

Addressing Scope 3

A START HERE GUIDE



Stephanie Bertels
Makhegu Mabunda

Addressing Scope 3

A Start Here Guide

Prepared by Stephanie Bertels and Makhegu Mabunda.

This document is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/). You are free to share (copy and redistribute the material in any medium or format) or adapt (remix, transform, and build upon) the material with appropriate attribution. You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests that the authors or The Embedding Project endorse you or your use of our work product.



Stephanie Bertels and Makhegu Mabunda, *Addressing Scope 3: A Start Here Guide*. (Embedding Project, 2023). DOI: 10.6084/m9.figshare.24769014.

Contents

Introduction	4
The Fundamentals of Climate Change	5
What causes climate change?	5
Our changing climate	7
Understanding Carbon in Your Value Chain	10
Comparing emissions – a common ‘currency’	10
What is a carbon footprint?	11
Understanding Scope 1, Scope 2, and Scope 3 emissions	12
A Deeper Dive into Scope 3 Emissions	15
Rising expectations for disclosure and credible action	15
Taking Credible Action on Scope 3	21
Plan and conduct a Scope 3 inventory	22
Data management and governance	28
Setting credible Scope 3 targets	33
Collaborating with value chain partners	36
Verification, assurance, and disclosure	37
Review and adapt	40
Governance and oversight of Scope 3	40
Next Steps	42
APPENDIX: Key Players in Scope 3	43
Acknowledgments	46

Introduction

As calls for credible climate action grow, so do expectations for companies to understand and take credible action to support rapid decarbonisation across their value chain¹. Also known as value chain emissions, Scope 3 emissions are the greenhouse gas emissions that are outside of a company's direct control that occur both upstream and downstream in their value chain.

This guide draws on the real-world experience of companies that are already navigating their Scope 3 journey to help you to understand the fundamentals of Scope 3 emissions and what's driving rapidly rising expectations around measuring, disclosing, and addressing them. It will also help you to understand how to get started on conducting a carbon inventory, setting credible Scope 3 targets, developing a value chain emissions data management strategy, collaborating with suppliers and customers to reduce your Scope 3 emissions, and disclosing your progress. At each stage, we help you to understand the key concepts, address the challenges you may face along the way, and direct you to resources that can help you to take credible action.

¹ Value chains are the full range of activities across the life cycle of a product, process, or service, including material sourcing, production, consumption to end of use, disposal and/or repurposing. To learn more about life cycles, read our guide on life cycle thinking: <https://eproject.org/life-cycle-thinking>

The Fundamentals of Climate Change

Climate change is a planetary and social crisis that threatens the future success of businesses in all sectors. The science is clear - human activities such as burning fossil fuels and deforestation are warming the climate at an unprecedented rate² and contributing to long-term shifts and disruptions in temperature and weather patterns.

To avoid the worst impacts of climate change, global emissions of greenhouse gases must be halved by 2030 and reach net zero by 2050.

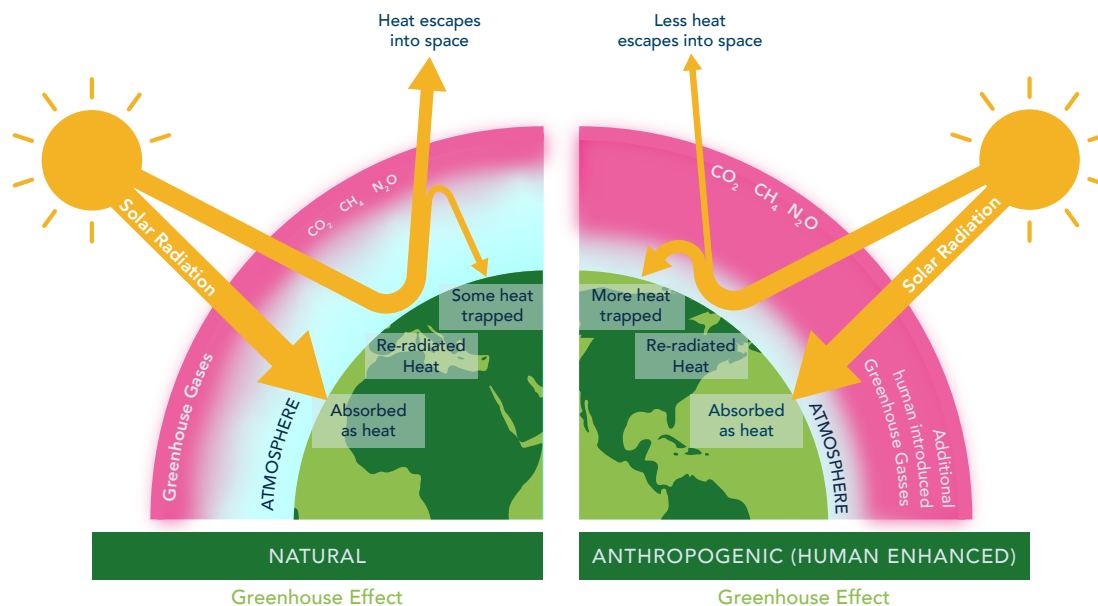
Businesses around the world must do their part to rapidly transition to a zero-carbon future by supporting rapid emissions reduction and climate adaptation, including in their value chains.

What causes climate change?

Greenhouse gases (GHGs), such as carbon dioxide, contribute to climate change by retaining heat in the atmosphere. While carbon dioxide (CO₂) is the primary greenhouse gas emitted through human activities, other gases such as methane, nitrous oxide, ozone, and even water vapour also contribute to climate change.³ As these GHGs build up in the atmosphere, they trap the heat from the sun, keeping the earth warm, and acting like a greenhouse.

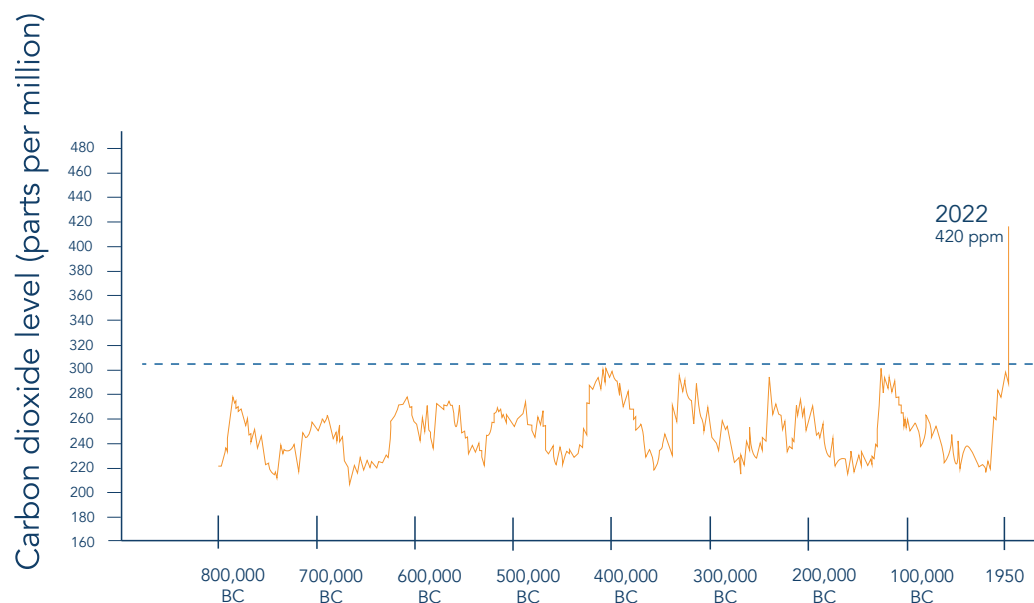
² <https://www.un.org/en/climatechange/what-is-climate-change>

³ <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>



The greenhouse effect: How human-enhanced greenhouse gas emissions contribute to global climate change

Although some of these gases have always had a role to play in warming the earth to support life, human activity is increasing their concentration in the atmosphere and has introduced novel gases. Over the last century, the atmospheric concentration of these greenhouse gases has steadily increased, reaching levels significantly higher than anything on record in the last 800,000 years,⁴ causing the earth to trap more heat than it would have through natural cycles.



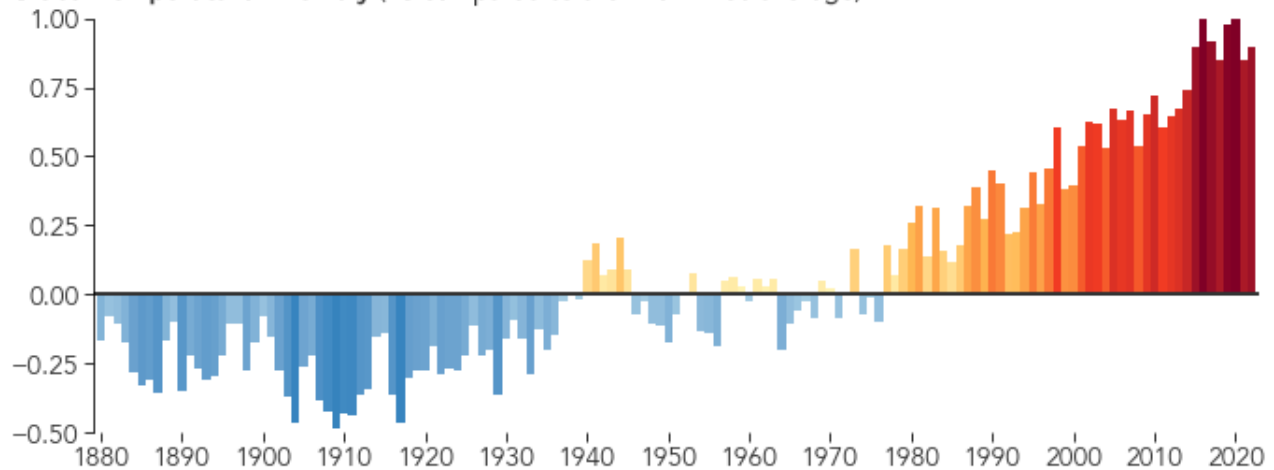
Adapted from <https://climate.nasa.gov/evidence/>

⁴ https://report.ipcc.ch/ar6syrr/pdf/IPCC_AR6_SYR_LongerReport.pdf

These excess greenhouse gasses are causing a long-term increase in global average surface temperatures and ocean temperatures – a phenomenon called global warming.

Last 9 Years Warmest on Record

Global Temperature Anomaly (°C compared to the 1951-1980 average)

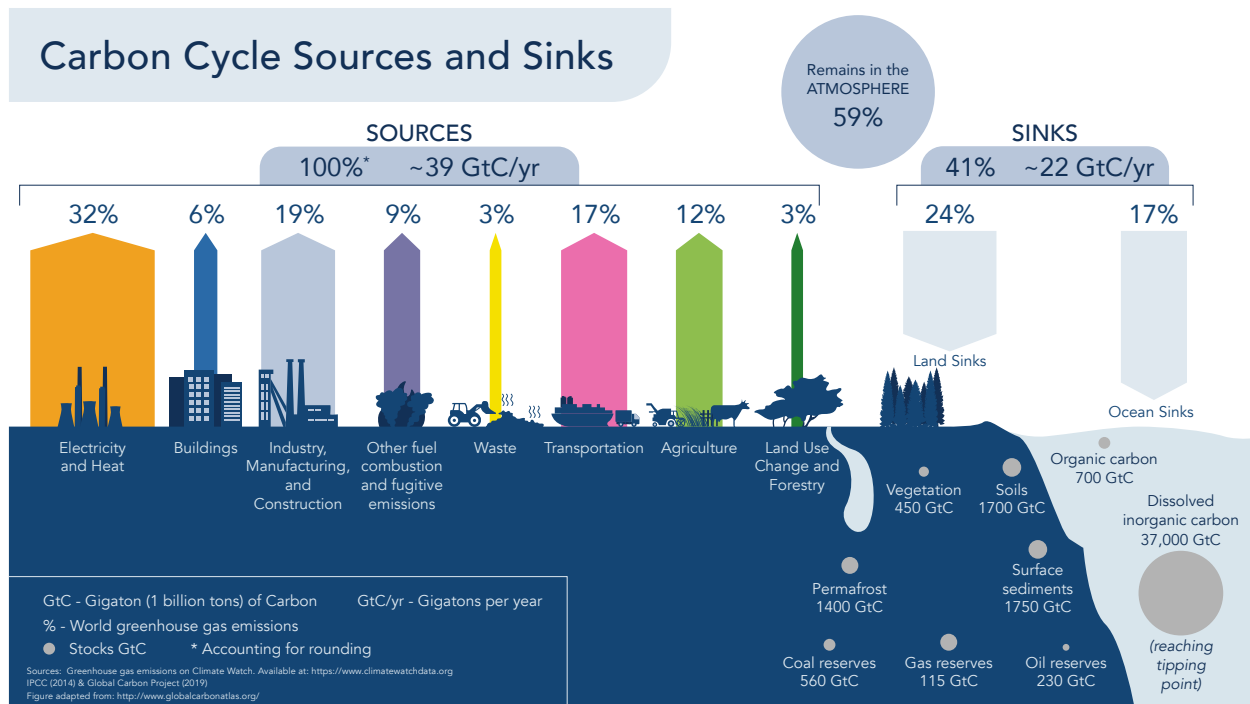


Surface temperature: Early surface temperature compared to the 20th-century average from 1880–2022. Blue bars indicate cooler-than-average years; red bars show warmer-than-average years. Based on data from the [National Centers for Environmental Information](#).

Ocean temperature: Observations from satellites and various ocean measurement devices, including conductivity-temperature-depth instruments (CTDs), Argo profiling floats, eXpendable BathyThermographs (XBTs), instrumented mooring arrays, and ice-tethered profilers (ITPs). Based on data from [NASA](#).

Our changing climate

Carbon is found in almost all living organisms and is vital to life on Earth. Carbon flows through the [carbon cycle](#), where it is exchanged between [sources and sinks](#). For more than 800,000 years, natural processes have been able to balance this carbon exchange, keeping atmospheric carbon dioxide levels relatively steady. Unfortunately, over the last 100 years, human activity has caused much more carbon to be released than absorbed by taking carbon stored in the ground over long periods of time (in the form of fossil fuels) and rapidly releasing it into the atmosphere.



Carbon cycle sources and sinks. Embedding Project.

At the same time, important carbon sinks like the ocean, healthy soil, and living organisms (plants, bacteria, and algae absorb carbon through photosynthesis) are at risk because they are approaching “tipping points”.⁵ Our oceans have been the largest carbon sink on the planet, absorbing thirty percent of the carbon we have emitted and ninety percent of the excess heat that has been generated by increased greenhouse gas emissions.⁶ But we are nearing a point where our oceans will be able to absorb less and less carbon dioxide from the atmosphere, which will lead to a more rapid accumulation and thus faster climate change. Also troubling is that as oceans absorb carbon dioxide, the acidity of the water increases, and this poses a serious threat to ocean coral and other sea life.

⁵ <https://www.nature.com/articles/d41586-019-03595-0>

⁶ <https://www.nationalgeographic.com/science/article/greenhouse-gases-lurk-in-oceans-could-make-warming-far-worse#:~:text=The%20oceans%20absorb%20a%20third,carbon%20sink%20on%20the%20planet.>

Forests and soils are also important carbon sinks, storing one quarter of global carbon emissions.⁷ But deforestation is rampant. Globally, the planet loses an area of tree cover equivalent to the size of Portugal every year.⁸ In addition to regulating the climate, forests provide ecosystem services and goods that are essential to human wellbeing. By damaging forests and soils, we are eroding the very foundations of our economies, livelihoods, food security, health, and quality of life.

Rising global average temperature also has impacts on long-term weather trends, causing climatic change and leading to regional and seasonal temperature extremes, and increased extreme weather events like hurricanes, flooding, heat waves, and droughts. It is also accelerating the melting of sea ice and glaciers, leading to global sea level rise, and changing habitat ranges for plants and animals, expanding some and shrinking others, leading to the accelerated extinction of some species of plants and animals. Communities that are most impacted and are unable to adapt will suffer disproportionately as human infrastructure and livelihoods are threatened.

Climate change is already affecting every region on Earth in multiple ways, and the changes we experience will increase with additional warming. Stabilising the climate will require strong, rapid, and sustained reductions in greenhouse gas emissions, and reaching net zero CO₂ emissions.

⁷ Dinerstein, E., Vynne, C., Sala, E., Joshi, A., Fernando, S., Lovejoy, T., Mayorga, J., Olson, D., Asner, G., Baillie, J., Burgess, N., Burkart, K., Noss, R., Zhang, Y., Baccini, A., Birch, T., Hahn, N., Joppa, L., & Wikramanayake, E. (2019). A Global Deal for Nature: Guiding principles, milestones, and targets. *Science Advances*, 5(4), 1-17. DOI:10.1126/sciadv.aaw2869

⁸ <https://forestdeclaration.org/summary>

Understanding Carbon in Your Value Chain

All businesses will need to do their part to reach a net-zero economy where greenhouse gas emissions are as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere through nature-based solutions or carbon capture and storage. To get started on understanding the carbon footprint of your business, you need to understand how to calculate carbon equivalencies.

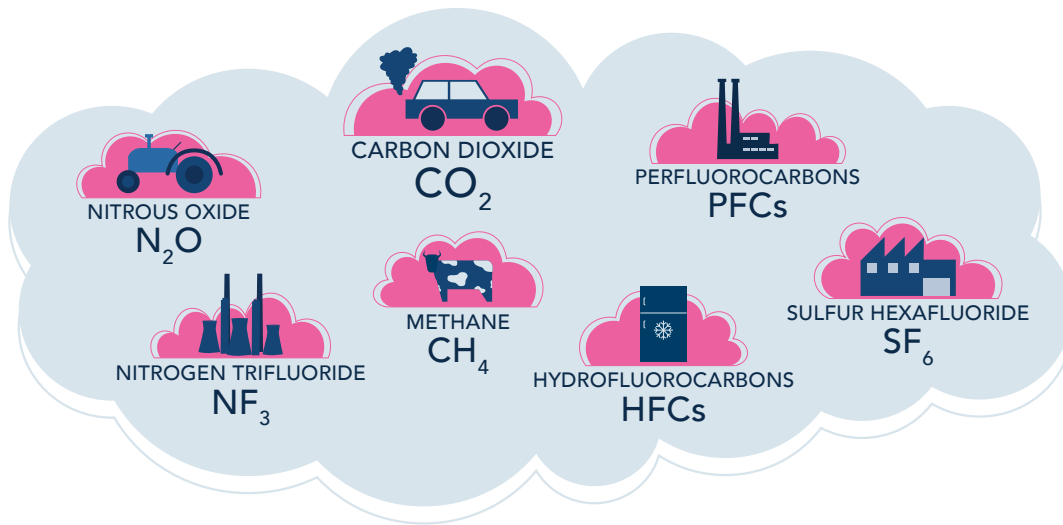
Comparing emissions – a common ‘currency’

Seven key greenhouse gases are currently the focus of reduction efforts: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PCFs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

These gases vary greatly in their ability to absorb energy (their ‘radiative efficiency’) and how long they stay in the atmosphere (their ‘lifetime’). Some gases will only last for weeks before being destroyed, while others (like carbon dioxide) stick around for thousands of years.

The concept of global warming potential (GWP)⁹ allows for comparisons by quantifying the relative radiative (warming) effect of a given gas. Carbon dioxide (CO₂) was selected as the reference gas since it is one of the most abundant greenhouse gases and also remains in the climate for a very long time (over 1000 years).

⁹ <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>



Key Greenhouse Gases (GHGs). Embedding Project.

The common timescale selected for comparison is 100 years (called the GWP100). For instance, over a 100-year timescale, methane (CH₄), is estimated to have a global warming potential about 28 times that of carbon dioxide (CO₂), Nitrous oxide (N₂O) has a GWP of about 273 times that of CO₂, and high-GWP gases like hydrofluorocarbons (HFCs – used in air conditioning, refrigeration, foams, and as propellants) are in the thousands or even tens of thousands. Thus, even small amounts of these high-GWP gases have significant impacts on warming. The standard unit of comparison is called a [carbon dioxide equivalent](#) (CO₂e), calculated by multiplying the amount of greenhouse gas by its GWP and frequently expressed as a million metric tonnes of carbon dioxide equivalents (MMTCDE). As a shorthand, people will use phrases like greenhouse gas (GHG) emissions, climate emissions, or, because carbon dioxide is used as the reference point, carbon emissions, or ‘carbon’.

What is a carbon footprint?

Understanding your corporate carbon footprint is a crucial step to understanding your organisation’s climate emissions and their associated climate impacts. This will help you set [credible climate action goals](#) and take credible climate action.

A carbon footprint is the total GHG emissions caused by an individual, event, organisation, service, place, or product. That means that a corporate carbon footprint is an estimate of the amount of greenhouse gases generated from a company's actions stemming from its direct operations and the impacts in its value chain.

Developing a credible corporate GHG emissions inventory is the first step to transparent reporting and to developing an effective strategy to manage and reduce your emissions.

The world's most widely used set of greenhouse gas accounting and reporting standards is the Greenhouse Gas Protocol ([GHG Protocol](#)),¹⁰ which sets out the processes to quantify and account for the carbon footprint of an organisation, event, product, or service. The [GHG Protocol Corporate Accounting and Reporting Standard](#) helps companies prepare a GHG emissions inventory using standardised approaches and principles.

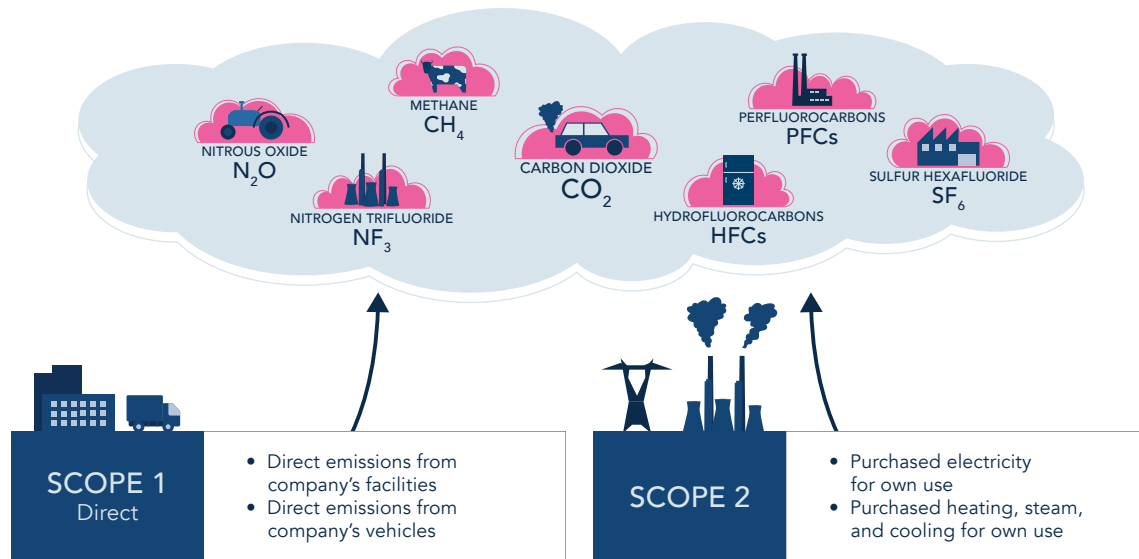
To help to overcome the potential for double counting, the GHG Protocol's corporate standard delineates between direct and indirect sources of emissions and defines three different Scopes: Scope 1, Scope 2, and Scope 3 to clarify boundaries of control and accountability over the various emissions sources.

Understanding Scope 1, Scope 2, and Scope 3 emissions

[Scope 1 emissions](#) are the direct GHG emissions from sources that are owned or controlled by your company. This includes emissions from your own production processes and industrial processes, refrigerants, combustion in boilers or furnaces, or emissions from any company owned vehicles.

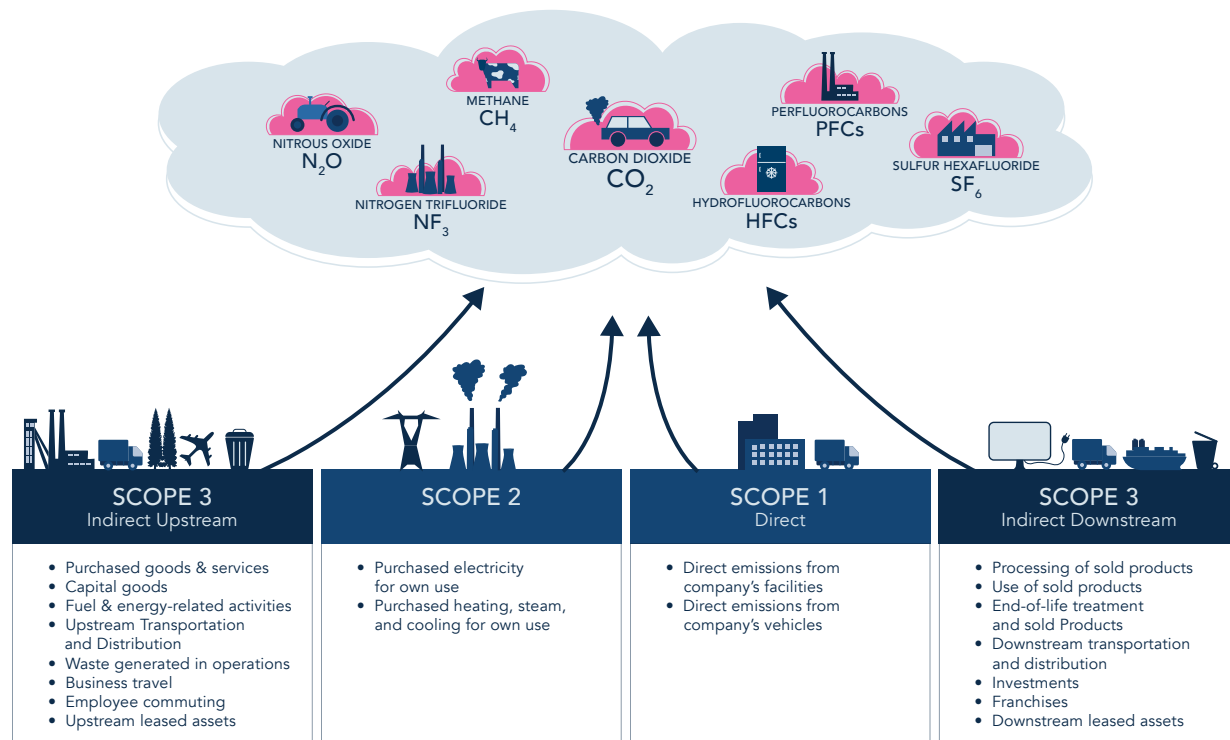
[Scope 2 emissions](#) are indirect emissions from your purchased or acquired electricity, steam, heat, and cooling. Electricity, steam, heating, and cooling are a significant source of GHG emissions globally, particularly in jurisdictions still heavily reliant on coal-fired electricity or other fossil-fuel based energy. For many companies, they are a significant on-going source of emissions and represent a significant operational cost for the business.

¹⁰ <https://ghgprotocol.org/>



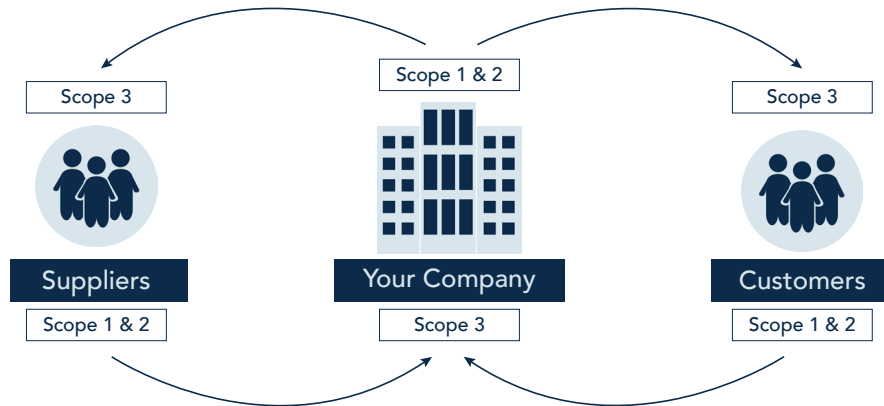
Scope 1 and 2 Greenhouse Gas Emissions (adapted from <https://ghgprotocol.org>)

In contrast, [Scope 3 emissions](#) derive from activities outside of your company's direct control, upstream or downstream in your value chain. While these emissions are a consequence of your activities and decisions, they occur in sources that are owned or controlled by other entities.



Scope 1, 2, and 3 Greenhouse Gas Emissions (adapted from <https://ghgprotocol.org>)

It means that your Scope 3 emissions are made up of the relevant portions of the Scope 1 and 2 emissions of your suppliers and customers. It also goes the other way around. Relevant portions of your Scope 1 and 2 emissions will be considered Scope 3 emissions for your suppliers and customers.



The relationship between scope 1, 2, and 3 emissions.

This overlap creates considerable opportunity for shared alignment and collaboration. Now that more companies are setting Scope 3 reduction targets, there is more motivation for collaboration to reduce emissions along the life cycle of a product or service. Setting Scope 3 targets can also foster industry level collaboration because competitors can each reduce their own Scope 3 emissions by collaborating to help suppliers reduce their Scope 1 and 2 emissions.

A Deeper Dive into Scope 3 Emissions

In most sectors, Scope 3 emissions make up the vast majority of a company's overall carbon emissions inventory and are significantly larger than their Scope 1 and 2 emissions combined¹¹.

On average, a company's supply chain produces **11 times**¹² more carbon emissions than its direct emissions, making it a crucially important aspect of a company's decarbonisation strategy.

Rising expectations for disclosure and credible action

Scope 3 emissions have been pushed into the spotlight. Businesses are under increasing pressure from customers, investors, lenders, insurers, and regulators to measure their Scope 3 emissions, set targets, take credible action to decarbonise their value chain, and disclose their progress. Requirements for Scope 3 disclosure are all but inevitable for large issuers, and pressure on smaller and private firms is mounting.

Science-based climate targets now require consideration of Scope 3

With corporate net-zero target setting fast gaining momentum, an increasing number¹³ of public and private organisations are either setting or committing to set science-based targets. The Science-based Target Initiative (SBTi), currently the key organisation responsible for guidance on setting science-based climate targets,

¹¹ CDP (<https://www.cdp.net/en/research/global-reports/engaging-the-chain>); (EPA (<https://www.epa.gov/climateleadership/Scope-3-inventory-guidance>); Carbon Trust (<https://www.carbontrust.com/resources/briefing-what-are-Scope-3-emissions>)

¹² CDP Global Supply Chain Report 2021: https://cdn.cdp.net/cdp-production/cms/reports/documents/000/006/106/original/CDP_SC_Report_2021.pdf?1644513297

¹³ <https://sciencebasedtargets.org/news/over-150-global-corporations-urge-world-leaders-for-net-zero-recovery-from-covid-19>

is now requiring companies whose Scope 3 emissions are more than 40% of total emissions to set either emission reduction or supplier and customer engagement targets that cover at least two-thirds¹⁴ (67%) of their total Scope 3 emissions.

In response to growing pressure from value chain partners, investors, lenders and other stakeholders, organizations setting their own emissions reduction targets may also consider including scope 3 in their targets.

Scope 3 targets mean increasing demands from customers

In a world where companies are increasingly attentive to reducing their Scope 3 emissions and consumers are more attentive to the impacts of their purchasing decisions, all companies will be under pressure to measure and disclose the carbon footprint of their products or services. Companies that can credibly demonstrate a lower carbon footprint across their value chain will be at a competitive advantage to those that cannot.

Value chain emissions may factor into your cost of capital

As financial institutions and insurers make commitments to decarbonise their assets, financing, and underwriting, providing your emissions data (across your value chain) may soon be a requirement and may also factor into your cost of capital. Companies making progress in reducing their value chain emissions may benefit from better rates, while those with high emissions footprints may face a higher cost of capital.

Scope 3 is a rapidly emerging expectation for credible financial disclosure

Recent efforts towards the consolidation of sustainability reporting disclosure standards have only solidified the inevitability of Scope 3 disclosures.

¹⁴ <https://sciencebasedtargets.org/resources/files/SBTi-criteria.pdf>

The Taskforce on Climate-Related Financial Disclosure (TCFD)

In 2021, the [Taskforce on Climate-Related Financial Disclosure \(TCFD\)](#) noted that Scope 3 GHG emissions are increasingly being viewed as foundational data necessary for financial institutions, investors, insurers, and other actors to assess their climate-related risks and opportunities¹⁵. The TCFD framework recommended that where such information is material, all organisations must disclose their Scope 1, 2, & 3 emissions, together with their climate-related risks and opportunities, and that emissions should be calculated in line with the GHG Protocol. Additionally, organisations should also describe their key climate-related targets for each of the scopes.

IFRS Foundation's International Sustainability Standards Board (ISSB)

In 2021, the International Financial Reporting Standards Foundation (IFRS), the body that develops international financial reporting standards for the vast majority of countries in the world, created the [International Sustainability Standards Board \(or ISSB\)](#) to provide consistent global guidance on financial materiality and the disclosure of the ESG factors that impact enterprise value.

In June 2023, the ISSB issued **IFRS S1** General Requirements for Disclosure of Sustainability-related Financial Information (IFRS S1) and **IFRS S2** Climate-related Disclosures (IFRS S2) (collectively, the **Standards**). [Climate-related Disclosures Standard \(IFRS S2\)](#) incorporates the guidance and recommendations of the TCFD and requires companies to disclose absolute gross greenhouse gas emissions generated during the reporting period, measured in accordance with the Greenhouse Gas Protocol, including Scope 1, Scope 2, and Scope 3 emissions.

Given that IFRS S1 and IFRS S2 fully incorporate the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), the work of the TCFD has now concluded and the Financial Stability Board has asked the IFRS to [take over the monitoring](#) of the progress on companies' climate-related disclosures.

It is up to individual jurisdictions worldwide to adopt and/or adapt the standards issued by the ISSB. The Standards are effective for annual reporting periods beginning on or after January 1, 2024, though local jurisdictions may elect a later date in their own endorsement process.

¹⁵ https://assets.bbhub.io/company/sites/60/2021/07/2021-Metrics_Targets_Guidance-1.pdf

Acknowledging the practical concerns of calculating scope 3, IFRS S2 offers one year of relief from providing scope 3 disclosures, to allow reporting entities to understand and map their value chain. In addition, to avoid undue cost or effort to measure and disclose their emissions, companies are permitted to use the most recent data available from entities in its value chain, even if it does not align with their own reporting period¹⁶.

Partnership for Carbon Accounting Financials (PCAF)

In the financial sector, the bulk of Scope 3 emissions fall within the downstream category related to financed emissions. The Partnership for Carbon Accounting Financials (PCAF) is a global partnership of financial institutions that are working together to develop and implement a harmonised approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments. The harmonised accounting approach provides financial institutions with the starting point required to set science-based climate targets and align their portfolio with the Paris Climate Agreement. PCAF enables transparency and accountability and has developed an open-source global GHG accounting standard for financial institutions, the [Global GHG Accounting and Reporting Standard for the Financial Industry](#).

Regulatory pressure for Scope 3 disclosure is sure to follow

Several regulatory jurisdictions (including the G20 group of countries) have signaled their intent to move towards mandatory Scope 3 disclosures and are in the process of articulating reporting requirements for climate-related financial disclosures. In most cases, the final details around the requirements for Scope 3 disclosure are still emerging; however, current signs point to some form of Scope 3 disclosures becoming a requirement, along with provisions for a transition period as companies improve their understanding and prepare to disclose.

EU Corporate Sustainability Reporting Directive

The European Union issued its [Corporate Sustainability Reporting Directive](#) (CSRD) in October 2023 with an effective date of January 1, 2024. As a result, companies in scope will be required to disclose their absolute gross scope 3, subject to materiality and other reliefs/exemptions.

¹⁶ <https://www.ifrs.org/news-and-events/news/2022/12/issb-announces-guidance-and-reliefs-to-support-scope-3-ghg-emiss/>

US Securities and Exchange Commission (SEC)

The US Securities and Exchange Commission (SEC) is in the process of articulating reporting requirements for climate-related financial disclosures. In both cases, the final details around the requirements for Scope 3 disclosure are still emerging; however, current signs point to some form of Scope 3 disclosures becoming a requirement, along with provisions for a transition period as companies improve their understanding and prepare to disclose.

In March 2022, the US SEC issued [Release No. 33-11042: The Enhancement and Standardization of Climate-Related Disclosures for Investors](#), which proposed rules to enhance and standardise certain climate-related information in issuers' registration statements and annual reports. The initial proposal included the disclosure of Scope 3 emissions. There has been an extensive comment period, with considerable attention on Scope 3 disclosures and concerns about the lack of maturity in Scope 3 measurement and disclosure. The timeline for the final rules has been pushed back.

Canadian Securities Administrators (CSA)

In July 2023, the Canadian Securities Administrators (CSA) indicated that it is working to adopt disclosure standards based on ISSB Standards, which could make scope 3 and other sustainability information required for at least some public companies in Canada. The CSA is also engaging and collaborating with the CSSB with respect to the ISSB Standards.

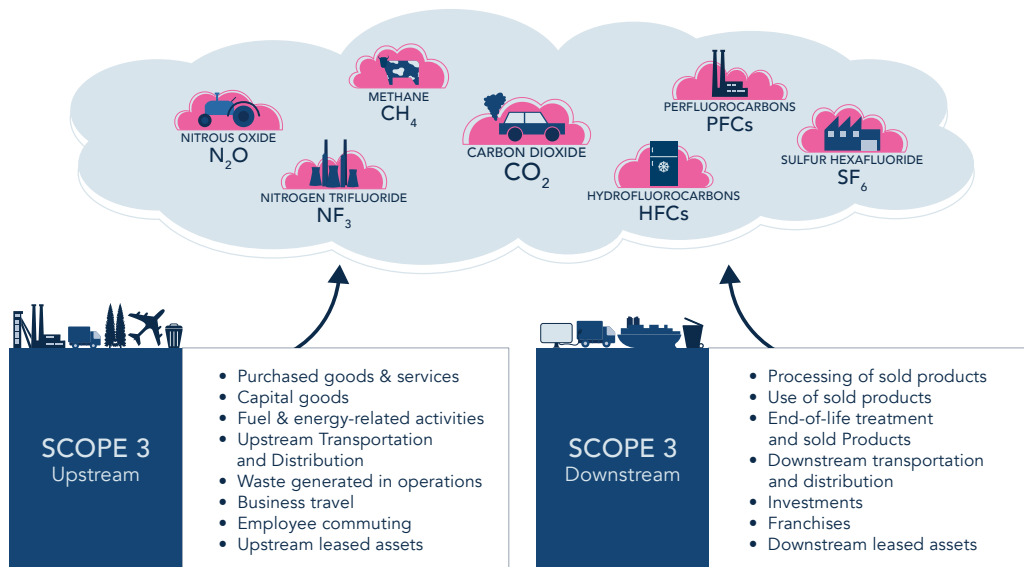
Other jurisdictions

The G20 countries, the Financial Stability Board, and the International Organisation of Securities Commissions (IOSCO) have all signaled their support for consistent and comparable global sustainability disclosures and have endorsed the work of the ISSB and the newly created IFRS standards.

Scope 3 emissions categories

So, what is covered by Scope 3? The GHG Protocol Corporate Standard differentiates between upstream and downstream emissions based on the financial transactions of the reporting company. One way to distinguish between upstream and downstream emissions is by asking who paid for the goods or services. If the reporting company or employees paid, those are upstream emissions. If the customers or suppliers of the reporting company paid, those are downstream emissions.

There are a total of 15 categories¹⁷ of Scope 3 emissions, though not all categories will be relevant to every company.



The 15 Scope 3 Categories in the GHG Protocol Corporate Standard

Upstream indirect emissions involve tracing back everything that goes into producing your goods and services before they reach your operational 'gate'. This includes purchased goods and services (the cradle to gate emissions generated by the goods and services that your company purchases from upstream suppliers and business partners including raw materials and intermediary parts, goods, and services); capital goods (the goods required to run your business); upstream transportation and distribution of goods; emissions related to the production of fuel and energy purchased or consumed by the company (includes transmission and distribution losses); waste generated at company operations; business travel by your employees; employee commuting; and upstream leased assets. Note that while emissions factors related to working from home are not currently included in the GHG Protocol, some organizations are choosing to consider them where they may be material.

Downstream emissions are related to sold goods and services. These include the transportation and distribution of goods to customers in vehicles that are not owned by the reporting company, sale and use of the goods, and end of life treatment of goods and services. Downstream emissions also include emissions from a company's investments and financing, franchises, and downstream leased assets, where applicable.

Additional guidance can be found in the [GHG Protocol's Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf).

¹⁷ https://ghgprotocol.org/sites/default/files/standards/Scope3_Calculation_Guidance_0.pdf

Taking Credible Action on Scope 3

To understand and address your Scope 3 emissions your company needs to:

- Undertake a Scope 3 inventory to measure your emissions and identify where to focus
- Develop a robust data management system
- Set Scope 3 targets (and optionally, seek validation of those targets)
- Develop a strategy to support your value chain partners to decarbonise
- Verify your data and data processes and disclose your progress
- Adapt your strategy to keep driving down value chain emissions

To understand and address your Scope 3 emissions you will need to define the boundaries of your operations and plan your inventory, which often involves mapping out your value chain and then conducting a preliminary inventory. Next, you will need to develop a robust data management system and refine your understanding by filling in key gaps. With the knowledge you gain from your first inventory, you can set your targets (and optionally, seek validation of those targets) and you will need to develop a strategy to support your value chain partners to decarbonise. You will also need to verify your data and data processes and disclose your inventory and your progress against meeting your targets. All these actions will require that you collaborate with suppliers, customers, and other value chain partners.



In subsequent years, there will be additional work to be done. You will need to improve your data collection and your understanding of your emissions, update your targets, and continue to invest in collaborating with your value chain partners to identify ways to further decarbonise until you reach your goal.

Get started early - ramping up on Scope 3 takes time: Given the multi-year timeframe for a company to gather credible Scope 3 data, set credible targets, and put in the place reliable processes and systems, companies should be preparing now for an inevitable future of Scope 3 disclosure.

Compliance with Scope 3 will require additional resources: Companies should be prepared for additional compliance costs related to Scope 3 emissions. Gathering, compiling, and analysing data; software integration; and assurance may all require significant training, staff time, and resources.

Plan and conduct a Scope 3 inventory

To develop the most effective decarbonisation strategy in your value chain, you should concentrate your efforts where you have the most impact. This is where the practices, processes, and products across your value chain emit the most carbon - your biggest carbon sources or carbon 'hotspots'. To understand where to find them and how to address them, your journey begins with planning, mapping out your value chain, and conducting your first inventory.

Planning your inventory

There are some crucial decisions to be made in the early stages. Before you get started you should review key standards and methods and make some key decisions about the scope of your inventory.

Review the accounting standards and methods: Even if you plan to work with a consultant to guide your inventory process, we recommend that you take the time to read the remainder of this guide and review the accounting standards and methods, starting with the [GHG Protocol Technical Guidance for Scope 3 Emissions](#).

Determine your organisational boundaries: You need to determine your [organisational boundaries](#) to identify the entities and assets that are included in Scopes 1 and 2. Your organisational boundary can be set based on operational control, financial control, or equity share of the assets (e.g., facilities, vehicles) and entities (e.g., subsidiaries, joint ventures, partnerships) that form part of your business. Once this is determined, those boundaries will determine which activities fall into your Scope 3. Your choice of operational boundaries can have important implications for how you calculate your Scope 3 emissions, particularly with respect to leased facilities or vehicles where there is an operating lease.

For more details on determining organisational boundaries see the GHG Protocol's [Corporate Standard](#), the [Corporate Value Chain Standard](#) and Appendix F of the GHG Protocol, [Categorizing GHG Emissions Associated with Leased Assets](#).

Select a base year: A meaningful and consistent comparison of emissions over time requires that companies set a performance datum with which to compare current emissions. Setting a base year is essential to be able to observe and account for changes and trends in your emissions information. According to the GHG Protocol Corporate Standard, a base year is “a historic datum (a specific year or an average over multiple years) against which a company’s emissions are tracked over time.”

If your company is measuring its Scope 3 emissions for the first time, the current reporting year will become your base year. If your company has measured its Scope 3 emissions in the past, you can use the oldest year for which you have available emissions information – preferably verified or assured – as your base year for each category of emissions for which the information is available. It is preferred, but not required, that all categories of your material Scope 3 emissions use the same base year.

See [Chapter 5 of the GHG Protocol Corporate Standard](#) for more information on setting and recalculating a base year.

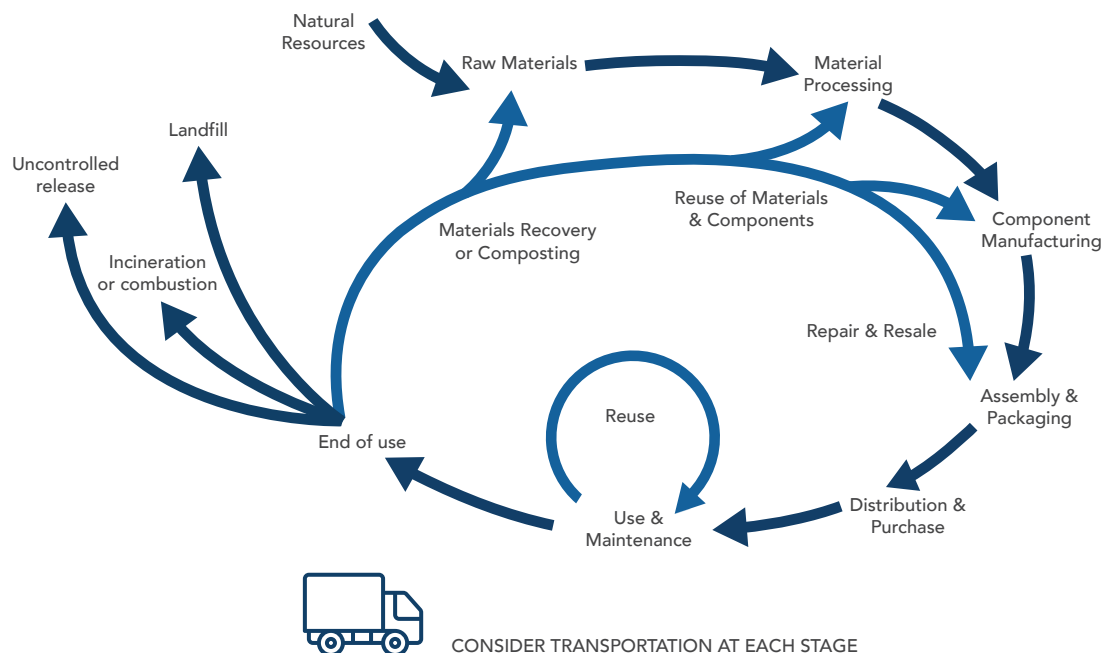
Map your value chain

When first getting started, a common approach is to select your top product(s) by revenue and identify the suppliers for key components, focusing on areas where you might anticipate that there would be high emissions. If you are not sure where to focus, start by identifying your most significant direct suppliers, customers, and end users.

Consider three key factors:

- **Activities:** What do they do? Are there likely to be high emissions from these activities?
- **Geography:** Where do they do it? Are there likely to be high emissions because of local grid emission factors (lack of availability of renewable energy) or from transportation over long distances?
- **Maturity:** What can you discern about their maturity in addressing their own Scope 1 & 2 emissions and/or their ability to collaborate on addressing Scope 3 emissions?

To better understand the emissions in your value chain, you will eventually need to map out your extended network of suppliers, distributors, and customers. To prepare to undertake your first inventory it still helps to have a bit better understanding of your value chain. The value chains of even the most basic goods and services have become increasingly long, complex, and global. To get started, you can think about the full life cycle of the key products and/or services that you offer from source to customer through to end of use and beyond.



Once you have identified a group of suppliers you can begin collecting information, such as site location(s) and the type of goods and services they provide. This can be translated into a geographical map or network diagram to help you understand the relationships between the actors in your value chain.

As you trace materials up and down the supply chain you may find some suppliers, buying agents, and other intermediaries, are reluctant to disclose their facilities, suppliers, sub-contractors, or customers, out of fear of being circumvented or penalised. To overcome this, you need to build trust, offer incentives for disclosures, and/or provide assurances of anonymity.

Conduct a Baseline Scope 3 Inventory

Conducting your first Scope 3 GHG inventory will establish your baseline. You will need to generate a comprehensive list of emission sources and quantify the associated emissions using standardised methods. Your first inventory will help you identify the most significant sources of emissions across your value chain (emissions hot spots) and help your company know where to focus its efforts (both where to gather better data and where you will need to partner to seek out ways to reduce those emissions).

[The GHG Protocol Technical Guidance for Scope 3 Emissions](#) sets out the process of conducting a Scope 3 inventory.

Determine the relevance of Scope 3 categories

Not all Scope 3 categories may be relevant to a particular reporting company. You will need to go through a structured process to understand the different Scope 3 categories and determine which are relevant for your company.

Remember that relevance can be sector specific. The CDP has made it easier for companies by publishing a [sector-specific guidance](#) document to help determine which Scope 3 activities may be relevant.

Estimate Scope 3 GHG emissions

In this step, you will estimate the emissions associated with each activity in your value chain. The process will help you establish a baseline from which you can set emissions reduction targets. It will also pinpoint where there are data gaps.

Ideally, you will get to the point where you gather primary data directly from suppliers or customers. At early stages, often this data is unavailable and most companies begin by making estimates using proxy data based on published emission factors (using the mass or volume of goods and/or based on spend).

The GHG Protocol provides different methods to measure and calculate your emissions based on data availability (full details are outlined in the [Technical Guidance for Calculating Scope 3 Emissions](#)):

- The spend-based method is the easiest to implement, but also the least precise. You estimate emissions based on the economic value of goods and services purchased multiplied by relevant industry average emissions factors.
- The average data method estimates emissions based on the mass (or other units) of goods and services and multiplied by relevant industry average emissions factors.
- The supplier-specific method relies on data available directly from suppliers. The advantage is that it better reflects your actual emissions, but requires considerably more resources.
- The hybrid method uses a combination of supplier-specific data (where available) and secondary data to fill the gaps.

A reliance on estimates instead of primary data has implications for the future. When your Scope 3 inventory relies heavily on estimates and averages, you will be unable to accurately pinpoint the emissions hotspots in your own value chain. It also becomes difficult to demonstrate emissions reductions. Unless you can gather better data, especially for the activities with the highest emissions in your value chain, you will need the whole product class or industry to shift for your company's Scope 3 emissions to come down.

You will also want to keep in mind that different activities will have different calculation methodologies (emission factors, assumptions made, etc.). You will need to document all these assumptions for subsequent years and when amendments and improvements in data quality need to be made. The GHG Protocol website hosts a list of third-party [life cycle databases](#) and GHG Protocol [calculation tools](#). There are also a broad range of external software tools available to support with early (and later) stages Scope 3 accounting and reporting.

Even at this early stage, you need to keep an eye out for high-GWP (global warming potential) gases like hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) used in manufacturing and emitted as by-products of industrial processes and sulphur hexafluoride (SF₆). Many of these gases are 1000 to 20,000 times more powerful than carbon dioxide (CO₂) at trapping heat and can stay in the atmosphere for thousands of years. That means that even small amounts of these high-GWP gases can have significant impacts on your Scope 3 inventory (and on climate heating).

For financial institutions, financed and facilitated emissions form a key component of Scope 3 emissions. [The Partnership for Carbon Accounting Financials \(PCAF\)](#) is a global partnership of financial institutions working together to develop and implement a harmonised approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.

Your first Scope 3 Inventory should help you to identify hotspots, to prioritise a set of suppliers, and identify areas where further data gathering is required. Just remember that this first inventory will likely be based on assumptions and make use of standard emissions factors. As a result, it is likely to be quite conservative (for instance, it may not reflect the progress already made by some of your suppliers and/or customers). When your inventory relies heavily on estimates and averages, unless you can gather better data, you will need the whole product class or industry to shift for your emissions to come down.

Common challenges at early stages

In the early stages, some of the most common challenges in developing accurate Scope 3 inventories include:

Time and resources – gathering Scope 3 data is often time-consuming and resource intensive.

Access to data – data access is often a significant challenge. Your value chain partners may be very early in their own journeys of accounting for their emissions and/or you may lack control or influence, especially as you get further up or down your value chain.

A lack of consistency – the methods of measurement related to Scope 3 emissions are significantly less mature than the measurement of Scope 1 and 2 emissions. It is common to experience considerable diversity in your data sources and their underlying assumptions – most companies are still in the early stages of adopting systems to track and report on their own Scope 1 and 2 emissions. At this point, there is still considerable variation in the methods and assumptions employed.

Challenges in data handling – in the best-case scenario, your Scope 3 emissions data will feed directly into your relevant information management systems. More likely, the data will need to be gathered manually and may not even be digital, making it harder and more expensive to capture (if you can secure it). In addition, it may not be in the format you need and may require additional calculations to render it suitable.

Challenges in attribution – making credible decisions about what portion of your supplier's emissions (or emissions reductions) to attribute to your Scope 3 inventory. Attribution can also be challenging when there are significant fluctuations in your company's supplier base.

Data management and governance

A clear data management and governance strategy is an important part of ensuring that your Scope 3 inventory is robust and reliable. You should outline key assumptions, the processes, key sources of data, and key contacts responsible for the data. This will enable the creation of a high-quality inventory. Key information to the document includes:

- Details on your organisational boundaries
- The rationale for your selection of the base year
- Data collection process, sources, and practices to support quality assurance and quality control
- Any emissions calculation methodologies employed
- Emission factors used and their sources
- Resources and training material on GHG emissions calculations
- Information about your third-party verification process
- Recalculation policy

Understand the limits of your current data

At early stages, Scope 3 data is generated from fragmented, incomplete, and voluntary disclosures that often rely on estimates based on emissions factors. Many companies are forced to rely on industry averages to estimate their Scope 3 emissions, which may not be representative of the context or jurisdiction in which they occur. While data that relies on industry averages may help to identify where to direct further effort, your organisation should be cautious in relying on it to support strategic decision-making. If you rely exclusively on averages, you will be unable to account for improvements made in **your** value chain.

Pay attention to data governance

Given the increasing attention to Scope 3 disclosures, it will be important to be attentive to data governance. How you implement your data governance will depend on your own data maturity.

You will need to assess whether your existing data management systems, processes, and controls are sufficient to support quality Scope 3 emissions disclosures. Companies that have built or are in the process of building an in-house data architecture and data governance for their own Scope 1 and 2 emissions data or broader sustainability data may be able to use the same approach for gathering, storing, processing, and analysing the data needed for their Scope 3 emissions calculations. In other cases, companies may elect to leverage their procurement data structures and governance systems with Scope 3 emissions being treated as a new use case.

Establish a recalculation policy

A recalculation policy is an important part of calculating your emissions. Key parameters (such as emission factors used, organisational boundary changes, improved or more accurate data, changes in regulations, etc.) may change over time. Your recalculation policy sets out the methodology and/or approach you will use when updating your inventory to ensure that your footprint is always calculated from the most up-to-date information and scientific references. It should articulate how you will go about adjusting the parameters used to calculate your emissions.

[The Corporate Value Chain \(Scope 3\) Accounting and Reporting Standard](#) provides additional guidance for determining the need for Scope 3 base year recalculation due to structural, boundary, and calculation methodologies changes, and to restate any significant errors.

Collecting better Scope 3 data from suppliers and customers

The data you need from suppliers will be the portion of their Scope 1, 2 and 3 emissions associated with the production and transportation of the goods and services they supply to your company. In the case of customers, the data required are the emissions associated with the use and end of life of the goods and services that they purchase from you or the financing that you provide.

Supplier and customer emissions data can be difficult to acquire but it is not impossible. Increasingly, companies are asking their suppliers to disclose their emissions using the [CDP Supply Chain questionnaire](#). Note that there is also a minimum version questionnaire available for SMEs (small and medium-sized businesses). As the world's largest repository of corporate environmental data, asking suppliers to report to the CDP can provide one common point of access for all your supplier emissions data. The platform can also be leveraged for supplier engagement.

Start with developing a supplier and customer collaboration plan¹⁸ that focuses on engaging your value chain partners on decarbonisation, target setting, data collection, and data sharing, and taking action to reduce emissions. The key is to find ways for the process to be valuable for your value chain partners as well.

Prioritise among your value chain partners. Focus on your hotspots. When engaging value chain partners, you will want to start with your organisation's biggest Scope 3 contributors.

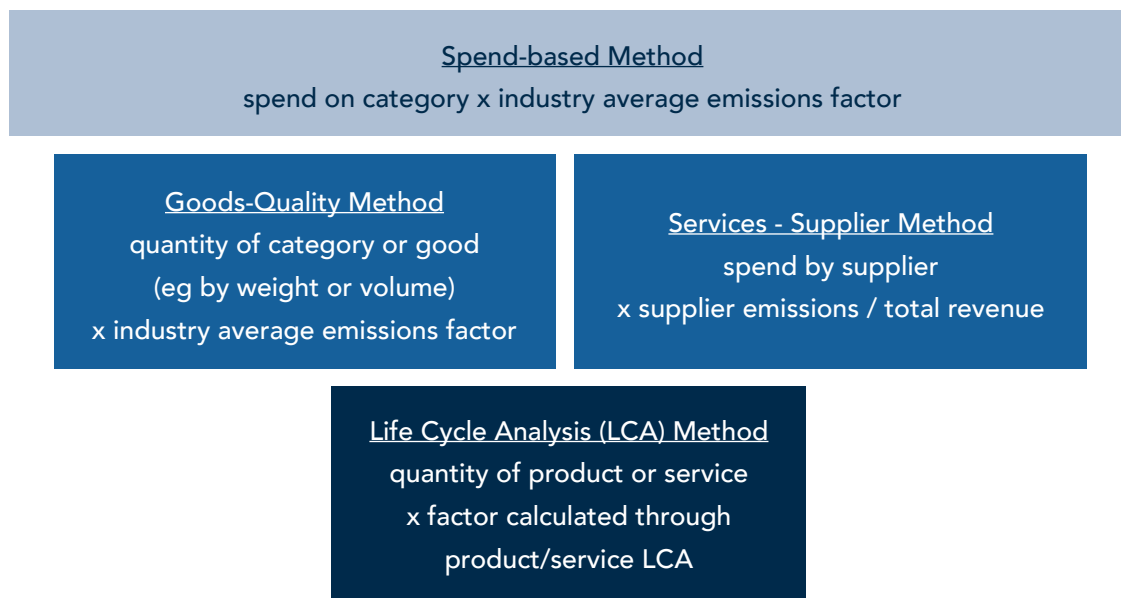
Be attentive to partner maturity. You will need to understand each partner's maturity when it comes to assessing and addressing their own carbon footprint. While this may be a new concept for some, others may be further down the path than you are and

may have insights to share. Developing this understanding of their maturity can be accomplished through targeted surveys or as part of your ongoing relationship.

Try to use available supplier data to avoid survey fatigue. Suppliers may have several customers asking for the same information in a variety of format. If your supplier has measured their emissions using a reputable methodology aim to be flexible in accepting this and not forcing them to use your chosen survey.

If your value chain partners are already measuring and reporting on all relevant categories of their Scope 1, 2, and 3 emissions, you will want to consider how to integrate and apportion this data most efficiently. If not, the next step will be to understand their business intelligence tools, the type of data that they collect, how they collect it, and to what extent this data could be used to calculate their relevant emissions.

Your company will need to develop a Scope 3 data roadmap to improve the quality and quantity of your data over time, from spend-based estimates, to a hybrid approach, to securing as much supplier-specific data as possible.



Measuring and calculating emissions: Increasing levels of effort and understanding.
 Embedding Project.

¹⁸ https://ghgprotocol.org/sites/default/files/standards_supporting/Supplier%20Engagement%20Guidance.pdf

Consider Life Cycle Assessments for key products and services

To move beyond estimates and generic emission factors, you may need to work with key suppliers and customers to undertake validated Life Cycle Assessments (LCAs). LCAs involve a scientific process to determine the impacts of an individual product or service over its full life cycle (cradle-to-cradle) or to the point of purchase (cradle-to-gate).

The [Greenhouse Gas Protocol on product LCA accounting and Report Standard](#) outlines the requirements, guidance, and steps for companies to quantify and account for impacts across the life cycle of a specific product. Two globally recognised standards (ISO 14044 and ISO 14067) governed by the International Organisation for Standardisation (ISO) outline the requirements and steps to conduct an LCA.

LCAs can be time-consuming and expensive to undertake, but when available, can provide valuable information to help you understand which products or processes need to be prioritised for improvements as part of your plan to decarbonise the value chain or to help to document GHG emissions improvements over time.

An increasing number of digital products and tools are available to help reduce the cost and resources required to conduct an LCA.

Consider when to report your baseline inventory

Once you have conducted your preliminary Scope 3 inventory, you will need to decide when to disclose your Scope 3 estimate along with your understanding of the areas of your value chain with the highest emissions (your hotspots).

Companies that have undertaken a purely spend-based analysis of emissions may elect to engage in a round of targeted partner engagement and data collection to address some of the most significant data gaps related to their key hotspots prior to setting targets for example, collecting material volume data from key good suppliers. Note however, that both the SBTi and CDP currently prioritise pace over precision, preferring that companies estimate and disclose their Scope 3 emissions as soon as possible and then transparently work on improving their understanding of their Scope 3 emissions over time.

Setting credible Scope 3 targets

Once your company understands its Scope 3 emissions profile, it is time to set targets for how you will support emissions reductions in your value chain. Various organisations such as the SBTi, disclosure platforms such as the CDP, and sustainability indices are requiring that companies set and report on their Scope 3 targets.

General advice on Scope 3 target setting

Build internal support for target setting. Building internal support within the company and externally with suppliers is an important step of the process. Ideally, there needs to be buy-in long before the target-setting process commences. Some companies opt to make a public commitment to set a public target through the SBTi. Committing to target setting can help to make target setting a company-wide focus, build trust with your external stakeholders, and hold your organisation accountable for delivering on the process.

Familiarise yourself with best practices in target setting. Scope 3 target setting is an evolving space. The lack of direct influence over these emissions makes them harder to reduce, so SBTi allows for more flexibility in setting a Scope 3 target. Companies whose Scope 3 emissions are more than 40% of total emissions are required to set one or more emission reduction targets and/or supplier and customer engagement targets that in combination, cover at least two-thirds¹⁹ (67%) of their total Scope 3 emissions.

Setting Scope 3 reduction targets

Companies who elect to set one or more Scope 3 reduction targets, or those who are required to do so as part of setting a science-based target (for instance, when Scope 3 is 40% or more of your overall emissions), will be expected to set ambitious and measurable targets with a clear time frame. You can find more information about setting a Scope 3 target in the [SBTi Getting Started Guide](#).

¹⁹ <https://sciencebasedtargets.org/resources/files/SBTi-criteria.pdf>

If aiming to set a science-based Scope 3 target, your company must set one or more emission reduction targets and/or supplier/customer engagement targets that collectively cover(s) at least 67% of total scope 3 emissions in conformance with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

Scope 3 emission reduction target(s) must be aligned with well-below 2°C pathways and targets must be achieved within 5-10 years from the date the target is submitted to the SBTi for validation. Several methods are accepted and companies may use a combination of these methods:

- **Absolute reduction:** Minimum 2.5% linear annual reduction.
- **Sector-specific pathways:** Depends on sector and company inputs.
- **Economic intensity:** Reduce emissions intensity per value added by at least an average of 7 percent year on year.
- **Physical intensity:** Reduce emissions intensity per value added by at least an average of 7 percent year on year.
- **Supplier /Customer engagement:** (see next section below)

All companies, but particularly those with scope 3 operations with transportation emissions, or those in the Power or FLAG sectors, should consult [SBTi's sectoral guidance](#) before setting a Scope 3 target.

Setting Scope 3 supplier and customer engagement targets

Your company can also help to support value chain decarbonisation by setting supplier and customer engagement targets. When a company faces significant challenges with Scope 3 data quality and aggregation in a particular category, it may elect to start by setting targets for a supplier or customer engagement.

For instance, your company could commit to supporting a specific percentage of suppliers (as a percentage of spend or GHG emissions) to set their own SBTs within five years from the date the company's target is submitted to the SBTi for validation. This could be through providing training, support, tools, and other resources to help

them measure their emissions, report, and set reduction targets. Companies can also commit to engaging their customers; for instance, they could help customers to reduce emissions during product use and/or end of life.

Engagement targets must state the percentage of emissions from categories covered by the targets, or the percentage of annual procurement spend. Targets must be fulfilled within 5 years of the date that the target is set. At a minimum, engagement targets should include asking suppliers/customers to set their own Scope 1 and 2 targets; inclusion of Scope 3 is encouraged.

Validating your Scope 3 targets

An increasing number of companies have elected to have their targets independently validated either by outside consultants or by SBTi. SBTi's technical experts offer a target validation service. The [SBTi Target Validation Protocol](#) provides more information about the process.

Mitigation beyond the value chain

While developing your strategy to address your Scope 3 emissions, you are encouraged by SBTi to look [beyond your value chain](#) to seek out additional opportunities to avoid or reduce greenhouse gas emissions or remove and store greenhouse gases from the atmosphere. This may include advocating for regulatory changes, supporting the implementation of policies that incentivise the transition to a net zero economy such as creating incentives to invest in renewable energy projects; adopting carbon pricing; securing and enhancing carbon sinks; and research and innovation. Through supporting mitigation beyond your value chain, your company can amplify its contribution towards limiting global emissions to below 1.5°C.

Collaborating with value chain partners

Engaging and collaborating with your suppliers and customers will be crucial throughout your Scope 3 journey. Collaboration is the only path forward with the speed and energy to support rapid decarbonisation throughout the economy. Your company can play an important role in encouraging and supporting your value chain partners to measure and disclose their emissions, set emissions reduction targets, implement sustainable practices to reduce emissions, and track their progress.

The key is to collaborate – not mandate. An approach that emphasises collaboration and partnership — rather than top-down demands for data without context or time to prepare — will be far more successful in winning over suppliers and customers. Some of the ways to engage with your value chain partners include:

- After conducting your own carbon inventory, you can share the knowledge and resources you developed to support key value chain partners in getting started on their own inventory.
- Adjust your procurement processes to value products and services that have a lower footprint and/or companies that have set credible climate targets.
- Include decarbonisation and data sharing expectations in your supplier code of conduct and in your contractual agreements.
- Help to build capability through sharing best practices and upskilling suppliers on how to measure their carbon footprint and/or decarbonise their operations.
- Provide resources or invest in supplier initiatives to support your suppliers on their decarbonisation journey.
- Engage with customers to better understand how you can support them to reduce emissions during product use and at end-of-use.

For more ideas, examples, and resources, consult our guide on [Supporting Scope 3 Value Chain Decarbonisation](#).

Verification, assurance, and disclosure

Verification and assurance

Momentum is building for verification and assurance on GHG emissions data, including on scope 3. Generally, the terminology used in carbon accounting refers to “verification” as the process of evaluating a statement of historical data (such as a GHG inventory), whereas “assurance” refers to the outcome of the verification process (i.e., a statement of limited/reasonable assurance).

Given that many companies will need to disclose their GHG emissions as part of their general-purpose financial reports and may be relying on the data to make financial decisions, make product sustainability claims, or to calculate executive compensation, assurance over the information becomes crucial. Without credible, independent assurance, scope 3 reporting can result in significant reputational, financial, and legal risks.

External verification of scope 3 data involves evaluating a statement of historical data and information to determine if the statement is materially correct. Verification can provide a certain level of assurance (e.g., limited or reasonable) that emissions data is prepared in all material respects, in accordance with the relevant standards under which the data is reported.

Verification will help to ensure that the data is accurate and complete and aligns with up-to-date reporting frameworks, and will help to build confidence with your stakeholders, including investors. Third-party verification can also be a good way to:

- Identify and improve any weaknesses in your internal data management processes.
- Help you to identify ways to automate your processes, avoid unnecessary errors, and plan for data continuity.
- Keep abreast of emerging changes in regulations on emissions reporting.

Although assurance (limited or reasonable) over GHG emissions data is not yet required in most regulatory jurisdictions (for example, as assurance over annual financial statements is required by securities law for public companies), there may be instances where an entity would seek assurance over GHG emissions data as a result of investor or other stakeholder needs, or for internal strategic purposes.

There are currently general assurance standards in many jurisdictions that can be applied to sustainability information and in some cases, also an assurance standard over GHG emissions statements. In addition, responding to investor and other stakeholder requests, in August 2023, the International Auditing and Assurance Standards Board published a proposed sustainability assurance standard that supports the consistent performance of quality sustainability assurance engagements.

Given the developments in this area, assurance over GHG emissions data and other sustainability information may well be required in due course.

Be sure that critical controls are in place for Scope 3 data and consider engaging a practitioner with relevant experience in the key standards or frameworks including the Greenhouse Gas Protocol (and if relevant to you, the Science-Based Targets initiative). Make sure that all parties within the value chain from which you are obtaining information are transparent in their methodologies so that you can make comparisons from year to year. In the early stages, your board's audit committee may need to seek guidance on how to effectively oversee Scope 3 data.

Disclosing your data

The release of the [IFRS S2 Climate-related Disclosures Standard](#) will create pressure for more comprehensive and transparent Scope 3 disclosures and the scrutiny of those disclosures will also inevitably rise over the coming years.

Many companies are already engaging in voluntary Scope 3 disclosures in their sustainability reports and through the [CDP](#) (formerly known as the Carbon Disclosure Project – the global platform for measuring, reducing, and reporting climate emissions).

Credible disclosure complements your current corporate sustainability reporting, helps to build trust and credibility with stakeholders and value chain partners, and helps to facilitate industry benchmarking. Scope 3 disclosures form part of a broader portfolio of climate-related disclosures that may include:

- [Articulating a credible public position on climate change](#) that includes commitments and actions on Scope 3
- Disclosure of Scope 1, Scope 2, and Scope 3 data to the CDP and relevant sustainability indices

- Annual reporting on progress against your Scope 1, Scope 2, and Scope 3 goals and targets in your sustainability and/or integrated financial reports.
- A stand-alone emissions report that includes Scope 3.

Emissions reporting usually includes comprehensive information on:

- Governance structures, processes, and your strategy to oversee company emissions reduction activities.
- Emissions reduction targets.
- Emission sources, including relevant emissions excluded, with reasons why the emissions were excluded.
- The entire GHG footprint and explanation of which activities were verified, and which were not, including the assumed margin of error.
- Intensity figures.
- Company risks and opportunities, including the potential cost to reduce emissions.
- The verification process undertaken to assure the accuracy of the data being reported.

[The CDP](#) (formerly known as the Carbon Disclosure Project) oversees the world's most recognised global environmental disclosure system. Investors, lenders, and customers are increasingly requesting that companies disclose their climate-related data using CDP's climate change questionnaire, which includes questions about Scope 3 emissions. Companies can also proactively elect to disclose their information through CDP.

The questionnaires provide a framework for companies to provide information covering governance and policy, risks and opportunity management, climate targets and strategy, and scenario analysis. [CDP's guidance documents](#) provide an overview of the questions as well as details on what information to provide.

Note that the CDP awards points for verification and requires verification to be completed in accordance with recognised verification standards. CDP has produced a [list of criteria and of verification standards](#) that have been deemed suitable for CDP reporting. One of the most common verification standards is [ISO 14064-3 Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements](#).

Review and adapt

Like any other management process, it is crucial to have processes in place to routinely review your Scope 3 emissions data management and governance, targets, supplier and customer engagement, and your progress against meeting your targets. Your company should proactively seek out feedback from your value chain partners as you work to adapt your strategy to ensure that you are on track to do your part to limit global emissions to below 1.5°C.

Governance and oversight of Scope 3

Executives and corporate directors play a crucial role in supporting the effective governance and oversight of Scope 3 emissions reductions. When it comes to Scope 3 emissions, here are some key questions that directors and senior executives should ask:

Understanding the pressure to address Scope 3 emissions

- Are our customers and/or suppliers demanding (or likely to demand) that we address Scope 3?
- Are we (or will we be) subject to disclosure requirements that will require us to report on Scope 3?

The strategic implications of Scope 3

- What the strategic implications of scope 3 for our business and our value chain?
- How could our Scope 3 emissions reduction efforts change our cost structure, price of products and services, and return on investment?

Understanding our Scope 3 emissions and hotspots

- Does our executive team and our board have a sufficient understanding of Scope 3 and the implications for our business?
- Have we undertaken a baseline inventory of our Scope 3 emissions?
- What hotspots or priority activities and/or suppliers or customers does it reveal?

- How much confidence do we have in our Scope 3 inventory and the hotspots identified within it? (Is the baseline largely estimated based on emissions factors or to what extent are we gathering data directly from suppliers and customers?)
- What are some of the key limitations? What efforts and resources would be required to improve our understanding?

Scope 3 target setting

- Have we set (or do we plan to set) a Scope 3 target? Are we committing to Scope 3 reductions and/or to engaging value chain partners?
- Are our targets consistent with limiting global warming to 1.5°C?
- Do our targets align with a science-based target, such as the process mandated by the SBTi (Science Based Targets Initiative)? Will we pursue validation by SBTi?

Scope 3 data management and assurance

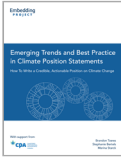
- Do we have the expertise, processes, and systems we need to manage Scope 3 effectively? Do we need to hire for the required skills or engage a 3rd party consultant for assistance?
- Is the data credible – can it withstand external verification and assurance?
- Are we engaging in verification and assurance of our Scope 3 data, processes, and disclosures?
- What do we need to do to improve the quality of our Scope 3 data collection?
- How can we build a scalable, secure (and ideally, automated) emissions data system across our value chain?
- Confidence in our strategy to deliver on our Scope 3 commitments
- Have we developed a credible strategy to meet our Scope 3 targets?
- Have we allocated the resources and capital to deliver on our commitments?
- How can we accelerate our Scope 3 activities to more quickly meet our decarbonisation targets?

Scope 3 disclosure

- Are we reporting or preparing to report in line with the GHG Protocol, CDP, SBTi and the evolving disclosure requirements proposed by the IFRS and others?
- Have we articulated a credible position, goals, and strategy that investors, customers, partners, and employees clearly understand?

Next Steps

We hope the guidance presented here helps your company to take credible action in understanding and addressing your Scope 3 greenhouse gas emissions. You may also want to read:

FOR MORE GUIDANCE ON SCOPE 3	
	Our guide on Supporting Scope 3 Value Chain Decarbonisation .
FOR SUPPORT ARTICULATING A CREDIBLE PUBLIC POSITION	
	Our guide on Developing Position Statements on Sustainability Issues
	Our guide on Emerging Trends and Best Practice in Climate Position Statements
	Our free position statement database
FOR ADDITIONAL GUIDANCE ON CLIMATE RISK AND CLIMATE RISK OVERSIGHT	
	Our guide on Climate Change and Climate Risk Oversight .

For additional resources to help support your companies to embed sustainability across its operations and decision-making, please visit <https://eproject.org/resources>.

APPENDIX: Key Players in Scope 3

Expectations continue to evolve when it comes to Scope 3 with several key organisations such as the GHG Protocol, CDP, the Science-Based Initiative (SBTi), the International Sustainability Standards Board (ISSB), and even the U.S Securities and Exchange Commission (SEC) shaping²⁰ the narrative when it comes to how companies address and disclose their Scope 3 emissions.

THE GHG PROTOCOL (GREENHOUSE GAS PROTOCOL)

The GHG Protocol is the global greenhouse gas accounting and reporting standard that most organisations use to measure, manage, and disclose their greenhouse gas emissions. It was developed over 20 years ago through a multi-stakeholder process in collaboration with governments, industry associations, NGOs, businesses, and other organisations, as a means to standardise reporting against the UN Framework Convention on Climate change and the targets outlined in the [Kyoto Protocol](#).

The GHG Protocol continues to develop additional guidance²¹ and updates to improve and simplify Scope 3 data collection and reporting. The current set of updates will build on the existing set of corporate GHG accounting and reporting standards for Scope 1, Scope 2, and Scope 3 emissions by removing disconnects in current reporting standards, supporting and enhancing the implementation of the GHG Protocol standards, and ensuring harmonisation and alignment with the accounting rules and standards under development through major disclosure initiatives including the US Securities and Exchange Committee (SEC), European Commission (e.g. EFRAG), and others²².

CDP

The [CDP](#) (formerly known as the Carbon Disclosure Project) is a not-for-profit charity that oversees the world's most recognised global environmental data disclosure system. Initially focused on climate emissions, the system now also addresses the disclosure of data related to water and deforestation. In addition to hosting the world's largest repository of environmental disclosure data, each year, CDP takes the information it receives from companies during the annual reporting process and scores companies based on their disclosure and action on addressing climate change, water security, and deforestation.

²⁰ <https://sciencebasedtargets.org/blog/new-resources-for-scaling-private-sector-climate-action>

²¹ <https://ghgprotocol.org/guidance-0>

²² <https://ghgprotocol.org/blog/next-steps-process-update-existing-corporate-standards>

SCIENCE-BASED TARGETS INITIATIVE (SBTi)

The SBTi is a global private-sector-focused initiative that drives and enables organisations to set science-based emissions reduction targets. It defines and drives ambitions and action in the private sector to halve emissions before 2030 and achieve net-zero by 2050. Additionally, it promotes best practice in emissions reduction, ensuring that there is uniformity in target setting, measurement, and disclosure.

The SBTi now requires companies whose Scope 3 emissions are more than 40% of total emissions to set either emission reduction or supplier and customer engagement targets that cover at least two-thirds²³ (67%) of their total Scope 3 emissions.

SBTi provides guidance on how to set Scope 3 targets in its [Getting Started Guide](#) and also provides [sector-specific guidance and requirements](#). Scope 3 reduction targets must be aligned with a well below 2°C emissions pathway (with encouragement to align with a 1.5°C pathway) and must be a near term with a 5–10-year time frame.

IFRS FOUNDATION'S INTERNATIONAL SUSTAINABILITY STANDARDS BOARD (ISSB)

In 2021, the International Financial Reporting Standards Foundation (IFRS), the body that develops international financial reporting standards for the vast majority of countries in the world, created the International Sustainability Standards Board (or ISSB) to provide consistent global guidance on financial materiality and the disclosure of the ESG factors that impact enterprise value.

In June 2023, the [International Sustainability Standards Board \(ISSB\)](#), released its Climate-related [Disclosures Standard \(IFRS S2\)](#), which incorporates the guidance and recommendations of the TCFD. IFRS S2 requires companies to disclose absolute gross greenhouse gas emissions generated during the reporting period, measured in accordance with the Greenhouse Gas Protocol, including Scope 1, Scope 2, and Scope 3 emissions.

Implementation timelines begin in 2024, but acknowledging the practical concerns of calculating Scope 3 emissions, reporting companies have been [offered one year of relief from providing Scope 3 GHG emissions](#), to understand and map their value chain. During the transition period, companies will be permitted to make use of reasonable and supportable information that is available without undue cost or effort and incorporates the use of estimation²⁴.

²³ <https://sciencebasedtargets.org/resources/files/SBTi-criteria.pdf>

²⁴ <https://www.ifrs.org/news-and-events/news/2022/12/issb-announces-guidance-and-reliefs-to-support-scope-3-ghg-emiss/>

SECURITIES AND EXCHANGE COMMISSION (SEC)

The US SEC has also put Scope 3 disclosure on the table. In March 2022, the SEC released²⁵ an exposure draft of new rules for climate change disclosures that included requirements for the disclosure of Scope 3 emissions “if material or if the registrant has set a GHG emissions reduction target that includes Scope 3 emissions.” As of the date of publication, an updated draft is still pending.

TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD)

In 2015 the Financial Stability Board (FSB) established the Taskforce on Climate-Related Financial Disclosure (TCFD) to develop a framework and guidance for the disclosure of climate-related risks and opportunities for companies. Companies are encouraged to integrate their climate-related risks and opportunities as part of their overall business strategy and decision-making process.

In 2021, the TCFD framework recommended that where such information is material, all organisations must disclose their Scope 1, 2, & 3 emissions, together with their climate-related risks and opportunities, and that emissions should be calculated in line with the GHG Protocol. Additionally, organisations should also describe their key climate-related targets for each of the scopes.

Given that IFRS S1 and IFRS S2 fully incorporate the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), the work of the TCFD has now concluded and the Financial Stability Board has asked the IFRS Foundation to [take over the monitoring](#) of the progress on companies’ climate-related disclosures.

PARTNERSHIP FOR CARBON ACCOUNTING FINANCIALS (PCAF)

PCAF is a global partnership of financial institutions that work together to develop and implement a harmonised approach to assess and disclose the greenhouse gas (GHG) emissions associated with their loans and investments.

The harmonised accounting approach provides financial institutions with the starting point required to set science-based climate targets and align their portfolio with the Paris Climate Agreement. PCAF enables transparency and accountability and has developed an open-source global GHG accounting standard for financial institutions, the [Global GHG Accounting and Reporting Standard for the Financial Industry](#).

²⁵ <https://www.sec.gov/news/press-release/2022-46>

Acknowledgments

This research was supported by the Social Sciences and Humanities Research Council of Canada



Social Sciences and Humanities
Research Council of Canada

Conseil de recherches en
sciences humaines du Canada

Canada

By CPA Canada



CPA

CHARTERED
PROFESSIONAL
ACCOUNTANTS
CANADA

And through contributions from our corporate partners:

eproj.org/our-community

The Embedding Project is hosted by the Beedie School of Business at Simon Fraser University
in Canada



BEEDIE
SCHOOL OF BUSINESS

We would also like to thank Luke Abbott, Branden Beatty, and Marija Loubser for
helpful comments on earlier drafts.

Embedding
PROJECT