An introductory guide to **Scope 3 emissions**
Contents

SECTION 1
What is Scope 3? 3

SECTION 2
Why Scope 3 matters 5

Why Scope 3 emissions matter to businesses 6
Why Scope 3 emissions matter to the public sector 8

SECTION 3
Measuring Scope 3 9

SECTION 4
Considerations: businesses 10

SECTION 5
Considerations: the public sector 14

SECTION 6
How the Carbon Trust can support 17
SECTION 1

What is Scope 3?

Scope 3 is a term defined by the Greenhouse Gas Protocol (GHG Protocol). The GHG Protocol provides the world’s most widely used greenhouse gas (GHG) accounting standards, which organisations and governments use to understand, quantify and manage their GHG emissions. Created to bring consistency, the GHG Protocol categorises emissions into three ‘Scopes’:

- **Scope 1**: Direct emissions from activities within your organisation’s control. This includes onsite fuel combustion from buildings and company vehicles as well as manufacturing and process emissions and direct emissions from agriculture.

- **Scope 2**: Indirect emissions from any electricity, heat or steam you purchase and use. By using the energy, you are indirectly responsible for the release of GHG emissions.

- **Scope 3**: Any other indirect emissions from sources outside your direct control. The GHG Protocol’s Scope 3 Standard categorises emissions across 15 different categories covering business activities common to many organisations, such as purchased goods and services, business travel and waste in operations. It also encompasses activities like leased assets, transport and distribution, the use and disposal of sold products and the impact of any investments.
1. WHAT IS SCOPE 3?

Scope 1
DIRECT

Scope 2
INDIRECT

Scope 3
INDIRECT

CO₂, CH₄, N₂O, HFCs, PFCs, SF₆

Upstream activities

Reporting company

Downstream activities

Source: GHG Protocol

Measuring your Scope 3 footprint: businesses

The GHG Protocol’s Scope 3 Standard, has identified 15 categories across upstream and downstream activities. Some categories and their associated emissions are easier to influence, like business travel and waste. Others, on the other hand, require new strategies, coordination and collaboration, such as engaging suppliers or adapting your product development strategy.

Measuring your Scope 3 footprint: the public sector

The public sector will find few of its emissions in downstream activities. Instead, upstream activities will fuel a large part of their Scope 3 footprint. A sizeable part of a public body’s Scope 3 footprint will be embodied in the goods and services they buy, e.g., construction materials or pharmaceuticals used across healthcare services. Measuring and addressing these emissions requires dedicated supplier and employee engagement strategies.

A carbon footprint is expressed as a ‘carbon dioxide equivalent’ – or CO₂e. This is the unit of measurement that allows different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO₂.
Why Scope 3 emissions matter

Scope 3 almost always represents the largest proportion of emissions. Across the private and public sectors, these emissions are typically responsible for 70-90% of an organisation’s carbon footprint. It makes accelerating action on reducing Scope 3 emissions all the more important if we want to keep 1.5C alive.
2. WHY SCOPE 3 EMISSIONS MATTER

Why Scope 3 emissions matter to businesses

Many businesses are optimising their operations to reduce emissions. Yet, they cannot meet their climate goals if they ignore the impact of their full value chain.

Since Scope 3 emissions can make up the majority of an organisation’s carbon footprint, the Science Based Targets initiative (SBTi) has made quantifying and setting Scope 3 targets a requirement of their validation process. Any business whose Scope 3 emissions represent more than 40% of the total footprint must now report on its Scope 3 reduction efforts.1

The regulatory lens is on carbon reporting

The regulatory landscape is also witnessing a global shift as countries across the world are beginning to mandate the disclosure of emission data for larger businesses:

- **Task Force for Climate-related Financial Disclosures (TCFD)**
  The TCFD framework requires businesses to disclose their climate-related risks and opportunities. While not mandatory, TCFD encourages businesses to disclose Scope 3 emissions. TCFD-aligned reporting is already compulsory across the UK, with more countries and regions expected to follow, including the EU, Colombia and the US.

- **Corporate Sustainability Reporting Directive (CSRD)**
  The EU has announced it will bring sustainability reporting in line with financial reporting. The new CSRD framework will be rolled out in a phased approach from 2024 and requires businesses to be more detailed in their sustainability reporting. For environmental reporting, EU businesses should have footprinted their whole value chain (Scope 1, 2 and 3) and have set (science-based) targets.

- **Securities and Exchange Commission (SEC)**
  SEC have proposed a new climate-related risk disclosure rule. As part of this, registrants would be required to ‘disclose information about its direct greenhouse gas (GHG) emissions (Scope 1) and indirect emissions from purchased electricity or other forms of energy (Scope 2).’ Any business with a ‘material’ value chain or with a Scope 3 target must also disclose their emissions from upstream and downstream activities.

- **International Sustainability Standards Board (ISSB)**
  In June 2023, the ISSB issued its inaugural IFRS Sustainability Disclosure Standards – IFRS S1 ‘General Requirements for Disclosure of Sustainability-related Financial Information’ and IFRS S2 ‘Climate-related Disclosures’. The Standards create a common language for disclosing the impact of climate-related risks and opportunities on a company in the short, medium and long term.3

---

1. FAQs — Science-based targets
2. SEC.gov — SEC proposes rules to enhance and standardize climate-related disclosures for investors
3. IFRS — ISSB update June 2023
The organisational benefits of tackling Scope 3 emissions

Scope 3 reporting is not just a tick-box exercise to comply with current and upcoming regulatory changes. When done correctly, Scope 3 reporting can provide valuable insights into your supply chain risks and product performance.

In doing so, you can take active steps to futureproof your business, and build confidence in your decision making, as you:

- Assess where emissions lie across your value chain. Your drivers for carbon emissions, may equally be the drivers for carbon-related risks and opportunities, so you can plan to mitigate resource and energy risks and their associated costs.
- Understand which suppliers are leaders and which are laggards in terms of their sustainability performance.
- Use Scope 3 data to inform decision making across procurement, product design and logistics.
- Increase engagement and relationships with suppliers by helping them implement sustainability initiatives.
- Find innovative solutions to create more sustainable products.
- Engage with employees to reduce emissions from business travel and employee commuting.
- Advance your climate strategy by setting Scope 3 carbon reduction targets or science-based targets.
- Increase the credibility of your brand’s climate action among investors, customers and other stakeholders.

If businesses only intend to use the information to support their corporate reporting and the disclosure of their emissions, they miss the value and opportunity to use the data to inform critical decisions about the future direction of their business.

Tom Cumberlege
Director at the Carbon Trust
The climate crisis is global, but its impact will be felt locally. It is a tremendous driver for public bodies, cities and regions to invest in climate action, and reduce carbon emissions.

By their very nature, public bodies offer services to support people and communities in living happier, healthier lives. Pollution, fuel poverty, and excessive waste linked to climate change can be centrally tackled through local government action and policy, education, and public health services.

For many, climate action is intertwined with the public sector’s core purpose and has spurred a movement of climate emergency declarations and Net Zero commitments.

In addition, many public bodies are setting carbon reduction targets earlier than national Net Zero targets. In doing so, they have directly or indirectly committed to reducing emissions beyond Scope 1 and 2.

The benefits of measuring and tackling Scope 3 emissions

Scope 3 emissions are everyone’s responsibility and require a collaborative approach. By measuring and communicating your Scope 3 emissions, you can hold yourself, your employees and your supply chain to account. Through a Scope 3 assessment, you can:

• Obtain a clear picture of how Scope 3 emissions contribute to your overall footprint.
• Prioritise decarbonisation efforts where they can make the biggest difference.
• Collaborate closely with suppliers, encouraging them to act on their emissions. This will lead to a butterfly effect that prompts businesses to become more sustainable.
• Demonstrate commitments to creating healthier communities.
• Engage with employees to reduce emissions from business travel, employee commuting, waste and water.
• Communicate a comprehensive footprint and progress with stakeholders, such as constituents.
• Support national endeavours towards Net Zero.
Measuring Scope 3 emissions

1. Define your organisational needs in regard to Scope 3 emissions
2. Define which Scope 3 categories should be prioritised for data collection
3. Determine the methodology and initial calculation methods
4. Collect and collate data
5. Calculate your carbon baseline
6. Verify your results (recommended)
7. Plan for emissions reductions (recommended)
8. Improve the accuracy of your Scope 3 footprint on a continuous basis and rebaseline where appropriate

Setting a Scope 3 carbon reduction pathway

1. Set carbon reduction targets
2. Model scenarios to determine the different pathways to achieve this target
3. Create an action plan
4. Monitor and evaluate your climate progress on an ongoing basis
5. Report your progress

If you would like to find out more about calculating and communicating an organisational or product footprint, please refer to the Carbon Trust’s introductory guide to carbon footprinting for businesses.
4. CONSIDERATIONS: BUSINESSES

Considerations: businesses

The quality of Scope 3 emissions calculations needs to be good enough to identify where to prioritise your decarbonisation efforts and implement decisions.

Yet, with 15 different categories to report on, conducting a Scope 3 footprint can seem daunting and resource intensive. By their very nature, these emissions are indirect, so organisations will feel discouraged that they may not have immediate access to activity data. To make the most of the resources at hand, it is important to consider the following points.

1. Identify your business needs

Identify your business objectives and the value you seek to generate from measuring and interpreting your value chain footprint. While initially it may be to meet regulatory reporting requirements, you can use the data to drive innovation, strengthen supplier conversations, or set science-based targets. To stay on track, organisations must always revert their focus back to the business value that a Scope 3 footprint and reduction plan can generate.

2. Start with the data at your disposal

Accept that the accuracy of Scope 3 reporting will not be perfect first time, and instead, will improve as more specific data becomes available.

Begin by calculating your Scope 3 footprint with your best available data at hand, so you can understand where your biggest emission hotspots lie. Many businesses start by using a spend-based approach to calculate their upstream emissions.

The use of spend-based data offers a very wide, but shallow lens on your emissions that focuses on the ‘purchased goods and services’. Often, the procurement data for the entire year is used, taking the ‘amount bought’ multiplied by the most applicable emission factors. This approach can be limiting as it captures secondary data, which lacks the detail to base business decisions on. Since these emissions factors are not specific to products or suppliers, they do not allow for year-on-year comparisons. While this data collection should not be used in the long term, it is often easier and cheaper to obtain, making it a good starting point.
3. Where to prioritise your data collection

Don’t chase everything at once. With limited resources at your disposal, it is important you place your efforts where they can have the greatest impact. A screening exercise can help your business identify where your key emissions across downstream and upstream activities lie. Ask yourself:

- **Which areas are most material in my footprint?**
  This can differ across industries. For agriculture, for example, most hotspots come from the emissions associated with its supply chain. The same is true for some manufacturing companies where raw materials are a more critical emission hotspot than the transport of goods. The ICT sector, however, will see that a large chunk of emissions is released in downstream activities, when their product has left the factory and is in use.

- **And what can I do about it?**
  Consider how well you can influence each emission hotspot.

Understanding your emission hotspots will drive your data collection efforts. Without this, it is impossible to implement a credible climate strategy, establish internal buy-in or report on your climate progress.

It will also help bring the best returns as you address your carbon footprint.
4. Make data collection a company-wide exercise

It is crucial that cross functional experts from your business are involved in collecting and analysing this data, so they can understand how their decisions impact the total value chain, not just their operations. Treating your footprinting with the same level of importance and scrutiny as financial reporting can lead to successful outcomes. Here, setting key performance indicators (KPIs) related to the accuracy and reduction of Scope 3 emissions can be highly beneficial.

5. Engage with suppliers and other value chain partners

Scope 3 data can inform decision making, but only if the footprint’s most material aspects are specific and granular enough to make strategic decisions. Once you identified the big emitters across your value chain, engage with them.

Encouraging suppliers to calculate their specific footprint is crucial for anyone working with a large number of suppliers, such as an electronic goods manufacturer. This way you can compare the emissions intensity of your supply chain each year and ultimately reduce uncertainty in your footprint by improving the quality of data. Once you have identified the big emitters across your supply chain, engage with them. Doing so will build confidence in your emission data, ensuring it is ‘good enough’ to inform decision making.

Your procurement team can set requirements to encourage carbon footprinting and decarbonisation across your supply chain. Here, teams should focus on the most material aspects and where they can have the greatest influence.

6. Delve into your data and model solutions

Product design and procurement decisions influence your footprint. After collecting your Scope 3 data, it is important to interpret your data and analyse which products have the biggest potential to help reduce emissions across your supply chain as well as during logistics, product use and end of life phases.

Product design and procurement teams need to consider the impacts of the products they buy or create across their lifecycle. This means taking into account factors such as recyclability, energy efficiency, and the use of alternative materials even before the products are made, all the way through to their end of life phase.
4. CONSIDERATIONS: BUSINESSES

7. Update your carbon baseline
Over time you will begin to replace secondary emission data with primary data from your suppliers. When this happens, it is important to recalculate your own baseline to ensure your measured progress is accurate and not a result of comparing different data sets. Upon receiving primary data from suppliers, ask for their historical data too, so you can recalculate your baseline.

8. Report transparently
Not all categories identified by the GHG Protocol Scope 3 Standard will apply to your business or sector. For example, emissions of ‘use of sold products’ (Category 11) may be significant to an electronic devices manufacturer but irrelevant to a furniture manufacturer.

In such cases, it may not be necessary to quantify categories that do not apply. However, transparency is crucial in order to conduct a credible Scope 3 assessment. In your reporting, disclose any excluded Scope 3 categories and provide reasons and assumptions for their exclusion. By doing so, you can justify the boundaries you have set.
**5. CONSIDERATIONS: PUBLIC SECTOR**

Considerations: the public sector

Public sector organisations operate on a service-based model, towards the end of supply chains. This means a large proportion of their total emissions arise from upstream activities, particularly through the purchase of goods and services – emissions from the supply chain. Emissions released downstream of public bodies are often limited to investments and the use of leased assets, e.g., the emissions from leased buildings owned by a local authority.

Given this position within supply chains, it may be viewed that public body Scope 3 emissions reporting is relatively simple compared to businesses. However, public bodies will often source thousands of different products and services from a wide range of sectors.

Public bodies should consider the following to address emission hotspots across their upstream activities:

1. **Identify your needs and scope**

Many public bodies and local governments have set Net Zero targets and strategies to match or improve upon national Net Zero ambitions. With this in mind, a plan to address Scope 3 emissions must be embedded within your Net Zero strategy. This means there is a commitment and a target to reduce emissions across your organisation.

As such, you need to first identify your organisational needs and what you would like to focus on: are you planning to measure Scope 3 emissions within a specific boundary?

2. **Plan and align your carbon reduction strategy in advance**

To avoid conflicts, align your carbon reduction strategy with other organisational strands, such as procurement, business travel and HR policies.

Many public bodies work within limited budgets and resources. Try to include effective governance structures for Scope 3 in your Net Zero strategy and allocate resources and budgets so that you can plan for ongoing carbon measurement and management. Finance, HR, procurement and supply chain managers need to be part of the journey alongside senior managers and sustainability professionals.
3. Start with the data at your disposal: a proxy footprint

As with all emissions categories, different methods can be applied to arrive at emissions estimates. Criteria such as the relative size of emissions will often guide your choice of calculation method, but are often limited by data availability.

Accept that data collection is a continuous cycle. As a first step, most public bodies will follow a spend-based method to calculate emissions across their supply chain. This involves multiplying the amount of goods or services bought by the most relevant emission factors.

It’s more common for distance estimates to be used for business travel and employee commuting, matched with the relevant emission factors. In the absence of this, spend-based data can serve as a useful proxy.

The proxy-based footprint identify emission hotspots and high-emitting activities for further investigation. It is a helpful first step to focus your efforts on areas where you can make the greatest impact.

A spend-based footprint has its limitations however, and shouldn’t solely be relied on for ongoing reporting, due to its non-specific nature. Scope 3 footprints will often start with a lot of secondary data but will be improved as you acquire more accurate primary supplier-specific data. As time passes, the data collected directly from suppliers should eventually replace those initial estimates.

4. Identify hotspot suppliers, services and products

The aim of the spend-based footprint exercise should be to allocate emissions per supplier. In many instances, the 80/20 rule will apply, with only a handful of suppliers responsible for a large portion of supply chain emissions.

This shortlist of suppliers gives you the basis for your initial supplier engagement efforts. Other considerations include contract length, type and broader strategic benefits of collaborating with key suppliers. This information should be available from procurement staff and account managers.

Here, it’s useful to look into suppliers’ publicly reported sustainability credentials. Some suppliers may already report on their organisational or product carbon footprints, making it easier for you to obtain the data you need and saving you time in the process.

5. Engage with suppliers

The Carbon Trust recommends engaging with key suppliers on a one-on-one basis, collecting data through questionnaires or software portals. Even if suppliers cannot provide sufficient emissions data, information on their general readiness, carbon reduction targets, and mitigation projects can still provide valuable insights.

Over time, as regulations on carbon reporting come into action, your suppliers will increasingly be required to report on their emissions. As this happens, suppliers will welcome centralised systems to avoid providing multiple clients with the same information again and again.
6. Add environmental credentials in tenders and steer procurement decisions

Factor in suppliers’ carbon transparency and climate commitments into your procurement decisions and explore if sustainable alternatives fit within your budget.

In line with this, consider including environmental metrics as a requirement of outgoing tenders. When writing tenders, check how these credentials align with your Scope 3 reduction efforts. Have suppliers set science-based targets? Have they measured their organisational or product footprint?

You should expect suppliers to estimate the carbon associated with the purchased product or service at the tender evaluation stage and regularly update you on this during contract management phases. They will need clear instructions on how to do this.

As a local employer – such as local government organisations and schools – you can create pressure and inspire climate action by explicitly specifying what you seek from suppliers in their sustainability efforts. It is one of the most valuable levers at your disposal.

7. Update your carbon baseline

Carbon footprinting is a continuous process. With this in mind, your carbon measurements will change as you begin to replace secondary emission data with primary data from your suppliers. When this happens, remember to recalculate your baseline to ensure your measured progress is accurate and up to date.

When you receive primary data from suppliers, collect their historical data where possible. This will help you recalculate your emissions baseline effectively, which will become more accurate each time.

8. Communicating your Scope 3 emissions

Currently, there is limited mandate for public bodies to report on their indirect emissions. However, as public bodies have a responsibility to act transparently and educate the public on their Net Zero carbon reduction strategies, it is important to cover all emission sources, including Scope 3.

By reporting your complete carbon footprint on an annual basis and communicating progress, you can lead by example and build confidence in local climate action, ultimately serving the public’s interest.
The Carbon Trust is your expert partner to turn climate ambition into impact. Climate pioneers for more than 20 years, we partner with leading businesses, governments and financial institutions to accelerate their route to Net Zero.

Given our advisory role in drafting the GHG Protocol’s Scope 3 measurement guidance, we know what best practice reporting looks like and can help you communicate your footprint transparently. Our team understands the complexities surrounding Scope 3 data collection and are here to help you measure and update your Scope 3 footprint accurately engage with suppliers and identify solutions that ultimately help you minimise your climate impact.

For businesses

Our experts will assess the carbon and environmental impacts and risks across your organisation’s value chain. We will work with you to set realistic strategies and targets that deliver efficiency and reputational gains, mitigate risks, cut costs and increase revenue.

As part of the Technical Advisory Group for the Science Based Targets initiative, we can help you move beyond reporting and use your Scope 3 data to set science-based targets that drive impactful emissions reductions.

All our services are tailored to your organisation and resources, whether we undertake full data collection and modelling or simply provide guidance and direction to your own team.

For public sector organisations

Our experts help cities, local governments and their partners to measure and set baseline footprints to inform concrete climate action.

We will partner with you to develop supplier engagement strategies, tools, and templates, as well as support supply chain collaboration and align you with best practices for Scope 3 measurement and management.

We will identify your goals, measure your organisational and supply chain footprint, provide procurement support and model carbon reduction scenarios tailored to your needs.

If you would like to find out more on how we can help your organisation, please get in touch with our client support team at client.support@carbontrust.com.
Visit carbontrust.com for our full range of advice and services
Call: +44 (0) 20 7170 7000
Email: client.support@carbontrust.com

Whilst reasonable steps have been taken to ensure that the information contained within this publication is correct, the authors, the Carbon Trust, its agents, contractors and sub-contractors give no warranty and make no representation as to its accuracy and accept no liability for any errors or omissions. Any trademarks, service marks or logos used in this publication, and copyright in it, are the property of the Carbon Trust. Nothing in this publication shall be construed as granting any licence or right to use or reproduce any of the trademarks, service marks, logos, copyright or any proprietary information in any way without the Carbon Trust's prior written permission. The Carbon Trust enforces infringements of its intellectual property rights to the full extent permitted by law.

The Carbon Trust is a company limited by guarantee and registered in England and Wales under Company number 4190230 with its Registered Office at: Level 5, Arbor, 255 Blackfriars Road, London SE1 9AX, UK.

© The Carbon Trust 2023. All rights reserved.

Published in the UK: 2023