Emissions: Supplier Transformation Guide

Responsible Sourcing

Partnering to Reduce Supply Chain Emissions

Clicking any of the items below will jump to that section

How to use this guide

This transformation guide is designed to provide an introductory framework and resource for BD suppliers working to establish a climate reduction program. It covers various topics with guidance and **links to best practice external resources**. Suppliers can **navigate to the section (linked below)** that is most relevant to their needs.

If you have any inquiries, please contact the BD Responsible Sourcing Team at BDResponsibleSourcing@bd.com.

Introduction to BD supplier climate action program

BD is committed to reduce Scope 3 emissions across our value chain

As a signatory to the UN Race to Zero and the Science Based Targets Initiative (SBTi) , BD is committed to reducing emissions across our entire value chain. A large share of our Greenhouse Gas (GHG) emissions are produced in our upstream supply chain. In order to address these emissions, BD is committed to working with our suppliers to create a more resilient supply chain that is adaptable to climate risks and minimizes our overall carbon footprint.

Climate Action Commitments

Climate change
Minimize our contribution to global emissions and utilize our capabilities to address unmet health needs for climate-vulnerable populations.

Product Impact
Reduce the environmental impact of our portfolio and address the sustainability needs of our customers.

Responsible supply chain
Create a supply chain adaptable to disruption and able to contribute to strong environmental and social performance.

BD Climate Action Targets

To reduce Scope 1 and 2 emissions 50% by 2030.
(from 2019 baseline)

BD commits to reach net zero GHG emissions across the value chain by FY 2050.

Scope 3: 75% BD suppliers should set greenhouse gas reduction targets aligned or approved by the Science Based Target initiative (SBTi) aligned by 2028.

BD supplier expectations on emissions

To achieve our larger emissions reduction goals are engaging directly with suppliers to set targets and lower emissions. We ask our suppliers to disclose their carbon emissions data, set GHG targets in alignment with SBT, and bring ideas for sustainable products and services to BD.

Expectations

- **Track** your emissions (Scope 1,2 & 3) and share this data with BD.
- **Submit** your data to BD annually.
- **Set** Science Based aligned targets by 2028.
- Reduce emissions in line with your targets and report progress.

Where to begin

- Start **measuring** your emissions.
- **Create a plan** on how to set achievable GHG targets.

How to engage with BD

- Verify targets on SBTi website. **Or make your targets public** through your company's website.
- **Measure** and **report progress** to BD on an annual basis.

If you have not yet tracked your emissions and are looking for guidance, please use the resourses in this guidebook to help you develop a plan on how to measure, set targets and reduce emissions.

Pathway to Net-Zero: Together we advance

6 SHARE AND ENGAGE
Communicate your efforts and engage with key stakeholders. Report publicly on your impact and progress.

5 CREATE PLAN AND ACT
Create an action plan to achieve your target. Implement initiatives that reduce emissions.

4 SET SBT TARGET
Set a Greenhouse Gas reduction target aligned with Science Based targets

3 COMMIT
Commit to set a Science Based aligned greenhouse gas reduction target

2 SCOPE 3
Calculate your Scope 3 emissions and create a baseline.

1 SCOPE 1 & 2
Calculate your Scope 1 & 2 emissions and create a baseline.

Encouraging BD suppliers to achieve greater emissions maturity

Where does your company sit in the BD supplier emissions maturity model? The links in this toolkit provide resources to help you to move from one stage to the next. **BD asks our suppliers to reach Stage 5 of this model by 2028.**

SUPPLIER MATURITY MODEL

Stage 1: No Data

No data available or not shared yet

Stage 2: Early stage

Supporting basic data sharing requests. No targets in place.

Stage 3: Developing

Developing data management systems. Have some targets in place.

Stage 4: Committed

Committed to set Science Based aligned targets (SBTi).

Stage 5: Leading

Demonstrating best practice. Have ambitious Science Based approved or aligned targets.

OUR COMMITMENT

Target – 75% of suppliers by emissions to reach Stage 5 by 2028

BD will prioritize new business with suppliers who respond to data requests

BD will provide supplier training and support capacity building

BD will look to collaborate on NPD, joint-innovation and recognize and reward supplier efforts

A high-level framework to progress from one maturity stage to the next based on best practice

Topics	Stage 1: No Data	Stage 2: Early Stage	Stage 3: Developing	Stage 4: Committed	Stage 5: Leading
GHG Measurement	*Create an inventory of all owned and operated assets, including facilities and vehicles, and their estimated use (e.g., facilities: annual electricity consumption; vehicles: annual mileage and fuel consumption) and measure your Scope 1 & 2 emissions.*	*Measure GHG emissions across Scope 1 and 2 according to the GHG Protocol annually*	*Measure GHG emissions across Scope 1, 2, and 3 according to the GHG Protocol annually*	*Externally verify Scope 1 and 2 GHG emissions inventory via an independent and reputable third-party assurance provider*	*Externally verify Scope 1, 2 and 3 GHG emissions inventory* *Perform climate life cycle assessments (LCAs) for key products and services*
Target Setting		*Set SBT aligned goal for absolute Scope 1 and 2 emissions*	*Commit to set SBT aligned targets for Scope 1, 2 and 3 emissions.*	*Set SBT aligned goal for absolute Scope 1, 2 and 3 emissions.*	*Consider validating targets with SBTi*
Reporting	*Report emissions data to BD on annual basis.*	*Report emissions data to BD on annual basis.* *Publicly disclose Scope 1 and 2 emissions and climate related commitments.*	*Report emissions data to BD on annual basis.* *Publicly disclose Scope 1, 2 and 3 emissions and SBT related commitments on company website/ESG Report or SBTi website or via 3rd part reporting tools (Ecovadis/CDP/Integrity Next)*	*Report emissions data to BD on annual basis.* *Publish time-bound climate transition plans/decarbonization roadmaps with some key elements of climate transition plans according to relevant frameworks.*	*Report emissions data to BD on annual basis.* *Publish time-bound climate transition plans/decarbonization roadmaps with some key elements of climate transition plans according to relevant frameworks.* *Disclose progress towards described actions and initiatives*
Renewable energy		*Start looking at options for Renewable energy procurement in your operations.*	*Buy Renewable energy for BD manufacturing.* *For the purchase of RE, obtain RE certificates as proof of validity*	*Buy Renewable energy for BD manufacturing.* *For the purchase of RE, obtain RE certificates as proof of validity*	*Set a target to procure 100% RE for BD manufacturing by 2030*

***Text in blue represent mandatory actions required to move from one stage to the next**

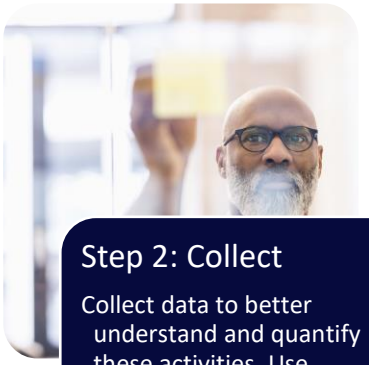
Calculating your emissions

How to calculate your emissions : Step by Step

While the complexity of quantifying your GHG emissions will depend on your business, the process of developing an inventory can be broken down into a few key steps. It may take several months to move through the steps outlined below, and many companies rely on third-party expertise to support this work. Typically, GHG accounting is an annual process that gets easier each time you do it. You can continue to improve the quality of inventory data over time.

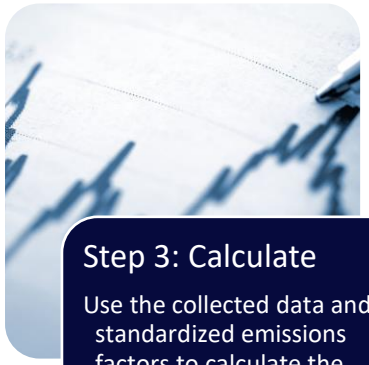
Step 1: Identify

Identify the activities in your business that are sources of emissions, such as energy use in your buildings, business travel etc.



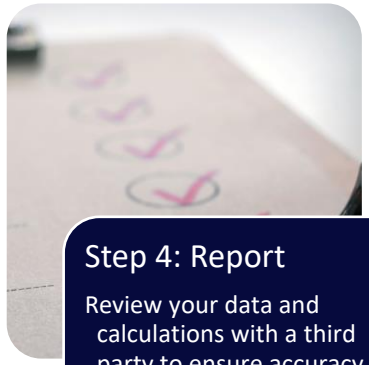
Step 2: Collect

Collect data to better understand and quantify these activities. Use estimates to fill gaps where data is unavailable or not feasible to collect.



Step 3: Calculate

Use the collected data and standardized emissions factors to calculate the emissions generated by each activity. Sum up the total emissions by scope and source.



Step 4: Report

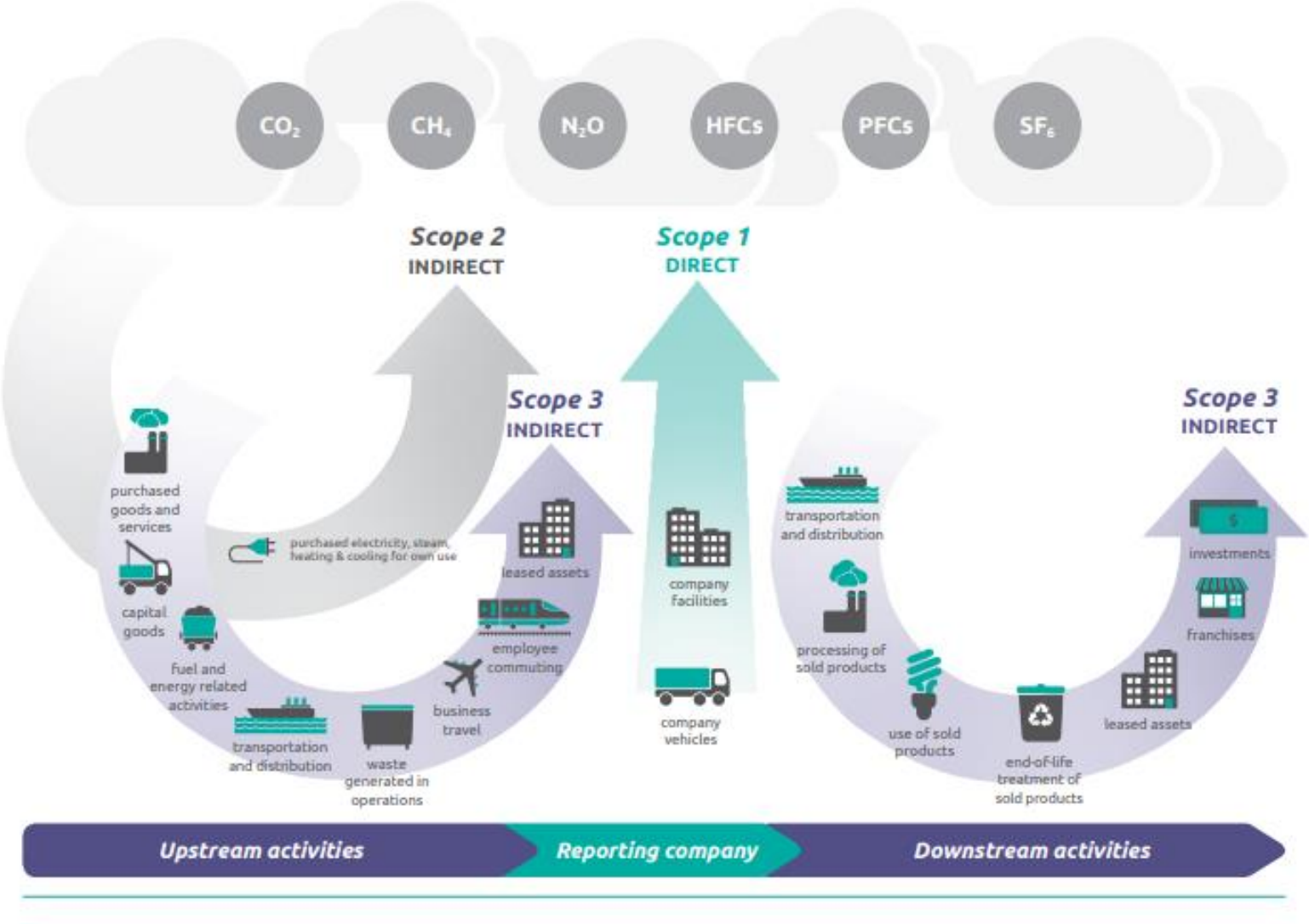
Review your data and calculations with a third party to ensure accuracy and completeness, and report emissions results to your stakeholders (like BD).

The next few slides will provide a basic understanding of the process and will link to external best practice resources that can help you get started.

Overview of Scope 1, 2 and 3 emissions

The GHG Protocol Corporate Standard classifies a company's GHG emissions into three "Scopes," and requires that companies account for and report all:

- **Scope 1 emissions** (i.e., direct emissions from owned or controlled sources).
- **Scope 2 emissions** (i.e., indirect emissions from the generation of purchased energy consumed by the reporting company).
- **Scope 3 emissions** (i.e., all other indirect emissions that occur in a company's value chain).



Source – GHG Protocol

Resources and Best Practice: starting your Scope 1 and 2 emissions journey

- Organizations can start their emissions measurement journey by first focusing on calculating Scope 1 & 2 emissions. Scope 1 and 2 is slightly easier to measure as it is owned by the organization. Many companies measure Scope 1 and 2 emissions first, and then move on to Scope 3.
- You can start this process by verifying your emissions sources and collecting the activity data for sources through utility bills etc. See example in following slide.
- Establishing a relevant, complete, consistent, transparent, and accurate scope 1 and scope 2 emissions inventory is a process of continuous improvement.

Resources and Best Practice

GHG Protocol A Corporate Accounting and Reporting Standard – The GHG Protocol Corporate Accounting and Reporting Standard provides requirements and guidance for companies and other organizations preparing a corporate-level GHG emissions inventory.

•Direct Emissions from Stationary Combustion (pdf) is used to identify and estimate direct GHG emissions from stationary (non-transport) combustion of fossil fuels at a facility (e.g., boilers, turbines, process heat).

•Direct Emissions from Mobile Combustion Sources (pdf) is used to identify and estimate direct GHG emissions associated with fuel combustion in owned or operated mobile sources.

•Indirect Emissions from Purchased Electricity (pdf) is used to identify and estimate indirect GHG emissions resulting from the purchase of electricity, steam, heat, or cooling.

•Direct Fugitive Emissions from Refrigeration, Air Conditioning, Fire Suppression, and Industrial Gases (pdf) is used to identify and estimate direct emissions of GHGs from refrigeration and air conditioning systems, fire suppression systems, and the purchase and release of industrial gases.

•The GHG Protocol published Scope 2 Guidance that standardizes how corporations measure emissions from purchased or acquired electricity, steam, heat, and cooling.

Identify data sources and collect activity data - Scope 1 & 2

The following exercise is intended to help you start mapping out what data you will need and who may be able to help provide it.

Instructions: Review the emissions sources and activity data examples as well as the relevance to your business. Identify the department and/or person(s)--internal and external–you know are most likely to have this data. Please note that this exercise continues on the following slides.

Relevant?	Emission Source	Activity data examples	Potential source	Who to contact
☐	Company Vehicles	- Gallons of fuel used - Miles travelled and vehicle MPG	Fuel purchase or mileage records	
☐	Company Facilities	- Natural gas used (e.g., therms) - -Money spent on natural gas - Facility square footage by location	- Utility bills - Meter reading records - Rent statement - Facility records	
☐	Purchased Electricity, Steam, Heating & Cooling	- Electricity purchased (e.g., kWh) - Money spent on electricity - Facility square footage by location	- Utility bills - Meter reading records - Rent statements - Facility records	

Guidance to start your Scope 3 emissions journey

- Organizations can start their emissions measurement journey by first determining which categories of scope 3 emissions are relevant to the organization. Scope 3 is divided into 15 different categories and all categories might not be relevant.
- You can start this process by verifying your emissions sources and collecting the activity data for sources, for instance, use spend data for purchases made for Scope 3 Category 1 Purchased Goods and Services. See example in slide following slides.
- Establishing a relevant, complete, consistent, transparent, and accurate scope 3 emissions inventory is a process of continuous improvement.

Resources and Best Practice

Corporate Value Chain (Scope 3) Standard – The Corporate Value Chain (Scope 3) Accounting and Reporting Standard allows companies to assess their entire value chain emissions impact and identify where to focus reduction activities.

Technical Guidance for Calculating Scope 3 Emissions – Technical guidance document serves as a companion to the Scope 3 Standard to offer companies practical guidance on calculating their scope 3 emissions.

SCOPE 3 GREENHOUSE GAS EMISSIONS CALCULATION - GUIDANCE FOR THE PHARMACEUTICAL INDUSTRY - The primary focus of this document is to provide a consistent guidance for pharmaceutical companies to calculate GHG emissions in their upstream and downstream value chains. It provides methodologies consistent with recommendations from the GHG Protocol for calculating emissions which are tailored for each different category. This document was developed by the Pharmaceutical Environment Group (PEG) and its participating companies, who have kindly shared it with the PSCI for diffusion.

Identify data sources and collect activity data - Scope 3

Relevant?	Emission Source	Activity data examples	Potential source	Who to contact
☐	Purchased Goods & Services	- Money spent by purchase category - Weight of materials purchased	- Purchasing records - Annual profit & loss statement(s)	
☐	Capital Goods	- Money spent by purchase category	- Purchasing record - Annual profit & loss statement(s) - Facility records	
☐	Fuel & Energy Related Activities	- Natural gas used (e.g., therms) - Electricity purchased (e.g., kWh)	- Scope 1 and 2 energy use data	Refer to Scope 1 & 2 reporting
☐	Upstream Transportation & Distribution	- Distance, mode and weight for product shipped to/between company facilities	- Bills and invoice - Purchasing record - Transit records	
☐	Waste From Operations	- Amount of waste landfilled, incinerated, recycled, and/or composted	- Waste hauling report - Waste audit record	
☐	Business Travel	- Distance traveled by transport mode - Money spent on travel - Count of nights of hotel stays	- Travel records	
☐	Employee Commuting	- Distance commuted by mode and frequency - Headcount by location	- Employee survey analyzing commuting habits	
☐	Upstream Leased Assets	- Natural gas used and electricity purchased - Money spent on natural gas and electricity - Building floor area	- Utility bills - Meter reading records - Rent statements	

Identify data sources and collect activity data - Scope 3

Relevant?	Emission Source	Activity data examples	Potential source	Who to contact
☐	Downstream Transportation & Distribution	- Distance, mode and weight for product shipped to customers after point of sale	- Bills and invoices - Purchasing records or supplier records	
☐	Processing of Sold Products	- Sales by intermediary product - High-level processing details by product	- Purchase records - Energy use from manufacturing partners	
☐	Use of Sold Products	- Sales by product - Product material components/ ingredients - Product packaging dimensions, materials	- Sales records - Product specs	
☐	End-of-Life Treatment of Sold Products	- Same data as use of sold products - Product recycling program information	- Sales records - Take-back program records - Product specs	
☐	Downstream Leased Assets	- Fuel and energy use by asset - Money spent on natural gas and electricity - Building floor area	- Utility bills - Rent statements - Lease records	
☐	Franchises	- Fuel and energy use by facility - Emissions inventories of franchises	- Utility bills - Rent statements - Lease records	
☐	Investments	- Proportional share of investment - Emissions inventories of investees	- Investment records: share by asset class, market capitalization of holding companies	

Calculate the resulting emissions

With your activity data in hand, the next step is to calculate the emissions arising from these activities. While this calculation is based on simple math, the details can be quite technical. If your business isn't too complex (e.g., few assets and a simple ownership structure) you may be able to complete these calculations using an online tool, such as those listed on the Greenhouse Gas Accounting: Calculators & Tools page. However, most companies rely on either internal or external experts to complete these calculations in accordance with GHG accounting standards.

Though you may not complete these calculations yourself, it may be helpful to have a general understanding of the process. Below provides a deep-dive into some of the more technical aspects of calculating GHG emissions.

Activity Data x Emissions Factor = Activity Emissions

To complete the inventory, the emissions from all activities are summed.

EMISSIONS FACTORS

Emissions factors quantify the amount of GHG emissions produced per unit of business activity (e.g., for electricity, metric tons of CO2e emitted per kilowatt-hour of electricity used). Most GHG inventories use emissions factors from public datasets produced by government agencies.

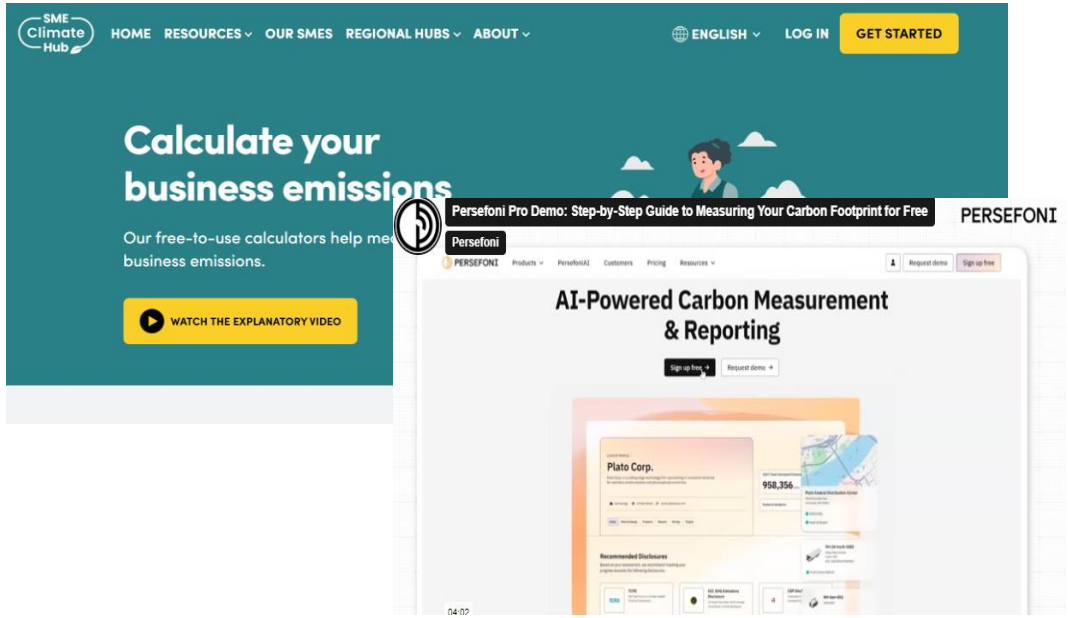
Emission Factor Sources

UK DEFRA, US EPA and GHG Protocol provide free emission factors for Scope 1, 2 and 3 emissions.
UK DEFRA
US EPA
GHG Protocol

IEA provide detailed electricity emission factors for companies having multiple facilities across different countries.
International Energy Agency

Eco invent provides a comprehensive and widely-used database of life cycle inventory data covering thousands of products, services, and processes across multiple sectors.

Free emissions calculators



SME Climate Calculator

Access calculator for free here

Persefoni Pro

Sign up for free here

Learn more about Persefoni Pro here

Additional free resources to calculate your emissions:

Start measuring - SME Climate Hub - SME Climate Hub offers free resources for Small and Medium sized companies to start calculating and measuring their emissions. You can use the Business Carbon Calculator in the SME Climate Hub to estimate your company's full carbon footprint.

Simplified GHG Emissions Calculator | US EPA - The EPA Simplified GHG Emissions Calculator is designed as a simplified calculation tool to help small business and low emitter organizations estimate and inventory their annual greenhouse gas (GHG) emissions.

Scope 3 Free Calculator: This Calculator enables users to evaluate and assess the Greenhouse Gas (GHG) Emissions from their supply chain, also known as Upstream Scope 3 Emissions. The Calculator can serve as a fundamental first step in your organization's Scope 3 journey (Using the emissions factors from United States Environmentally-Extended Input-Output (USEEIO) models)

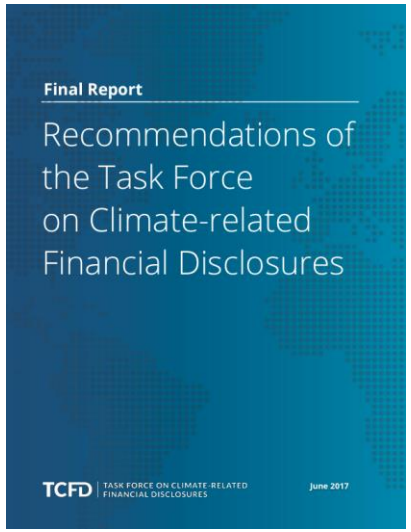
Top climate reporting frameworks and standards for external reporting

Reporting your emissions data in accordance with the leading frameworks such as GRI, CDP, SBTi and TCFD will help your organization in enhancing transparency, improving stakeholder trust, improved risk management, and alignment with global sustainability goals.

[Global Reporting Initiative (GRI)]

[Climate Disclosure Project (CDP)]

[Science Based Targets initiative (SBTi)]



[Task Force on Climate Related Financial Disclosures (TCFD)]

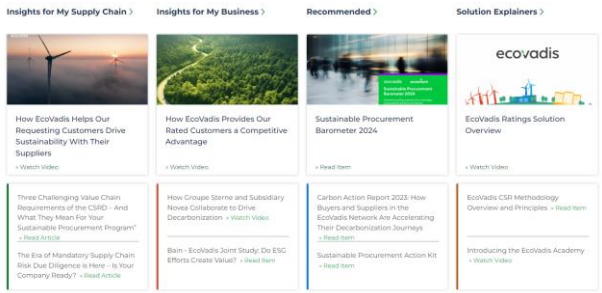
For Small and Medium Enterprise - [Climate Reporting Guidance for SMEs]

Reporting your emissions data to BD

EcoVadis

EcoVadis is BD's preferred mode of receiving carbon emissions data from our suppliers. We ask suppliers to report their emissions and SBT details to BD on an annual basis. If you have not already participated in EcoVadis, you can do so here.

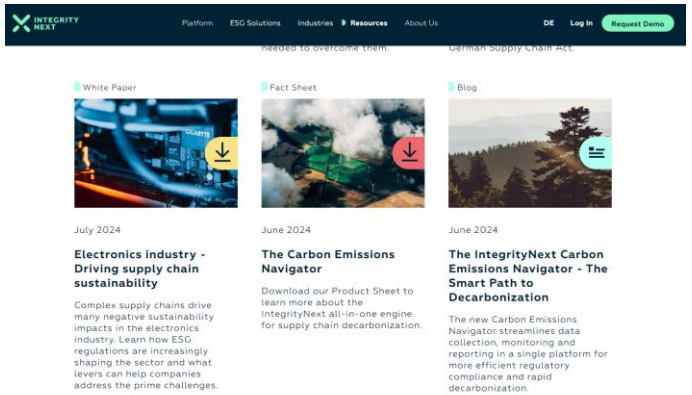
The EcoVadis Resources page provides useful links and resources to complete the EcoVadis assessment and why it is important. EcoVadis also shares a carbon calculator tool if you have not yet measured your emissions.



IntegrityNext

BD also accepts emissions data through the IntegrityNext platform. While not as detailed as EcoVadis, you can still share key details on emissions targets and measurements here. Reach out BDResponsiblesourcing@bd.com to complete an assessment and we will send you a reporting link.

To learn more about Integrity Next visit their Resources page.



Persefoni

If you have not measured your emissions data yet, Persefoni Pro can provide step-by-step guidance via an online tool to measure your carbon footprint for free. No prior experience required, and it will walk you through the data inputs needed to calculate your Scope 1 and 2 emissions (with Scope 3 coming soon).

BD also uses this tool to track our own emissions, so after measuring your emissions, you can report them to BD with one click.

Learn more and sign up here

Product Carbon Footprint (PCF) or Life Cycle Analysis (LCA)

Life Cycle Analysis (LCA), also known as Life Cycle Assessment, is a systematic process used to evaluate the environmental impacts associated with all the stages of a product's life, from raw material extraction through materials processing, manufacturing, distribution, use, repair and maintenance, and disposal or recycling. The goal of LCA is to quantify the environmental impacts of a product, service, or process, and to identify opportunities for improvement.

A product carbon footprint or LCA provides granular emissions related data for a product and can be used to compare material, vendors, manufacturing processes etc. to improve the emissions. This is the reason some customers' request product carbon footprint or LCA from their suppliers. Performing a LCA requires time and effort so companies should start off with calculating their Scope 1, 2 and 3 emissions first. After that they can perform LCA to improve their Scope 3 data.

The Product Life Cycle Accounting and Reporting Standard by GHG Protocol can be used to understand the full life cycle emissions of a product and focus efforts on the greatest GHG reduction opportunities.

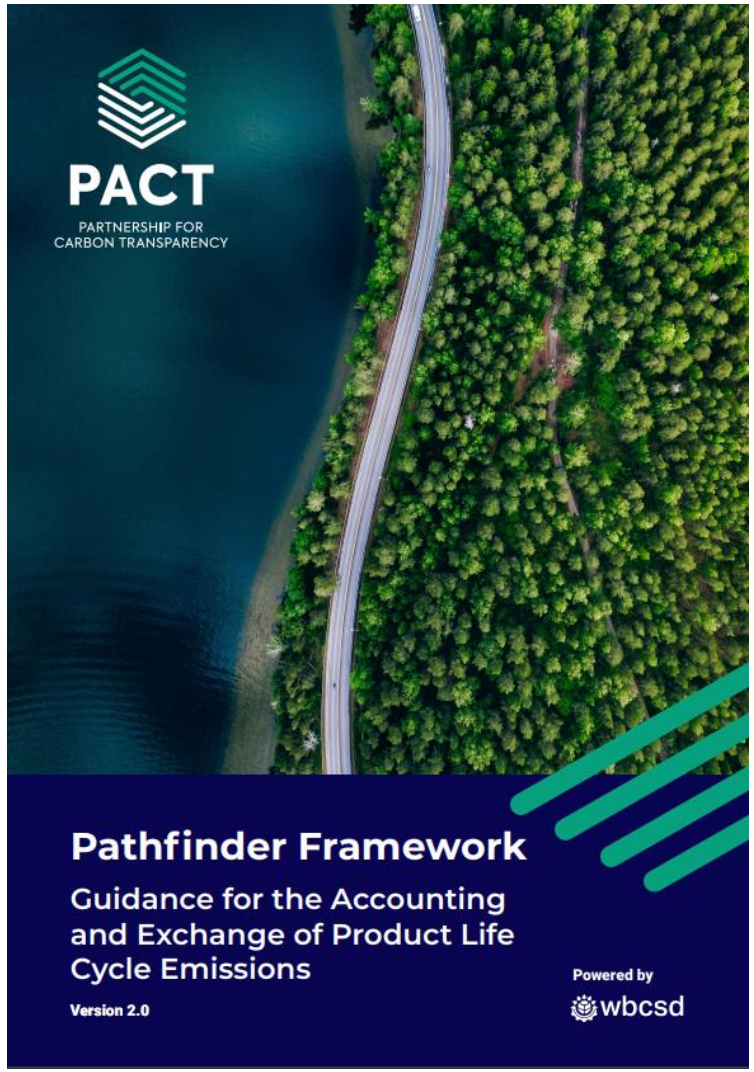
Product Standard | GHG Protocol

Source: GHG Protocol

PACT: Product Carbon Footprint

The PACT Methodology (previously known as the Pathfinder Framework) builds on and leverages existing standards to provide guidance on calculation, data integrity, assurance and verification, and exchange of cradle-to-gate PCFs, with the aim of creating more granular, comparable, and consistent emissions data.

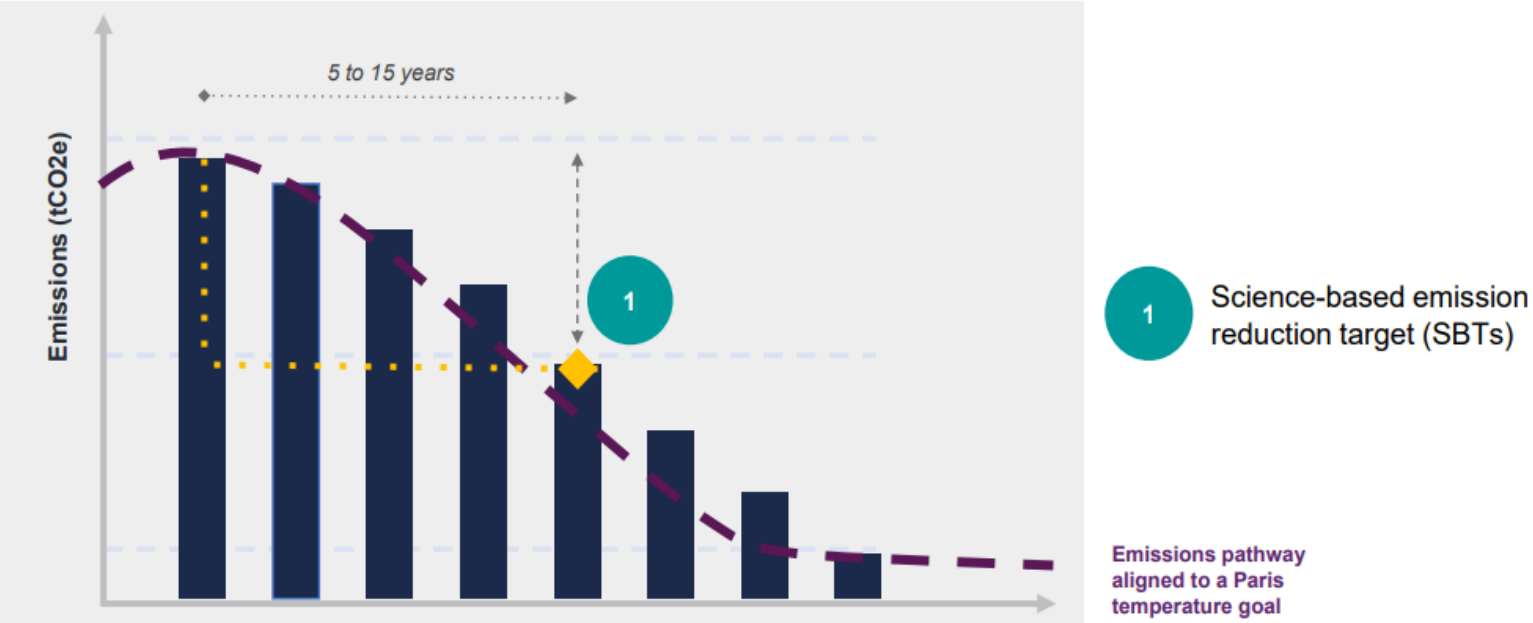
[PACT Methodology V2: Guidance for the Accounting and Exchange of Product Life Cycle Emissions]



Setting Science Based Targets

What are Science Based Targets?

Science Based Targets, or SBTs, are targets adopted by companies to reduce greenhouse gas (GHG) emissions. These targets are considered "science-based" if they are in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement: limiting global warming to well below 2°C above pre-industrial levels and making efforts to limit warming to 1.5°C.



BD Science Based Targets

Overall Net-Zero Target: Becton, Dickinson & Company commits to reach net-zero greenhouse gas emissions across the value chain by FY2050.

Near-Term Targets: Becton Dickinson & Company commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year. Becton Dickinson & Company also commits that 75% of its suppliers and customers by emissions covering purchased goods and services, capital goods, upstream transportation and distribution, use of sold products and end- of-life treatment of sold products, will have science-based targets by 2028.

Long-Term Targets: Becton Dickinson & Company commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2050 from a 2019 base year. Becton Dickinson & Company commits to reduce scope 3 GHG emissions 97% per unit of sold product by 2050 from a 2021 base year.

What is the Science Based Target initiative (SBTi)?

The Science Based Targets initiative (SBTi) is a corporate climate action organization that enables companies and financial institutions worldwide to play their part in combating the climate crisis. Science-based targets show companies and financial institutions how much and how quickly they need to reduce their greenhouse gas (GHG) emissions to prevent the worst effects of climate change. SBTi develop standards, tools and guidance which allow companies to set greenhouse gas (GHG) emissions reductions targets in line with what is needed to keep global heating below catastrophic levels and reach net-zero by 2050 at latest. 4,205 companies including BD have set science-based targets validated by the SBTi by the end of 2023. All the biggest companies in the world are setting SBT.

**Reference – Science Based Targets Initiative (SBTI)*

BD approved pathway options for suppliers to set Science Based Targets

BD aims for 75% of our suppliers to establish science-based aligned targets by 2028, and we have outlined three pathway options to get there.

Pathway 1

Targets Officially validated by SBTi (Preferred)

- Commit to SBTI.
- Work with SBTI and develop and validate your targets.
- Disclose your targets publicly and via SBT website.
- Track progress and report status annually.

Pathway 2

SBT alignment with public disclosure

- Commit to BD to set SBT by 2028.
- Develop targets around your Scope 1, 2 and 3 (if greater than 40% of total emissions) in alignment with SBT.
- Disclose your targets publicly and communicate targets to BD.
- Track progress and report status annually.

Pathway 3(For SME)*

Scope 1 & 2 SBT alignment with public disclosure

- Commit to BD to set SBT by 2028.
- Develop targets around your Scope 1 & 2 emissions in alignment with SBT.
- Disclose your targets publicly and communicate targets to BD.
- Track progress and report status annually.

*As per SBT pathways only small and medium size companies are exempt from setting Scope 3 targets in the near term. See criteria from SME company in slide here

Steps for setting a Science Based Target

The process for setting a climate target involves the milestones outlined below. While the overall process is straightforward, there can be complexity in the details. It often takes companies more than a year to move through the steps outlined below, and many companies rely on third-party expertise to support this work. We have provided resources in this module that can help guide you through this process.

Commit

Publicly commit, or commit to BD, to set a target within a specified time period. Making a public commitment may be especially useful to companies that aren't ready to set a target but want to let stakeholders know they're working to do so.

Develop

Conduct a GHG inventory to establish your baseline. Forecast future emissions. Reference target-setting standards and third-party tools to determine target details. Consider what actions and resources will be needed. Engage stakeholders.

Validate

Submit your target for review by a third-party, namely the Science Based Targets initiative (SBTi). This is an optional step but increases the credibility of your target.

Disclose & Act

Publicly announce your target. Take concrete action to reduce emissions and scale your climate impact. Report your progress toward the target each year.

How to make a SBT commitment to BD

Companies can confirm their commitment to set SBT to BD using the options below

1. SBTi website	Preferred mode of making a SBT commitment.
2. Supplier website or Public report	Supplier confirm on their public website or annual ESG report that they commit to set or have set targets in alignment with SBTi Methodology. • **MUST** include Scope 3 SBTi commitment, cannot be limited to Scopes 1 &2
3. 3rd Party confirmation (EcoVadis, IntegrityNext or CDP)	3rd party confirmed SBTi commitments from companies that declared SBTi commitment via CDP, IntegrityNext or EcoVadis response. • If you have made your SBT commitment using CDP, please send us your CDP report. • If there is another 3rd party tool, reach out to BDResponsibleSourcing@bd.com and we can validate

If you wish to make a SBT commitment on the SBTi website, use the SBTi Commitment Application Form here.

Understanding the SBT criteria to develop your targets

Level of ambition: (Scope 1+2) At a minimum – consistent with the level of decarbonization required to keep temperature increase to 1.5°C.

Progress: Both the target timeframe ambition (base year to target year) and the forward-looking ambition (most recent year to target year) must meet the SBT criteria.

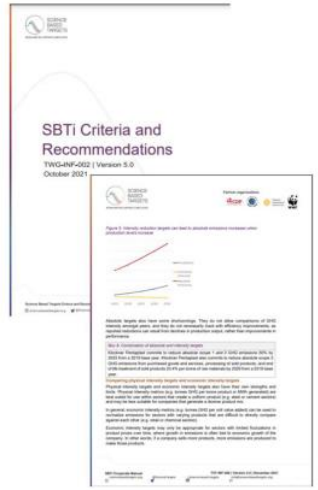
Boundary: All company-wide Scope 1 and 2 GHG emissions (> 95%);

Maintain: A minimum 4.2% absolute emissions reduction year on year of your Scope 1 & 2 emissions

Timeframe: 5-10 years into the future from baseline year;

Reporting: Disclose GHG emissions inventory on an annual basis.

Scope 3: A Scope 3 screening is required. A Scope 3 target is required when Scope 3 emissions cover < 40% of total emissions (not applicable for SME).



SBTi Criteria

This document provides a good entry point to companies who are looking to develop GHG targets aligned to best practice.

Resources:

- SBTI Net-Zero Standard - The intended audience for this document is corporates with more than 500 employees that wish to commit to setting net-zero targets through the SBTi.
- SBTi Corporate Manual - Detailed step-by-step guide to the process of setting a science-based target through the SBTi.
- How to guide for companies to set near term targets - A quick, simple, step-by-step flow chart that allows suppliers to understand how to set science-based targets for their specific situation.
- Set a target as a small and medium enterprise - - Unlike larger suppliers, the near-term option does not require SMEs to set targets for their scope 3 emissions.

This slide represents a summary and not a comprehensive overview. If you choose to have your targets verified by external third party similar to BD, you can aim to have your SBT aligned targets verified and approved by SBTi - learn more on the SBTi website.

Criteria to fall under Small Medium Enterprise (SME) measurements (as defined by SBTi)

Companies may set targets for just Scope 1 & 2 emissions if the qualify as a SME.
Below are the criteria points to be classified as SME.

Mandatory criteria:

1. Have <10,000 tCO2e across scope 1 and location-based scope 2.
2. Are not classified in the Financial Institutions (FIs) and Oil & Gas (O&G) Sectors
3. Are not a subsidiary of a parent company whose combined businesses does not classify as a SME.

Two or more are true:

1. Employ <250 employees.
2. Turnover of <€50 million.
3. Total assets of <€25 million†

Link - Small and Medium sized enterprise FAQs

Free courses: PSCI offers decarbonization curriculum

BD is an active member of the Pharmaceutical Supply Chain Initiative and collaborates with this network to offer resources to suppliers. There is an entire Decarbonization curriculum developed by network members, free to any member suppliers. Suppliers simply create a login for free on the PSCI website and Learnster platform. There are are two courses developed around SBTs.

Primer Course: Join the primer course on SBT here

This course is part of the PSCI Decarbonization curriculum and was designed for early-stage suppliers who are just starting out their SBT journey. It will cover lots of information about the SBTI.

Syllabus
- Where to start.
- The SBTi Target setting process.
- Developing Science Based Targets.
- Resources to develop Science Based Targets.
- Submission of Science Based Targets.
- External discourse, best practice and developing a credible Climate Transition Plan.

Detailed Course: Join the detailed course on SBT here

This training guide will help you **understand the difference between near-term and long-term science-based targets (SBTS),** and **what's involved in setting long-term SBTs.** It will also introduce you to key elements of the **Net-Zero Standard framework.**

Syllabus
- SBTs and the SBTi - a refresher.
- Near-term and long-term SBTs, what's the difference?
- Why do I need a long-term SBT?
- Things to consider when setting a long-term SBT.
- Introducing the different target-setting methods.
- What Net-Zero means. The Net-Zero standard framework.
- What's the difference between a long-term SBT and Net-Zero?
- Implications for existing SBTs.
- Submitting SBTi targets.
- Disclosing targets and performance.
- Requirements for recalculating targets.

PSCI PHARMACEUTICAL SUPPLY CHAIN INITIATIVE
Building responsible supply chains

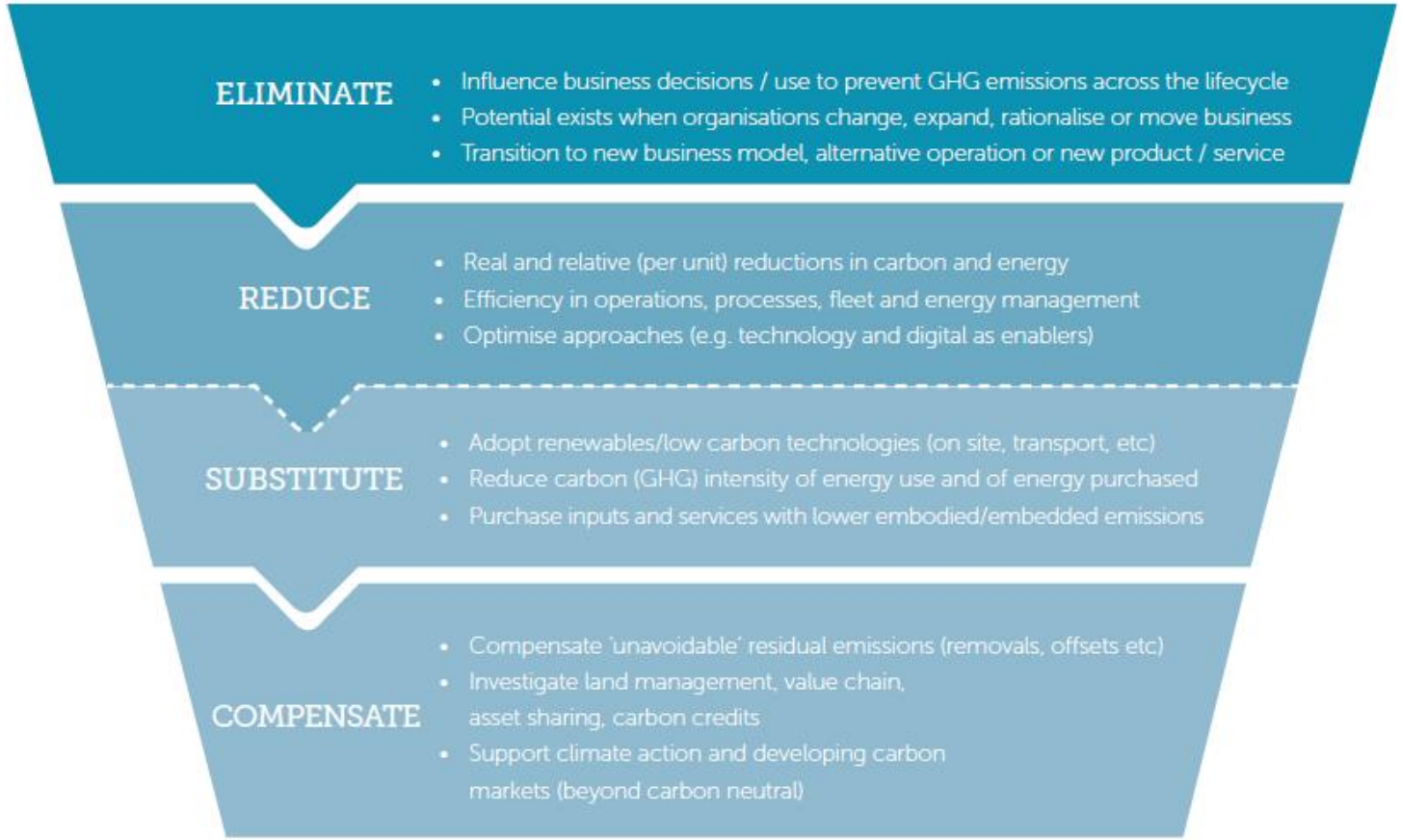
Working Towards Net-Zero

A framework to reach Net-Zero

Achieving climate targets is a multi-year, or even multi-decade effort that requires planning, innovation, strategic thinking and dedicated resources. Your company's approach to emissions management should receive the same attention to detail as other aspects of your business management and strategic planning process.

Prioritize actions using the Carbon Management Hierarchy

To maximize impact and credibility while working toward net-zero, companies should follow the widely-recognized carbon management hierarchy. The hierarchy prioritizes avoiding and reducing emissions because the most impactful action a company can take is to not generate emissions in the first place. Carbon credits are used to compensate only for those emissions that can't yet be avoided, reduced, or replaced (Max allowed as per SBT criteria 10%).



Source: [Pathways to Net-Zero: Using the IEMA GHG Management Hierarchy]

Reducing emissions across each Scope

There are many ways to address GHG emissions; which actions make the most sense for your business will depend on a number of factors, such as industry, location, and ownership structure. In this module, we'll focus on measures that are relevant and accessible to a wide range of businesses. A few examples are noted below.

Scope 1

- Energy efficiency in factories and office buildings
- Electrification
- Fleet fuel efficiency

Scope 2

- Energy efficiency in factories and office buildings
- Renewable energy

Scope 3

- Supplier Engagement – Asking suppliers to set SBT aligned targets
- Sustainable purchasing policies
- Sustainable Design
- Investments
- Industry collaboration

Energy efficiency

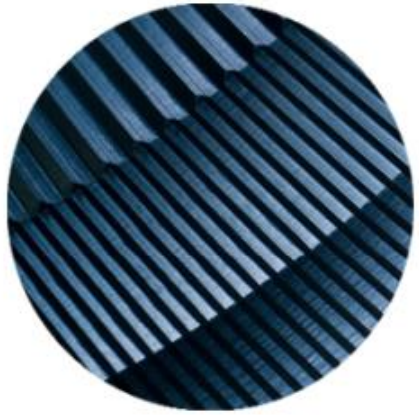
Energy efficiency

World Business Council for Sustainable Development have developed an integrated approach for energy and fuel efficiency. This organization's guidance document is recommended for employees involved in developing the company's integrated energy strategy, particularly individuals with positions in strategic sourcing/procurement, manufacturing/engineering and energy and sustainability.

This document provides details and background on sections such as:

Engaging with your workforce and value chain partners to improve energy efficiency

Using smart controls to improve energy and fuel efficiency



Upgrading and replacing equipment and assets to improve energy efficiency

How to collaborate with your suppliers, customers and employees

Decarbonizing energy sources

World Business Council for Sustainable Development have also developed an integrated approach to decarbonizing energy sources. This guidance provides an overview of sustainable energy sourcing solutions, a representative set of collaboration examples for each type of energy use and articulates the associated benefits – from optimizing resource use and reducing risk, to improving access to finance and accelerating innovation.

ELECTRICITY

HEATING & COOLING IN BUILDINGS

HEATING & COOLING IN INDUSTRY

TRANSPORT

Source - World Business Council for Sustainable development website

Renewable Energy

There are several options which an organization can use to procure Renewable Energy

Use of renewable energy can help an organization to lower its carbon footprint. Renewable energy from solar, wind, hydroelectric, and geothermal sources generates electricity with little to no greenhouse gas emissions compared to fossil fuels. By replacing coal, oil, and natural gas with renewable energy, companies can significantly decrease their carbon footprint.

There are different options to purchase renewable energy:

- **Onsite Generation**
- **Power Purchase Agreements**
- **Renewable Energy Credits (RECs) Guarantees of Origin (GOs) or Energy Attribute Certificates (EACs)**
- **Contract with supplier such as green tariffs**

Watch the **Webinar: Intro to Clean Energy Procurement** to learn about the different options available today for a company to procure clean energy, but what methods are the best to meet their goals.

Overview on Onsite generation and Power Purchase Agreement (PPA)

On-Site Generation:

- **Solar Panels:** Installing photovoltaic (PV) systems on rooftops or on the ground within your facility's premises.
- **Wind Turbines:** Erecting small or medium-sized wind turbines on your property to generate electricity.
- **Biomass Systems:** Using organic waste materials to generate heat and electricity on-site.
- **Geothermal Systems:** Installing geothermal heat pumps or small-scale geothermal power plants on your property.

Power Purchase Agreements (PPAs):

- **On-Site PPAs:** Entering into agreements with third-party developers who install, own, and operate renewable energy systems on your property. You purchase the electricity generated at a negotiated rate.
- **Off-Site PPAs:** Contracting with renewable energy developers to purchase electricity generated off-site. This can involve physical delivery or virtual PPAs (vPPAs) where you receive renewable energy credits and financial benefits without physical delivery of power.

Resources for onsite generation:

- On-Site Renewable Energy Generation
- The benefits of on-site solar
- On-site renewable electricity and storage for corporates: business models & policy framework

Resources for PPA:

- What is a Power Purchase Agreement (PPA)?
- What is corporate sourcing and what are PPAs?
- Understanding PPAs

Overview on Renewable Energy Credits (RECs) and Green Tariffs

Renewable Energy Credits (RECs)/ Guarantees of Origin (GO's)/ Energy Attribute Certificates (EACs):

Buying RECs allows you to claim the environmental benefits of renewable energy generation. Each REC represents 1 megawatt-hour (MWh) of electricity generated from renewable sources.

- **Bundled RECs:** RECs purchased along with the physical electricity.
- **Unbundled RECs:** RECs purchased separately from the electricity. This allows for flexibility if physical renewable energy procurement isn't feasible.

Green Tariffs:

- **Utility Green Pricing Programs:** Many utilities offer green tariffs or green pricing programs where customers can opt to pay a premium to support renewable energy generation. This can be an easy way for businesses to procure renewable energy through their existing utility provider.

Resources for RECs:

- What is a REC?
- What is the difference between bundled and unbundled EACs?

Resources for green tariffs:

Europe

A good introduction into the world of corporate RE sourcing for anyone looking to understand the market.
Guidance and reports - RE-Source Platform (resource-platform.eu)

USA

The resources below provides an overview on:

- The green power options available in the USA - Green Power Options | ENERGY STAR
- US, EPA's Power Profiler allows you to plug in your zip code to get details on the electricity mix in your region.
- Availability of utility green tariff programs in various states - Green Tariffs - CEBA (cebuyers.org)

Impact of various renewable energy options

Not all renewable energy options are equal in their impact on climate change or the clean energy market. Some types of renewable purchases create demand for new renewable energy, while others pull from existing projects. Generally, purchases that drive additional renewable energy onto the market are considered higher impact. That said, the highest impact options may not be feasible for all companies. For example, you might not own a facility on which to put solar PV or have the volume or resources to transact a large, long-term PPA. For many companies, utility or retail product options are most feasible to get started with renewable energy procurement. And in some regions, your only reasonable option may be to purchase unbundled RECs.

Approach	Sub-Types	Pros	Cons
Unbundled RECs	Unbundled RECs purchased separately from the associated power, often through a broker.	-Inexpensive -Low financial risk -Short term contracts	-Not related to the RE produced from a project. -Low impact in construction on new Renewable energy projects. -No energy hedge (Cost savings)
Contract with supplier	Products offered by a utility or retail energy supplier such as Green Tariffs or green pricing.	-Plug and play solution -Pay via retail bill -Supplier takes on PPA contracting	-Limited availability -Cost premium -Low impact in construction on new Renewable energy projects.
Bundled RECs	Bundled RECs	-RECs tied to a particular project -Inexpensive -Low financial risk -Short term contracts	-No energy hedge (Cost savings) -Might not result in construction on new Renewable energy projects.
Power purchase agreements	-Physical Power purchase agreements -Virtual Power purchase agreements	-High Impact -Bring new projects to life -Potential energy hedge/financial upside	-Long term contracts -Financial Risk -Accounting complexity
On Site generation	-On Site solar -Geothermal	-High Impact -Bring new projects to life -Good for brand perception	-Expensive -Not feasible for all facilities -Does not cover entire load -Ongoing maintenance cost

Source – Webinar: Intro to Clean Energy Procurement (leveltenenergy.com)

Scope 3 emissions reductions

Levers suppliers can use to reduce their Scope 3 emissions

	Suppliers	Employees	Customers	Users/ consumers	Investees/ other partners
SCOPE 3 CATEGORY	Purchased goods & services Capital goods Fuel & energy related activities Transportation & distribution Waste from operations Leased assets	Business travel Employee commuting	Transportation & distribution Processing of sold products	Use of sold products End-of-life treatment of sold products	Leased assets Franchises Investments
KEY ACTIONS/ LEVERS	• Engage with suppliers to set SBT aligned targets. • Use emission metrics in procurement standards. • Usage of renewable energy and heat in supplier operations. • Improve energy efficiency in supplier factories. • Sustainable Design – Resource. Optimization, Usage of recycled content in products and packaging. • Switch to greener inputs. • New processes and materials. • Fuel Switch • Industry collaboration • Implement circularity principles in operations & design principles.	• Reduce business travel or opt for low-carbon transportation options. • Adjust ways of working to reduce employee commuting.	• Redesign products, including circularity. • Encourage distributors to use greener fuels/ transport methods. • Optimizing supply chain networks and routes. • Switching from Air to Sea, from Road to Rail. • Freight load efficiency. • Minimize emission during processing.	• Design circular or more low carbon products. • Sustainable Design – Designing products that can be recycled easily. • Diverting products and packaging to recycling. • Divert incineration to incineration w/ Energy. • Encourage consumer behavior change.	• Reduce investment in GHG-intensive areas. • Promote sustainable business. • Help business partners decarbonize.

Source: BCG, WBCSD The Climate Drive https://www.theclimatedrive.org/guidebook/reduce/step-2-explore-abatement-levers-from-a-company-perspective/address-emissions-across-your-supply-chain

To create a Scope 3 decarbonization plan, first understand your biggest categories of emissions

Purchased Goods and Services and Capital Equipment (Category 1 & 2) are estimated to make up nearly **40%** of BD emissions. Largest sources of these emissions include:

Plastic components

Packaging

Resins

Metal

Rubber

How can BD suppliers help reduce GHG emissions?

Estimate your Scope 3 GHG emissions using an appropriate methodology.

Identify the categories/suppliers that generate the greatest impact on GHG emissions.

Develop an action plan and **collaborate** with your key suppliers on reductions.

Resources to help reduce emissions:

- The 1.5°C Supplier Engagement Guide is a freely accessible guide for companies seeking to reduce GHG emissions in their supply chains.
- Climate Transition Plan developed by CDP outlining how companies can align their strategy with latest climate science recommendations.
- EPA's Guidance on how to engage with suppliers.

How to engage your own suppliers on emissions reduction

An important aspect of sustainable purchasing is how you segment and engage with suppliers. This may include communicating clear expectations with regards to sustainability, measuring performance, requesting data, providing enablement resources, and creating an open dialogue. Since you likely can't maintain the same level of engagement with every supplier, it's important to prioritize. One approach is to segment your suppliers based on factors such as those shown below and engage more directly and deeply with high impact suppliers, while using lighter-touch, scalable solutions for lower impact suppliers.

ALL SUPPLIERS

Identify highest priority suppliers based on factors such as: spend, emissions, maturity, leverage, and business criticality

- **High impact suppliers and categories** → In **depth** engagement and tailored strategies to maximize success.
- **Low priority suppliers and categories** → **Scalable** solutions to common challenges.

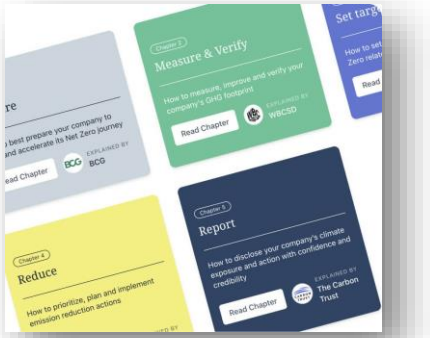
SBT's supplier engagement guide provide detailed guidance on how to evaluate and set supplier engagement targets, implement related initiatives and ensure companies fully understand what it takes to achieve these goals.

ENGAGING SUPPLY CHAINS ON THE DECARBONIZATION JOURNEY

Source – SBTi

Leverage The Climate Drive along your decarbonization journey

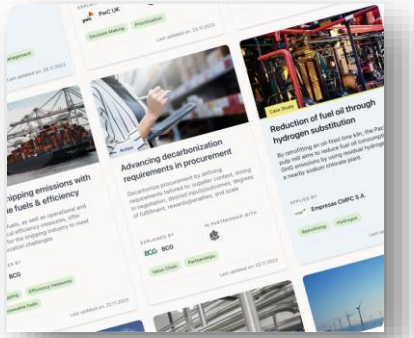
The Climate Drive is an open digital platform, built by WBCSD, to support businesses to confidently move from ambition to action. It provides free, high-quality, business-focus and actionable guidance on Net Zero.



LEARN

with the Net Zero Guidebook

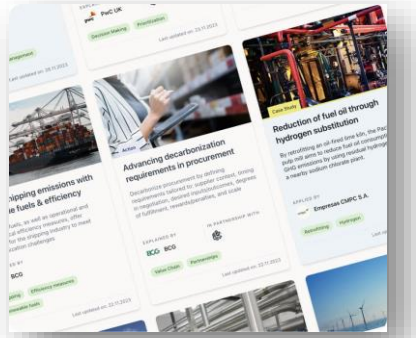
Most up to date guidance on the latest best practices along the corporate decarbonization journey, available in several languages.



ACT

with the Action Library

100+ decarbonization actions, with business impact specifics and implementation guidance.



SHARE

in the Action Library

Opportunity to publish your best practices as case studies within the action library to help other decarbonize.

PSCI: Decarbonization Playbook for Pharmaceutical Industry

This Playbook provides 24 detailed emissions reduction initiatives across 7 impact areas. The initiatives were assessed in terms of addressability, emission reduction potential, implementation timeline, upfront cost, and regulatory complexity, and intervention adoption timeframe.

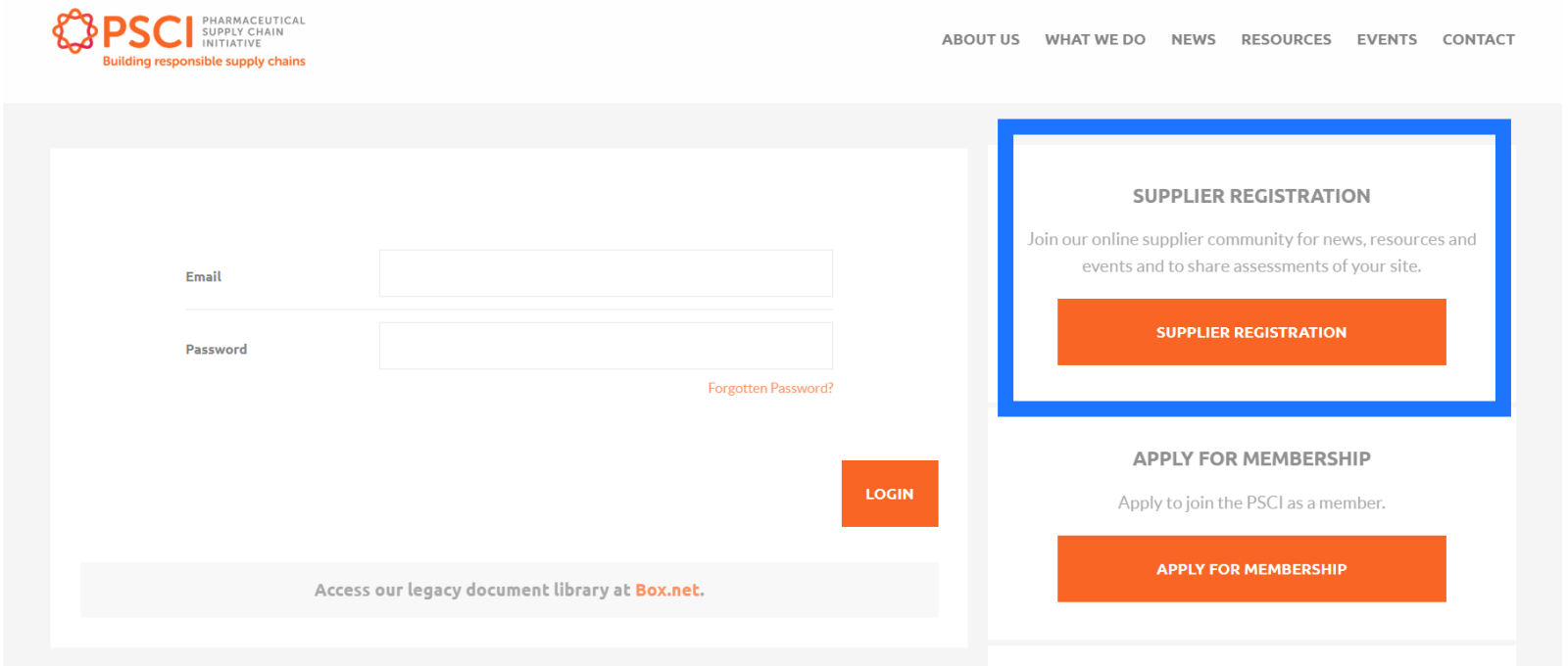
DECARBONIZATION PLAYBOOK FOR THE PHARMACEUTICAL INDUSTRY

Other important resources

PSCI – Register to PSCI for free

The Pharmaceutical Supply Chain Initiative (PSCI) is a group of pharmaceutical and healthcare companies who share a vision of excellence in safety, environmental, and social outcomes in the communities where we buy.

PSCI registration is free for all BD suppliers. BD suppliers can leverage PSCI resources to develop their program and improve their emissions maturity.



Login - PSCI

The EcoVadis academy

If you have a EcoVadis subscription and have reported your ESG data using EcoVadis, you can use the EcoVadis academy to learn about various Greenhouse gas management topics below.

Greenhouse Gas Emissions Tracking and Reporting

EN | 1h 00m

E-Learning

Energy and Greenhouse Gas Actions

EN | 30m 00s

E-Learning

Scope 3 Greenhouse Gas Emissions Calculation

EN | 1h 00m

E-Learning

Carbon Reduction Target Setting

EN | 45m 00s

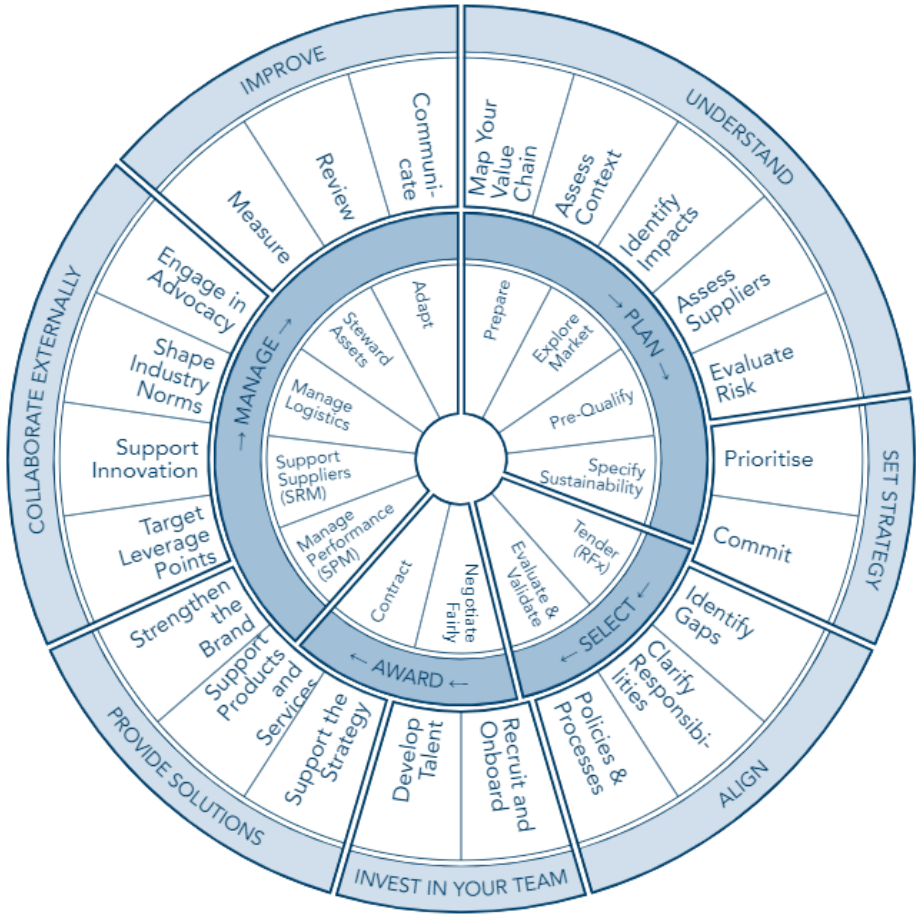
E-Learning

The Product Carbon Footprint Data Exchange

EN | 45m 00s

E-Learning

The Embedding project – Sustainable Procurement Pledge



The Sustainable Procurement Wheel is a free tool developed to help companies to embed sustainability across their procurement and supply chain practices.

Based on research with leading companies, the Embedding Project has identified key practices and curated a selection of the most relevant resources and tools to help you implement them. The inner wheel follows the procurement lifecycle and the outer wheel looks at broader practices supporting change.

[Supporting Sustainable Value Chains | Embedding Project]

Source – The Embedding project.

Free Trainings and Webinars

- GHG Protocol Webinars to Learn more about Corporate GHG Reporting and Scope 1 & 2 emissions – Link
- CDP webinars on Scope 3 and supplier engagement – Link
- SBTi technical guidance webinar for setting Science Based Targets – Link
- CDP Supply Chain webinar: The Company Journey to Environmental Leadership – Link

Questions?

Want to share best practice?

Have ideas for collaboration?

Contact the BD Responsible Sourcing team at BDResponsibleSourcing@bd.com

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