

In 2020, we shared our aspiration to help individuals, cities, and other partners collectively reduce one gigaton of their carbon equivalent emissions annually by 2030. This is an ambitious vision that we have set to push us to contribute meaningfully to helping with climate solutions beyond our own operations and value chain.

In 2021, we set an ambitious goal to achieve net-zero emissions across all of our operations and value chain, by 2030. To accomplish this, we aim to reduce 50% of our combined Scope 1, Scope 2 (market-based), and Scope 3 absolute emissions (versus our 2019 baseline) before 2030, and plan to invest in nature-based and technology-based carbon removal solutions to neutralize our remaining emissions. We have formally committed to the Science Based Targets initiative to seek their validation of our absolute emissions reduction target.

One of the key levers for reducing emissions from our operations is transitioning to clean energy. Since 2017, we have matched 100% of the electricity consumption of our global operations with purchases of renewable energy on an annual basis. However, because of differences in the availability of renewable energy sources like solar and wind across the regions where we operate—and because of the variable supply of these resources—we still need to rely on carbon-emitting energy sources that power local grids. That is why we set a goal to run on 24/7 carbon-free energy (CFE) on every grid where we operate by 2030.

Achieving net-zero emissions and 24/7 CFE by 2030 are extremely ambitious goals. We also know that our path to net-zero emissions will not be easy or linear. Some of our plans may take years to deliver results, particularly where they involve building new large-scale infrastructure with long lead times. So as our business continues to evolve, we expect our emissions to rise before dropping towards our absolute emissions reduction target.

To benefit the people and places where we operate, we have set goals to replenish 120% of the freshwater volume we consume, on average, across our offices and data centers by 2030 and to help restore and improve the quality of water and health of ecosystems in the communities where we operate.

We also aim to maximize the reuse of finite resources across our operations, products, and supply chains. Our circularity principles focus on designing out waste from the start, keeping materials in use for as long as possible, and promoting healthy materials—for our data centers, workplaces, and products.

More information on our approach to sustainability can be found in our annual sustainability reports, including Google's Environmental Report. The contents of our sustainability reports are not incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC. For additional information about risks and uncertainties applicable to our commitments to attain certain sustainability goals, see Item 1A Risk Factors of this Annual Report on Form 10-K.

## Culture and Workforce

We are a company of curious, talented, and passionate people. We embrace collaboration and creativity, and encourage the iteration of ideas to address complex challenges in technology and society.

Our people are critical for our continued success, so we work hard to create an environment where employees can have fulfilling careers, and be happy, healthy, and productive. We offer industry-leading benefits and programs to take care of the diverse needs of our employees and their families, including opportunities for career growth and development, resources to support their financial health, and access to excellent healthcare choices. Our competitive compensation programs help us to attract and retain top candidates, and we will continue to invest in recruiting talented people to technical and non-technical roles, and rewarding them well. We provide a variety of high quality training and support to managers to build and strengthen their capabilities—ranging from courses for new managers, to learning resources that help them provide feedback and manage performance, to coaching and individual support.

At Alphabet, we are committed to making diversity, equity, and inclusion part of everything we do and to growing a workforce that is representative of the users we serve. More information on Google's approach to diversity can be found in our annual diversity reports, available publicly at [diversity.google](https://diversity.google). The contents of our diversity reports are not incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC.

As of December 31, 2023, Alphabet had 182,502 employees. We have work councils and statutory employee representation obligations in certain countries, and we are committed to supporting protected labor rights, maintaining an open culture, and listening to all employees. Supporting healthy and open dialogue is central to how we work, and we communicate information about the company through multiple internal channels to our employees.