



# HEALTHY CLIMATE, HEALTHY LIVES™

Healthy Climate, Healthy Lives™ is Biogen's groundbreaking initiative to eliminate fossil fuels from our operations and address climate, health and equity – issues that have never been more urgent.



Fossil Fuel Free  
Operations



Engaging  
Employees



Strategic  
Collaborations

## YEAR PROGRESS

In year two, we convened a Scientific Advisory Council to guide our program, analyzed the environmental impact of another three products, and strengthened our plan to reduce scope 3 emissions, setting a science-based target to achieve net zero emissions by 2045. Below are progress highlights across the three pillars of Healthy Climate, Healthy Lives, all designed to foster a healthier, more sustainable and equitable world.





## Fossil Fuel Free Operations

### 2040 GOALS

Zero fossil fuel emissions from Biogen operations

100% Renewable Electricity

All products achieve and sustain more than 90% of green chemistry targets

Eliminate, minimize, or closed-loop recycle all fossil fuel derived plastics

Zero emissions from our fleet

Reduce scope 3 emissions by 90% by 2045 from 2019

### 2-YEAR PROGRESS

6% reduction in direct emissions (2019–2021)

Sustained 100% Renewable Electricity

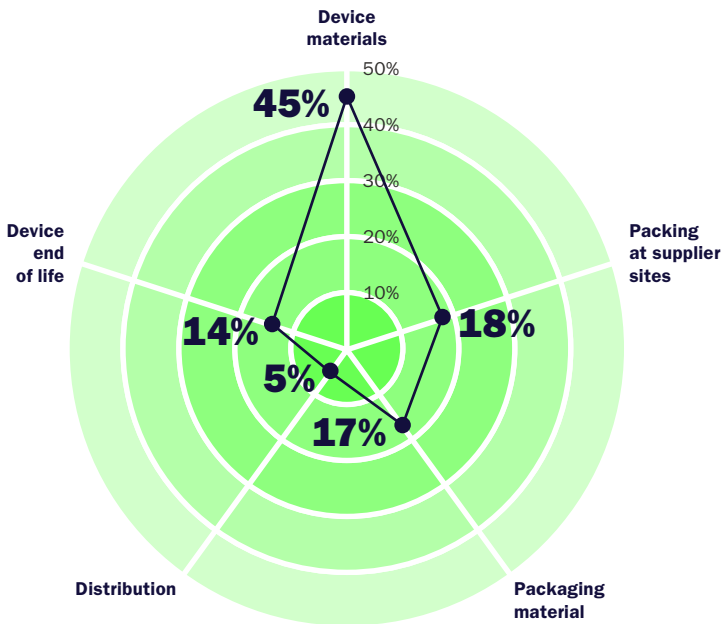
41 Biogen labs enrolled to achieve “My Green Labs” certification

Completed lifecycle analysis for three biosimilars

Grew our electric vehicle program to 12 countries

7% reduction of scope 3 emissions (2019–2021).

18% of Biogen’s top 80% of suppliers, by spend, have SBTi-approved targets



## Addressing Product Lifecycles

In 2022, we completed a life cycle assessment (LCA) of three biosimilars products – Benepali™, Flixabi™ and Imraldi™ – across multiple configurations in France, Germany, Sweden and the U.K. The LCA provided new insights on climate impacts from material selection to manufacturing and distribution to end-of-life. We found that just a few processes are the biggest contributors to our products’ carbon and air pollution footprints. Now, the team is working on an action plan to address these impacts.

## Creating a Culture of Sustainability in Science

Biogen piloted the My Green Labs program in 2021, with 14 labs achieving third-party certification for sustainability practices, including water, energy and plastics. Now, Tooba Gilani, a Senior Associate in EHS, has championed the program’s expansion to 41 labs globally, saying, “the My Green Labs program encourages people who might not have been thinking about sustainability to start acting on it.”

Biogen’s Product and Technology Development team have also been hard at work, developing and implementing their principles for sustainable development. These principles will help to promote environmentally conscious decisions within our operations.



Biogen employee, Tooba Gilani holding up Platinum My Green Lab certificates.



## Engaging Employees

**2040 GOALS**  
Engage employees

Help employees to go fossil fuel free in their homes

**2-YEAR PROGRESS**  
+15% of Biogen employees involved in Healthy Climate Healthy Lives programs

More than 800 employees participating in Biogen’s “green benefits”

## Inspiring and Connecting Employees to Our Goals

Melanie Horkan and Caitlyn Plunkett joined ourIMPACT, Biogen’s employee resource network of 780 employees focused on climate, health and equity. Melanie and Caitlyn work in different departments and came together through ourIMPACT to help advance Biogen’s Healthy Climate, Healthy Lives goals.

They have run events such as Biogen beehive tours, native plant expositions, and group clean-ups of a vital water source in RTP, North Carolina. And, they are working on a closed-loop recycling program in RTP that could help cut costs while reducing waste.



*Dan Blake, a Biogen engineer, was one of the first Healthy Climate, Healthy Lives Employee Innovation Challenge winners.*



*Biogen employees from Research Triangle Park (RTP) take part in a beehive tour.*

## Employee Innovation Challenge Inspires Change

In the past year, our employees have helped to address climate, health and equity. In 2021, Biogen hosted our first Healthy Climate, Healthy Lives Employee Innovation Challenge, which encouraged employees to share ideas that build towards our climate, health and equity goals. In total, we received 180+ ideas from 14 sites worldwide. As of 2022, four winners have received awards (pictured, Dan Blake, who won an award for his idea). All 180+ ideas underwent consideration, and many have already been implemented.



## Strategic Collaborations

### 2040 GOAL

Drive innovation, mitigate environmental and health impacts, and influence policy.

### 2-YEAR PROGRESS

Conducted the most comprehensive meta-analysis to date on air pollution and dementia with **Harvard T.H. Chan School of Public Health**, which was presented at the American Academy of Neurology in 2022.

Collaborated with the **MIT Joint Program on the Science and Policy of Global Change and the Technology and Policy Program** to develop a state-of-the-art integrated model of how various climate actions impact public health, including the **Tool for Air Pollution Scenarios (TAPS)**. It is open source and available to the public.

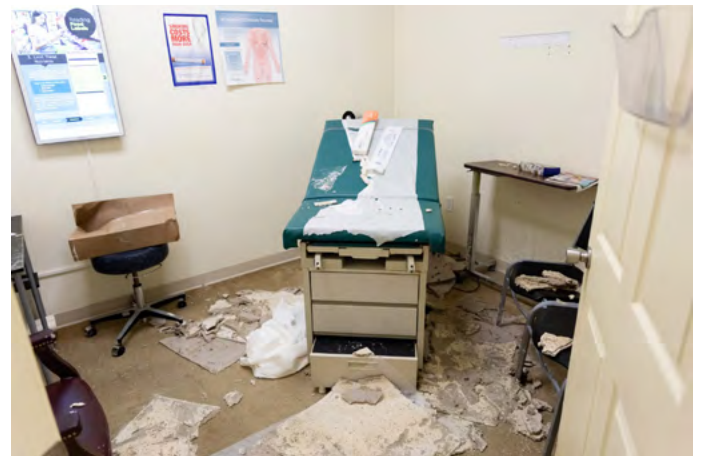
The World Business Council for Sustainable Development's (WBCSD) Healthy People, Healthy Business project – a **cross-sectoral coalition of 23 leading companies, co-chaired by Biogen** – has been working to understand the connection between the environment and human health.



## Helping community health clinics care for the most vulnerable amidst the climate crisis

Across the U.S., the climate crisis is threatening the ability of thousands of community health centers care for millions of uninsured or underinsured patients. To address climate-related risks to their operations and patient health, **Biogen** collaborated with **Americares** and the **Harvard T.H. Chan School of Public Health (Harvard Chan C-CHANGE)**.

Together, we **surveyed 450+ frontline clinic staff** in 47 U.S. states and territories, finding 81% of clinic staff experienced climate-related disruptions within the past three years. To respond, we introduced a new doctrine on patient-centered climate action, published in **JAMA**, to catalyze health sector and policy action and published first-ever resources to help. The **Climate Resilient Health Clinics Toolkit** has reached 2500 clinic providers and staff in a pioneering effort that is catalyzing support from others in the pharmaceutical sector.



*Avicenna Free Clinic in Panama City, Florida, suffered major damage from Hurricane Michael. Photo used with permission from Avicenna Free Clinic.*