓ Compare reduction initiatives

✓ Track the program's progress over time

This approach provides a more robust and scalable foundation for managing Scope 3 emissions.

A progressive approach combines estimates, benchmarks, and directly collected data. It maintains broad coverage while improving accuracy for the most important suppliers.





“It would take someone with the patience of a saint to send hundreds of emails, organize meeting after meeting to obtain the necessary data, and then enter it manually into Excel files. It quickly becomes difficult to manage, particularly when working with thousands of suppliers.”

Res Witschi
Delegate for Sustainable Digitalization, Swisscom

swisscom

05 Manage your entire Scope 3 journey in one platform

Sweep helps companies move from an initial emissions estimate to data that is accurate enough to guide decisions.

Sweep helps companies move from an initial emissions estimate to data that is accurate enough to guide decisions.

Estimate and build your baseline

- Import procurement data through files, APIs, SFTP, or connectors to your procurement and data platforms
- Sweepy cleans the files, merges duplicate suppliers, and suggests emission factors with confidence scores you review before anything is applied
- Get a first Scope 3.1 estimate and see your emission hotspots

Enrich and engage

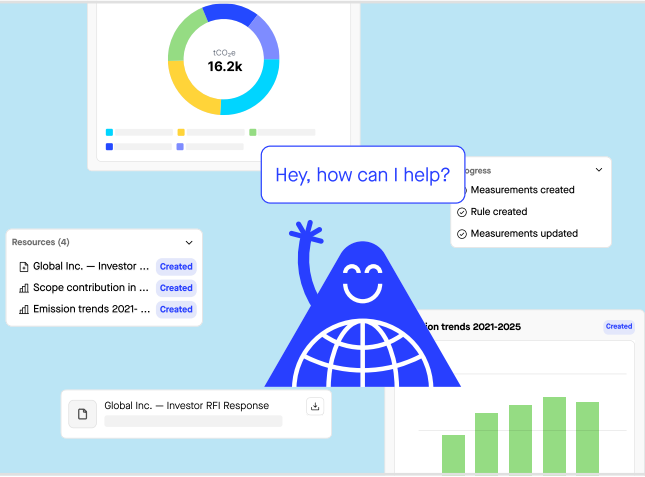
- Enrich suppliers in bulk with company-reported emissions from sources such as S&P Global
- Send targeted campaigns with deadlines, reminders, and progress tracking in one place
- Suppliers respond for free in a private portal, with last year's answers pre-filled and Sweepy helping pre-fill responses
- Approve or reject each answer, with a reason the supplier can see

Get product-level visibility

- Request PCFs for a supplier's whole product range in one campaign
- Let suppliers without a PCF create one with AI and get a PACT-aligned result they can reuse with other customers
- Approved PCFs replace spend-based estimates in your inventory

Turn data into actions

- Model reduction scenarios on real supplier data and track each initiative against your targets
- Ask Sweepy questions about your emissions data to surface insights and build your reduction strategy
- Create custom dashboards and reports to share with stakeholders



AI throughout the journey

Sweepy helps teams clean, structure, and analyze their data. It supports data matching, identifies missing information, answers questions, and guides suppliers. Suggested actions remain visible and subject to your approval.

Better data for better decisions

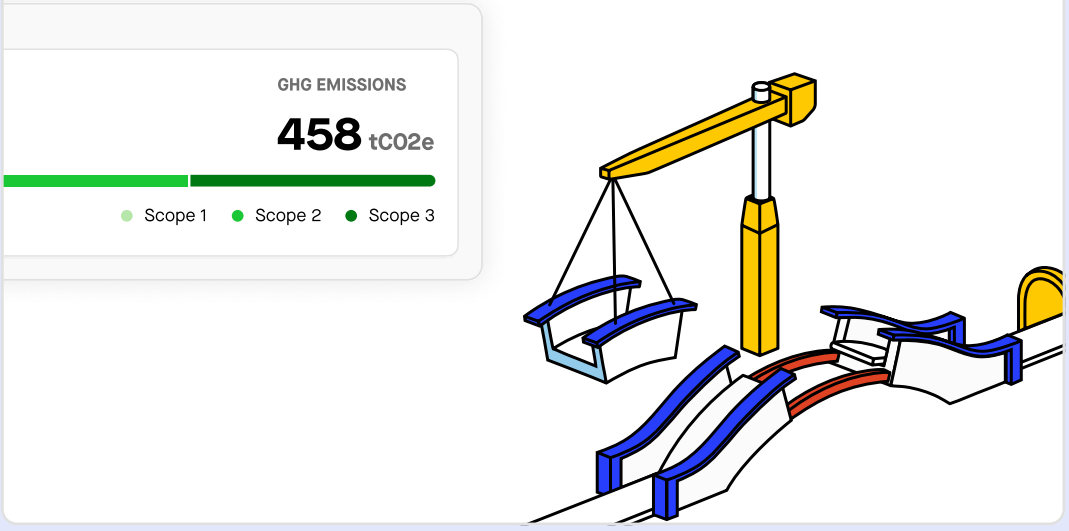
An effective Scope 3 approach combines broad coverage with targeted accuracy.

Estimates provide a view of the entire value chain. Published data improves supplier insights. Questionnaires support engagement with strategic partners. Product carbon footprints provide the detail required for the most important decisions.

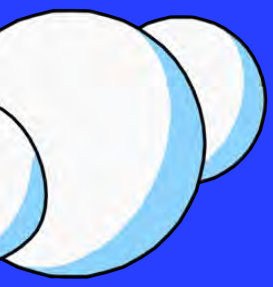
This approach connects carbon data with procurement, design, operations, and investment decisions.

Ready to turn your Scope 3 data into action?

Talk to our team about building a value chain decarbonization program tailored to your business.



Book a demo →





SWEEP

Sustainability Intelligence Platform

sweep.net

Book a demo →