

The Pharmaceutical Industry's Path to Net Zero Emissions

The pharmaceutical industry has committed to ambitious climate targets — pledging to halve emissions by 2030 with the ultimate goal of achieving NetZero emissions by 2050¹.

Emissions reporting across pharmaceutical companies demonstrates generally high quality standards. Since 2019, the majority have consistently reported Scope 1 and 2 emissions (those generated by their own business operations and electricity use). Scope 3 emissions, which encompass the entire value chain, are currently reported by some companies, though not universally.

Most pharmaceutical organizations have initiated meaningful reductions in Scope 1 and 2 emissions, primarily through renewable electricity procurement and increased on-site power generation such as solar installations. Industry-wide targets typically include 100% renewable energy adoption and transitioning to all-electric vehicle fleets.

Significantly, approximately 90% of a pharmaceutical company's emissions fall within Scope 3. Companies can only address these emissions by transforming supplier relationships or developing products with lower emissions profiles. This necessarily influences supplier relationship management and impacts existing, established operational models within the value chain. Since the Med-Tech market is showing growth², it underlines the relevance of managing the supply chains.

Leading pharmaceutical companies have started establishing clear emissions requirements for their supplier network and are providing support activities to the supplier landscape. The business of sustainability is showing tremendous business opportunities in achieving meaningful emissions reductions, not only to business consultancies.

According to Roland Berger, no single pharmaceutical entity currently serves as a comprehensive reference for best practices across all ESG indicators and dimensions. Even industry leaders remain very much works in progress³.

The transition to net zero has created significant opportunities for multiple areas in the value chain of Pharma, as the industry works methodically toward 2050 targets under intense scrutiny regarding individual company performance and progress.

What is Sustainability?

Sustainability refers to the practice of meeting current needs by balancing economic, environmental, and social considerations to meet today's needs without compromising the future. This includes efforts to conserve natural resources, reduce pollution, promote social well-being, and ensure economic stability. Sustainability aims to support a healthy planet and society now and in the future. In our world, corporate goals are mostly summarized in a CSR or ESG Report. In this document, we at elmplastic address the emission saving and future potential for natural resource and reduced pollution. For our customers, these are Pharma Scope 3 emissions.

What are Scope 3 Emissions?

Scope 3 emissions refer to all indirect greenhouse gas emissions that occur in a company's value chain, including both upstream (related to purchased or acquired goods and services) and downstream activities (related to sold goods and services). They can be categorized into 15 distinct categories, which encompass various activities such as purchased goods, employee commuting, and waste disposal.

Addressing Scope 3 is crucial for any company seeking comprehensive sustainability – these emissions typically make up the largest part of a company's CO₂ footprint and are the most challenging to control¹.

The most important categories in Scope 3 are:

UPSTREAM SCOPE 3 EMISSIONS

-  **Purchased Goods and Services**
-  **Capital Goods**
-  **Fuel and Energy-Related Activities**
(not included in Scope 1 or 2)
-  **Upstream Transportation and Distribution**
-  **Waste Generated in Operations**
-  **Business Travel**
-  **Employee Commuting**
-  **Upstream Leased Assets**

DOWNSTREAM SCOPE 3 EMISSIONS

-  **Downstream Transportation and Distribution**
-  **Use of Sold Products**
-  **End-of-Life Treatment of Sold Products**
-  **Downstream Leased Assets**
-  **Franchises**
-  **Investments**

Where to find the quick wins?

1. Know Your Battle

ESG frontrunners distinguish themselves by clearly focusing on specific ESG commitments and priorities.

Typical “lighthouse” topics include:

- WATERMANAGEMENT
- GREEN CHEMISTRY
- ESG TRANSPARENCY
- ENGAGEMENT WITH LOCAL COMMUNITIES

Often overlooked but impactful topics include:

- SUSTAINABLE SOURCING
- EMISSION REDUCTION (RENEWABLE ENERGY)
- WASTE POLLUTION
- SOCIAL ASPECTS

business ethics, employee development, diversity

These are areas where optimizing your Scope 3 emissions within the pharma supply chain will add value.

2. Partner with the Right Suppliers

Sustainable Sourcing - Many supply chain partners are medium-sized companies who are only at the beginning of their ESG journey. Working with suppliers who provide both high-quality products or services and developed strong ESG practices is essential. The combined offering of product / service value and ESG compliance gives you the competitive edge in achieving your sustainability goals⁴.

Remember, the value drivers of modern pharma companies are much more than just the products sold!

The elmplastic Advantage

As a specialized German manufacturer of pharmaceutical medical devices and primary packaging solutions, elmplastic offers unique sustainability achievements to enhance your ESG development. Since years, the company is invested into achieving an outstanding low CO₂e emission management:

- **Product offer enhancement with bio-based solutions**
 - Bio material mix with improved sustainability values
 - Commercially viable, affordable and compliant to regulations
 - Best in class usability values to ensure end user satisfaction⁵
- **Energy related activities**

A modern machinery park, technical equipment, and newly built real estate support energy efficiency and reduction in both, electric consumption and CO₂ emissions.
- **Waste management in operations**
 - IT and AI process optimization to reduce waste rates
 - Waste materials are returned to the recycling process
 - Water consumption and residues remain consistently low
- **Procurement and Scope 3-Control**
 - Providing awareness to ESG requirements within supply chain
 - Developing a monitoring path to enable KPI tracking
- **Transportation and Distribution**
 - Partnering on pilot projects to sustainable and measurable logistic
 - Downstream transportation with urban e-mobility and refined fuel
- **Social Responsibility**
 - Commitment to gender diversity, a balanced employer age distribution, active employee development plans, medical care, and social engagement
 - Supported e-mobility amongst our staff and environmentally friendly bicycle leasing
- **Finance and Reporting**
 - Transparent cost management and reporting KPIs for full value generation



Why elmplastic?

We focus exclusively on pharmaceutical packaging and medical devices to help patients recover from all kind of illnesses. We are specialists in our field and dedicated to advancing sustainable, reliable solutions for the pharmaceutical industry:

- Full understanding of pharmaceutical manufacturing requirements
- Complete in-house production in Germany for total supply control
- Extended independency from external service providers
- Quick turnaround times
- Flexible scaling for any order size
- Full regulatory compliance and MDR certification with auditable processes
- New product development according to customer and sustainability requirements

A Sustainable Future Starts Today

Achieving NetZero and addressing Scope 3 emissions requires lasting commitment and decisive action. By working with elmplastic, you work towards achieving your strategic targets and contribute to a greener, more responsible supply chain. Let's shape a sustainable future together.

Ready to advance your sustainability goals?

Contact elmplastic today to discuss your pharmaceutical packaging needs:

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Our team of experts is ready to help you develop customized solutions that ensure your pharmaceutical packaging supply chain remains resilient in the face of any challenge. Reach out today and discover how elmplastic can become your trusted partner in pharmaceutical packaging excellence.

Sources:

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