

BIOGEN Climate Change Position

The World Health Organization identifies climate change as “the greatest threat to global health in the 21st century.”¹ The direct and indirect impacts to health are already being felt in many ways, including the spread of infectious diseases, lower air quality and increased frequency of extreme weather events. These challenges place the greatest burden on the most vulnerable and least-served portions of our society – notably children, the elderly, low-income families, communities of color and people who have pre-existing health conditions.

Climate change also poses business risks. It threatens global stability,² which could affect Biogen’s ability to make our advanced therapies accessible to more people around the world. Immediate and sustained action is needed to reduce anthropogenic greenhouse gas (GHG) emissions and avoid the most severe consequences to human health and planetary wellbeing.

As a science-based company, Biogen supports the conclusions of the Intergovernmental Panel on Climate Change (IPCC). At COP21 Paris in December 2015, 195 countries, including the United States, agreed upon the overwhelming scientific evidence that we need to keep global temperature rise below 2°C. In 2019, IPCC confirmed the new consensus that we must limit warming to no more than 1.5°C and do so by reaching net zero emissions by mid-century.

International bodies and national governments play an important role in fulfilling our collective obligations under the Paris Agreement by providing a framework for a transition to a low-carbon economy. We believe the role of government also includes the following: setting targets and performing transparent tracking and reporting progress, implementing market-based mechanisms that spur investment in cost-effective renewable energy, supporting innovation and removing barriers to the transition to low-carbon solutions, and promoting and supporting appropriate climate adaptation measures.

Addressing the climate challenge requires the private sector to go beyond regulatory requirements. Businesses must take responsibility for GHG emissions from their operations and throughout their value chain, improving the energy efficiency of operations and products and transitioning to low carbon or emissions-free energy.

As a responsible life sciences company committed to improving human health, Biogen has aligned our climate strategy, Healthy Climate, Healthy Lives™, with guidance on the scale of action needed to limit warming to no more than 1.5°C. We are advancing the United Nations Sustainable Development Goal (SDG) 13: Take urgent action to combat climate change and its impacts at the same time we promote SDG 3: Ensure healthy lives and promote wellbeing for all at all ages.

Healthy Climate, Healthy Lives goes far beyond our 2014 carbon neutral commitment. With this initiative, we aim to eliminate fossil fuels across our operations and work with global organizations to advance the science and improve health, starting with the elimination of fossil fuel combustion across our global operations by 2040.

We increased the ambition of our science-based target in 2020 to reflect this fossil fuel free goal:

Biogen commits to reduce absolute Scope 1 + 2 GHG emissions 55% by 2032 from a 2019 base year and 100% by 2040 without the use of direct land use or carbon capture technologies.

Biogen also commits that 80% of its suppliers by spend covering purchased goods and services and capital goods, will have science-based targets by 2025.

Biogen acknowledges the benefits of carbon neutrality and net zero; however, neither fully addresses the negative health impacts of other fossil fuel emissions, such as particular matter and sulfur dioxide. Biogen's aim to be fossil fuel free goes far beyond net zero to actual zero, and addresses the interconnected nature of climate and health.

To achieve these goals and address the challenges of climate, health and equity, Biogen will invest \$250 million over 20 years. We have established a holistic long-term plan that focuses on maintaining 100% renewable electricity, electrifying our buildings and fleet, accelerating the integration of green chemistry into all stages of product development, addressing fossil fuel-derived plastics, increase investments in high-performing ESG (environmental, social and governance) companies and funds, and supporting our suppliers as they transition their own operations away from fossil fuels.

Leadership on climate change also means engaging stakeholders, sharing best practices, and advocating for sustainable climate policies. We actively participate in initiatives that include:

- In 2014 we joined the RE100 Initiative and achieved our target of 100% renewable electricity.
- In 2015 we joined the We Mean Business coalition and signed the American Business Act on Climate Pledge in support of the COP21 conference target of limiting warming to less than 2°C.
- In 2017 we joined the Science Based Target community with an approved science-based target.
- In 2020 we joined the EV100 initiative to electrify our 1,500+ vehicle fleet by 2025 and we are the first U.S. pharmaceutical company to join the Business Ambition for 1.5°C.

We also plan to extend our focus on innovation and expand collaborations that address human health, the climate crisis, and the link between the two. We are collaborating with global leaders including the [Harvard T.H. Chan Center for Climate, Health, and the Global Environment](#), the [MIT Joint Program on the Science and Policy of Global Change and the Technology and Policy Program](#), the United Nations, the World Business Council for Sustainable Development and others to use data science and predictive analytics to drive strategies to mitigate climate and health impacts, influence policy and help improve health outcomes, especially for the world's most vulnerable populations. Biogen is defined by our commitment to changing lives for the better, and we will work fearlessly to achieve it.

"Our Healthy Climate, Healthy Lives initiative further builds on Biogen's long-standing strategy to deal with climate change by addressing the interrelated challenges of climate and health, including in the realm of brain health," said Michel Vounatsos, CEO, Biogen. "Biogen was the first company in the life sciences industry to become carbon neutral. We believe that it is time to take even greater action by implementing a well-defined program that examines how we live, how we do business and how we consume energy. By doing so, Biogen will play its part to address and impact dramatic health disparities among people around the world, as well as build a stronger, more sustainable future for all."

Together, our goal is to create an equitable future where everyone enjoys a healthy climate and a healthy life. It's where science meets humanity.

1 <http://www.who.int/globalchange/global-campaign/cop21/en/>

2 <http://www.defense.gov/News/News-Releases/News-Release-View/Article/605221>

3 Scope 3 emissions are all indirect emissions (not included in emissions from the generation of purchased energy) that occur in the value chain of the reporting company, including both upstream and downstream emissions.