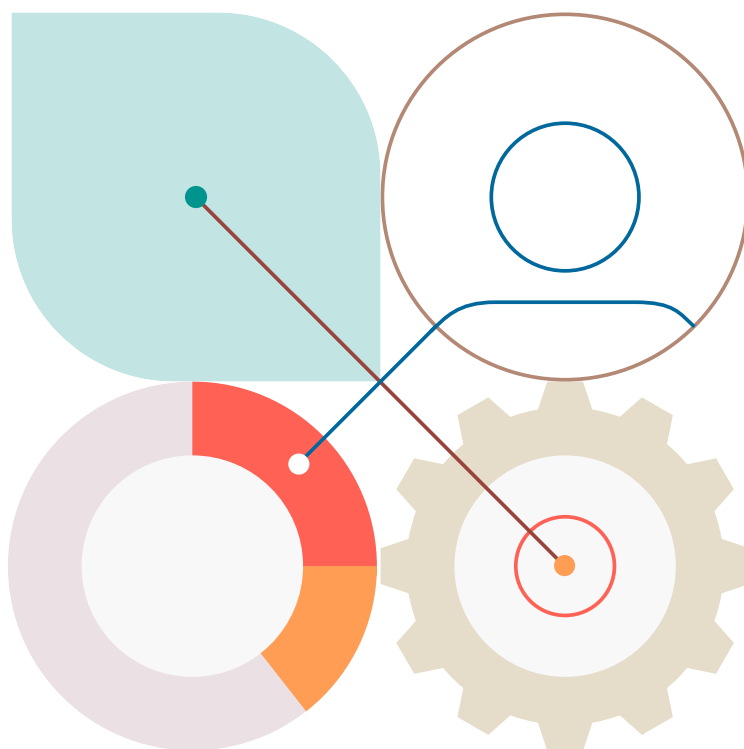
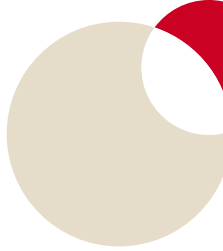


INDUSTRY GUIDE

Scope 3 emissions reporting for the packaging industry





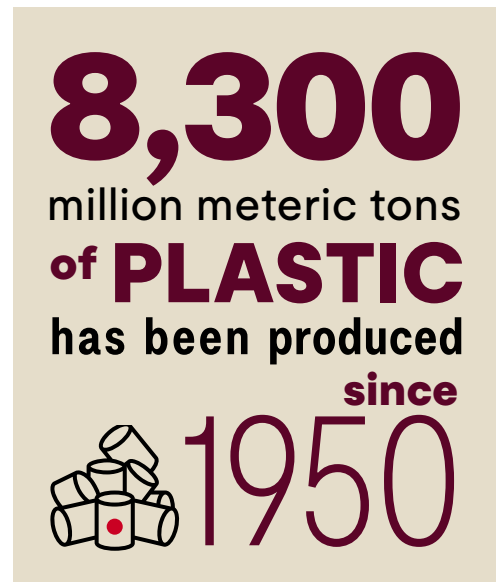
Executive summary

The environmental impact of packaging is enormous:

- On average, 381 pounds of packaging waste is generated per inhabitant in the European Union.¹
- 8,300 million metric tons of plastic have been produced since 1950. Of this total, 79% has outlived its usefulness and is sitting in landfills or the natural environment.²

The packaging industry faces mounting pressure to run more sustainable business operations and report sustainability data, including progress toward greenhouse gas (GHG) emissions reduction targets. According to a 2020 survey conducted by McKinsey & Company, 55% of U.S. respondents reported they were “extremely concerned” or “very concerned” about packaging’s impact on the environment.³ Most willingness to pay higher prices for more sustainability packaging.

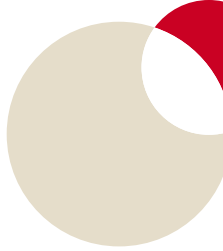
In addition to consumer demand for sustainable packaging, local and national regulations are increasingly concerned with packaging safety and sustainability. For example, Title 2 of New York’s Environmental Conservation Law recently prohibited the distribution, sale or offer of food packaging that intentionally contains perfluoroalkyl and polyfluoroalkyl substances (PFAS). Until recently, companies have focused on reporting scope 1 emissions — direct emissions from sources that a company owns or controls (such as furnaces or a fleet of vehicles) — and scope 2 emissions — indirect



1. EuroStat, “Development of all packaging waste generated, recovered and recycled, EU, 2007-2017

2. The Atlantic, “Half of All Plastic That Has Ever Existed Was Made in the Past 13 Years,” July 19, 2017

3. <https://www.mckinsey.com/industries/paper-forest-products-and-packaging/our-insights/sustainability-in-packaging-inside-the-minds-of-us-consumers>



emissions from the off-site generation of electricity, steam, heating and cooling bought and consumed by the company. However, in recent years, a greater emphasis has been placed on scope 3 emissions reporting — which includes all other indirect emissions occurring in a company's value chain and comprises the majority of the packaging industry's emissions.

For example, in 2022, the Securities and Exchange Commission (SEC) proposed to enact a requirement⁴ for companies registered with it to disclose various

environmental risks to the business and information about its direct, indirect and value chain GHG emissions.

Despite demand for enhanced emissions reporting, only a small minority of companies have set public commitments to reducing scope 3 emissions. Several features of the packaging industry complicate scope 3 emissions calculation, reporting and reduction. In this guide, we provide an overview of challenges, opportunities and first steps for packaging companies to consider when embarking on their scope 3 emissions reporting journey.



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



Scope 3 emissions reporting challenges facing the packaging industry

Value chain complexity

Packaging companies' value chains are broad and complex, relying on different suppliers for the raw materials of their extensive array of packaging products. This complexity means that packaging companies need to be able to influence and support the suppliers' efforts to transform their practices.

Lack of knowledge and resources

Packaging solutions providers hold a key position in moving forward in the journey toward a circular economy. However, many firms lack dedicated sustainability teams. This can make it difficult for a company to make progress on its initiatives and meet compliance requirements, potentially damaging consumer trust, affecting supplier scores, and reducing business potential with retailers and brands. Failure to report data can result in products being removed from shelves at major retailers and from online marketplaces.

Ineffective modeling

Common scope 3 modeling approaches provide insight into current emissions levels, but they may not provide detailed enough information to help plastics companies identify specific opportunities to reduce emissions. Also, sustainability teams may pay too much attention to manipulating the model itself and not to making real progress toward emissions reduction. Extrapolating results from a small sample of suppliers without statistical



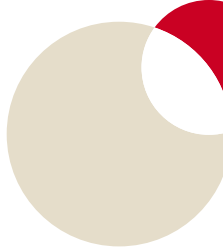
expertise and reporting on factors that are most easily measured (rather than the most significant items) may result in unreliable data.

Reporting complexity

Determining a company's carbon footprint can be an inefficient and confusing process. Packaging companies must rely on secondary data from their suppliers, which puts a large burden on companies and often leads to a lack of trust in the reporting data. Furthermore, because there are multiple approaches to measuring carbon emissions, it is very difficult to directly compare various companies' emissions data.

Complicated downstream emissions data

Capturing downstream emissions — that is, emissions incurred after the packaged product lands on the retailer's shelf — is extremely complex and often unreliable. Reliable quantitative data cannot be captured without an overarching surveillance program.



Opportunities for packaging companies to improve scope 3 emissions reporting and reduction

Collective, consistent, consolidated efforts

Engaging in collective efforts to encourage consistent scope 3 data collection and reporting methodologies may boost supplier cooperation. If suppliers know what to expect and understand that the request for data will be coming from their top customers, they may be more motivated to adapt.

In light of increased expectations to report and reduce scope 3 emissions, some plastics companies with historically large supply networks have consolidated their suppliers so all their energy and resources aren't spent on due diligence, leaving them with no resources available to fix the problems they uncover.

Supply chain education and accountability

Through education and accountability, packaging companies can support their suppliers' journey

to reduce and offset emissions. This involves gathering data from the supplier and showing the current emissions status, educating the supplier on best practices to reduce emissions while increasing productivity and net income, and then placing emissions-reduction demands in suppliers' contracts. Practices that help reduce emissions include nature-based solutions, such as substituting plant-derived materials for noncompostable plastics, revolutionizing the entire packaging methodology and eliminating non-recyclable or excess materials.

Regulations are starting to drive businesses forward as governmental agencies set requirements for raw materials, end-of-life alternatives, operational efficiencies and carbon emissions.





Begin the journey towards scope 3 emissions reporting and reduction

Efficient and effective data gathering and reporting is the foundation for the food and beverage industry’s sustainability journey. Meaningful, reliable data helps companies meet their investors’, clients’ and regulators’ demands while underpinning company action and progress.

UL 360 ESG and Sustainability software, part of ULTRUS™ from UL Solutions, supports food and beverage. companies’ efforts to gather, measure, report and act on key sustainability and environmental, social and governance (ESG) data across their organizations while aligning with frameworks such as Carbon Disclosure Project (CDP), Sustainability Accounting Standards Board (SASB), Global Reporting

Initiative (GRI), Dow Jones Sustainability Indices (DJSI) and the UN.

Our advisory services can help you understand where materiality lies in your value chain, what standards and guidelines are important, and how to optimize your stakeholder engagement and data efficiency processes. This, in turn, helps you optimize your use of reporting software.

Some of the largest global food brands trust our investment-grade non-financial reporting software for their own reporting needs and their supply chain. Whether you’re just starting your sustainability journey or are already an established reporter , we can help you choose the right software to meet your needs.

	1	2	3	4	5
	Mobilize	Measure	Manage	Report	Assurance
	Establish and optimize your ESG programs	Implement robust systems for measuring ESG performance	Drive continuous improvements on your ESG key performance indicators (KPIs) and goals	Streamline and enhance your ESG disclosure and reporting	Independent verification of key ESG KPIs
Advisory	●	●	●	●	
Software		●	●	●	
Assurance					●

UL 360 and ULTRUS™ software

The software component of our ESG and scope 3 service, UL 360 ESG and Sustainability, is part of ULTRUS, which brings together digital offerings from UL Solutions to help customers manage regulatory,supply chain and sustainability challenges.

Learn more about UL Solutions UL 360 ESG and Sustainability Software or [contact us](#) for more information.



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