

Greenhouse Gas Emissions and Energy Use Issue Brief

Importance to Elanco and our Stakeholders

Climate change represents a significant risk to populations around the world, as increases in greenhouse gas (GHG) emissions contribute to rising global temperatures, droughts, more extreme storms and rising sea levels. Effective energy and emissions management is critical to limiting the impacts of climate change, for our operations and the global community.

Elanco conducts business in an environmentally responsible manner and takes active measures to minimize emissions.

Our Action

Elanco takes a comprehensive approach to energy management and efforts to reduce our GHG emissions – encompassing our global operations as well as our value chain. As we continue to increase our focus in this area, we launched a new global Sustainability Community of Practice in 2024 to highlight localized internal talent and initiatives. This initiative is divided into two working groups - one focused on manufacturing and R&D locations, and another focused on our commercial sales affiliates.

- The manufacturing and R&D group works to identify opportunities and best practices regarding identified or completed initiatives at our largest centers of consumption and emissions.
- The commercial sales affiliate group focuses on opportunities and best practices demonstrated by our regional sales organizations. This group also provides an opportunity to gain insights about customer interest in Elanco's sustainability initiatives – potentially outlining a pathway to further engage with our customers on sustainability matters.

These groups foster cross-functional collaboration to exchange ideas and results. They seek to facilitate short- and long-term goal setting, enhance tracking of key performance indicators and accelerate progress and impact. In this way, successes in Germany or the United Kingdom might serve as templates and inspiration for facilities or teams in Southeast Asia, Brazil or the United States.

We also continue to enhance our systems and data availability, to better inform decision making, meet stakeholder expectations and align with disclosure requirements forthcoming in many of the jurisdictions where we operate. In 2024, we established a platform that provides a monthly managerial dashboard through which we can view energy use and emissions — allowing teams to benchmark against data from prior months, similar internal sites or regions and across emissions sources.

Our approach to managing our GHG footprint is further informed by a TCFD-aligned climate risk and opportunity scenario analysis, updated for 2025. For information on our practices and identified focus areas, please see our [TCFD report](#).

Energy Management

Elanco carefully considers the hierarchical impacts of our actions toward responsible energy use:

- We employ conservation practices to reduce the energy required to operate.
- We seek energy efficient technologies and methods to reduce energy demand.
- We source energy from renewable sources.

We regularly investigate and implement numerous energy efficiency projects across our manufacturing, warehousing and administrative locations. These include local projects such as:

- Upgrading to LED lighting
- Equipping facilities with motion sensors to control lighting
- Enhancing heating, ventilation and air conditioning (HVAC) settings to account for the time of day and number of individuals present
- Optimizing equipment settings to reduce electricity and natural gas consumption
- Air leakage reduction initiatives
- Conducting energy assessments at key locations and obtaining relevant certifications — such as the ISO 50001 certification at our Kiel, Germany manufacturing location, and at Monheim, our Germany R&D location.

Renewable Electricity

Increasingly, regional utility providers are offering green tariffs or other grid-based renewable electricity options to their customers. These purchasing vehicles generally have certifiable

renewable components that may comprise up to 100% renewable energy. Several facilities in our global portfolio subscribe to such renewable energy purchasing mechanisms for electricity:

- Our manufacturing site in Kiel, Germany operates on 100% renewable grid electricity sourced from wind power.
- More than 85% of electricity purchased at our manufacturing site in Fort Dodge, Iowa, is generated from renewable sources.¹
- Our Huningue, France manufacturing location purchases 100% renewable grid electricity.

We may seek to expand our use of green tariffs at additional locations in the future, as availability permits.

Emissions Management

Our Scope 1 GHG emissions result predominantly from natural gas and fuel oil use related to manufacturing Elanco products at owned and leased facilities, as well as fleet vehicle use across our sales teams. Across our portfolio, we've been able to achieve significant emission reductions. Global site examples include:

- Purchasing 100% climate-neutral eco gas at one of our largest manufacturing facilities
- Consolidating, idling and selling facilities, which decreased our manufacturing footprint
- Shutting down coal boilers at one site, which reduced CO₂e by 56,400 metric tons/year
- Switching from fuel oil to natural gas for a boiler at another location, reducing CO₂e by 2,100 metric tons/year
- Adapting fermentation process changes to reduce energy demand
- Installing a Combined Heat-Power (CHP) unit for burner optimization at one of our locations
- Maximizing CHP usage through load balancing to minimize grid electricity consumption

¹ 2023 is the most recent year for which Mid-American Energy Company renewable electricity has been certified by the Iowa Utility Board

- Installing control software to track demand and match turbine output demand, to prevent unnecessary importing and exporting of electricity
- Optimizing a large-scale air compressor at one of our locations with variable speed drives – to provide more efficient air leak management, reducing emissions by more than 11,000 metric tons of CO₂e over a two-year period.

Scope 2 GHG emissions relate primarily to purchased electricity at owned and leased facilities. Given that our combined Scope 1 and 2 GHG emissions footprint is predominantly from purchased electricity, energy efficiency plays an important role in our emissions management strategy.

We also seek to influence GHG emissions reductions beyond our direct operations. Beginning with fiscal year 2021, we finalized our first comprehensive Scope 3 GHG emissions analysis, determining that 11 of the 15 Scope 3 categories identified by the GHG Protocol are relevant to Elanco's business.

Our teams across the globe have executed a number of initiatives to reduce Scope 3 GHG emissions:

1. **Logistics:** We have enhanced our logistics reporting capabilities and tools to gain more granular visibility into Scope 3 emissions generated from our collaboration with freight forwarders. This provides us with ongoing, automated emissions calculations. As we further develop visibility with our freight forwarders, we may identify additional optimization opportunities to reduce emissions and improve efficiency in this area.
2. **Data visibility:** We have completed implementation of a project to automate the gathering of all utility billing invoices globally and began mapping our carbon footprint in a single dashboard, allowing us to establish sustainability task forces with key vendors.
3. **Commuting:** Our Huningue, France and Warsaw, Poland locations have implemented green commuting incentives encouraging employees to bike or ride the train to work.
4. **Packaging:** We have implemented and continue to research numerous sustainable packaging initiatives.

We expect to monitor supplier energy and emissions management initiatives, in part, through a third-party due diligence platform. In the future, we may seek to directly collect supplier emissions data in lieu of spend-based estimates, as well as details on supplier emissions

reduction goals and initiatives. These insights will enable us to engage categorically across our value chain to help reduce emissions, where possible.

Transportation and Distribution

Our logistics data collection and freight forwarder dashboard considers air, sea, rail and road transportation modes across our top international freight forwarders – representing more than 90% of our product volume. (A freight forwarder is a person or company that coordinates and organizes the movement of shipments on behalf of a shipper.) Our logistics platform provides us with ongoing, automated emissions calculations.

We have identified multiple future opportunities to further advance logistics efficiency and emissions reduction:

Distribution Center Management

- **Domestic (U.S.) distribution:** Elanco has been working to improve the structure and coordination of our domestic distribution network. By refining our network of warehouses and distribution centers, we have optimized transportation modes and flows — maintaining service levels while reducing shipping distance and carbon emissions.
- **International freight:** We continue to optimize our international freight operations from Germany to the U.S., to reduce cost as well as our carbon footprint. In some markets, we've transitioned from small volume/high frequency shipments by individual facilities to a model that aggregates material at a mother hub before distributing from that location in bulk. Such consolidation has helped optimize shipping routes and overall trip count, reducing emissions.
- **Europe, Middle East and Africa (EMEA) network:** Based on the success of our U.S. and international distribution efforts, we are exploring a similar hub-and-spoke approach to serve Elanco affiliates across the EMEA region — to help improve service levels, while reducing cost and transportation-related emissions.

Transport Mode Optimization

- **Transport management system:** In 2023, we implemented automation software to inform strategic decisions across air, sea and road transportation modes at one pilot site. This platform helps select the most time efficient, cost effective and environmentally friendly shipping approach — which is good for both our bottom line and environmental footprint. We plan to extend this program to all Elanco sites in 2024 and 2025.

Manufacturing Optimization

- **Manufacturing strategy:** We are reviewing our manufacturing approach to identify, reduce or eliminate backtracking shipments — to further optimize our manufacturing process and reduce emissions.
- **Elanco External Manufacturing (EEM) capability:** This approach involves making informed, sustainable choices for fuel, contributing to a reduction in our carbon footprint. For example, we can optimize product carbon footprints for livestock feed ingredient premixes by planning logistics to prevent backtracking and by diluting the mix as late as possible in the process, to keep volume and weight down.

Truckload Size Management

- **Shipment optimization:** We're evolving our legacy focus on shipping timelines to consider road transportation service costs and reduced emissions. In some areas, utilizing multiple smaller shipment sizes in a single truck or a multi-stop truck can lead to better utilization, while in EMEA we're moving from less-than-truckload to full-truckload shipments.

Competitive advantage through sustainable packaging

Elanco's sustainable packaging and logistics initiatives help reduce GHG emissions, reduce harmful chemical use and provide waste reduction, while providing opportunities to develop value chain partnerships that can enhance our positive impact and drive industrywide change.

Well-designed packaging is essential to facilitate reliable transport from manufacturing sites to end user, prevent loss of product, protect product quality and assure efficacy, and inform users about product ingredients and appropriate use. At the same time, an unfocused approach to packaging can overconsume natural resources, create excess material, lead to damaged product and result in additional waste. Elanco remains engaged to ensuring product integrity while attempting to minimize negative environmental impacts, unnecessary packaging weight, materials and cost.

We continue to follow our Sustainable Packaging Guideline, formalized in 2023 and updated in 2025, which outlines our approach to reducing the environmental impact of packaging while maintaining compliance with pharmaceutical product regulations. Further, these principles offer guidance to our packaging designers and engineers, as they consider the sustainability implications of design decisions and seek to imbue sustainability principles throughout their processes, such as necessary reduction or elimination of PVC or PFAS in our packaging materials.

In 2024, we continued to enhance data collection from our purchasing systems and are developing a packaging specification database, as we work to establish a baseline for our packaging footprint. These advancements will help us make informed decisions, advance our sustainable packaging strategy, and track future progress.

Our sustainable packaging efforts for primary, secondary, and tertiary packaging. 2024 efforts included:

- **Paper:** We're reducing paper use through a combination of activities and material selection in our secondary and/or tertiary packaging. Where possible, we've replaced traditional packaging inserts with QR codes that direct customers to digital product information and use instructions – cutting waste and enhancing our ability to communicate more detailed information to customers.
- **Plastic:** In 2024, we introduced more sustainable packaging for our Seresto Flea and Tick Control collar in the U.K. and Germany. The redesigned pack replaces our legacy tin can and PET-containing label with a molded fiber container and branding sleeve made from renewable materials. This new format enhances on-shelf presentation by enabling an upright display position, while reducing overall package weight and delivering a 70% reduction in CO₂e emissions associated with manufacture of the packaging.

Elanco received a German Packaging Award in the sustainability category for this innovation. This acknowledgment highlights our continued involvement with innovative, environmentally responsible packaging solutions.

- Cardboard: We're assessing the use of a pallet stretch hood with post-consumer recycle (PCR) in our packaging. In 2025, we plan to assess the potential decrease in CO₂ emissions and conduct trials at our production sites. In addition, we are planning to reduce the amount of cardboard and energy used, by selling our AdTab packs with the display tray removed. and have it shrink-wrapped.
- PVC and Aluminum: We're working to optimize the size of blister packs for our Advantix™ product line by reducing them to a single cavity. This reduction is expected to result in annual material savings of 900 kg (~1,985 lbs.) of PFAS-containing PCTFE, 2000 kg (~4,400 lbs.) of PVC, and 300 kg (~660 lbs.) of aluminum. We have identified potential reductions in the PVC thickness of the films used, providing a CO₂e reduction from 22 to 31%, depending on size. We expect to launch this new blister packaging with reduced materials by the end of 2025. We're also identifying suppliers and initiating technical trials to eliminate the PVC layer in aluminum blister packaging.
- Cold-Chain Packaging Innovation: Through innovations and partnerships across our value chain, Elanco seeks to reduce the environmental impact associated with transporting our products around the world.]

With over 11,000 shipments in 2023, we continued transitioning in 2024 from expanded polystyrene (EPS) foam for perishable outgoing shipments from our largest distribution centers to ClimaCell® box liners made 90% from renewable inputs of cornstarch and paper. These new liners provide Elanco with extended travel duration beyond 48 and 72 hours. ClimaCell is a USDA Certified Biobased Product wrapped in paper from FSC® certified mills. We estimate that medium and large boxes using ClimaCell yield a 24% and 44% reduction in CO₂e emissions, respectively, compared to the previous shipping methods using EPS foam insulation. The ClimaCell liners are designed to be recycled in one step – just put them into the recycling bin with the outer box, since they are similar to sorted cardboard. By transitioning to ClimaCell packaging for our cooler kits, frozen payload shippers and refrigerated payloads, in 2024 Elanco avoided approximately 129 metric tons of Scope 3 CO₂e emissions.

Elanco recognizes the byproducts generated by our business operations and we're committed to managing pollution managing pollution and waste through a variety of best practices such as reuse, recycling and conventional waste management. We're dedicated to evaluating the various impacts of our operational waste to enhance outcomes related to human and public

health, environmental integrity of land and water, and the mitigation of global warming. Our health, safety, and environmental (HSE) organization upholds rigorous procedures that prescribe the appropriate management of waste from all segments of our manufacturing processes.

Governance and Risk Management

Elanco's support for responsible and sustainable practices is evident in its robust ESG governance structure. The Board oversees ESG through its Corporate Governance Committee, which evaluates strategies, risks, and performance, with updates provided regularly. Other Board committees, such as the Compensation and Human Capital, Disclosure, Innovation, Science and Technology, and Audit Committees, address specific ESG aspects, ensuring comprehensive consideration across the organization.

At the management level, the VP of Investor Relations and ESG leads the program, supported by a dedicated team. They work to mitigate risks, measure progress, and align with stakeholder expectations, providing regular updates to the Executive Committee and CEO.

Cross-functional ESG Steering Committees, comprising senior representatives from diverse departments, monitor risks, drive progress, and integrate ESG into departmental decisions. The Health, Safety, and Environment (HSE) department, overseen by a global steering committee, manages environmental resilience and collaborates with the ESG team.

Working groups, with employees from various departments and locations, foster collaboration and integrate ESG into daily decisions. This multi-layered framework ensures accountability and drives meaningful progress on ESG initiatives throughout Elanco.

HSE Governance Documents

In addition to ESG governance, the HSE department governance impacts all business areas, including manufacturing and quality, research and development, affiliate locations and general administrative offices, are required to operate with an HSE management system that adheres to the requirements of the Elanco HSE Policy and associated standards. The basic elements of the HSE Management System Standard align with internationally recognized management systems such as ISO45001 (Occupational Health and Safety Management Systems), ISO14001

(Environmental Management Systems), American Chemistry Council's Responsible Care Management System and the Occupational Safety and Health Administration Voluntary Protection Program.

Our global HSE policy contains core principles and expectations that our employees apply in their daily activities. This policy is implemented through our global standards and procedures, articulating our focus on setting basic requirements for both regulatory requirements and established best practices. Our core governing documents include the following:

- Global HSE Policy – Protecting People, the Environment and our Assets
- Environmental Standard
- Health and Safety Standard
- HSE at Global Affiliate Offices and Shared Service Centers Standard
- HSE Management System Standard
- Process Safety Management and Combustible Dust Standard
- Product Stewardship Standard.

The content of this brief is informed by global ESG disclosure standards and frameworks.

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