



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.

We're committed to conducting business in an environmentally responsible manner and taking active measures to reduce energy use and 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 part of our effort, we recognize the value of highlighting localized internal talent and initiatives in a global Sustainability Community of Practice. This group fosters cross-functional collaboration to exchange ideas and results and facilitate short- and long-term goal setting and tracking of key performance indicators. In this way, successes in Germany or the United Kingdom might serve as templates and inspiration for facilities in Southeast Asia, Brazil or the United States.

We also continue to enhance our systems and data availability, to better inform decision making, ensure we meet stakeholder expectations and align with disclosure requirements forthcoming in many of the jurisdictions where we operate. In 2022, we expanded our GHG emissions reporting boundary to reflect our full operational control as defined by the GHG Protocol¹ – which includes our fleet and all owned and operated global locations.

Energy Management

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

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

We implement numerous energy efficiency projects across our manufacturing, warehousing and administrative locations. These include:

- Upgrading to LED lighting where possible
- 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

Increasingly, local utility providers are offering green tariffs 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 green tariffs for electricity and natural gas, and we seek to expand our use of green tariffs as future availability permits at additional locations.

Renewable Electricity

Several of our sites take advantage of renewable options offered by local energy providers:

- Our manufacturing site in Kiel, Germany operates on 100% renewable grid electricity sourced from wind power.
- More than 88% of electricity purchased at our manufacturing site in Fort Dodge, Iowa is generated from renewable sources.²
- Our affiliate office in Macquarie Park, Australia purchases 100% green electricity that uses a combination of renewable sources and carbon offsets to achieve net zero emissions.
- Our Huningue, France manufacturing and warehouse locations purchase 100% renewable grid electricity.

Green tariffs alone will not enable Elanco to achieve our goal to source 100% of electricity from renewable sources by 2030. To accelerate our progress, we're exploring options for Power Purchase Agreements (PPAs). This could involve localized solutions or investment in grid-scale renewable energy generation to offset electricity greenhouse gas emissions not mitigated by conservation, efficiency or other efforts. Furthermore, we are evaluating opportunities for on-site solar arrays at Elanco properties with physical space and attributes that could support such installations.

Emissions Management

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

- Purchasing 100% climate-neutral eco gas at one of our largest manufacturing facilities in Kiel, Germany
- 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
- Installing control software to track demand and match turbine output demand, to prevent unnecessary importing and exporting
- 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

Our Scope 2 GHG emissions relate primarily to purchased electricity at owned and leased facilities. Energy efficiency is also an important part of our emissions management strategy because Scope 2 GHG emissions from purchased electricity account for the majority of our combined Scope 1 and 2 GHG emissions footprint.

We also seek to influence GHG emissions reductions beyond our direct operations. In 2023, 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 enacted a number of initiatives to reduce Scope 3 GHG emissions:

- **Logistics:** We shifted logistics from air to sea freight for products shipped to a major online retail customer from our Huningue, France location.
- **Data visibility:** We began mapping our carbon footprint with freight forwarders in a single dashboard, allowing us to establish sustainability taskforces with key vendors.
- **Commuting:** Our Huningue, France and Warsaw, Poland locations implemented green commuting incentives encouraging employees to bike or ride the train to work.
- **Packaging:** We've implemented and continue to research numerous sustainable packaging initiatives

We monitor supplier energy and emissions management initiatives through a third-party due diligence platform. And in the future, we plan to engage categorically across our value chain to help reduce emissions, where possible.

Downstream Transportation and Distribution



Our logistics data collection and freight forwarder dashboard considers air, ocean and road transportation modes across our top international freight forwarders – representing more than 90% of our product volume. This platform provides visibility into our international freight performance, including CO₂ emissions. Targeted tactical efficiencies will allow us to optimize logistical choices for carbon reduction. Between 2022 and early 2023, the program has optimized routes to allow for a 13% decline in air freight use – our most carbon-intensive transportation mode.

In 2022, we finalized the redesign of our logistics network, thanks to new capabilities for supply chain and logistics scenario modeling. This effort supports cost optimization, faster customer service levels and reduced carbon emissions. Initial outcomes include consolidation and reduction in our number of warehouses by 33%, and an estimated decrease of more than 1,500 metric tons of CO₂e globally (approximately a 10% reduction in 2022 Scope 3 Category 4 emissions for third-party transportation and distribution, compared to 2021).

Metrics and Measurement

In 2022, we broadened efforts to understand and account for all applicable GHG emissions. We expanded our reporting boundary for Scope 1 and 2 emissions to include all sites for which we have full operational control. In the first half of 2023, we completed a comprehensive analysis of our 2021 and 2022 Scope 3 emissions.

Our enhanced emissions inventory will enable us to set a comprehensive Scope 1 and 2 emissions reduction target. We also intend to pursue future certification of our emissions reduction goals from the Science Based Targets initiative.

We track the following energy and GHG metrics:

- Total electricity use
- Total electricity intensity
- Total and % renewable electricity use
- Scope 1 GHG emissions (location and market based)
- Scope 2 GHG emissions (location and market based)
- Combined Scope 1 & 2 emissions intensity (location and market based)
- Scope 3 GHG emissions

For details, please view our [ESG Key Performance Indicators](#)

Governance and Risk Management

Our Board and executive management team are actively engaged in Elanco's activities and approach to addressing climate-related risks and opportunities. The Corporate Governance Committee provides oversight and guidance for our overall ESG & sustainability program, including our strategy, programs and policies related to climate change and operational

sustainability. These include emissions and waste reduction efforts, consumption of energy and water, and investments in renewable energy – such as our commitment to source 100% renewable electricity by 2030. Additionally, the Audit Committee reviews policies and practices related to environmental protection, monitors compliance and reports or makes recommendations to the full Board, as appropriate.

Our Global Head of ESG and Sustainability oversees internal management of Elanco's climate-related strategy, programs, goals and disclosures – with further oversight from the Elanco Healthy Purpose Steering Committee. Our Healthy, Safety and Environment (HSE) organization – part of our manufacturing and quality business unit and led by our Senior Director of Global HSE – has operational responsibility for the resilience of our operations, including energy and water use, as well as waste and emissions management. HSE receives oversight from the global HSE Steering Committee, a cross-functional group which includes representatives such as our Executive Vice President of Human Resources; our Executive Vice President of Manufacturing and Quality; our Executive Vice President, General Counsel and Corporate Secretary; our Executive Vice President of Innovation and Regulatory and our Global Head of ESG and Sustainability.

In addition, 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.

Annual performance measures for our Global Head of ESG & Sustainability, Senior Director of Global HSE, members of our global ESG and sustainability team and other senior leaders across our business include climate-related objectives. These may include progress toward our renewable electricity goal or other environmental impact reduction initiatives, as well as accurate and transparent disclosure of our environmental metrics and programs.

The content of this brief is informed by the following ESG disclosure standards:

- *Policies and commitments that guide Elanco's approach to the material issue (GRI Disclosure 3-3c)*
- *Mechanisms to integrate the material issue into strategy, decision-making and financial planning (IFRS S1 General Requirements Standard)*
- *Actions taken to respond to the material issue, with a qualitative assessment of how these actions support the 'resilience' of Elanco (IFRS S1 General Requirements Standard)*



- *Action taken to manage impacts related to the issue (GRI Disclosure 3-3d)*
- *Processes used to track effectiveness and lessons learned (GRI Disclosure 3-3e)*
- *Board and management responsibilities related to the material issue (IFRS S1 General Requirements Standard, GRI 2-12, 2-13, 2-14)*
- *Connections between the material issue and remuneration outcomes (IFRS S1 General Requirements Standard, GRI 2-17, 2-18)*

1. The Greenhouse Gas Protocol (2004) A corporate accounting and reporting standard: revised edition
2. 2021 is the most recent year for which Mid-American Energy Company renewable electricity has been certified by the Iowa Utility Board