

2024

Amazon Sustainability Report



Executive Summary

amazon

A Letter from Our Chief Sustainability Officer



Amazon is a unique company. The diverse nature of our business allows us to test new sustainability solutions across industries. When we discover a solution in one area, we can quickly adopt it across our business, helping us move faster toward our sustainability goals. As a customer-obsessed company, we find this approach helps us make our customers' lives better and easier every day, while making our operations more sustainable.

We're developing cutting-edge AI, delivering packages at record speeds, creating award-winning entertainment, advancing healthcare solutions, and promoting global broadband access—while simultaneously reducing waste, expanding carbon-free energy, using lower-carbon building materials, protecting forests, protecting and furthering human rights, and helping our communities recover from global disasters.

Amazon's culture also encourages us to ask "Why?" at every turn. When we ask why sustainability matters, the answer is clear: Sustainability is not separate from our customer obsession—it's an extension of it. Solutions that benefit the environment can create superior experiences for our customers and also become an economic driver that helps to strengthen communities and protect the planet. In 2024, we demonstrated this repeatedly across our business, with sustainability innovations directly enhancing customer experiences. For example, choosing same-day delivery was often our lowest-carbon delivery option. Our ongoing packaging innovations meant customers had fewer boxes to break down and now zero air pillows to pop.

2024 also marked a turning point for artificial intelligence (AI). It's a transformative technology that we believe will reinvent virtually every customer experience, as well as create new experiences altogether that we only once dreamed would be possible. Over the last few years, Amazon has accelerated its investments in generative AI to build these experiences across our business and, including through the 1,000-plus AI applications we're developing across Amazon. We introduced Amazon Q, the most capable AI-powered coding assistant; SageMaker, a service that makes it easier to build foundation models; Amazon Bedrock, which allows developers to do GenAI inference at scale; our own frontier model, Amazon Nova, to give customers leading intelligence

at lower latency and cost; and we're rolling out Alexa+, our next-generation Alexa personal assistant that's meaningfully smarter, more capable, and is the first personal assistant that can take significant actions for customers. We've also harnessed AI as a powerful sustainability tool—optimizing sizing recommendations to reduce returns, identifying energy inefficiencies, detecting water leaks, and avoiding packaging—solving countless environmental challenges while simultaneously improving service quality. And we're just at the beginning.

As we harness generative AI's potential and our AI business continues to grow rapidly, we are investing in the infrastructure that we'll need to make AI innovation possible. We're also tackling one of its greatest challenges head on, rising energy demand. Rather than viewing this as a limitation for sustainability, we see it as an opportunity we're facing head-on to pioneer sustainability solutions at scale through our AWS business for our customers and our suppliers.

In 2024, we unveiled breakthrough data center innovations in power systems, cooling technology, and hardware architecture that will simultaneously support next-generation AI capabilities while improving energy efficiency—proving that technological progress and sustainability can advance in tandem. We're also diversifying and expanding our carbon-free energy portfolio, which includes our first investments in nuclear energy, alongside maintaining our position as the world's largest corporate purchaser of renewable energy for the fifth consecutive year. Through these complementary approaches—optimizing efficiency while scaling carbon-free energy—we're creating a more sustainable foundation that AI needs to fulfill its world-changing potential.

AI is already embedded in much of this work, but when our customers think about sustainability at Amazon, it's most often associated with our retail business, which we've made more sustainable too. In 2024, we delivered at faster speeds than ever before, with 10 billion items delivered the same or next day around the world. At the same time, our growing fleet of over 30,000 electric delivery vehicles helped deliver 1.5 billion packages globally. Across our global operations, we eliminated all plastic air pillows and replaced them with recyclable paper filler. We also reduced our total

plastic packaging by 16.4%. We've been keenly focused on preventing and diverting waste, and in 2024, 85% of our waste was diverted from landfill.

As we continue to champion sustainability solutions for our customers, we're doing the same for our partners and suppliers. As of today, over 550 companies have committed to The Climate Pledge and are choosing to come together to drive joint action and fast-track decarbonization solutions. In that same spirit of collaboration, we're engaging our suppliers to set their own sustainability goals. To accelerate collective progress, we launched The Sustainability Exchange, sharing our playbooks and previously proprietary insights freely with businesses worldwide. This collaborative approach multiplies our impact by allowing companies to build on proven solutions, combines our collective resources to tackle our greatest environmental challenges, and drives industry-wide momentum with a powerful blend of urgency and optimism.

Looking ahead, we recognize that the path to being a more sustainable company will never be linear, because we're charting new territory at an unprecedented scale. While we are firm on our goals, our approach will continuously evolve with emerging challenges and opportunities, as we're seeing with the rapid adoption of AI. No matter what we're faced with in the future, we'll remain steadfast in our commitment to sustainability and will continue to invest, innovate, and obsess over our progress each year, with the same intensity and focus that has defined Amazon from Day One.

The progress demonstrated in this report is the result of the years of work by thousands of Amazonians who have never stopped asking "Why?" to find better and more sustainable solutions. This questioning mindset has uncovered innovative ways to reduce waste, cut emissions, and improve efficiency. I'm confident our habit of asking tough questions will lead to continued breakthrough solutions for decades to come. Thank you to everyone—our teams, partners, and customers—who have helped turn these questions into real-world progress.

With gratitude,
Kara Hurst
Chief Sustainability Officer

How We Work

Our Mission

To make customers' lives better and easier every day.

Our Business

We are committed to addressing sustainability at every stage of our value chain.

Our Operations

We offer a wide range of products and services—both Amazon-branded and from other brands and third-party sellers—through our Amazon stores, supported by advanced global transportation and logistics capabilities. We also operate businesses in digital media, including the creation and distribution of original entertainment content. In addition, AWS provides the world's most widely adopted and comprehensive cloud offering, supporting customers and businesses around the globe.

Our Supply Chain

We procure materials, commodities, components, finished goods, and services from a complex supplier network. We engage suppliers globally to align our expectations for respecting human rights, maintaining safe, inclusive workplaces, and promoting more sustainable practices.

Our Workforce

Amazon's more than 1.5 million full- and part-time employees are key to our success, from enabling global fulfillment to delivering on sustainability initiatives. We support them in advancing their own career goals, and we offer competitive pay and benefits, upskilling and educational programs, opportunities to give back to our communities through volunteerism, as well as an inclusive workplace.

Our Communities

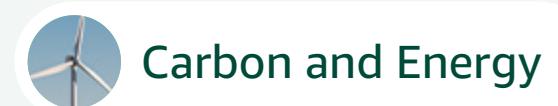
Amazon is committed to investing in local communities, and being a good neighbor all around the world, wherever we operate. We work side-by-side with community partners to build long-term, innovative programs that have a lasting positive impact. Programs vary globally and include increasing access to affordable housing, alleviating hunger, strengthening education, and helping those impacted by natural disasters when they occur.

Our Customers

We continually seek new and better ways to serve customers, offering lower prices, more convenient services, and a larger selection of more sustainable products. We also help customers advance their businesses and enable digital transformations through AWS, content development services, and advertising options. In addition, we support small businesses with access to Amazon's tools, resources, and network, helping them reach customers around the world.

Our Reporting Topics

We include a number of topics in our reporting. We view these topics as interconnected and recognize that our progress in one area can often help address challenges in another.



Carbon and Energy



Waste and Circularity



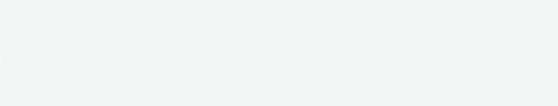
Packaging



Water



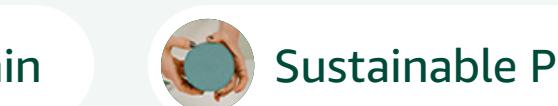
Biodiversity



Human Rights



Responsible Supply Chain



Sustainable Products



Employee Experience



Health and Safety



Inclusive Experiences



Community Impact



Responsible Business Practices



Goals Summary


[Download Accessible Table](#)


Achieved



Making Progress



Did Not Meet

Goal	2022 Progress	2023 Progress	2024 Progress	Status
Carbon and Energy				
Reach net-zero carbon emissions across our global operations by 2040	65.10M MTCO ₂ e	64.38M MTCO ₂ e	68.25M MTCO ₂ e*	→
	85.7g CO ₂ e/\$GMS	75.6g CO ₂ e/\$GMS	72.6g CO ₂ e/\$GMS†	
Through The Climate Pledge, inspire and empower others to join us on a mission to reach net-zero carbon emissions by 2040	396 signatories	473 signatories	549 signatories	→
At least 100,000 electric delivery vans on the road by 2030, from Rivian and other manufacturers	7K+ electric delivery vans	19K+ electric delivery vans	31.4K+ electric delivery vans	→
Deploy 10,000 electric vehicles (EVs) in India by 2025	3.8K+ EVs deployed	7.2K+ EVs deployed	10K+ EVs deployed	✓
Match 100% of the electricity consumed by our global operations with renewable energy by 2025—five years ahead of our original target of 2030	90% matched	100% matched	100% matched	✓
Invest in wind and solar capacity equal to the energy used by all active Echo, Fire TV, and Ring devices worldwide by 2025‡	100% capacity procured	100% capacity procured in 2022	100% energy matched with operational capacity	✓
Waste and Circularity				
Reduce food waste by 50% across U.S. and Europe operations by 2030§	82M meals-equivalent donated globally	80M meals-equivalent donated globally	81M meals-equivalent donated globally¶	→

*Carbon dioxide equivalent. †Grams of carbon dioxide equivalent per dollar of gross merchandise sales. ‡To understand what this goal should encompass, we model and measure the energy consumed by our devices in different types of use, then project their total average global annual electricity consumption. §Goal scope covers food that is considered inventory. It is measured with a food waste intensity metric that calculates the amount of food waste generated as a percentage of total food handled within Amazon. ¶Meals-equivalent donated globally aligns with our approach to prevent waste by prioritizing the flow of products to their intended use, in this case ensuring surplus food goes toward human consumption. A reduction in meals-equivalent donations indicates a reduction in food waste.

Goal	2022 Progress	2023 Progress	2024 Progress	Status
Water				
Amazon is committed to returning more water to communities in India than it uses in all direct operations by 2027				Goal set in 2024 →
AWS will be water positive by 2030, returning more water to communities than it uses in its direct operations	Goal set in 2022	41% progress toward meeting its water positive goal	53% progress toward meeting its water positive goal**	→
Employee Experience				
Invest \$1.2 billion to upskill over 300,000 U.S. Amazon employees by 2025	110K employees upskilled	358K+ employees upskilled††	439K employees upskilled	✓
Community Impact				
Invest \$3.6 billion to create and preserve more than 35,000 affordable homes†‡	\$1.6B committed and 11K homes created or preserved	\$1.8B committed and ~15.8K homes created or preserved	\$2.2B committed and 21K+ homes created or preserved	→
Distribute up to \$60 million in AWS cloud computing credits to support organizations promoting global health by the end of 2024§§	\$14M+ in cloud computing credits distributed	\$32M+ in cloud computing credits distributed	\$60M in cloud computing credits distributed	✓
Help 29 million people globally grow their technical skills by providing free cloud computing skills training by 2025	13M people helped	21M people helped	31M people helped	✓
Provide free artificial intelligence (AI) skills training to 2 million people globally by 2025	Goal set in 2023	2M+ people provided AI skills training		✓

**A number below 100% indicates AWS is still working to meet the water positive goal. ††In 2022, we reported progress for the Career Choice program in the U.S. In 2023, we expanded our reporting to include all in-scope upskilling programs in the U.S. ‡In 2024, we announced an expanded commitment of \$1.4 billion to create and preserve an additional 14,000 homes. This goal is not currently time-bound. §§In January 2024, AWS announced an additional \$20 million in funding for the Health Equity Initiative, bringing the company's total commitment to \$60 million in cloud credits.



2024 Year in Review

As we reflect on 2024, we are proud of our achievements. We have worked hard to reduce our environmental footprint, drive improvements throughout our value chain, and to create a safer, more inclusive place for people to work.

**1.5B**

Packages delivered by electric delivery vehicles globally

16.4%

Reduction in single-use plastic delivery packaging globally

1.15

Global Power Usage Effectiveness (PUE) for AWS data centers, compared to the industry average of 1.25

\$2.2B

Invested in pay for U.S. employees in frontline operations roles, bringing average base pay to over \$22 per hour and average total compensation to over \$29 per hour including the value of elected benefits

95M

Meals donated or delivered to households in need

1.7B+

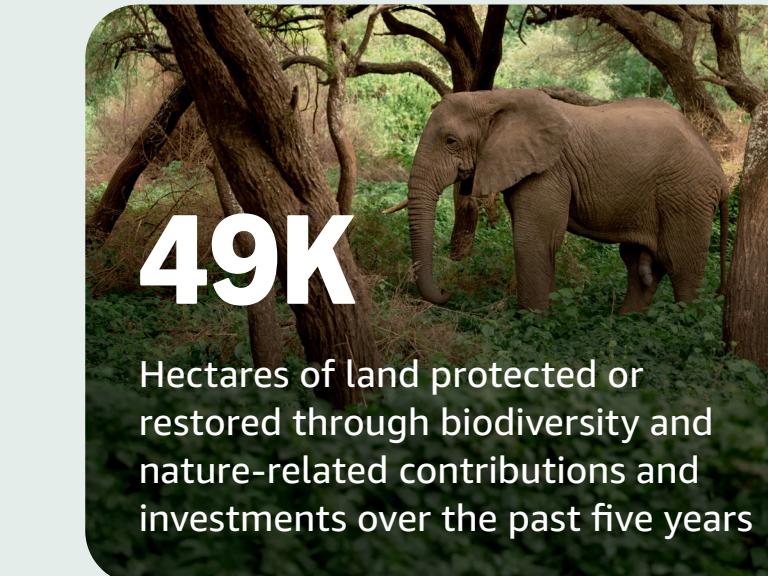
Units sold that were recognized by certifications in our Climate Pledge Friendly program, a 48% increase from 2023

34%

Improvement in Recordable Incident Rate (RIR) and 65% improvement in Lost Time Incident Rate (LTIR) among employees across our global operations over the past five years. RIR includes any work-related injury that requires more than basic first aid treatment and LTIR includes any work-related injury that requires someone to take time away from work (the most serious injuries)

3.6K+

Supplier audits including Amazon-branded products, third-party labor, service, and not-for-resale goods providers across our logistics, warehousing, and construction supply chain

**49K**

Hectares of land protected or restored through biodiversity and nature-related contributions and investments over the past five years

85%

Landfill diversion rate, up from 84% in 2023 and 82% in 2022

A photograph of a calm river flowing through a landscape of green grass and trees under a clear sky. The water reflects the surrounding environment.

Launched Amazon Sustainability Exchange to help others take action, sharing our formerly proprietary guidelines, playbooks, science models, and other resources

100K+

Employees participated in Career Choice, our free education and skills training program

12%

Of packages globally shipped without additional Amazon packaging as part of the Ships in Product Packaging program

7.8M+

Students reached from underserved communities globally through Amazon Future Engineer programs

4.3B

Liters of water returned to communities from active replenishment projects, with more than 7 billion liters of total annual contracted replenishment volume for future years



