

# Climate Change



- Scientific evidence supports that anthropogenic climate change poses a threat to human and animal health globally.
- As a global health care company, we support policies that help mitigate and adapt to climate change.
- Our Company is taking action to mitigate our impact on and adapt to climate change.

## Our Position

Scientific data supports that anthropogenic climate change is occurring, and we are taking action to reduce the economic, human, and animal health risks associated with a changing climate. Our Company supports international and national level measures to address the challenges presented by climate change, including market-based instruments and regulatory mechanisms that create economic incentives for researching, developing, and deploying low-carbon and renewable-energy technologies.

### 1. Climate Policy Principles

We support the principles of the Paris Climate Agreement, which created a global framework to combat climate change. The goal of the agreement is to limit global temperature rise to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels.

Our Company's position on climate change is guided by the following principles:

- Climate-related goals and associated regulatory frameworks must be science-based and align with the effort to keep global temperature rise to well below 2°C, preferably to 1.5°C
- Regulatory frameworks should be designed to encourage energy conservation and stimulate private sector innovation and investment
- Sustainable finance will be a key tool to unlock technological and organizational advancements to both combat and adapt to the change in climate
- Public policies should promote the development, use and storage of energy from renewable sources
- Public policies must address the links between climate change, water scarcity, risk of biodiversity loss, deforestation, and public health risks
- Public policies should allow and plan for appropriate adaptation and mitigation measures,

including water conservation and management programs in areas of high-water risk, and initiatives to strengthen health systems in targeted regions

- Public disclosures should align with global frameworks and should represent core elements of how organizations operate: governance, strategy, risk management and metrics and targets

## 2. Governance

Our Environmental, Health and Safety (EHS) Council is a cross-functional body, chaired by our General Counsel, with leadership representation from each area of our business, and is responsible for overseeing our environmental sustainability strategy, policy, and risk mitigation controls. It monitors performance against our targets and increases transparency on environmental matters within the Company, the Executive Team (ET), and the Board.

## 3. Reducing Our Impact

We conducted an impact materiality assessment in 2023 to focus, act, and report on the most critical potential business risks and opportunities that influence our ability to create value. Climate change risks and management have once again emerged as a priority topic, just as it did in our 2015, 2018 and 2021 materiality assessment. Our Company has adopted and achieved several GHG-reduction goals over the last decade. In 2023 we committed to reaching net-zero greenhouse gas emissions (GHG) by 2045 across Scopes 1, 2 and 3, aligned with the Science Based Target initiative's (SBTi) criteria, building on our near-term targets set in 2021 to reduce our Scope 1 and market-based Scope 2 absolute GHG emissions 46 percent by 2030 from a 2019 base year<sup>i</sup>. Feedback and engagements with our stakeholders, including customers and trade organizations, has played a key role in shaping our strategy, helping us align our targets with growing external expectations and industry momentum.

We believe that reducing GHG emissions can provide both environmental and business benefits. Our efforts to reduce energy demand through energy conservation, improved operating efficiency, and increased reliability have resulted in significant cost savings, which contributes to the company's long-term financial strength. Seeking diversity in our energy supply can reduce risk to our operations, provide budget certainty, allow the flexibility to shift to new, efficient technologies, and accelerate our net-zero transition.

## 4. Our Commitment to Renewable Energy

We recognize that renewable energy is cost-effective in many applications, and that these technologies will be needed to achieve significant reductions in GHG emissions worldwide. Photovoltaic arrays, wind turbines, and other renewable-energy installations avoid emissions and help reduce energy-demand peaks.

Our Company has set bold renewable energy targets. We are committed to sourcing 100 percent of our purchased electricity from renewable sources.

## 5. Our Approach to our Value Chain

We realize that to make a truly meaningful reduction in our overall environmental impact, we must engage with our suppliers to drive positive change. Our Company and suppliers must accept our shared impact and utilize our expertise, experiences, and influence to drive action. Our near-term Scope 3 reduction target, to reduce our emissions 30% by 2030 from a 2019 baseline, has been validated by the SBTi and aligns with our net-zero target of 2045. We believe that strengthening our supplier engagement is a way to de-risk our supply and create opportunity.

## 6. Mitigation and Adaptation

To mitigate our own impact on the climate and support the achievement of our climate goals, we have created net-zero roadmaps to guide our progress to help identify and implement emission reduction activities across Scopes 1, 2 and 3. We continuously explore ways to decrease our energy demand and increase the amount of renewable energy we purchase. In our Business Partner Code of Conduct, we request that suppliers conserve energy and engage in activities aimed at reducing GHG emissions. Our Procurement team engages strategic suppliers to reduce the environmental impacts within our supply chain.

Our Company believes that climate change could present risk to our business. We are adapting to a changing climate by integrating climate-related physical and transition risk into our Enterprise Risk Management process, following the same identification, assessment, and management principles as any other risk type. These potential risks are incorporated into our Company's adaptation business planning.

## 7. Reporting on our Performance

We are committed to measuring our progress in reducing energy use and GHG emissions and reporting our progress to stakeholders in a timely and transparent manner. Our reporting practices include:

- Annual reporting of GHG emissions to regulatory agencies as required by local, state and national laws
- Annual disclosure of performance against GHG and energy targets in voluntary reports.

## 8. Stakeholder Engagement

We regularly conduct a climate policy alignment assessment of trade associations by determining whether they had publicly disclosed formal positions on climate change and, if so, reviewing those positions in the context of ours. We help shape perspectives and share best practices within the industry via our membership in European Federation of Pharmaceutical Industries and Associations (EFPIA), the International Federation of

Pharmaceutical Manufacturers & Associations (IFPMA), the American Chemical Society Green Chemistry Institute Pharmaceutical Roundtable (ACS GCIPR), and The Conference Board (TCB).

We are also working with other members of the Pharmaceutical Supply Chain Initiative (PSCI) to communicate our sustainability expectations with our suppliers.

We are one of the founding members of the Energize Program, a collaboration of global pharmaceutical companies, which aims to accelerate the adoption of renewable energy and reduce GHG emissions within the pharmaceutical value chain. The program provides education on renewable energy adoption and contracting with suppliers who may not otherwise have internal resources or expertise available to participate in renewable energy markets.

We believe the business community must be engaged on this issue in a constructive and meaningful way by promoting science-based solutions that will be a crucial part of the transition to a low-carbon economy.

## Background / Context

In its 2023 Sixth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) examined both global and regional impacts and concluded that, “Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020. Climate change is a threat to human well-being and planetary health.”

Changes to the environment impact both human and animal health. A warming climate, loss of biodiversity, onset of droughts, and the aftermath of extreme weather events can propagate the spread of disease and will require new solutions. As a global healthcare company, we recognize that we have an obligation to identify and respond to the public health risks associated with climate change, as well as mitigate our own impacts on the climate.

In addition to adding our voice to the call for action, our Company’s Environmental Sustainability strategy has three focus areas: 1) Driving operational efficiency; 2) Designing new products to minimize environmental impact; and 3) Reducing any impacts in our upstream and downstream value chain.

## Definitions and Scope

**Scope:** The position covers all global company operations, research laboratories, manufacturing facilities, and the value chain, including business partner expectations and community collaboration.

### Definitions:

*Purchased Electricity:* We define “purchased electricity” as electricity sourced from external suppliers as well as renewable electricity that was generated and utilized on-site where we retained the renewable attributes or where we have obtained renewable attributes through contract.

*Scope 1:* Direct emissions from owned or controlled sources (e.g., burning fossil fuels in company-owned boilers, fugitive emissions from refrigerant gases, process emissions)

*Scope 2:* Indirect emissions from the generation of purchased energy (e.g., purchased electricity, steam, cooling water)

*Scope 3:* Indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions (e.g., purchased goods and services, employee commuting, business travel, waste disposal)

*Net-zero science-based target:* A GHG mitigation target that implies: Reducing scope 1, 2, and 3 emissions to zero or a residual level consistent with reaching global net-zero emissions or at a sector level in eligible 1.5°C-aligned pathways; and permanently neutralizing any residual emissions at the net-zero target year and any GHG emissions released into the atmosphere thereafter.

## References

[American Chemical Society Green Chemistry Institute Pharmaceutical Roundtable \(ACS GCIPR\)](#)

[Energize Program](#)

[European Federation of Pharmaceutical Industries and Associations \(EFPIA\)](#)

[Greenhouse Gas \(GHG\) Protocol](#)

[International Federation of Pharmaceutical Manufacturers & Associations \(IFPMA\)](#)

[IPCC Sixth Assessment Report](#)

[Merck Sustainability Overview](#)

[Paris Agreement](#)

[Pharmaceutical Supply Chain Initiative \(PSCI\)](#)

[Science Based Targets Initiative \(SBTI\)](#)

[The Conference Board \(TCB\)](#)

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<sup>i</sup> The target boundary includes biogenic emissions and removals from bioenergy feedstocks.