

Healthy environment



A healthy planet is the foundation for a healthy society. We are working to keep the communities around us sustainable, viable and healthy.

What we're focused on

- Accelerating our path to net-zero.
- Managing weather-related risks.
- Reducing waste, water and paper.

Climate change has clear public health implications. Research shows a changing climate heightens exposure to extreme heat, poor air quality and extreme weather events. Such environmental conditions increase health risks like respiratory infections, heart disease and mental health disorders.

While every person is impacted by the health of our environment, communities of color, low-income populations, children and older adults are among those most likely to live in poor environmental conditions, which cause or worsen negative health effects – exacerbating existing health inequities.

Our company's [strategic growth priorities](#) are intrinsically tied to the well-being of the population and the planet. Preventing disease and improving health outcomes can help reduce energy, waste and water-intensive hospital care. Deploying technologies to modernize, streamline and simplify the health system can reduce the use of paper and improve efficiency. We strive to build a modern, high-performing health system for the benefit of not only the people we care for but also the world we live in.



Charting our path to net-zero

Recognizing the effect climate change has on human health, we are minimizing our environmental impact with long-term commitments designed to reduce our carbon footprint over the next several decades.

In 2022, our overall emissions increased, due largely to the operations and square footage of acquired businesses. We also saw an increase in employees returning to work sites, which drove on-site electricity usage. We are considering both areas as we implement our decarbonization strategy. As part of our net-zero commitment, we intend to support the development of additional renewable energy sources, as well as directly generate renewable energy to power our operations, when possible. Simultaneously, we are initiating energy efficiency improvements at key sites within our footprint. We expect gradual reductions in total emissions while these actions are being implemented.

Our commitment

Operational net-zero by 2035, with 60% scope 1 and 2 reduction and 100% renewable energy by 2030

About our commitment

We are committed to reducing scope 1 (direct emissions; e.g., fuel burned from company vehicles) and scope 2 (indirect emissions; e.g., purchased electricity) emissions by 60% against our 2021 baseline by 2030. Operational net-zero involves reducing these emissions to as close to zero as possible, with minimal use of offsets. Achieving 100% renewable energy involves implementing solutions to source renewable energy for our entire operations.

Our progress

We have seen a 4.7% increase in emissions in 2022 due to growth, largely through mergers and acquisitions, and increased site occupancy post-pandemic. We have focused on building a roadmap to increase energy efficiency and pursue generation of new renewable energy.

Why this is important to us

Rising levels of greenhouse gas (GHG) emissions can cause or exacerbate a wide range of health problems, including heart and kidney disease, respiratory illness, injuries and premature death related to extreme weather events, threats to mental health, changes in the distribution of food and infectious disease. These health effects disproportionately affect those who are most vulnerable and disadvantaged.

How we're delivering on our commitment

Our strategy relies on direct mitigation of global emissions. This approach prioritizes reducing energy consumption within our operations while improving energy efficiency and transitioning to renewable energy sources.



The growing threat of climate change drives our focus on reducing our carbon footprint as we work toward net-zero.

In June 2022, we committed to the Science Based Targets initiative (SBTi) Net-Zero Standard, a set of criteria based on the need to limit global warming to 1.5 degrees Celsius. As part of our commitment (including our scope 1, 2 and 3 emissions), we are assessing carbon sources and measuring the most significant emissions contributors, identifying opportunities and strategies to increase energy efficiency, shifting to renewable energy sources, and addressing emissions in our value chain.

The full impact of any organization's GHG footprint goes beyond what the organization itself produces. This is now reflected in our scope 3 assessment, which measures emissions from upstream sources such as purchased goods and services and downstream sources such as our investments. Measuring scope 3 emissions provides a more complete picture of our GHG emissions across the full scope of our business and informs our approach to net-zero emissions through our external partnerships as well as our internal operations.

Though numerous energy efficiency, renewable energy and other emissions reduction efforts are underway, our primary focus areas in 2022 were:

1. Completing measurement of the most significant contributors to our value chain emissions (scope 3) for the first time.
2. Developing plans to strategically enable us to achieve our goals.

Our efforts focused on laying the groundwork for major reductions in our emissions and use of resources in the years ahead. This includes assessing the full breadth of our direct and indirect emissions, supporting the global energy transition, developing new contracting standards, and completing other formative work. While we expect to see increases across many of our environmental metrics over the short term as our company grows, the approaches we are formulating today are being designed to dramatically reduce our environmental footprint over the next seven to 20 years.



Advancing energy efficiency

Our first step to net-zero is reducing our energy use, recognizing the cleanest energy is the energy we don't use. This in turn reduces the volume of energy we require. We are scaling solutions that reduce energy consumption in our entire real estate footprint – ranging from data centers and pharmaceutical distribution centers to clinical care facilities. This approach includes new construction projects, renovations, collaboration with landlords and employee behavior programs.

In 2022:

- We initiated a Building Management System (BMS) pilot to support the diverse and extensive network of properties in our portfolio. Where deployed, this BMS has the potential to reduce energy consumption by up to 20% over previous systems and provide enhanced operational reporting to drive future energy reduction.
- In San Antonio, we are pursuing WELL certification for our two-building, 352,000-square-foot WellMed campus, where the first building is now complete. WELL is a performance-based system for measuring, certifying and monitoring features of the built environment that impact human health and well-being.
- In our Ireland office, we decreased internal nighttime lighting, which is expected to save 5,000 kWh per year.
- We continued to invest in energy efficiency projects, including LED fixture upgrades and HVAC system replacements.

We are working to establish global sustainability standards, which can be used to guide leasing, renovation and new builds.

Transitioning to renewable energy

In 2022, we honed our roadmap for identifying and scaling our transition to renewable energy sources so we could most effectively decrease our GHG emissions and help improve the health of the communities where we operate.

At our Optum headquarters in Minnesota, we are installing on-site solar panels, with project completion expected in summer 2024. Once operational, this project is expected to meet approximately 50% of the site's energy needs.

To introduce renewable energy across our broader portfolio, we have actively been exploring virtual power purchase agreements (VPPAs), which would allow us to apply renewable energy credits across our portfolio while also supporting the generation of new sources of renewable energy. Our company's ability to guarantee demand for renewable energy makes it possible to justify the construction of additional renewable energy projects that can begin operating quickly, which in turn helps accelerate development of the green energy industry and increases the availability of renewable energy on the grid. We are considering the use of VPPAs as a key component of our zero-carbon strategy, since a significant portion of our real estate is leased and therefore cannot be retrofitted.

After our initial work to optimize energy efficiency, generate renewable power on-site and execute our first VPPAs in the U.S., we plan to continue exploring other renewable energy procurement options globally.

Piloting electric vehicles

Although our fleet is a small part of our overall emissions footprint, we are working to identify and support opportunities for electrification wherever possible. Our vehicles are commonly used to deliver medications, conduct wellness visits with Medicare members, transport members to medical appointments and maintain our facilities.

As a first step, we initiated a pilot study to test the feasibility of issuing electric vehicles to clinicians who travel to patient homes as part of their work. Learnings from this study will help us clarify infrastructure needs, procurement considerations, operational impacts and additional expansion opportunities as we move forward.



“Our work in 2022 paves the way for us to deliver on our net-zero commitment and transition our company to renewable sources of energy – setting us on a path to better protect our environment and promote the health of communities where we live and do business.”

Dave Black, VP of Facilities and Operations, Real Estate Services, UnitedHealth Group

Assessing value chain emissions

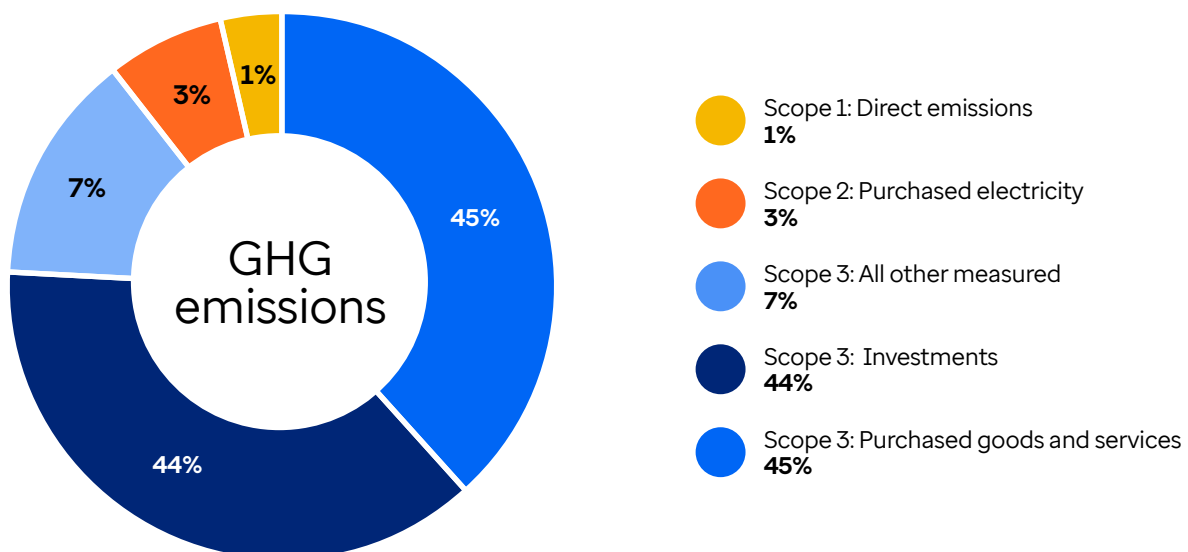
Because scope 3 emissions represent the bulk of our emissions, it is imperative for us to better understand and evaluate the emissions in this category. In 2022, we completed our first-ever scope 3 assessment, which identified the most significant categories of emissions from both upstream sources – such as purchased goods and services, waste generated in operations and employee commuting – and downstream sources, such as investments.

Our assessment showed two areas of emissions account for the vast majority of our GHG footprint:

- Purchased goods and services
- Investments

With this scope 3 assessment, we are now better able to prioritize opportunities for action and work toward an SBTi-approved emissions target, which will be reviewed by SBTi and shared in our 2023 Sustainability Report.

To see our complete inventory of emissions, please see our Performance Data, starting on [page 83](#).



Engaging our suppliers

To better understand the emissions impact of our purchased goods and services, we piloted the CDP Supply Chain program (formerly Carbon Disclosure Project), which supports companies' disclosure of their environmental impact. We requested CDP Climate Change Assessments from some of our largest suppliers to learn more about their sustainability efforts. We had an overall response rate of 83%, with 81% reporting emissions-related goals.

In 2023, we will be:

- Requesting select suppliers (representing 80%-85% of our 2021 baseline supply chain emissions) complete the CDP Climate Change Assessment, which will help us improve our emissions calculation and assess supplier performance when making procurement decisions.
- Engaging targeted suppliers to track, report and commit to reducing their carbon footprint.
- Updating procurement policies, employee and supplier trainings, and other procurement practices to reflect our ambitions.

See the [supply chain management](#) section for more information on risk management and strategy development.

Assessing our financed emissions

Using the Partnership for Carbon Accounting Financials (PCAF) methodology, we measured our financed emissions for certain asset classes such as corporate bonds, loans, equities and sovereign debt. Generally, the PCAF methodology aims to derive a financial attribution factor for each in-scope investment in UnitedHealth Group's portfolio. The attribution factor is then multiplied by the specific in-scope investee's reported or estimated emissions to determine UnitedHealth Group's financed emissions. Our financed emissions are largely tied to holdings in the energy, industrials and utilities sectors.

Our diverse, high-quality investment portfolio is well-positioned to see declines in our financed emissions in the coming years.

In 2023, we will be:

- Developing temperature rating targets and a power intensity target for in-scope assets aimed to achieve a glide path to net-zero, including determining a specific target year.
- Reducing financed emissions guided by an active approach with investment managers to invest in companies committed to emission reductions without compromising portfolio diversification, liquidity and performance. We do not intend to adopt exclusionary provisions limiting investments in sectors.
- Identifying attractive direct investments in renewable energy projects to supplement our investment portfolio and to more directly support renewable energy projects on a larger scale.
- Reviewing and updating our investment policy guidelines.

The target-setting process will combine multiple strategies to achieve net-zero in a balanced way as we continue to prioritize the preservation of capital and earn appropriate risk-adjusted returns.

Leading collective action to decarbonize the health system

We recognize the critical need to reduce the carbon footprint of the U.S. health care system, which is responsible for 8.5% of U.S. carbon emissions. We are helping to lead collective action through the [National Academy of Medicine's Action Collaborative on Decarbonizing the U.S. Health Sector](#), which is co-chaired by our CEO. This public-private collaborative seeks to address the health sector's environmental impact while strengthening its sustainability and resilience.

Managing weather-related risks

Our integrated, multidisciplinary process helps us to identify, assess and manage risk and ultimately minimize disruption for the people who count on us.

In 2023, we aim to deepen our analysis of climate risks and develop scenarios to assess the impact of risks over the short, medium and long term.

Managing operational impacts

Our weather risk mitigation plan stretches across all our businesses and includes operational redundancies to help ensure continuity of our business operations. We have also identified critical sites most susceptible to utility outages and weather-related impacts and have put in place backup emergency systems.

Providing support during extreme weather events

Extreme weather events can directly impact our customers, members, employees and providers. Depending on the event, our response may include:

- Allowing early refills of prescription medication.
- Easing restrictions on use of out-of-network providers.
- Facilitating early replacement of durable medical equipment.
- Making the Optum Crisis Counseling line available to the community.
- Arranging for evacuation of members who are especially vulnerable due to disease or frailty.



When Hurricane Ian struck in late September 2022, we took immediate action to help ensure the safety and well-being of affected communities.

- Within 96 hours of the event, we coordinated with state and local partners to stand up nine mobile response units in the hardest-hit, lowest-resourced communities. These trailers provided medical care, distributed food and water, and offered Wi-Fi access, which was otherwise unavailable. Thanks to support from the WellMed Charitable Foundation, these services were open to anyone at no cost. To further improve access to medication, we also provided Genoa Pharmacy with an additional unit for use as a mobile pharmacy after their facility incurred damage during the storm.
- Our clinicians and nurses went door to door to provide care for those who were unable to get to a care center.
- Employees who experienced personal hardship received financial support through the company's United for Each Other program.

Reducing waste, water and paper

Minimizing our resource utilization and waste production is a fundamental aspect of good environmental stewardship.

We are working to reduce our footprint by transitioning to a digital-first health system with less paper usage, piloting new and innovative approaches to long-term waste management and prevention, and reducing our water usage in water-stressed regions of the world.

Reducing paper through modernization

As we continue to modernize our processes and technologies to create simple, seamless consumer experiences, we have made significant progress toward our goal of reducing paper usage across the health system.

We started by identifying simple changes with an immediate impact, such as shifting provider groups to digital rather than paper-based communications for activities like prior authorizations and claims decisions, as well as eliminating unnecessary print marketing materials. As one example, we have typically included an envelope with every pharmacy order we sent out. A newly developed system automatically identifies and includes an envelope only on orders where there is an invoice with a balance due. The result: more than a 90% reduction in the volume of envelopes used, which is estimated to save more than 35 million envelopes in 2023.

Beyond the environmental impact, reducing paper usage has also improved the speed and simplicity of our communications with consumers and providers by replacing paper-based communications with digital tools. In 2022, 91 types of member and provider transactions were digitized or enhanced, leading to faster turnaround times and reductions in wait times for some claims reimbursements from 10 days to 24 hours. In addition, provider digital document delivery was up 200% over 2021, with over 1.6 million providers enrolled in e-delivery. About 98% of total claims on our core platforms were submitted digitally.

We will continue to build on these efforts in the years ahead and work with a diverse set of stakeholders, including employers, consumers, providers, health equity advocates and other players in the health care industry. We are focused on addressing regulatory requirements, which currently account for roughly 40% of our paper use. We are working toward providing even more (and better) paperless experiences for consumers and providers – a dual-purpose goal designed to minimize use of energy, water and raw materials while creating a better consumer experience.

1B

pieces of paper saved in 2022.

24M

envelopes saved in 2022.

24%

reduction in inbound paper volume (e.g., claims appeals, payments, etc.).

Reducing waste

We are dedicated to managing and preventing waste by piloting new, innovative solutions designed for long-term waste reduction. We take a multidimensional approach to minimizing our environmental impact through ongoing management of our various waste streams, including municipal, construction, electronic, hazardous and regulated medical and pharmaceutical waste. Our 2022 scope 3 assessment included an enterprise-wide, waste-associated inventory, which will help inform our waste management and reduction strategy in 2023 and beyond.

In 2022, we implemented several new pilots to reduce waste and improve patient care.

- We converted prescriptions to larger pack sizes, which reduced our plastic bottle usage by approximately 546,000 bottles in 2022.
- We used insulated mailers to ship medications requiring refrigeration, which in turn reduced our gel pack usage by eliminating 489,000 unnecessary coolers.
- Eight sites in India established on-site composting of organic material, which has diverted 129,254 pounds of waste so far.
- We established a zero-landfill project in two 150-bed hospitals in Brazil.

In 2023, we plan to implement new solutions to improve efficiency and reduce waste, including reducing single-use plastic, exploring opportunities to expand composting and recycling services, evaluating design and construction processes, and continuing to improve waste data collection.

Conserving water

We are working to reduce excess water consumption – a critical and increasingly worrisome global health issue – by taking steps to help ensure our facilities use water as efficiently as possible, which is particularly important for water-stressed and water-sensitive locations across the globe.

We continue to advance plumbing and irrigation projects and sustainable landscape projects aimed at reducing our water usage. After implementing a holistic water-tracking program for our India real estate portfolio in 2021 to remotely measure, monitor and influence water usage, we found about 47% of total water usage is currently treated/recycled water instead of fresh water. In 2022, we expanded this effort to add water meters in our five sites in the Philippines.

In 2023, we plan to create a holistic approach to water conservation across the enterprise, including creating design guidelines for water efficiency and water quality.

1.2M

gel packs eliminated in 2022 through the use of insulated mailers.

1.7M lbs

of waste diverted by recycling electronics like laptops and PCs.

68%

of sites⁶ have a Water Use Intensity rating below EPA guidelines.

6. Includes integrated sites where water is tracked on utility bills.