A Roadmap to Addressing Scope 3 Emissions for Healthcare Organizations

Understanding Scope 1–3 Emissions

The healthcare sector is responsible for a significant proportion of U.S. greenhouse gas (GHG) emissions. Different organizations in the sector can play critical roles in reducing these emissions. Emissions are classified into three scopes by the Greenhouse Gas Protocol (Figure 1):

- **Scope 1:** Direct emissions controlled or owned by the organization, including emissions from facilities and vehicles.
- **Scope 2:** Indirect emissions from the generation of purchased energy, such as electricity, steam, heating, and cooling.
- **Scope 3:** All other indirect emissions, including those within the supply chain, covering the production and transportation of goods and services.

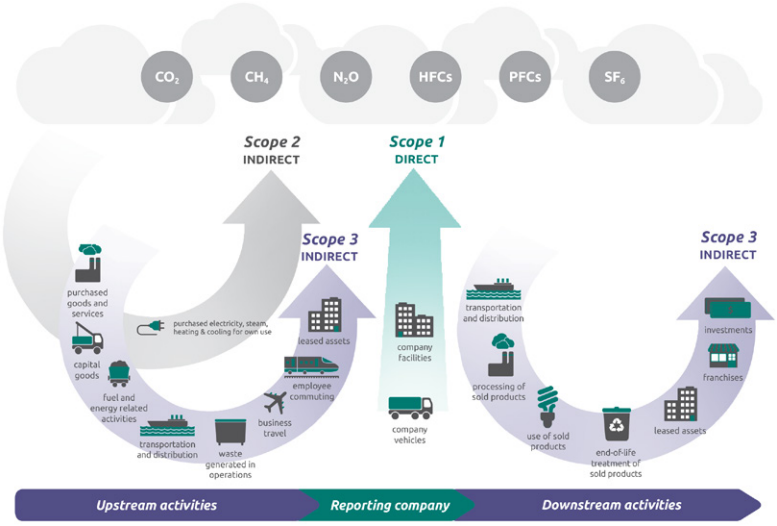

Figure 1, Source: *Scope 3 Standard*

Scopes 1 and 2 in Healthcare

In the healthcare sector, Scopes 1 and 2 are primarily related to healthcare facility operations (e.g., emissions associated with energy used to power buildings and equipment, heating and cooling, clinical processes, and hospital-owned transportation). Reducing these emissions through enhancements to energy efficiency, increases in renewable energy sources, and reductions in clinical emissions (e.g., certain anesthetic gases) and similar actions is often a first step in a healthcare organization's commitment to emissions reduction and climate resilience.

Scope 3: The Bulk of Emissions in Healthcare

Scope 3 emissions constitute most the healthcare sector's emissions, estimated at approximately 80%.[1] These emissions arise from complex supply chains, which include the production and transportation of medical supplies, waste management, and staff commuting. The challenge in addressing these emissions stems from healthcare institutions' limited direct control over these activities. The White House/HHS Health Sector Climate Pledge underscores the importance of managing these emissions, with signatories committing to conducting a Scope 3 emissions inventory by the end of 2024.

Integrating Values in Addressing Scope 3

Addressing Scope 3 emissions in healthcare is an opportunity to embed core values into purchasing and supplier decisions, and to foster climate-smart and resilient operating practices. Prioritizing local purchasing, when appropriate, supports local economies and may reduce transportation emissions. Emphasizing fair labor practices and choosing sustainable materials reflect a commitment to social responsibility and environmental stewardship.

[1] Matthew J. Eckelman , "Health Care Pollution and Public Health Damage in the United States: An Update," *Health Affairs* 39, no. 12 (Dec. 2020): 2071–79.

Approach to Addressing Scope 3 Emissions in Healthcare Institutions: Practical Guidance

This document presents a strategic approach for healthcare organizations to consider in their efforts to reduce Scope 3 emissions:

A. Develop a Scope 3 Emissions Inventory Using EPA's Practical Guidance

Step 1: Determine Relevant Categories: Assess and estimate which of the 15 emissions categories (Table 1) are most relevant to your organization, considering factors like data availability, size/magnitude of emissions, your influence over these emissions, associated risks, stakeholder concerns, outsourcing practices, and sector-specific guidance. Table 2 provides criteria to help identify relevancy. Relevancy in this context refers to the degree of importance or significance of these emissions categories to an organization. If necessary, make a rough emissions estimate (described in Step 2) to determine this relevancy.

Table 1: List of Scope 3 Categories

Upstream or Downstream	Scope 3 Category
Upstream Scope 3 emissions	**1.** Purchased goods and services **2.** Capital goods **3.** Fuel- and energy-related activities (not included in Scope 1 or Scope 2) **4.** Upstream transportation and distribution **5.** Waste generated in operations **6.** Business travel **7.** Employee commuting **8.** Upstream leased assets
Downstream Scope 3 emissions	**9.** Downstream transportation and distribution **10.** Processing of sold products **11.** Use of sold products **12.** End-of-life treatment of sold products **13.** Downstream leased assets **14.** Franchises **15.** Investments

Source: *Scope 3 Standard*

Table 2: Criteria for identifying relevant Scope 3 activities

Criteria	Description
Size	They contribute significantly to the company's total anticipated Scope 3 emissions
Influence	They contribute to the company's risk exposure (e.g., climate change related risks such as financial, regulatory, supply chain, product and customer, litigation, and reputational risks)
Risk	They are deemed critical by key stakeholders (e.g., customers, suppliers, investors, or civil society)
Stakeholders	They are outsourced activities previously performed in-house or activities outsourced by the reporting company that are typically performed in-house by other companies in the reporting company's sector
Outsourcing	They have been identified as significant by sector-specific guidance
Sector guidance	They have been identified as significant by sector-specific guidance
Other	They meet any additional criteria for determining relevance developed by the company or industry sector

Source: *Scope 3 Standard*

Step 2: Estimate GHG Emissions: Use resources such as the GHG Emission Factors Hub for estimates. Estimates for Scope 3 categories can vary in accuracy depending on factors like available data and high-level emissions/dollar spend. Refer to the 'EPA Scope 3 Inventory Guidance' for detailed methods.

Step 3: Improve and Expand Over Time:
Enhance the accuracy of Scope 3 data by incorporating additional categories as more data become available. Prioritize categories that have the most significant impact on the overall GHG inventory. Transition from relying on secondary data sources to obtaining primary data for more accurate estimates. For instance, direct data collection from high-emission suppliers can refine the accuracy of these estimates. Enhancement of both accuracy and completeness will require time, as depicted by the EPA Scope 3 Inventory Guidance. Progress may involve starting with reporting on a few categories using basic methodologies, evolving into a more comprehensive report that uses specific calculation methods over several years. Furthermore, highlighting the lack of precise data may motivate suppliers to more accurately measure (and manage) their own emissions.

B. Report Emissions Internally and Externally: There is value in both internal reporting (within the health system) and external reporting (to the public). Reporting all relevant categories acknowledges their significant contribution to total GHGs, aiding in the development of effective reduction strategies. Transparent reporting enhances accountability and allows for benchmarking and sharing of practices across institutions within the healthcare sector.

C. Implement Sustainable and Resilient Procurement Practices and Influence the Value Chain: Healthcare institutions can impact supply chain emissions through their procurement choices. Selecting suppliers and vendors committed to environmental sustainability and social responsibility encourages greener and more equitable practices. This could involve prioritizing initiatives that ensure fair labor practices, support local purchasing, and focus on selecting products that are both environmentally sustainable and resilient to climate change impacts. Emphasizing environmentally preferable materials, energy efficient production and transportation, and waste minimization reflects a commitment to environmental stewardship. Healthcare institutions can leverage their often-significant purchasing and hiring power to support local economies, and to influence equitable and environmentally responsible operating practices across the entire healthcare supply chain.

D. Collaborate to Reduce Emissions: Collaboration is essential in addressing Scope 3 emissions. Healthcare organizations can learn from one another and leverage their collective influence, developing standardized methods for tracking Scope 3 emissions and guiding the market toward sustainable operating and purchasing practices. Forming local, national and international partnerships to align sustainable purchasing goals can support these efforts.

Conclusion

As healthcare organizations strive to fulfill their commitment to reducing emissions and completing a Scope 3 inventory by the end of 2024, it's crucial to acknowledge that estimating and reporting Scope 3 emissions poses challenges. However, a wealth of guidance and support is available to jumpstart the process. By working to track and manage Scope 3 emissions, lead with their values, and champion environmentally responsible and equitable practices across the supply chain, organizations can make significant progress. Collaborative action can accelerate the healthcare market's movement toward lower-carbon production and procurement.

Resources Referenced Above

- EPA Scope 3 Inventory Guidance: This resource provides guidance for organizations to measure their indirect emissions from sources not directly owned or controlled by them.
- ENERGY STAR®—Joint program run by the U.S. Environmental Protection Agency and U.S. Department of Energy to help organizations benchmark energy performance and improve energy efficiency. Portfolio Manager® is the ENERGY STAR® tool used to measure and compare energy performance of buildings.
- EPA Greenhouse Gas Inventory Guidance: Indirect Emissions from Events and Conferences. This guidance covers indirect emissions—including emissions from travel, hotel stays, and the venue itself—for events (e.g., sporting events, concerts) and conferences (e.g., business meetings, exhibits, conventions).

Other Tools, Guides, and Calculators

(The inclusion of products, services and organizations in this list does not constitute government endorsement.)

- GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard ("Scope 3 Standard"): This standard presents details on all scope 3 categories, as well as requirements and guidance on reporting Scope 3 emissions.
- GHG Protocol Scope 3 Calculation Guidance: Provides standardized methods and tools for companies to measure and manage their indirect emissions from activities such as business travel, procurement, waste, and water usage.
- Healthcare Anchor Network: A collaborative network focused on improving community health and economic well-being through local investment and purchasing strategies by healthcare organizations.
- National Academy of Medicine Action Collaborative on Decarbonizing the U.S. Health Sector: This initiative, which includes a supply chain working group, brings together health sector stakeholders to identify goals and approaches for rapid emissions reduction.
- Practice Greenhealth Health Care Emissions Impact Calculator: An accounting tool specifically designed to help health care organizations measure their GHG emissions. The calculator can be used to develop a GHG inventory at the facility and/or system level for all Scope 1, 2, and 3 emissions.
- Science-Based Targets initiative (SBTi): This collaboration champions science-based target setting by corporations in the transition to a low-carbon economy.
- Yale Supply Chain Emissions Carbon Calculator: This tool is specifically designed for healthcare organization accounting of emissions embodied in purchased goods and services.