

Environmental impact



For more than 50 years, IBM has committed to environmental responsibility—a commitment formalized by our first corporate environmental policy in 1971, which integrated environmental responsibility throughout the fabric of our business.

IBM views environmental leadership as a long-term strategic imperative, demonstrated today as we continue to set ambitious goals and apply our technologies to accelerate solutions to global environmental challenges.

Global environmental management system

IBM's [corporate environmental policy](#) provides the strategic framework for the company's global environmental management system (EMS). IBM has sustained a formalized EMS for decades, and it is continually updated to reflect our company's intersections with environmental matters. The global applicability and scope of IBM's EMS covers hardware product design, manufacturing, data centers, real estate operations, procurement, logistics, asset recovery services, and business services.

This year marks the 25th anniversary of IBM's single global registration to the ISO 14001 EMS standard and 10th anniversary of IBM's single global registration of its EMS to the ISO 50001 energy management systems standard. Both registrations have been maintained continuously.

21 goals for environmental sustainability

In 2021, IBM announced an updated set of 21 comprehensive, voluntary environmental sustainability goals that address the ways in which today's IBM intersects with the environment. Collectively, the goals cover energy and climate change, conservation and biodiversity, pollution prevention and waste management, supply chain and value chain, and our global EMS. We establish near-term goals that are transparent and authentic to drive real progress and accountability. We work hard to avoid opaque representations of achievement. For detailed information about each of these goals, please see ["Driving progress with 21 goals for environmental sustainability."](#)



Stakeholder engagement and voluntary collaborations

We proactively engage and collaborate with stakeholders from a cross-section of nongovernmental organizations (NGOs), government agencies, businesses, industry associations, investors, academia, communities, and employees. Some examples:

As a founding member of the United Nations Environment Programme's Science-Policy-Business Forum on the Environment (UNEP-SPBF), IBM is helping to demonstrate how data and advanced information technology can underpin new solutions to persistent environmental problems. In 2021, IBM participated in the launch of the UNEP-SPBF Asia chapter, sharing information on how:

- Farmers are using insights enabled by data and AI to improve crop yields.
- The Plastic Recovery Insight and Steering Model platform (PRISM)—co-developed by IBM and the Alliance to End Plastic Waste—is digesting disparate data and applying analytics to help inform decisions to reduce plastic waste leakage.
- The IBM-developed VolCat process can turn PET (a type of plastic commonly used in food packaging and polyester clothing) into a renewable resource.
- IBM is identifying new catalysts that enable efficiency improvements in the conversion of carbon dioxide (CO₂) to new materials such as aliphatic polycarbonates.

IBM joined the Climate Neutral Data Centre Pact in 2021. As a member, IBM will continue to increase energy efficiency, purchase additional renewable electricity, conserve water, and facilitate the reuse and repair of IT equipment at our data centers.

Also in 2021, IBM became a founding member of the European Green Digital Coalition (EGDC). The EGDC is a group of companies committed to supporting the green and digital transformation of the European Union. In joining the coalition, IBM pledged to continue developing digital technologies and services that are more energy- and material-efficient, along with methods and tools to measure the environmental impacts of these technologies.

IBM joined a dozen other enterprises as inaugural members of the Massachusetts Institute of Technology Climate and Sustainability Consortium, whose mission is to accelerate the large-scale, real-world implementation of solutions to address the threat of climate change.

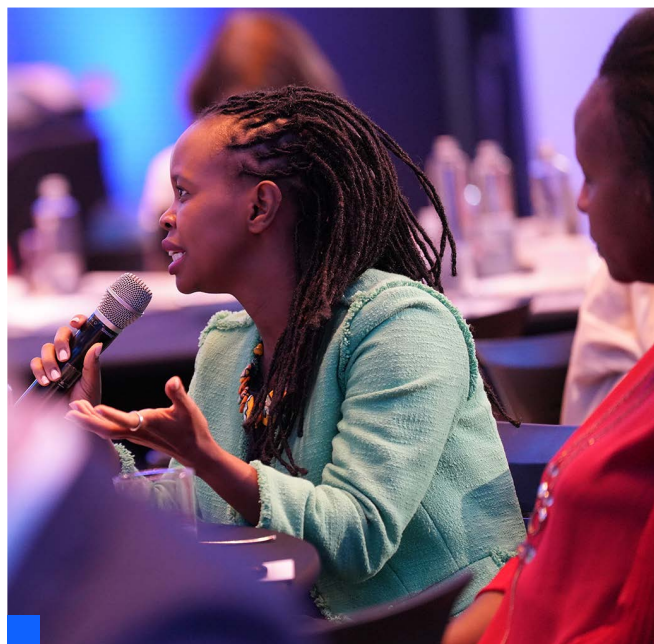


Photo credit: DSklilton/UN-SPBF

Charity Wayua of IBM Research Africa spoke at a UN Environment Assembly meeting on big data for the environment in March 2022.

Spinoff of IBM's managed infrastructure services business

IBM completed the spinoff of its managed infrastructure services business, now a publicly traded company called Kyndryl, in early November 2021. Accordingly, the environmental information in this report includes 10 months of data for that business. When we publish results for calendar year 2022, they will cover a notably different base of operations.

Energy and climate change

IBM has been demonstrably committed to addressing climate change for three decades. As a founding partner, IBM helped the US Environmental Protection Agency (EPA) launch ENERGY STAR in 1992. We began disclosing CO₂ emissions in 1994, and made our first purchase of renewable electricity in 2001. IBM published its policy position on climate change in 2007, long before today's acute focus, recognizing that climate change is a serious concern that warrants timely, meaningful action on a global basis.

In 2015, IBM voiced its support for the Paris Agreement, and reaffirmed such support in 2017. IBM became a founding member of the Climate Leadership Council in 2019 and continues to support the council's bipartisan plan for a carbon tax, with its proceeds—a "carbon dividend"—to be returned to citizens.

Updated goals

In 2021, IBM established its third consecutive goal for the use of renewable electricity; its fifth consecutive goal to reduce greenhouse gas (GHG) emissions; a goal to achieve net-zero GHG emissions; and related goals for energy conservation, data center energy efficiency, energy-efficient product design, suppliers, and client engagements. Nine of our goals involve climate change. Five are described below, and the others are cited in this report's sections regarding product energy efficiency and supplier environmental goals:

- Procure 75% of the electricity IBM consumes worldwide from renewable sources by 2025, and 90% by 2030.
- Reduce IBM's GHG emissions 65% by 2025, against base year 2010, adjusted for acquisitions and divestitures.
- Reach net-zero GHG emissions by 2030, using feasible technologies to remove emissions in an amount which equals or exceeds IBM's residual emissions. Aim for residual emissions of 350,000 metric tons of CO₂ equivalent or less by 2030.