

ABOUT SURVEY

ACCOUNTING AND

SUSTAINABILITY REPORTING FRAMEWORKS

SUSTAINABILITY

SCOPE 3 CHALLENGES

INTEGRATED TECHNOLOGY SOLUTIONS

QUALITY GHG **EMISSIONS DATA**

Introduction

ESG and sustainability reporting is becoming mandatory for companies in multiple jurisdictions. The accounting and disclosure of corporate value chain emissions (Scope 3) is increasingly required for these reports.

The complicated nature of Scope 3 reporting presents significant challenges. Companies that proactively measure, report and reduce their direct (Scope 1) and indirect (Scope 2 and Scope 3) greenhouse gas (GHG) emissions will be upheld as sustainability leaders.

This report presents knowledge and insights from Sphera's team of sustainability experts and findings from Sphera's Scope 3 survey of sustainability professionals. The expertise and findings provide a compelling look at the current state of Scope 3 assessment and reporting within the context of the evolving voluntary and mandatory ESG reporting landscape.

Overall, our report aims to:

- Examine the challenges associated with Scope 3 assessment and reporting.
- Identify best practices that contribute to the development of more effective, standardized approaches to Scope 3 emissions reporting and data management.

With our report, we hope to inform corporate efforts to measure and report Scope 3 GHG emissions for regulatory compliance and to drive greater sustainability within their operations and supply chains.





ABOUT SURVEY

ACCOUNTING AND

REPORTING FRAMEWORKS

SUSTAINABILITY

SCOPE 3 CHALLENGES

TECHNOLOGY SOLUTIONS

QUALITY GHG **EMISSIONS DATA**

About the Scope 3 survey

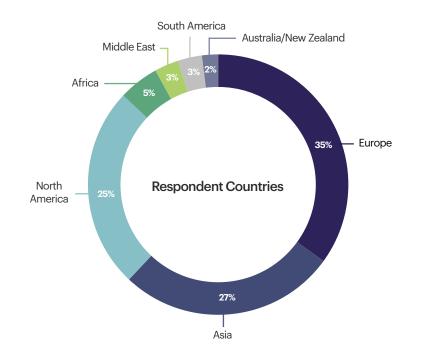
The findings in this report are based on Sphera's Scope 3 survey, which was conducted globally among sustainability professionals in 2023. The survey received responses from 262 professionals, who provided insights into the complexity of Scope 3 measurement and reporting.

Of the respondents, 35% work for companies headquartered in Europe, and 27% work for companies based in Asia. Twenty-five percent are employed by North American businesses, and the remaining 13% are with companies that are spread across Africa, the Middle East, South America and Australia/New Zealand.

Manufacturing is the most heavily represented industry, with 23% of respondents. The automotive and chemicals industries came in second and third with 10% and 9% of respondents respectively.

Industries represented in survey

Aerospace & Defense	Chemicals	Financial Services	Life Sciences	Oil & Gas	Retail & Consumer Goods
Automotive	Construction	Government	Manufacturing	Petrochemicals	Technology
Business Services	Education	Healthcare	Metals & Mining, Resources	Power & Utility	Transport & Logistics



40%

of the companies surveyed reported an annual revenue of at least \$500 million.

INTRODUCTION

SURVEY

ACCOUNTING AND REPORTING

REPORTING FRAMEWORKS

SUSTAINABILITY REGULATIONS

SCOPE 3 CHALLENGES

TECHNOLOGY

SOLUTIONS

QUALITY GHG EMISSIONS DAT



GHG emissions accounting and reporting

The Greenhouse Gas (GHG) Protocol categorizes greenhouse gas emissions into three groups or 'Scopes.'

Scope 1 covers direct emissions from owned or controlled sources, while Scope 2 includes indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions from a company's value chain and are grouped into 15 categories covering upstream and downstream activities.

As they are traditionally the focus of corporate reporting, Scope 1 and Scope 2 have a more mature data foundation for their measurement and assessment. The quantification, reduction and reporting of Scope 3 emissions, on the other hand, is fraught with more challenges.

According to the CDP, the value chain or Scope 3 emissions constitute, on average, 75% of a company's carbon footprint. In some sectors, such as food manufacturing, Scope 3 emissions can make up 90 - 95% of a business' GHG emissions. Therefore, assessment and reduction of Scope 3 emissions play a foundational role in a robust science-based decarbonization strategy toward net zero.

Scope 1 DIRECT



Scope 2 **INDIRECT**



SCOPE 3 CHALLENGES

Scope 3 INDIRECT



services

waste

generated in

operations



business

travel



activities





employee

commuting



Upstream

Downstream









sold products







ACCOUNTING AND REPORTING

The importance of GHG accounting and reporting across all Scopes is increasing LARGE COMPANIES ARE LEADING THE WAY

Forty-three percent of survey respondents report that their company discloses its GHG emissions. Of those respondents, 52% disclose their emissions across all Scopes (Scope 1 - 3).

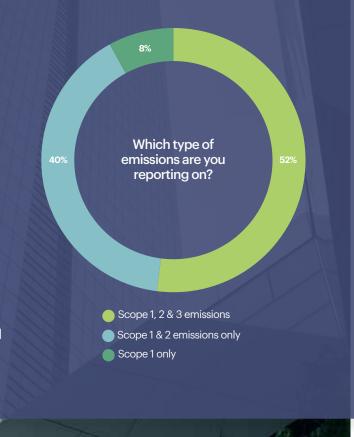
Another 30% of the survey participants indicate that their company plans to report on Scope 3 in the future.

What size companies are reporting on GHGs?

Sixty-nine percent of all large companies surveyed (with a revenue of more than \$1 billion) are leading the way in greenhouse gas reporting across all Scopes.

Mid-market companies came in second, with 40% of all companies with annual revenue between \$51 million and \$1 billion indicating that they are reporting on GHGs in some capacity.

Finally, 26% of the small businesses surveyed report that they are beginning to address GHG emissions. However, they are still in the early stages of data collection and are mainly focused on Scope 1 and 2 emissions.



Scope 3 disclosure requirements for companies come from different stakeholders such as investors, lenders, customers. supply chain partners and, more recently, regulators.

To better understand their risk exposure, investors and lenders demand more transparent reporting on a company's climate impact across its value chain. Customers want to understand the impact that businesses have on the environment and climate change, and they are increasingly using their purchasing power to express satisfaction (or dissatisfaction) with corporate behavior. Businesses that are under pressure to demonstrate greater sustainability can't claim progress if their suppliers have a poor environmental record or show disregard for the health and safety of their employees.

Noncompliance with Scope 3 reporting requirements comes with many penalties and problems.

- Financial risks, high capital costs and reputational damage may result.
- In a rapidly evolving regulatory environment, falling behind in compliance obligations creates additional risk at the corporate level.
- Companies that don't report on supply chain emissions make themselves vulnerable to supply chain risk.
- Noncompliance may bring added pressure from stakeholders such as shareholders, customers and green investors.
- As growing data needs are left unaddressed, reporting challenges will multiply.



ABOUT SURVEY

ACCOUNTING AND

SUSTAINABILITY REPORTING **FRAMEWORKS**

SUSTAINABILITY REGULATIONS

SCOPE 3 CHALLENGES

TECHNOLOGY SOLUTIONS

QUALITY GHG **EMISSIONS DATA**

Voluntary sustainability and ESG reporting frameworks with Scope 3 components

For years, non-governmental organizations and environmental initiatives have been developing voluntary rules and frameworks for corporate GHG accounting, sustainability and ESG reporting.

Reporting frameworks provide recommendations and standards for sustainability and climate-related disclosures. Apart from GHG emissions, information on waste and water management. biodiversity, circularity and the treatment of employees and supply chain workers, among other things, can also be included. Companies may use these standards and frameworks to report voluntarily in accordance with their sustainability or climate strategies.

Some of the relevant, globally recognized voluntary reporting frameworks and standards are:

- IFRS S1 & S2: The International Sustainability Standards Board (ISSB) launched new International Financial Reporting Standards, IFRS S1 and IFRS S2, on June 26th, 2023, IFRS S2 focuses on climate-related disclosures, while IFRS S1 encompasses all other ESG disclosures. Together, these standards aim to streamline and unify the sustainability reporting process.
- **TCFD:** The Task Force on Climate-related Financial **Disclosures** was created by the Financial Stability Board to develop a framework of recommendations for assessing the risks, opportunities and financial impacts of climate change. They provide guidance to companies in preparing information for investors, lenders and insurers who allocate

- capital and underwrite risk. The work of the TCFD has been completed, and companies that apply the ISSB Standards will automatically meet the TCFD recommendations (so there is no need to apply both the TCFD recommendations and the ISSB's standards).
- GRI: The Global Reporting Initiative is an independent, nongovernmental standards organization dedicated to helping companies, governments and other organizations disclose their impact on society and the planet. Reporting on sustainability efforts in accordance with the GRI guidelines offers one of the most trusted, globally recognized ways to communicate relevant environmental, social and governance data to investors and other stakeholders.
- **CDP:** Formerly known as the **Carbon Disclosure Project**, the organization was founded in 2000. The non-profit charity manages a global disclosure system that enables companies, cities, states and regions, as well as investors, to report and manage their performance with respect to the environment. The CDP does this by providing a platform that enables transparent reporting on climate, deforestation and water security impacts, with corrective action as the ultimate goal.
- **UNGC:** The **United Nations Global Compact** is a principles-



SUSTAINABILITY

REGULATIONS

based framework for companies that sets out 10 principles in the areas of human rights, labor, environment and anti-corruption. Participants strive to incorporate these principles into their global operations and align them with the U.N. Sustainable Development Goals (SDGs). Companies participating in the UNCG must prepare an annual Communication on Progress (COP) outlining their efforts to integrate the 10 principles into their strategies and activities. They are also expected to highlight initiatives to support social priorities.

SBTi: The **Science-Based Target initiative** is a collaboration between the CDP, United Nations Global Compact, the World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). It develops and promotes best practices for companies to reduce their GHG emissions by setting science-based targets (SBTs).

Aligning with external frameworks like these gives organizations the ability to access capital markets and gain credibility. As sustainability disclosures have become a central focus for investors, regulators and stakeholders, companies must deal with multiple reporting frameworks and standards. The need for consolidation of sustainability standards and scalable and flexible software solutions that support reporting in line with various frameworks is becoming increasingly clear.



ACCOUNTING AND

SUSTAINABILITY REPORTING FRAMEWORKS

SUSTAINABILITY REGULATIONS

TECHNOLOGY SOLUTIONS

QUALITY GHG **EMISSIONS DATA**



INTEGRATED

TECHNOLOGY

SOLUTIONS

Sustainability and ESG regulations

With the mandating of ESG and sustainability disclosures in several jurisdictions, the international ESG reporting landscape has evolved to the next level.

The current and upcoming global sustainability and ESG regulations place more demands on companies to assess, monitor, improve and disclose their sustainability performance annually. This is especially challenging for companies operating in multiple countries, where deciphering the required reporting obligations can be complex.

Multiple sustainability reporting regulations are in place today. Four are notable for their relevance to Scope 3 emissions disclosure and, in some cases, their broad reach.

- The EU's Corporate Sustainability Reporting Directive (CSRD) entered into force in January 2023. It amends the 2014 Non-Financial Reporting Directive (NFRD) and expands the scope of companies that must report on sustainability topics in a more regulated manner. The CSRD applies to roughly 49,000 companies including approximately 10,000 non-EU companies with operations in the EU. The CSRD itself does not provide detailed disclosure requirements; those are described in the European Sustainability Reporting Standards (ESRS) established by the European Financial Reporting Advisory Group (EFRAG). Under the directive, companies must report their Scope 3 GHG emissions if deemed material or if they publicly set climate-related goals.
- The U.S. Securities and Exchange Commission's (SEC's) climate-related disclosure rules were finalized March 6th, 2024. Companies that fall within the scope of the SFC's rules must disclose material climate-related risks and the corresponding mitigation or adaptation measures. If considered material, large accelerated filers and accelerated filers are required to report their Scope 1 and Scope 2 emissions. The Scope 3 component was not included in the final rules.
- **California's Climate Corporate Data Accountability** Act (SB 253) applies to public and private companies operating in the state with annual revenue of at least \$1 billion. Approximately 5,400 companies fall within the scope of SB 253 and will be required to report their Scope 1, Scope 2 and Scope 3 emissions.
- The EU's Sustainable Finance Disclosure Regulation (SFDR) holds financial market participants responsible for providing transparent information on investment products, requiring investment funds to measure companies' Scope 3 emissions. The Scope 3 mandate went into effect on January 1, 2023.

The CSRD and SB 253 include an assurance requirement.

SEC releases climate disclosure rules:

KEY TAKEAWAYS

On March 6, 2024, the SEC adopted its final climate disclosure rules, outlining several key requirements for public companies:

- Disclosure of material Scope 1 and Scope 2 emissions is required for certain large accelerated filers and accelerated filers.
- Climate-related risks that have had or are likely to have a material impact on the company's strategy, business model and outlook in the TCFD-aligned areas of:
 - Governance.
 - Strategy.
 - Risk management.
 - Metrics and targets.
- Governance of climate-related risks and relevant risk management processes.
- Limited assurances will be required after an initial transition period with some filers required to report with reasonable assurances after a further transition period.

The first disclosures for large accelerated filers are due in filings related to fiscal year 2025 (in early 2026). For information on additional requirements, please see the SEC's fact sheet or a supplementary blog.





Under the SEC's rules, limited assurance is required; after a transition period, large accelerated applicants must submit reports at the reasonable assurance level. The SFDR requires limited third-party verification of the information that is reported.

To prepare for compliance in time, companies should seek expert guidance to navigate the complex landscape of global sustainability regulations. This includes a comprehensive understanding of the regulations relevant to their business in different parts of the world. In addition, it is important to identify the intersections between the regulations to streamline compliance.

To get ready, companies should take foundational steps such as conducting a materiality or double materiality assessment to identify material gaps and set priorities. They should assess their corporate emissions baseline for Scope 1 and Scope 2 emissions. In addition, Scope 3 emissions screening and detailed quantification studies of hotspot categories within Scope 3 are recommended. A comprehensive risk and opportunity assessment helps businesses identify and mitigate potential risks associated with climate change.

Companies should also consider conducting Life Cycle Assessments (LCA) or Product Carbon Footprints (PCF) for key products or product groups to gain insight into their environmental impact and improve performance from a bottom-up perspective.

To streamline data collection, performance management and reporting, companies should invest in and utilize software solutions designed for these purposes. This technology not only facilitates the efficient handling of data, but also improves overall sustainability management.

Although Scope 3 reporting is excluded from the final version of the SEC's climate disclosure rules, its importance to global companies remains, as they will still need to report their value chain emissions under other regulations. The proactive management of Scope 3 emissions goes beyond regulatory requirements and includes market differentiation, competitive advantage and enhanced brand reputation. It makes companies more resilient to regulatory changes, promotes supply chain resilience and often leads to cost savings through increased operational efficiency. Innovation, stakeholder engagement and investor attraction are additional benefits, contributing to long-term success, positive community impact and alignment with evolving environmental expectations. Ultimately, going beyond compliance in Scope 3 emissions management is a holistic approach that creates value, mitigates risks and fosters sustainable growth.



ABOUT SURVEY

ACCOUNTING AND REPORTING

SUSTAINABILITY REPORTING FRAMEWORKS

SUSTAINABILITY REGULATIONS

SCOPE 3 CHALLENGES

INTEGRATED TECHNOLOGY SOLUTIONS

QUALITY GHG EMISSIONS DATA

CONCLUSION

SPHERA SCOPE 3 SURVEY REPORT 2024

Scope 3 reporting challenges

Because Scope 3 emissions occur across a company's entire value chain, numerous suppliers, customers and other stakeholders are involved. Influencing value chain emissions often requires collaboration and engagement with these external entities.

The lack of direct control or ownership of Scope 3 emissions makes it difficult for businesses to ensure data accuracy and consistency across their value chain. Many of these players may not collect or track relevant data, making it hard to obtain comprehensive information. Sharing information that may be constrained by privacy or IP rules is also a challenge.



Scope 3 assessment and reporting challenges: It's all about data

The quality and availability of external data (from partners, suppliers, customers) and the availability of LCA-based emission factors are seen as the biggest challenges by most of the respondents that already disclose their Scope 3 emissions.





ACCOUNTING AND

SUSTAINABILITY

SUSTAINABILITY REGULATIONS

SCOPE 3 CHALLENGES

INTEGRATED

TECHNOLOGY

SOLUTIONS

QUALITY GHG EMISSIONS DATA

Quality data underpins the accuracy, credibility and effectiveness of an organization's sustainability reporting. Inaccuracies in data can lead to inaccurate emissions assessment and reporting. This, in turn, may lead to a breach in customer trust and penalties for companies that do not comply with the relevant regulations like the California Climate Corporate Data Accountability Act or CSRD. In addition, the development of realistic emission reduction targets and, even more so, achievement of such targets may be seriously jeopardized by unreliable or inaccurate data.

Implementing robust data collection processes across complex value chains can require significant time, effort, resources and costs. This also can be a barrier for many companies.

Reporting standards and assessment methodologies present another challenge: They are constantly evolving. This can create confusion and uncertainty for companies as they try to navigate the best approach for their specific business.



Financial institutions face unique Scope 3 challenges

UNIQUE CHALLENGES FOR FINANCIAL INSTITUTION REPORTING

In the financial sector, the biggest challenge is the assessment and reporting of emissions related to Scope 3 Category 15: Investments. Those are emissions tied to the lending and investing activities of financial institutions. The quantification and reporting of these emissions come with unique challenges for Assets Under Management (AUM).

Financial organizations often struggle to collect relevant and sufficiently granular primary data from their

SCOPE 3 CHALLENGES

financial assets and portfolio companies. This results in adopting secondary data, which may come from industry averages or spend-based emission factors.

The lack of a standardized methodology mentioned earlier applies here as well. While the GHG Protocol Scope 3 standards and calculation guidance provided some orientation for companies seeking to calculate their financed emissions, many practical industry-specific questions

remained unanswered. This prompted the formation of The Partnership for Carbon Accounting Financials (PCAF), an industry-led initiative that enables financial institutions to consistently measure and disclose the GHG emissions financed by their loans and investments. Due to an urgent need for standardization, PCAF has developed standards and calculation guidance specific to certain financial asset classifications. PCAF is continuously updating these standards as more is learned.





ABOUT SURVEY

ACCOUNTING AND

SUSTAINABILITY REPORTING FRAMEWORKS

SUSTAINABILITY REGULATIONS SCOPE 3 CHALLENGES

INTEGRATED TECHNOLOGY SOLUTIONS

QUALITY GHG EMISSIONS DATA

The role of integrated technology solutions

Across the board, collecting measurable, actionable and auditable data for reporting GHG emissions can be complex and daunting—both in terms of the methodology and the management of the data involved.

The task often involves tedious manual processes and data challenges that include collection, validation, external audits and reporting—all of which can overwhelm an organization. Technology enables organizations to reduce the burden and automate Scope 3 management-related tasks.

As businesses prioritize sustainability and face increasing pressure for transparent reporting, integrated technology solutions are emerging as key tools to move organizations toward goal achievement. Integrated platforms go beyond simply collecting data; they offer a holistic approach to managing sustainability efforts, particularly in the complex realm of Scope 3 emissions.

Integrated solutions streamline data collection from various sources, both internal and external. These solutions also leverage automation and cloud computing to efficiently capture an abundance of data such as energy consumption, material use and transportation. Integrating data seamlessly from disparate systems facilitates a more comprehensive and accurate representation of Scope 3 emissions.

Technology solutions can also enforce standardized methodologies and reporting protocols, ensuring consistency in data collection and reporting. This enhances the reliability and comparability of Scope 3 emissions data over time.

Advanced analytics capabilities then process and visualize this data, providing valuable insights into a company's overall environmental footprint and identifying key areas for improvement. Additionally, many solutions support collaboration and communication with suppliers, enabling data collection and transparency throughout the value chain, which is crucial for accurate Scope 3 reporting.

These integrated solutions empower businesses to move beyond compliance-driven reporting toward proactive sustainability management. By offering actionable insights and facilitating continuous monitoring, they enable companies to set data-driven goals, track progress and make informed decisions to reduce their environmental impact.

They are essential for helping organizations overcome the biggest challenges affecting Scope 3 goal attainment:

- Collecting and validating data efficiently, both from within the company and from suppliers
 - Scope 1 and Scope 2 data from within the company
 - Product carbon footprint data from suppliers
- Multiple tiers of supplier data
- Providing access to high-quality, industry-based emission factors from the leading LCA databases
- Integrating into sustainability reporting

The best approach is to employ a flexible digital platform that can easily adjust to changing frameworks, disclosure requirements and regulations. Companies need software that is intentionally designed for streamlined ESG data collection, calculation, automation and interoperability that prepares them for limited assurance. It is essential for driving positive change and building a more sustainable future.



ABOUT SURVEY

ACCOUNTING AND REPORTING

SUSTAINABILITY REPORTING **FRAMEWORKS**

SUSTAINABILITY REGULATIONS

SCOPE 3 CHALLENGES

INTEGRATED **TECHNOLOGY** SOLUTIONS

QUALITY GHG EMISSIONS DATA

The importance of having quality GHG emissions data

Quality emissions data is foundational to a company's Scope 3 assessment and reporting, impacting their sustainability and ESG disclosures and climate strategies. When reporting on Scope 3 emissions, it can be challenging to understand what data should be leveraged.

Often the supply chain emissions pose the greatest risk and contribute the most to the overall environmental impact of an organization. This is why efficient management and reduction of emissions in the supply chain (Scope 3 Category 1: Purchased Goods and Services) are crucial for a sound decarbonization strategy. Multiple, complementary data sources can be leveraged to create a complete picture of an organization's emissions:

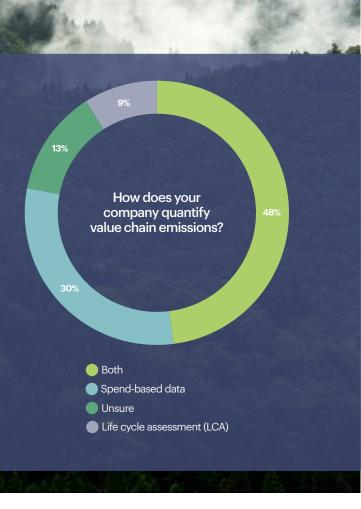
- Spend-based data: The most common method of calculating GHG emissions is to use spend-based data. Typically, companies use an online calculator that estimates the carbon footprint based on procurement spend.
- Product life cycle assessment (LCA) data: This method is becoming increasingly important as the demand for more accurate data increases. Ruled by ISO 14044, LCA datasets provide granular GHG emissions data to understand the impact of a product or process from the extraction of raw materials through processing and production to distribution.
- Supplier-specific data or supplier PCFs: Sending questionnaires to suppliers is a common method used by companies to collect GHG data from their suppliers.

From high-level to specific data for Scope 3 assessment

Of the respondents who report that their company discloses its Scope 3 emissions, the majority state that their company assesses its value chain emissions using both spend-based and LCA data. Nine percent of companies use only LCA to quantify Scope 3.

According to survey results, the manufacturing, automotive and chemical industries are at the forefront of LCA data use in combination with spendbased data. For these industries, the trend goes even further. As part of industry initiatives such as CATENA X or Together for Sustainability (TfS), original equipment manufacturers (OEMs) are working to obtain product carbon footprints (PCFs) from suppliers for their product and corporate GHG assessments and reports.

At present, many large companies still use spend-based data, often in combination with LCA data, for Scope 3 reporting due to the complexity of their value chain and supply chain. To tackle decarbonization it is essential to have the ability to track improvements, so it is recommended that they move from using spend-based data to using LCA data.



All data sources for Scope 3 quantification have their pros and cons. Spend-based data has been sufficient for public reporting, and is valuable in minimizing the complexity of the inventory, but to achieve strategic goals like decarbonization, spend-based data is limited because it is highly aggregated, outmoded in many instances and not reflective of actual values.

Product-level LCA data enables opportunities for actionability and performance optimization. When using product-level LCA or PCF data, it is possible to identify emissions hotspots throughout the life cycle of the supplied products or materials and work with the suppliers to achieve reductions. But the quality of LCA data from different database providers can vary greatly.

Data Source	Advantages	Disadvantages	
Supplier-specific PCF data	The most accurate approach since it reflects more precise cradle-to-gate GHG emissions from that value chain.	To scale, a supplier data collection platform may be required and there is the risk of non-responsiveness from suppliers. Suppliers must have a level of sophistication to provide PCFs.	
Product LCA databases	A highly scalable approach that is more accurate than spend-based and potentially simpler to implement than supplier-specific PCF data.	The value of product LCA data is dependent on the quality and scale of the databases used.	
Spend-based data	The simplest approach to implement.	Data is highly aggregated and often outdated. Provides minimal value for baselining or establishing a decarbonization strategy.	



LCA data quality assurance

Sphera's Managed LCA Content (MLC) is the largest industry-based, third-partyverified and annually updated LCA database globally, with more than 18,000 datasets. Managed LCA Content was first verified by DEKRA, the world's largest independent testing, inspection and certification organization, in 2013. DEKRA continues to ensure the data quality of the MLC with the ongoing verification of sector-specific datasets.

REPORTING

FRAMEWORKS

Data collection from the supply chain

The next level of precision can be reached with emissions data from suppliers. By measuring actual emissions, companies can understand supplier performance and build decarbonization requirements into the procurement and supplier management process. Yet obtaining primary data from suppliers is a complex and resource-intensive undertaking, especially for companies with extensive supply chains. The limited willingness of suppliers to provide their emissions data is often an obstacle. Key recommendations for successful supplier engagement are:

- Use a technology-driven approach that enables two-way communication and collaboration with suppliers, in addition to high-quality, granular data.
- Right-size the data request; be sure to ask for information that suppliers can currently provide, or at least will be able to soon.
- Map upstream suppliers to understand upstream hotspots, but only after engaging Tier 1 suppliers.
- Integrate results into the organization's procurement system so that the business processes can support the reporting and decarbonization strategy.



The value of collecting data directly from suppliers **CASE STUDY**



INTRODUCTION

Customer: U.S. pharmaceutical company



Problem: Relied on spend-based Scope 3 estimates



Solution: Replace spend-based Scope 3 estimates with allocated supplierreported data



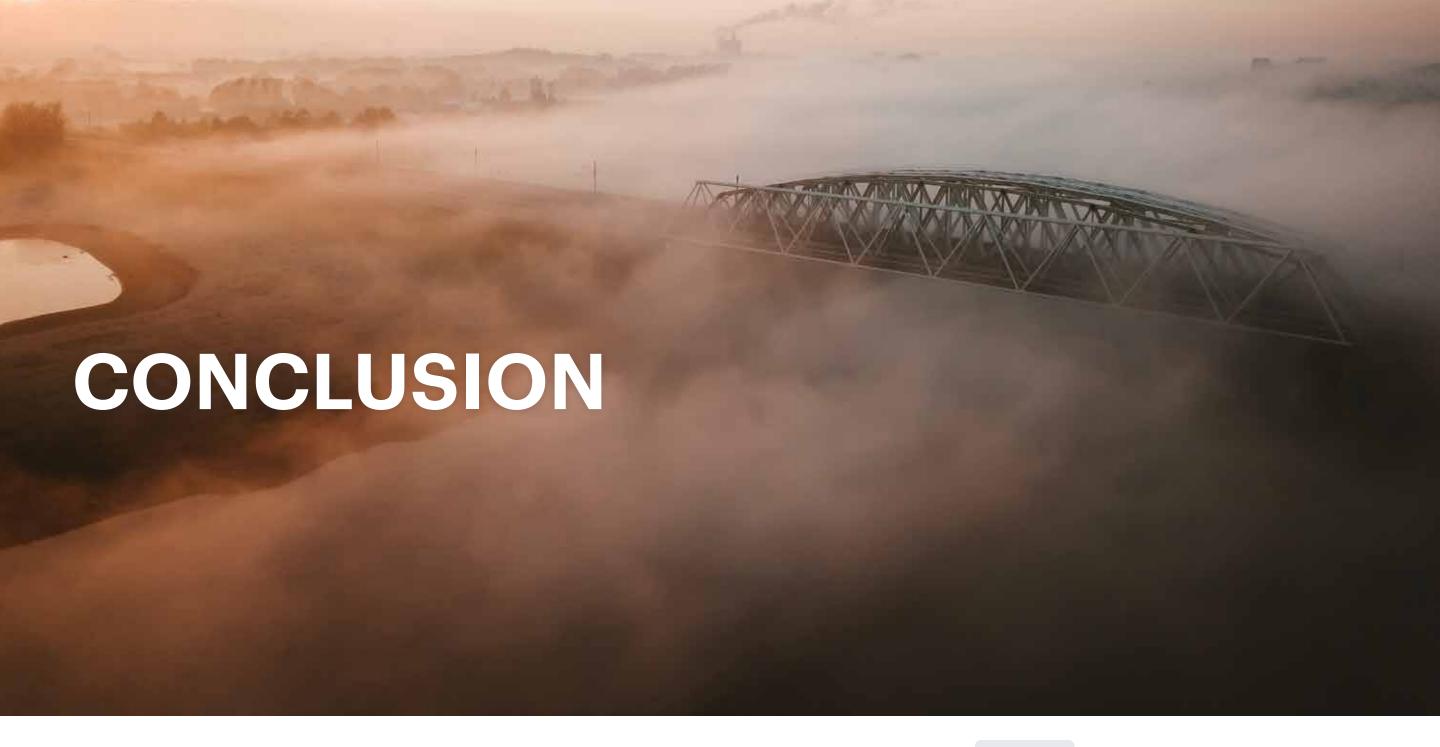
Result: Scope 3 Category 1 emissions declined 5% from 2020-2021

The critical role of LCA

Life cycle assessment (LCA) is a powerful tool that can help identify hotspots in the cradle-to-gate GHG emissions baseline for the supplied products while providing transparent and reliable data for Scope 3 quantification and reporting. It captures the impact of each production step up to the mine, well or farm and can be adjusted to reflect particular characteristics of a company's value chain. LCA helps companies assess reduction potentials from product-level innovations, improve Scope 3 estimates and reach consistency between corporate- and product-level GHG accounting.

Performing LCAs across their entire product portfolio can enable companies to provide efficient, granular productlevel and Scope 3 reporting to customers, regulatory bodies and industry associations at scale. But scaling LCAs poses significant challenges, including the complexity of collecting comprehensive data across fragmented systems, resourceintensive manual processes and the need for specialized expertise. As organizations expand their LCA scope to cover entire product portfolios or value chains, challenges such as time constraints, data quality issues and difficulties in handling Scope 3 emissions become more pronounced. Ensuring consistency, defining scope boundaries and integrating LCA technologies into existing systems add further complexities.

To overcome these hurdles, many organizations turn to LCA automation, utilizing technology and advanced analytics to streamline data collection, enhance efficiency and facilitate a more scalable and comprehensive approach to sustainability assessments. This approach addresses the challenges associated with large-scale LCAs, allowing organizations to gain timely, accurate and meaningful insights into their environmental impact across diverse operations.



ABOUT SURVEY

ACCOUNTING AND REPORTING

SUSTAINABILITY REPORTING FRAMEWORKS

SUSTAINABILITY REGULATIONS SCOPE 3 CHALLENGES

INTEGRATED TECHNOLOGY SOLUTIONS

QUALITY GHG EMISSIONS DATA

The need for an integrated approach to sustainability

Many companies have embarked on a journey toward greater sustainability, prompted by new disclosure requirements, stakeholder pressure or a combination of both. This journey demands strategic direction set by leadership who demonstrate a sustainability mindset. It requires incremental operational changes, underpinned by high-quality data and actionable information.

This journey isn't a "one-and-done" event. Sustainability officers and teams must continually check their progress and adjust their tactics to achieve their sustainability targets. And once they've met those targets, they must set new, more ambitious goals. Sustainability is an iterative process that can't be compartmentalized or assigned to a single team or department. An all-hands-on-deck effort is needed.



FRAMEWORKS

SCOPE 3 CHALLENGES

QUALITY GHG

Real sustainability can only be achieved through an integrated, threepronged approach that encompasses these key components:



1. The company

The organization itself must reduce its GHG emissions and its impact on the environment. Does it own and operate a fleet of vehicles? What kind of waste does it produce and how does it manage that waste? How much energy does it require and which energy sources does it rely on? These are just some of the factors the company needs to consider.



2. The company's products and/or services

Consider a business that manufactures printers for home use. The company likely manufactures a variety of printers that have different features and are available at different price points. What is the environmental impact of each printer it manufactures? What kinds of materials are used? How much energy does each product require? How long does each printer last? When a part fails and needs to be replaced, is it affordable and easy to find? Or would the user likely just replace the entire printer?



3. The company's value chain

How sustainable are the suppliers who provide materials for the printers? What about the companies that transport the materials to the manufacturer? What goes into the packaging for the printers? How are they transported to retailers? What happens in the end-of-life phase?



This is the way forward, and with the software solutions, data and expertise available, companies can build a successful Scope 3 reporting practice that produces the measurable, actionable and auditable information that's now so widely in demand.

TECHNOLOGY

SOLUTIONS

Sphera's approach to Scope 3 assessment and reporting

To help organizations navigate this complex data collection, assessment and reporting responsibility, Sphera has assembled a portfolio approach to Scope 3 readiness:

Corporate Sustainability

SpheraCloud Corporate Sustainability software provides a solution-at-scale that facilitates the ability to respond to a multitude of reporting frameworks and stakeholder initiatives and comply with new ESG reporting frameworks. It enables companies to provide sustainability information professionally and transparently to complement financial reporting. There are a multitude of tools to help to improve corporate sustainability performance to execute a measurable, actionable and auditable net-zero strategy.

Supply Chain Transparency

Sphera's Supply Chain Transparency solution integrates Risk Management and Sustainability software products, delivering holistic insights, real-time monitoring, regulatory and ESG risk assessments, as well as direct supplier data collection, engagement and improvement. Empower procurement and sustainability teams for the agile management of your supply chain.

LCA for Experts

Sphera's comprehensive Product Sustainability solutions combine the world's leading LCA modeling and reporting software with reliable and consistent environmental data. Our data analytics and reporting tools enable organizations to understand the environmental impacts of the entire life cycle, identify hotspots and make fact-based decisions to improve sustainability. All of Sphera's LCA solutions are backed by the Managed LCA Content database (MLC), which consists of over 18,000 annually updated, 3rd-party-verified datasets.

LCA Automation

The traditional way of performing LCAs is labor intensive and must be done on a product-by-product basis. This leads to a backlog of LCAs that either need to be initiated or updated. To scale this type of operation would require thousands of expert person-hours. LCA Automation gives you the ability to perform LCAs at scale for your entire product portfolio—increasing transparency into your environmental impact and supporting your decarbonization and carbon neutrality commitments.

Sustainability Consulting

With more than 30 years' project experience and deep sector-specific knowledge, Sphera's sustainability and ESG consultants are trusted advisors on topics such as double materiality assessment, decarbonization, net zero, Scope 3, Corporate Carbon Footprint (CCF), Life Cycle Assessment (LCA), CBAM, GRI, CDP, CSRD, SEC climate rules and more. Sphera's experts help your company assess and quantify Scope 3 emissions, identify hotspot categories and develop strategies for improvement. To support sustainable supply chains, Sphera can help companies collect primary supplier data, compare their reported emissions to the industry average, and help set supplier-specific reduction targets.

FRAMEWORKS

TECHNOLOGY SOLUTIONS QUALITY GHG



About Sphera

Sphera is the leading global provider of integrated sustainability, risk & performance management software, data and services, focusing on Environment, Health, Safety & Sustainability (EHS&S), Operational Risk Management (ORM), Product Stewardship and Supply Chain Risk Management (SCRM).

Learn more about our Scope 3 solutions >

For more information, contact us at: sphera.com/contact-us

®2024 Sphera. All Rights Reserved.