

## **Elanco Task Force on Climate-related Financial Disclosures Report**

The Task Force on Climate-related Financial Disclosures (TCFD) provides a framework of recommended disclosures for corporate reporting on climate-related risks and opportunities.

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including, without limitation, our environmental, social and governance (ESG) matters and expectations, operational and financial goals, targets, commitments and expectations regarding future climate conditions. Forward-looking statements are based on our current expectations and assumptions regarding our business and future conditions. Because forward-looking statements relate to the future, by their nature, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. As a result, our actual results may differ materially from those contemplated by the forward-looking statements. Important risk factors that could cause actual results to differ materially from those in the forward-looking statements include regional, national or global political, economic, business, competitive, market and regulatory conditions, including but not limited to the following:

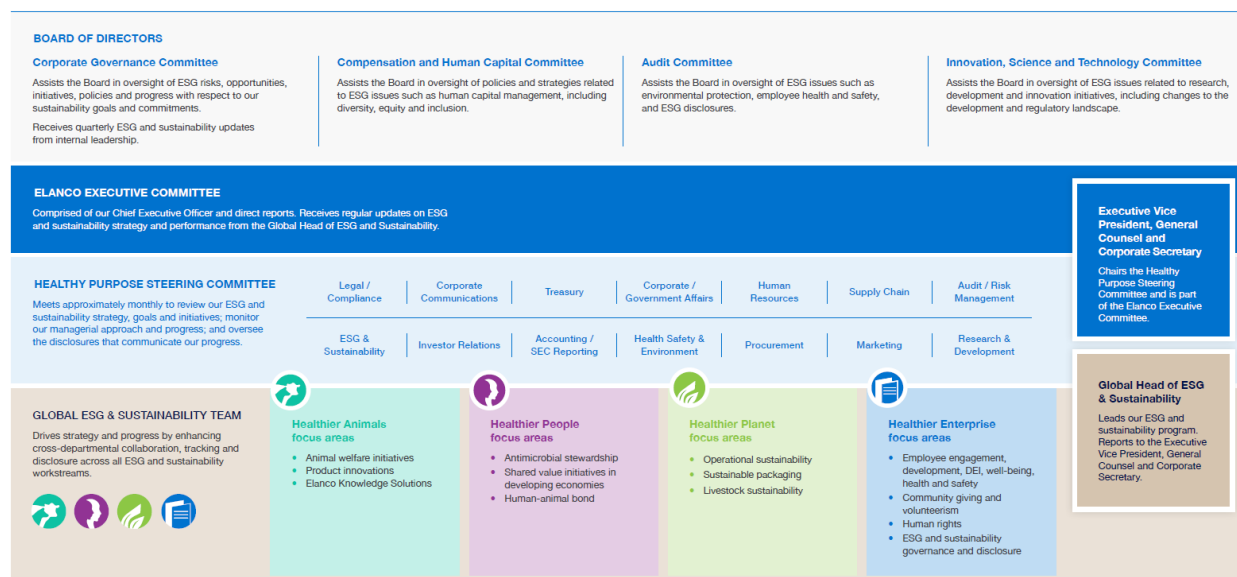
- the impact of weather conditions, including those related to climate change and the availability of natural resources;
- actions by regulatory bodies, including as a result of their interpretation of studies on product safety, as well as increased regulation or decreased governmental financial support relating to the raising, processing or consumption of farm animals;
- increases in the cost and availability of raw materials used in manufacturing our products, and
- risks related to environmental, health and safety laws and regulations.

For additional information about the factors that could cause actual results to differ materially from forward-looking statements, please see the company's latest Form 10-K and Form 10-Q filed with the Securities and Exchange Commission. Although we have attempted to identify important risk factors, there may be other risk factors not presently known to us or that we presently believe are not material that could cause actual results and developments to differ materially from those made in or suggested by the forward-looking statements contained in this report. If any of these risks materialize, or if any of the above assumptions underlying forward-looking statements prove incorrect, actual results and developments may differ materially from those made in or suggested by the forward-looking statements contained in this report.

We caution you against relying on any forward-looking statements, which should also be read in conjunction with the other cautionary statements that are included elsewhere in this report. Any forward-looking statement made by us in this report speaks only as of the date thereof. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update or to revise any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

**Inclusion of information in this report should not be construed as a characterization of the financial materiality or impact of that information.**

## GOVERNANCE



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### Board Oversight

Our Board of Directors oversees and our executive management team is engaged in Elanco's activities and approach to address climate-related risks and opportunities. The Board's Corporate Governance Committee oversees our overall ESG and sustainability program – including our strategy, programs and policies related to climate change and operational sustainability. These include monitoring efforts to reduce emissions, waste and the consumption of energy and water, investments in renewable energy – such as our 2030 commitment to source renewable electricity equal to 100% of our electricity consumption, development of our climate transition plan and goals, and efforts to comply with current and future climate-related disclosure regulations.

The Global Head of ESG and Sustainability provides quarterly updates about our ESG and sustainability program to the Corporate Governance Committee, including an annual update to the full Board. These updates include discussion of climate-related issues and initiatives. Our Vice President of Farm Animal provides periodic updates to the Board and Corporate Governance Committee about climate-related commercial opportunities to support livestock sustainability.

### Managerial Oversight

Our Global Head of ESG and Sustainability oversees internal management of Elanco's climate-related risks, strategy, programs, goals and disclosures. In 2022, we established a centralized ESG and sustainability oversight team which includes a Global ESG and Sustainability Advisor and a Global ESG Reporting Lead. These individuals, who report to the Global Head of ESG and Sustainability, help identify and drive internal understanding of climate-related risks, accelerate measurement and progress across current and future sustainability initiatives, contribute to the development of incremental targets and enhance data collection for disclosure. The team works to demonstrate Elanco's broad commitment to sustainability, while seeking to address the increasingly sophisticated expectations of regulators, shareholders, employees and customers.

Leadership across the company contributes to these efforts – including accountability by our management Executive Committee, led by our Chief Executive Officer and his direct reports, to which our Global Head of ESG and Sustainability provides regular updates.

Further oversight is provided by the Elanco Healthy Purpose Steering Committee, a cross-functional group comprised of senior representatives from across our business, including communications, finance, human resources, internal audit, investor relations, legal and compliance, manufacturing and quality, marketing and regulatory – chaired by our Executive Vice President, General Counsel and Corporate Secretary. This steering committee meets approximately monthly and, among other obligations, is charged with advising and helping accelerate our ESG and sustainability initiatives. The committee monitors our managerial approach toward leading ESG issues – such as risks and opportunities identified in our recent climate risk assessment and scenario analysis, progress toward current goals – such as our commitments to sustainable packaging and renewable electricity, and assists in the development and approval of new targets. The committee also oversees the disclosures that communicate our progress and works to integrate ESG and sustainability issues throughout departmental decision making. The group receives updates at each meeting from the Global Head of ESG and Sustainability, as well as various programmatic leads.

Our Health, Safety and Environment (HSE) department – part of our manufacturing and quality organization 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. The Senior Director of Global HSE, Global Head of ESG and Sustainability, and their respective teams collaborate to drive cross-departmental ownership and implementation of various environmental initiatives and risk mitigation activities. The HSE department receives oversight from the global HSE Steering Committee, a cross-functional group which meets quarterly and includes representatives such as our Executive Vice President of Human Resources; our Executive Vice President of Innovation, Regulatory and Business; our Executive Vice President of Manufacturing and Quality; our Executive Vice President, General Counsel and Corporate Secretary; and our Global Head of ESG and Sustainability. Like the Healthy Purpose Steering Committee, the HSE Steering Committee oversees our managerial approach toward leading environmental issues and risks, monitors progress toward current goals, helps develop and approve new targets and oversees environmental disclosures. The committee receives updates at each meeting from the Senior Director of Global HSE.

#### *Working Groups*

We utilize working groups led by senior managers and comprised of employees across the globe and throughout our company – to foster cross functional collaboration and tracking of key performance indicators (KPIs) toward the achievement of objectives and monitoring of day-to-day business performance. Workgroup participants advocate for ESG and sustainability initiatives across the business and help incorporate associated performance metrics into everyday decision-making. Working group leaders, in addition to the global HSE team and/or global ESG and sustainability team, provide periodic performance updates to the Healthy Purpose Steering Committee, HSE Steering Committee and/or the management Executive Committee, as appropriate.

#### *HSE Governance Documents*

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 commitments and setting basic requirements for both regulatory requirements and established best practices. Our core governing documents include the following:

- Environmental Standard
- Global HSE Policy – Protecting People, the Environment and our Assets
- 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

#### *Climate-related Ties to Compensation*

Annual performance measures for our Global Head of ESG and Sustainability, Senior Director of Global HSE, select members of our global ESG and sustainability team, select members of our global HSE team and others across our business include considerations for demonstrable action toward environmental sustainability-related programs, targets and/or objectives. Based on role, these may include progress toward measuring our climate-related risks and opportunities and creating associated action plans. They may also include progress toward our renewable electricity goal or other environmental impact reduction or risk mitigation initiatives and goals, as well as development and execution of plans to address regulatory compliance and accurate/transparent disclosure of our environmental sustainability metrics and efforts. Performance toward such goals and priorities is taken into account when the supervisor determines merit salary increases, bonus awards and/or stock awards (if eligible).

For additional information about Board and executive oversight of ESG and environmental matters, see our [2023 Proxy Statement](#) and [Board committee charters](#).

## **STRATEGY**

Our business operations have an impact on the environment and we are committed to conducting business in an environmentally responsible manner. We take active measures to reduce energy and water use, emissions and waste – including minimizing the presence of pharmaceuticals in the environment.

#### *Climate Risk and Opportunity Assessment and Scenario Analysis*

In 2023, Elanco engaged a third-party consultant to conduct an in-depth climate risk and opportunity assessment and scenario analysis aligned with TCFD guidelines. This work included definition of two climate scenarios informed by the Intergovernmental Panel on Climate Change (IPCC) Shared Socioeconomic Pathways (SSPs) as well as the International Energy Agency (IEA) World Energy Outlook (WEO). These sources were used together to consider potential physical and transitional risks and opportunities under a High Carbon and Low Carbon climate future:

- **High Carbon Scenario:** A “business-as-usual” scenario with a moderate amount of greenhouse gas emissions demonstrating a trajectory implied by today’s existing climate and energy-related governmental policy settings, resulting in a projected rise of 2.7°C in mean temperatures by 2100.

- Physical: IPCC SSP2-4.5 scenario
- Transition: IEA WEO 2022 Stated Policies Scenario (STEPS)
- **Low Carbon Scenario**: This scenario represents a more sustainable pathway with ambitious decarbonization and decreasing greenhouse gas emissions. The scenario assumes that all aspirational climate-related targets announced by governments are met fully and on time, including long-term net zero and energy access goals, resulting in a projected rise of 2.0°C in mean temperatures by 2100.
  - Physical: IPCC SSP1-2.6 scenario
  - Transition: IEA WEO 2022 Announced Pledges Scenario (APS)

Key questions identified by Elanco to guide our explorative scenario analysis include:

- What are the top physical and transitional climate-related risks and opportunities that can affect Elanco's facilities, assets, people and overall business?
- What are the potential financial and strategic implications of future climate scenarios on our business?
- What are the various climate-related risks and impacts for farm animals and companion animals?
- What climate-related risk management strategies do we currently have and how can we better integrate them into our overall Enterprise Risk Management (ERM) process?

Elanco's climate risk assessment explored both physical and transitional risks and opportunities along the aforementioned two climate scenarios and three time horizons, defined as:

- Short term: 0-7 years (2023-2030)
- Medium term: 7-17 years (2030-2040)
- Long term: 17-27 years (2040-2050)

Our analysis also categorized the estimated likelihood and magnitude of impact for each risk and opportunity:

- **Likelihood**: Determined by exposure scores based on high-resolution climate data, company data and external sources. Exposure scores were categorized: (5 = Very likely, 4 = More likely than not, 3 = About as likely as not, 2 = Unlikely, 1 = Very unlikely).
- **Magnitude of impact**: Determined by vulnerability scores using internal stakeholder survey responses. Magnitude of impact was categorized: (5 = high, 4 = medium-high, 3 = medium, 2 = medium-low, 1 = low).

Analysis included physical impacts to owned and operated facilities, third-party manufacturing sites, R&D locations and warehouses – as well as legal, policy, market, reputational and/or technology-related impacts to the company. To gain input and feedback regarding potential business climate-related impacts and management strategies, Elanco engaged internal stakeholders across the organization via a combination of electronic surveys and live interviews. Elanco combined this feedback with high-resolution climate projection data to prioritize climate-related risks and opportunities likely to have the highest impact to the company.

Our leading climate-related risks and opportunities are listed below. The time horizon indicated represents where the risk or opportunity presents the most significant impact(s) or where it has stabilized (i.e., does not increase substantially in the future).

## Physical Risk – Severe Storms

Risk Type	Acute
Time Horizon(s)	Medium term and long term (2030-2050)
Description	<p>Severe storms may cause business downtime and operational disruption, facility and/or inventory damage, increased insurance premiums, employee health and well-being risks, and/or a loss of customers due to shipment delays.</p> <p>While changes in severe storm patterns are among the most difficult to forecast, the conditions that allow for severe storms are projected to increase. Differences in site geography, resilience and preparedness may result in a variety of potential impacts.</p>
Impact to Business	<p><u>Primary potential financial impact:</u> Increased indirect (operating) costs, increased direct (capital) costs and/or loss of revenue; property damage and/or business downtime costs to owned and operated facilities and/or critical third-party suppliers</p> <p><u>Likelihood:</u> About as likely as not</p> <p><u>Magnitude of impact:</u> Medium</p> <p><u>Explanation of potential financial impact (internal methodology):</u></p> <p>Potential financial costs due to property damage were assessed by multiplying the insured value of the building/facility/contents with the annual probability of severe storms and the portion of the property damaged. This value was added with potential expense and/or lost revenue from business downtime, which was calculated by multiplying the forecasted cost to business for one day of downtime by the annual probability of severe storm events and estimated number of downtime days from a severe storm event. These calculations were completed at the site level and then aggregated for both owned and operated sites, as well as critical third-party suppliers.</p> <p>Insured building value and estimated cost from a downtime day were forecasted to the year 2050, using revenue growth projections reflecting the anticipated growth of the business. The annual probability of severe storm events was derived from high-resolution climate data. An assumed range of 1 to 10 downtime days and 5-50% property damage was utilized to demonstrate the range in severity of severe weather events.</p> <p>This analysis did not incorporate potential insurance coverage at these locations, potential increased insurance costs, potential long-term impacts of losing customers, or potential employee impacts.</p>
Managerial Approach	<p>Elanco has established a robust global risk management program that includes a property loss prevention program and insurance covering a variety of perils, including potential losses from severe weather. The program covers all owned, leased and critical third-party (warehouses, suppliers and external manufacturing) locations. Risk assessments are completed annually at all key owned locations and any potential exposures identified are evaluated for an appropriate risk mitigation strategy. Risk assessments have also been completed at several of Elanco's highest value third-party warehouses, as well as some of our largest external manufacturers, based on revenue</p>

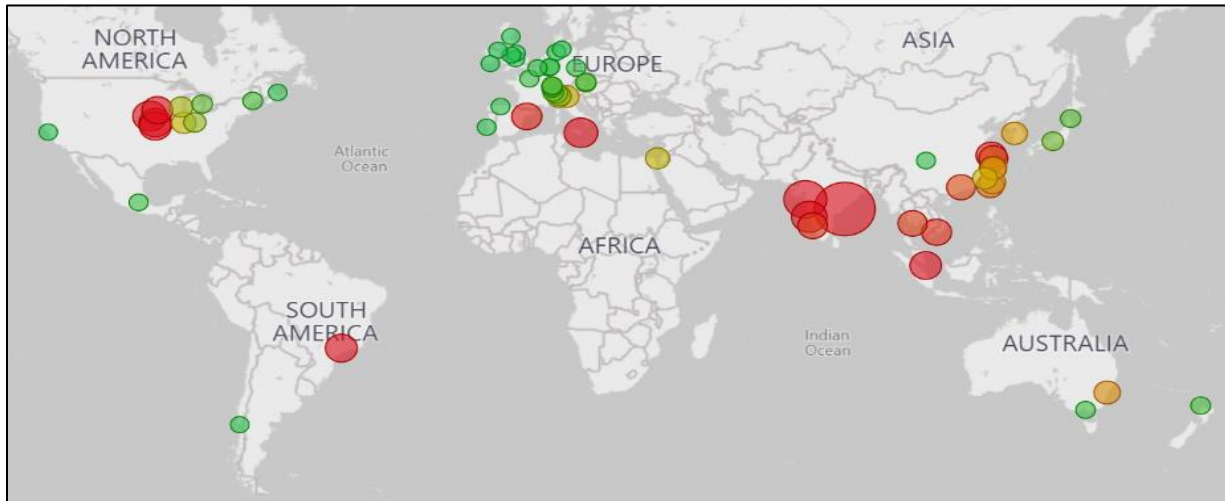
dependency. Additional key third parties have been prioritized for risk assessments that will occur later in 2023 and in 2024.

*(Note: The locations identified on the below maps indicate Elanco locations and/or those of critical suppliers. Smaller green circles represent areas of lesser risk. Larger yellow or red circles represent areas of greater risk.)*

### Global Exposure to Severe Storms, High Carbon Scenario (2022)



### Global Exposure to Severe Storms, High Carbon Scenario (2050)



## Physical Risk - Rising Mean Temperatures

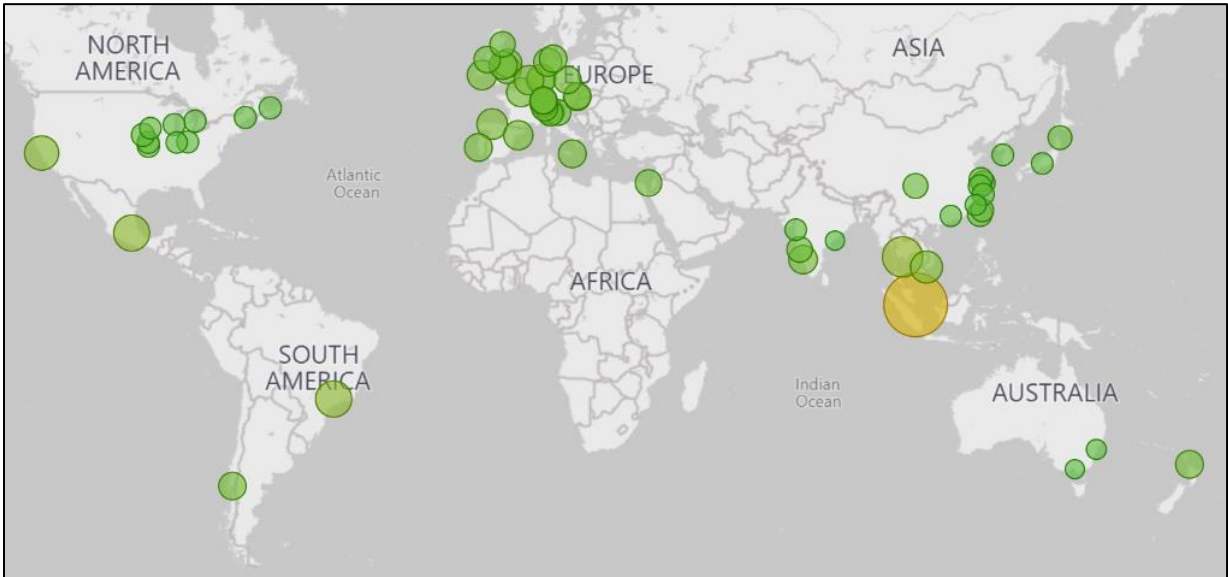
Risk Type	Chronic
Time Horizon(s)	Medium term (2030-2040)
Description	<p>Rising mean temperatures can cause stress to the heating, ventilation and air conditioning (HVAC) systems of facilities, leading to higher operational costs and possible increases in employee health, safety and operational concerns.</p> <p>Rising mean temperatures can also lead to negative impacts for farmers and producers, such as reduced livestock size and/or productivity due to health implications, reduced herd size, or increased input costs such as higher feed prices and/or costs for increased veterinary care. Additional considerations for these downstream impacts to Elanco customers are found under the “Product opportunities from climate impacts to animals” section of this report.</p> <p>While mean temperatures fluctuate annually, the impacts of the expected, gradual rise of annual temperatures will most likely be felt at a seasonal level.</p>
Impact to Business	<p><u>Primary potential financial impact:</u> Increased indirect (operating) costs, e.g. additional cooling costs at owned and operated facilities</p> <p><u>Likelihood:</u> More likely than not</p> <p><u>Magnitude of impact:</u> Medium</p> <p><u>Explanation of potential financial impact (internal methodology):</u></p> <p>Potential increases in electricity costs were assessed by multiplying electricity costs in 2022 by the increase in cooling degree days and by the electricity load attributed to cooling. These calculations were completed at the site level for owned and operated facilities, and then aggregated.</p> <p>The increase in cooling degree days was determined by using high-resolution climate data. A 20-50% range of electricity loads attributable to cooling was utilized, based on research from the International Energy Agency.</p> <p>This analysis did not consider changes in electrical grid mixes, renewable energy standards or purchased renewable energy certificates, and/or potential on-site energy generation to decrease grid electricity consumption.</p>
Managerial Approach	<p>Elanco carefully considers the hierarchical impacts of our actions toward responsible energy use:</p> <ul style="list-style-type: none"> <li>• We employ conservation practices and seek to reduce the energy required to operate.</li> <li>• We seek energy efficient technologies and methods to reduce energy demand.</li> <li>• We implement numerous energy efficiency projects across our manufacturing, warehousing and administrative locations. These include: <ul style="list-style-type: none"> <li>○ Optimizing equipment settings to reduce electricity consumption</li> <li>○ Air leakage reduction initiatives</li> </ul> </li> </ul>



	<p>For example, in 2022:</p> <ul style="list-style-type: none"> <li>○ Our manufacturing site in Kiel, Germany implemented numerous energy efficiency projects – including enhancement of HVAC settings to account for time of day and number of individuals present</li> <li>○ Our Huningue, France manufacturing site completed a carbon footprint analysis – installing an energy monitoring system and optimizing HVAC settings</li> <li>○ Our Clinton, Indiana manufacturing site optimized HVAC settings and commenced real-time energy monitoring</li> </ul>
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*(Note: The locations identified on the below maps indicate Elanco locations and/or those of critical suppliers. Smaller green circles represent areas of lesser risk. Larger yellow or red circles represent areas of greater risk.)*

**Global Exposure to Rising Mean Temperatures, High Carbon Scenario (2022)**



**Global Exposure to Rising Mean Temperatures, High Carbon Scenario (2050)**



## Physical Risk – Drought

Risk Type	Chronic
Time Horizon(s)	Long term (2040-2050)
Description	<p>Drought is likely to cause water scarcity, shortages or increased regulations – as well as smaller herd sizes, increased potential for crop failure (including feedstocks for farm animals), ecosystem degradation and limitations for manufacturing (including additional sourcing costs).</p> <p>Areas with historical records of significant droughts are likely to see drought events of longer durations in the future. High-quality water is needed to manufacture pharmaceutical products. Local water scarcity can limit inputs into manufacturing and can also impact farm customers, such as by limiting drinking water availability to provide and care for livestock.</p> <p>Additional considerations for these downstream impacts to Elanco customers are found under the “Product opportunities from climate impacts to animals” section of this report.</p>
Impact to Business	<p><u>Primary potential financial impact:</u> Increased indirect (operating) costs, e.g increased water costs at owned and operated locations</p> <p><u>Likelihood:</u> Unlikely</p> <p><u>Magnitude of impact:</u> Medium</p> <p><u>Explanation of potential financial impact (internal methodology):</u></p> <p>Potential increases in water costs were assessed by multiplying estimated water costs for 2022 by the level of water stress and the estimated annual increase in water rates. These calculations were completed at the site level for owned and operated facilities, and then aggregated.</p> <p>2022 water consumption was estimated using square footage and average commercial water intensity figures from the International Energy Agency. Estimated water purchase rates (costs) were assumed to increase only for locations in a “water-stressed” region – identified by a drought metric (local supply over demand) greater than 0.4, as indicated by high-resolution climate data for each site. A 1.5-3% range of annual increases in water purchase rates was utilized, based on historical trends from the International Water Association.</p> <p>This analysis did not consider any resilience investments, private water sources (e.g. wells) or downstream customer impacts.</p>
Managerial Approach	<p>As an example of our global water management efforts, for more than a decade our Clinton, Indiana manufacturing location has been reducing groundwater withdrawal for site operations, through projects such as a wastewater treatment membrane bioreactor, repairs to underground fire main headers and improved cooling tower chemistry and maintenance. Between 2008 and 2022, annual well water withdrawal at the site dropped from 2.3 billion gallons to 1.1 billion gallons. In 2022, we completed a</p>

water recycling project at the Clinton site that will reduce well water withdrawal related to one of the cooling towers supporting the manufacturing process.

The Clinton facility has also reduced municipal water discharge by over 5 million gallons per year, through beneficial reuse of wastewater for irrigation and by converting a grass covered area to a drought-tolerant native prairie habitat.

In the future, we seek to complete a global water scarcity evaluation and establish a global water use reduction target.

*(Note: The locations identified on the below maps indicate Elanco locations and/or those of critical suppliers. Smaller green circles represent areas of lesser risk. Larger yellow or red circles represent areas of greater risk.)*

**Global Exposure to Drought, High Carbon Scenario (2022)**



**Global Exposure to Drought, High Carbon Scenario (2050)**



## Transition Risk – Cost and availability of fossil fuels

Risk Type	Market
Time Horizon(s)	Medium term (2030-2040)
Description	<p>Impacts to the cost and availability of fossil fuels include increased expenditures and/or operational disruption from lack of resources, additional costs from a transition to low carbon fuels, taxes from extended fossil fuel use, and/or reputational damage.</p> <p>Worldwide fossil fuel use could continue at the same pace, which may cause increased demand or decreased availability due to dwindling fossil fuel reserves – leading to increased commodity prices for companies such as Elanco.</p>
Impact to Business	<p>Primary potential financial impact: Increased indirect (operating) costs, e.g. incremental natural gas and electricity costs at owned and operated facilities</p> <p><u>Likelihood</u>: Very likely</p> <p><u>Magnitude of impact</u>: Medium-high</p> <p><u>Explanation of potential financial impact (internal methodology)</u>:</p> <p>Potential increases in natural gas and electricity costs were assessed by multiplying 2022 energy costs by the projected future change in costs. Financial risk was only estimated for sites under operational control where primary data was available. Changes in natural gas prices were gathered from the World Energy Outlook (2022). Changes in electricity prices were gathered from the Network for Greening the Financial System (NGFS). We applied a +/- 5% uncertainty range to the portfolio total to demonstrate the range of potential outcome.</p> <p>Due to limited data availability, this analysis did not consider changes in electrical grid mixes, renewable energy standards or renewable energy certificates, potential on-site energy generation or upstream costs for transportation and distribution.</p>
Managerial Approach	<p>We’re implementing numerous energy efficiency programs across the globe, to drive cost savings and reduce our emissions footprint.</p> <p>One of our largest manufacturing sites (in Kiel, Germany) implemented numerous energy efficiency projects during 2022, continuing strong momentum since the introduction of a formal energy action plan in 2016. Examples include:</p> <ul style="list-style-type: none"> <li>• Upgrading to LED lighting across several buildings</li> <li>• Enhancing HVAC settings to account for time of day and number of individuals present</li> <li>• Optimizing laundry equipment settings to reduce electricity and natural gas use, in partnership with our laundry contractor</li> </ul> <p>These projects are expected to save over 45,000 kWh of electricity each year. The team at Kiel is continuing efficiency efforts in 2023, prioritizing further lighting</p>

	<p>improvements, heating efficiency projects and air leakage reduction initiatives to reduce energy use even further.</p> <p>Other 2022 efforts to reduce energy and greenhouse gas (GHG) emissions across our operations include:</p> <ul style="list-style-type: none"> <li>• Completing a carbon footprint analysis, installing an energy monitoring system and optimizing HVAC settings at our manufacturing site in Huningue, France</li> <li>• Installing LED lighting at our manufacturing facility in Fort Dodge, Iowa – estimated to save over 273,000 kWh annually</li> <li>• Optimizing HVAC settings and commencing real-time energy monitoring at our manufacturing site in Clinton, Indiana</li> </ul> <p>We also continue to progress toward our goal to source 100% renewable electricity by 2030. Our strategy includes selecting green tariffs and other renewable grid electricity options from local providers and exploring power purchase agreements (PPAs) that can secure a long-term supply of renewable electricity by contracting directly with solar or wind power developers. Furthermore, we are considering opportunities for on-site solar arrays at Elanco properties with physical space and attributes that could support such installations.</p>
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**Transition Risk – Cost and availability of raw materials**

Risk Type	Market
Time Horizon(s)	Medium term (2030-2040)
Description	<p>Impacts due to the cost and availability of raw materials, such as active pharmaceutical ingredients (APIs), may include decreased margins from higher manufacturing costs, shifts in company strategy and resilience, loss of customers or market share due to changes in availability of raw materials or required changes in Elanco’s pricing structure – as well as supply chain bottlenecks, delays and/or disruptions.</p> <p>Many chemicals, solvents and other feedstocks used for APIs are derived from fossil fuels and are energy intensive to manufacture into APIs. Elanco’s ability to produce and sell products could be impacted by potential changes in the cost and availability to produce key APIs.</p>
Impact to Business	<p><u>Primary potential financial impact:</u> Increased indirect (operating) costs</p> <p><u>Likelihood:</u> Very likely</p> <p><u>Magnitude of impact:</u> Medium-high</p> <p><u>Explanation of potential financial impact (internal methodology):</u></p> <p>At this time, it is not possible to directly quantify the changing cost and availability of APIs due to a lack of public research on the relationship between climate change and API prices. However, Elanco is evaluating key metrics to support future quantification of this risk, such as energy or emissions intensity related to manufacturing reported by</p>



	our key suppliers. This may provide additional insight on the fuel requirements or other dependencies that influence this transition risk.
Managerial Approach	<p>Elanco’s manufacturing supply chain management organization seeks to ensure availability of APIs and other significant raw materials by focusing on near-term operational issues such as physical materials availability and logistics – which includes certain climate-related impacts, such as floods. We also monitor cyber-related risks such as secure remote access and dynamic inventory assessment – as well as geopolitical risks, such as relations with countries such as Russia and China.</p> <p>We seek to expand our risk management activities to include additional climate transition-related impacts such as increasing costs and/or regulatory issues impacting manufacturers of our APIs and other raw materials.</p>

**OPPORTUNITIES**

Climate change-related factors with the potential to negatively impact the health and well-being of animals may also create opportunities for Elanco, as we work to support pet owners and livestock producers seeking to raise healthy animals, as well as customers seeking to reduce the environmental footprint of their operations.

**Opportunity – Product opportunities from novel/increased animal diseases and pests**

Opportunity Type	Market
Time Horizon(s)	Short term (Present-2030)
Description	Parasitic disease patterns shift in response to changing climate conditions. A changing climate may lead to biodiversity losses and/or population movement, causing increases in animal diseases and pests, such as fleas and ticks. Elanco could have opportunities to develop new products and/or expand sales of existing products to help customers mitigate the impacts of novel and/or increasing diseases and pests. This could lead to shifts in company strategy, resilience or research and development investments – as well as access to new markets and/or customers, and revenue and company growth.
Impact to Business	<p><u>Primary potential financial impact:</u> Increased revenues from increased demand for products/services related to novel/increased animal diseases and pests, e.g. additional sales of flea and tick products</p> <p><u>Likelihood:</u> Very likely</p> <p><u>Magnitude of impact:</u> Medium</p> <p><u>Explanation of potential financial impact (internal methodology):</u></p> <p>Due to a lack of public research, a wide study on the influence of climate change on new and worsening diseases and pests specific to farm and companion animals was not available. Because of that, Elanco focused on a sub-category of this opportunity specific to increased flea and tick populations from global rising mean temperatures.</p>



	<p>A potential increase in sales was estimated by multiplying recent (2022) and anticipated annual revenue from flea and tick products by the estimated increase in market demand.</p> <p>A multiple linear regression of historical Lyme disease incidence and the deviation from global mean temperatures was used to help predict future Lyme disease incidence – an indicator for tick populations which we used as a proxy for increased market demand.</p> <p>There is also a significant, unquantifiable opportunity to promote animal welfare by mitigating and preventing the medical impacts of these diseases and pests on farm and companion animals.</p>
Managerial Approach	<p>Elanco has one of the broadest parasiticide portfolios in the pet health sector based on indications, species and formulations – with products that protect pets from intestinal parasites, fleas and ticks. Seresto™ -- as well as Advantage™, Advantix™ and Advocate™ (collectively referred to as the Advantage Family of products) – are over-the-counter treatments for the elimination and prevention, respectively, of fleas and ticks, and complement our prescription parasiticide products, Credelio™, Credelio Plus, Interceptor Plus™ and Trifexis. We expect to continue investing in innovation, to bring additional solutions to the space.</p> <p>The Managing Animal Health and Acaricides for a Better Africa (MAHABA) initiative is a collaboration between Elanco and GALVmed (The Global Alliance for Livestock Veterinary Medicine), with support from the Bill and Melinda Gates Foundation – to aid small-scale beef and dairy producers in Uganda and small-scale cattle and poultry producers in Nigeria. Livestock farming is a significant source of food and income in these countries. At the same time, direct and indirect effects of tick infestations negatively impact animal health and output, and the economic stability of area small-scale livestock producers. Treatment failures and tick resistance are prevalent in the region, due to a lack of education and resources that lead to inappropriate selection of chemical classes and application of acaricides. Through MAHABA, we seek to equip small-scale producers in Uganda and Nigeria with quality acaricides and education, to help them realize significant livestock productivity gains by better managing ticks and the impact of tick-borne disease.</p>

**Opportunity – Product opportunities from climate impacts of and to farm animals**

Opportunity Type	Market
Time Horizon(s)	Short term (Present-2030)
Description	<p>Changing climate conditions – including drought, extreme weather events and rising mean temperatures – may negatively impact the health and productivity of farm animals. In addition, the agricultural industry may experience heightened pressure from stakeholders to reduce its sizeable emissions of greenhouse gases. These impacts could result in changes in animal ownership (e.g., herd sizes), changes in the cost of ownership (e.g., feed prices), shifts in animal management (e.g., focus on production efficiency) and/or changes in regulations (e.g., methane-reduction initiatives).</p>



	Elanco has an opportunity to expand current product offerings and/or develop new products to help customers address and mitigate these impacts.
Impact to Business	<p><u>Primary potential financial impact:</u> Increased revenues from increased demand for products/services related to climate impacts of/to farm animals</p> <p><u>Likelihood:</u> Very likely</p> <p><u>Magnitude of impact:</u> Medium</p>
Managerial Approach	<p>Operational sustainability is just as important to our customers as it is to Elanco. We're committed to supporting our livestock customers as they seek to maximize productivity and reduce their environmental footprint. Our products and services can help customers reduce feed inputs per animal, increase beef and dairy yield from the same size herd and operate more sustainably with fewer overall methane or ammonia emissions.</p> <p>Our four-pillar approach to supporting customer GHG emissions reductions includes:</p> <ul style="list-style-type: none"> <li>• <b>Innovation:</b> Through research, development and strategic partnerships, we offer products and services that can directly lessen emissions.</li> <li>• <b>Measurement:</b> We're developing tools our customers can use to measure their GHG emissions, establish baselines and demonstrate improvement.</li> <li>• <b>Value creation:</b> We're helping establish capital markets that can reward producers for GHG emissions reduction progress.</li> <li>• <b>Coalition:</b> We collaborate with customers and non-government organizations to establish industry protocols and disseminate best practices that can catalyze broader systemic change.</li> </ul> <p><a href="#">Rumensin™</a> is a product that decreases enteric methane emissions of beef and dairy cattle. Rumensin helps beef and dairy farmers produce more meat and milk using fewer natural resources. Rumensin can reduce the enteric emissions of dairy cows<sup>1</sup> and beef cattle up to 5.4% – and can reduce the amount of feed needed for beef cattle up to 10%.<sup>2</sup></p> <p>Launched in 2021, <a href="#">Experior®</a> is the first FDA approved product with an environmental claim to help reduce ammonia gas emissions per pound of carcass weight in cattle fed in confinement. When fed at the approved doses and duration, Experior reduced ammonia gas emissions an estimated 16%, according to clinical research studies.<sup>3</sup></p> <p>Bovaer® (3-NOP) is a first-in-class methane-reducing product for beef and dairy cattle currently approved in Europe, Brazil, Chile, Australia and other jurisdictions. Bovaer consistently reduces enteric methane emissions approximately 30% for dairy cows and</p>

<sup>1</sup> Marumo, LaPierre, and Van Amburgh. Enteric Methane Emissions Prediction in Dairy Cattle and Effects of Monensin on Methane Emissions: A Meta-Analysis. <https://pubmed.ncbi.nlm.nih.gov/23769353/>

<sup>2</sup> Appuhamy, Jayasundara, et al., Anti-methanogenic Effects on Monensin in Dairy and Beef Cattle: a Meta-analysis, <https://pubmed.ncbi.nlm.nih.gov/23769353/>

<sup>3</sup> <https://animaldrugsatfda.fda.gov/adafda/app/search/public/document/downloadFoi/5005>





	<p>even higher percentages for beef cattle.<sup>4</sup> Elanco obtained exclusive rights to manufacture and sell Bovaer in the U.S from DSM. We continue to have a path toward FDA approval in the first half of 2024.</p> <p>We have a public goal – through our products, innovation, services and tools – to help our customers avoid 21 million metric tons of GHG emissions from their farms by 2030 (2020 base year). Customers using Rumensin between 2020 and 2022 collectively avoided an estimated 7.2 million metric tons of GHG emissions (CO<sub>2</sub>e) – approximately equivalent to removing 1.6 million passenger cars from the road annually.<sup>5</sup></p> <p>For more information, see our <a href="#">2022 ESG Report</a> and <a href="#">livestock sustainability</a> website.</p>
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**RISK MANAGEMENT**

We recognize extreme weather events or climate-related natural disasters may impact our ability to operate and serve our customers. Climate change-related factors may also negatively impact the health and well-being of farm animals as well as our customers’ ability to raise healthy livestock. And as climate change impacts may create economic downturns, such developments could potentially negatively affect pet owners’ ability to provide veterinary care for their pets. This, in turn, could lead to reduced demand for Elanco’s products and services.

Elanco and our affiliates are subject to various environmental, health and safety laws and regulations that apply in the different jurisdictions in which we operate. work to

*Climate Risk and Opportunity Assessment – Scenarios*

In 2023, Elanco engaged a third-party consultant to facilitate and conduct a climate risk and opportunity assessment and scenario analysis aligned with TCFD recommendations. We analyzed two scenarios – high carbon and low carbon.

Based on the latest climate science, Elanco chose to assess climate risks and opportunities using Shared-Socioeconomic Pathway (SSP) scenarios, which aligns with Elanco’s long-term sustainability goal timeline (2030) and the most likely future outcomes. The low carbon scenario used for assessing physical chronic and acute risks was defined by the SSP1-2.6 pathway. The high carbon scenario used for assessing physical chronic and acute risks was defined by the SSP2-4.5 pathway. SSP1-2.6 is aligned with the 2.0°C warming limit defined by the Paris Agreement – while SSP2-4.5 follows a slower, less accelerated decrease in emissions that results in warming of 2.7°C by the end of the century.

Elanco recognizes additional best-case and worst-case scenarios are possible. However, we decided to utilize SSP1-2.6 and SSP2-4.5 to test the most likely situations to occur – given current policy initiatives, such as nationally determined contributions (NDCs) pledged under the Paris Agreement or other individual country pledges made through September 2022. In addition, the physical climate impacts of the selected scenarios do not differ significantly until after 2050 (beyond the long-term time horizon identified by Elanco for this analysis).

The climate scenarios used for assessing identified transition risks and opportunities incorporated International Energy Agency (IEA) Stated Policies and Announced Pledges scenarios to compare what

<sup>4</sup> [https://www.dsm.com/content/dam/dsm/corporate/en\\_US/documents/summary-scientific-papers-3nop-booklet.pdf](https://www.dsm.com/content/dam/dsm/corporate/en_US/documents/summary-scientific-papers-3nop-booklet.pdf)

<sup>5</sup> EPA. Greenhouse Gas equivalencies calculator. <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>



government policies currently align with a 2.7°C in 2100 scenario, and where future policies match current government pledges (aligned with 2.0°C in 2100).

Elanco's chosen scenarios for this analysis (sourced from IPCC and IEA) have been peer-reviewed, issued by independent organizations and supported by publicly available data sets. The chosen scenarios present two feasible future conditions against which Elanco can compare our business operations, assess the materiality of climate-related risks and opportunities, and evaluate potential business impacts.

#### *Climate Risk and Opportunity Assessment – Analysis Process*

Our assessment began with a benchmarking exercise and gap analysis to gain comprehensive understanding of the type and level of climate-related reporting detail demonstrated among peer companies and other business leaders, as well as the most commonly identified climate risks and opportunities for the pharmaceutical and animal health industry. We then conducted interviews of key internal stakeholders across multiple departments, including business continuity; risk management; HSE; corporate strategy; corporate affairs; innovation; procurement; ESG and sustainability; finance and investor relations. These discussions informed a list of the top climate-related risks and opportunities likely to be relevant for Elanco.

We analyzed data using a mix of quantitative and qualitative methods. Our consultant used high-resolution climate data to model the likely exposure to physical climate hazards of the top owned, operated and third-party facilities – prioritized by revenue and asset value.

Physical risks assessed in this analysis include:

- Flooding
- Precipitation
- Wind
- Rising mean temperature
- Heat waves
- Cold
- Severe storms
- Wildfires
- Sea level rise
- Drought

For transition risks, the team leveraged company financial data to assign exposure scores for each identified market, technology, reputation and policy/legal risk.

We also discussed which risks may materialize as an opportunity. Internal stakeholders were surveyed to rate the company's vulnerability to each of the identified risks and opportunities.

Combined, these factors helped us identify the top seven climate-related risks and opportunities representing the greatest potential financial, strategic and/or environmental impact to the company. The company prioritized risks based on the likelihood and impact of the risk, and prioritized opportunities based upon several factors – including climate change impacts on animal health and the business operations/strategy of our customers.

The quantifiable measures used to estimate impact on our business include, among others:

- Changes in revenue
- Changes in operational costs

- Potential financial impact due to loss of productivity to our people, property damage and/or additional expenses such as business downtime

### Leading Climate-related Risks (Summary)

For full details see the Strategy section of this report.

Category	Risk Type	Description	Time Horizon
Physical Risk	Acute	<b>Severe storms</b> may cause facility damage and/or lost revenue due to business downtime	Short term
	Chronic	<b>Rising mean temperatures</b> may increase cooling costs and health impacts at operational locations and/or cause downstream disruption to farm animal customers	Medium term
	Chronic	<b>Long-term drought</b> may cause increased operational disruption at manufacturing sites and/or downstream impacts to farm animal customers	Long term
Transition Risk	Market	The shifting <b>cost and availability of fossil fuels</b> may cause increased operational expenditures and/or upstream supply chain disruptions	Medium term
	Market	Changing <b>cost and availability of raw materials</b> (such as APIs) may cause manufacturing disruptions or delays, increase costs and/or tighten margins	Medium term

### Leading Climate-related Opportunities (Summary)

For full details see the Strategy section of this report.

Opportunity Type	Description	Time Horizon
Market	Expand current products and develop new products to help customers address the increasing <b>climate impacts of and on farm and companion animals</b>	Short term
Market	Help mitigate the impacts of <b>novel and/or increased diseases and pests</b> by expanding availability of existing relevant products and/or developing new products	Short term

Historically, Elanco has not experienced significant disruptions or property damage from extreme weather events at its owned and operated facilities. Overall, our climate risk and opportunity assessment and scenario analysis also demonstrated that Elanco has low exposure to physical risks across both climate scenarios. However, we expect to analyze critical and strategic sites with high exposure and pursue opportunities to conduct cost-benefit analysis of potential mitigation measures. In the future, we also expect to increase visibility into our supply chain to better understand our resilience to upstream climate disruptions.

For transition risks and opportunities, we will continue to develop our strategy to lower GHG emissions across our operations and value chain, monitor key policy changes that impact our business and customers, engage with customers to better understand/help them manage their environmental impacts, and engage with leading suppliers to collect better emissions data and mutually identify ways to reduce carbon emissions. Additionally, we expect to engage with internal stakeholders to build awareness around key climate risks and opportunities, and develop action plans. We're also working to improve data availability to enable more granular analysis of climate risks in the future.

These efforts will be championed by our global ESG and sustainability team, in collaboration with departments across the business – such as risk management, HSE, procurement, supply chain, manufacturing and quality, R&D, marketing, commercial/sales affiliates, and others.

### *Enterprise Risk Management*

We maintain an enterprise risk management (ERM) program to identify, assess, manage, monitor and report any risks that may have an impact on our business – including potential risks related to the health and safety of our people and the planet. We implement and regularly update business continuity plans and risk mitigation measures that strengthen our operational resilience and protect our ability to navigate uncertainties – such as governmental policy development, seasonal changes in risk exposure, and potential impacts to our supply chain.

Elanco considers climate-related risks as part of our overall ERM efforts and analysis framework. Based on the results from our 2023 climate risk and opportunity assessment and scenario analysis, Elanco expects to identify and prioritize risk management strategies that align with our leading climate-related physical and transitional risks, including risk avoidance, transfer and mitigation – as well as the pursuit of climate-related opportunities.

For details on our integrated approach to climate-related risks – including Board and executive oversight – please visit the Governance section of this TCFD disclosure, our annual [ESG Report](#) and our collection of ESG [issue briefs](#).

If applicable, information on financially material environmental or other business risks may be found in our [Form 10-K](#).

### **TARGETS**

Targets	2022 Progress
Source renewable electricity equivalent to 100% of our electricity consumption by 2030	We sourced >13% of electricity from renewable sources in 2022.
Track and implement programs to reduce Scope 1 and Scope 2 GHG emissions	We expanded our 2022 GHG emissions reporting boundary to reflect our operational control as defined by the GHG Protocol <sup>6</sup> – which includes our fleet and all owned and operated global locations. We're working across our sites to understand regional energy efficiency and opportunities for renewable energy programs.

<sup>6</sup> The Greenhouse Gas Protocol (2004) A corporate accounting and reporting standard: revised edition.

Develop a comprehensive approach to address Scope 3 emissions	We're now disclosing 2021 and 2022 Scope 3 GHG emissions representing the 11 categories relevant to Elanco.
Through our products, innovation, services and tools, help our customers avoid 21 million metric tons of GHG emissions from their farms by 2030 (2020 base year)	Customers using Rumensin between 2020 and 2022 have collectively avoided an estimated 7.2 million metric tons of GHG emissions (CO <sub>2</sub> e).

## METRICS

We continue to enhance our systems and data availability in an effort to meet stakeholder expectations and align with disclosure requirements forthcoming in many of the jurisdictions where we operate. As part of our continuous improvement program, 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. Our enhanced emissions inventory will enable us to set a comprehensive Scope 1 and 2 emissions reduction target. We are also considering future certification of our emissions reduction goals from the Science Based Targets Initiative.

Our Scope 1 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. For 2022, we added emissions calculations to reflect all owned and leased locations – as well as production-related emissions, such as fermentation.

Our Scope 2 emissions relate primarily to purchased electricity at owned and leased facilities, and for 2022 we incorporated the positive impact of renewable electricity purchases on our reported market-based emissions, as we advance toward our 100% renewable electricity goal.

In the first half of 2023, we completed a comprehensive analysis of our 2021 and 2022 Scope 3 emissions, which we [disclosed](#) for the first time in our 2022 ESG reporting. We determined 11 of the 15 Scope 3 categories identified by the GHG Protocol are relevant to Elanco's business.

### *Renewable Electricity*

We continue to progress toward our goal to source 100% renewable electricity by 2030. Our strategy includes selecting green tariffs and other renewable grid electricity options from local providers and exploring power purchase agreements (PPAs) that can secure a long-term supply of renewable electricity by contracting directly with solar or wind power developers. Furthermore, we are considering opportunities for on-site solar arrays at Elanco properties with physical space and attributes that could support such installations.

In 2022, we sourced >13% of electricity from renewable sources. Several of our sites take advantage of renewable options offered by local energy providers:

- In 2022, our manufacturing site in Kiel, Germany began operating on 100% renewable grid electricity sourced from wind power.
- In 2022, 100% of electricity purchased at our manufacturing site in Fort Dodge, Iowa was generated from renewable sources.
- In 2022, our affiliate office in Macquarie Park, Australia began purchasing 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.

For more information, see our [GHG and Energy issue brief](#).

#### *All Environmental Metrics*

For a comprehensive view of our environmental metrics, please view our [ESG Key Performance Indicators \(KPIs\)](#) web page. Environmental disclosures include:

- Electricity
  - Total electricity (absolute and intensity)
  - Renewable electricity (absolute and percentage)
- GHG Emissions (absolute and intensity)
  - Scope 1
  - Scope 2 (market and location-based)
  - Scope 3 (11 of 15 categories are applicable to Elanco)
- Waste (absolute and intensity), including hazardous waste and waster recycled, incinerated, reused or landfilled
- Water (absolute and intensity), including water use/intake and discharge, and water use/intake in areas of water stress