

Sustainability Question Bank

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Environment

What priorities is the Amazon sustainability team working on?

Amazon has global teams focusing on our key environmental and social impacts and opportunities for innovation. Our programs include Frustration-Free Packaging and retail packaging standards; solar on our fulfillment center rooftops; investments in the circular economy with the Closed Loop Fund; and numerous other initiatives happening every day by teams across Amazon. Amazon joined The Recycling Partnership to increase the recycling of products and packaging, and launched Amazon Second Chance, a one-stop shop for customers to learn how to minimize their impact on the environment through reuse, refurbishing, and recycling. These are just a few of the innovative programs and initiatives to help the company achieve our sustainability goals.

Learn more about how Amazon prioritizes our sustainability efforts [here](#).

What are some examples of Amazon's environmental sustainability initiatives?

Renewable energy: As of December 2019, Amazon has 70 renewable energy projects, which have the capacity to generate 1,900 megawatts (MW) and deliver more than 5.3 million megawatt hours (MWh) of energy annually. Amazon has 37 rooftop systems in the U.S., 12 in Europe, and eight in India, totaling more than 110 MW of installed capacity. Learn more about Amazon's global [renewable energy projects](#).

Packaging: Since 2008, Amazon's sustainable packaging initiatives have helped eliminate more than 810,000 tons of packaging material, the equivalent of 1.4 billion shipping boxes. Learn more about Amazon's efforts to [reduce packaging waste](#).

Headquarters: We have developed our corporate headquarters in Seattle using sustainable, energy-efficient building design. The buildings' interiors feature salvaged and locally-sourced woods, energy-efficient lighting, composting and recycling alternatives, as well as public plazas and pockets of open green space outside of the buildings. As of June 2019, the U.S. Green Building Council has awarded 26 of our Seattle buildings with LEED certification, including 18 that are LEED Gold and 4 that have achieved LEED Platinum certification for sustainable design and construction methods. Our newest buildings in the Denny Triangle area of Seattle are heated through an innovative, and energy-efficient, "district energy" system that recycles heat generated at a neighboring data center. We focus on sustainable design in our international locations as well. For example, Amazon's corporate offices in Munich, Germany have been Gold-certified for environmental design by the German Sustainable Building Council, based on their energy-efficient interiors and use of sustainable building materials. Amazon's fulfillment center in Beijing, China maximizes the use of natural lighting, saving thousands of kilowatt-hours of power usage each month.

Partnerships: Many of the cross-cutting sustainability issues that we prioritize at Amazon are enhanced through partnerships and collaborative initiatives with credible, knowledgeable, and innovative industry

partners in the areas of renewable energy, circular economy, responsible sourcing, and sustainable business. Learn more about Amazon's [sustainability partnerships](#).

For more information, please visit Amazon's [sustainability website](#).

How does Amazon drive improvement in environmental sustainability?

Our energy and environmental efforts are taking place across the company, and at our locations around the world. We are constantly looking for ways to build upon our best energy and environmental practices and use them throughout Amazon. For example we have Kaizens taking place in our fulfillment centers globally -- employees participate in small teams to identify waste and streamline processes. These best practices can be repurposed throughout our operations network.

Our Circular Economy team conducts surveys of our fulfillment centers to understand the items that make up our waste stream. We use the data from these surveys to evaluate existing recycling processes, analyze new diversion and reuse opportunities, and engage multiple business units around how to improve waste diversion.

In 2017 we added a sustainability metric to our operational scorecard leaders use to evaluate the performance of our fulfillment centers in North America. This process holds everyone in our operations accountable for sustainability and provides general managers with tangible solutions for improvement over time.

Our newest, largest wind farm – Amazon Wind Farm Texas – is up and running, adding more than 1,000,000 megawatt hours (MWh) of clean energy to the grid each year. As of May 2019, we've completed 57 wind and solar projects worldwide. Together, these projects will generate enough energy to power over 297,700 homes and will support hundreds of jobs, while providing tens of millions of dollars of investment in local communities.

Over the past 10 years, our sustainable packaging initiatives have eliminated more than 244,000 tons of packaging materials, avoiding 500 million shipping boxes. Our programs have reduced packaging waste by 16%, avoiding 305 million shipping boxes in 2017 alone.

How are Amazon employees engaged in sustainability efforts?

Amazon has global teams focusing on our key environmental and social impacts and opportunities for innovation. In 2017, we launched Amazon Sustainability Ambassadors, a voluntary employee program to engage sustainability-minded employees in collaborative initiatives and projects that drive sustainability results, enhance the customer experience, reduce costs, and protect the environment. The Sustainability Ambassadors program started with chapters in corporate offices and fulfillment centers in the U.S. and EU, and now includes more than 3000 Amazonians worldwide.

Learn more about [Amazon Sustainability Ambassadors](#).

What is Amazon doing to promote sustainable transportation?

Amazon operates hundreds of electric vehicles across the globe and invested \$440 million in Rivian to accelerate the production of electric vehicles, which are critical to reducing emissions from transportation. As part of our commitment to The Climate Pledge, Amazon recently ordered 100,000 new electric delivery vehicles from Rivian, the largest order ever of electric delivery vehicles. Amazon plans to start using these new electric vehicles to deliver packages to customers by 2021, with 10,000 new vehicles on the road as

early as 2021 and all 100,000 vehicles on the road by 2030, saving 4 million metric tons of carbon per year by 2030.

Amazon is constantly working to optimize our network and drive efficiencies. This includes managing our own fleet of trailer equipment which is designed to minimize fuel consumption. In North America, our fleet includes a mix of trailers in different sizes that are equipped with skirts (panels attached to the lower side edges of a trailer to make it more aerodynamic) and automatic tire inflation systems that keep tires properly inflated and maximize fuel efficiency. In Europe, we have deployed double-deck trailers, which increase the load capacity per trailer, reducing the total number of trailers on the road.

Across Europe, Amazon is contracting with our service providers to launch our first low-pollution last-mile fleet. Our European delivery fleet is comprised of a growing number of low-pollution electric and natural gas vans and cars, and we use e-cargo bikes for deliveries in some urban centers. Additionally, we are in the process of rolling out hydrogen fuel cell forklifts to a portion of our logistics facilities. We continually test new technologies in different locations around the world in an effort to increase our efficiency while reducing emissions.

In 2017, Amazon signed the Sustainable Fuel Buyers' Principles, demonstrating our commitment to working with service providers to accelerate the transition to low-carbon commercial transportation solutions. The Sustainable Fuel Buyers' Principles were developed by members of the Business for Social Responsibility (BSR) Future of Fuels group and vetted through the nonprofit's network of 600 expert and industry stakeholders. The Buyers' Principles outline the seven criteria that will catalyze the partnerships needed to drive the transition to a sustainable road freight transportation system. The Buyers' Principles focus on three areas: building demand for low-carbon fuels, managing sustainable progress, and developing partnerships and collaborations for systemic solutions.

Learn more about Amazon's efforts on [sustainable transportation](#).

Is Amazon a member of any industry consortia, working groups or other forums that focus on ESG/Sustainability? If yes, which ones?

Yes. Many of the cross-cutting sustainability issues that we prioritize at Amazon are enhanced through partnerships and collaborative initiatives with credible, knowledgeable, and innovative industry partners. Examples of these groups include:

Advanced Energy Buyers Group

In 2017, Amazon became a founding member of the Advanced Energy Buyers Group (AEBG). The mission of the business-led AEBG is to engage on policies that make it possible for non-residential energy users to meet their own energy needs with advanced energy through simple, flexible, market-based solutions; and to support policies that facilitate the transition to an electricity system that is secure, clean, resilient, smart, and affordable.

Advanced Energy Economy

To promote education, analysis, and policy advocacy for clean energy, Amazon joined Advanced Energy Economy (AEE), a nonprofit association of clean energy businesses that is committed to promoting clean and affordable energy technologies. AEE publishes reports, brings together stakeholders, and advocates for advanced energy policies with state and federal policymakers on issues related to electric vehicles, renewable energy, energy efficiency, and the smart grid.

American Council on Renewable Energy

To support our engagement on renewable energy, Amazon joined the American Council on Renewable Energy (ACORE), a nonprofit membership organization dedicated to building a secure and prosperous America with clean, renewable energy. ACORE convenes thought leadership forums and creates energy industry partnerships to communicate the economic, security, and environmental benefits of renewable energy.

amfori

In 2019, Amazon began working with amfori, a leading global business association for open and sustainable trade. They bring together over 2,000 retailers, importers, brands, and associations from over 40 countries, to drive social performance and improvements in their global supply chains.

Beauty and Personal Care Leadership Group

In 2017, Amazon joined the Beauty and Personal Care Leadership Group, a multi-stakeholder group of brands, retailers, and NGOs working to enhance beauty and personal care product sustainability by aligning and simplifying the assessment criteria for determining product sustainability.

Business for Social Responsibility

Amazon is a member of Business for Social Responsibility (BSR), a global nonprofit that works with partners across business, civil society, and government sectors to build a just and sustainable world. Amazon participates in working groups such as Future of Fuels (a collaboration with a mission to drive a sustainable transition to low-carbon commercial road freight), Clean Cargo Working Group (an initiative to reduce the environmental impacts of global goods transportation), and Tech Against Trafficking (a coalition of technology companies collaborating with global experts to help eradicate human trafficking using technology).

BSR HERproject™

Amazon joined BSR's HERproject™, a collaborative initiative that strives to empower low-income women working in global supply chains. Bringing together global brands, their suppliers, and local NGOs, HERproject™ drives impact for women and business via workplace-based interventions on health, financial inclusion, and gender equality. Since its inception in 2007, HERproject™ has worked in more than 700 workplaces across 14 countries and has increased the well-being, confidence, and economic potential of more than 800,000 women.

Center for Climate and Energy Solutions

Amazon joined the Business Environmental Leadership Council at the Center for Climate and Energy Solutions (C2ES) to work toward practical solutions to the world's climate and energy challenges. C2ES is an independent, nonpartisan, nonprofit organization working to forge practical solutions to climate change. Through strong policy and action to reduce greenhouse gas emissions, promote clean energy, and strengthen resilience to climate impacts, C2ES works with Fortune 500 companies to coordinate business action and business support for effective climate policy.

Closed Loop Fund

Amazon has committed \$10 million to the Closed Loop Fund to increase the recycling of products and packaging. Through project finance, the fund provides cities and companies with access to capital necessary to increase recycling rates in communities across America and build circular supply chains.

Corporate Eco Forum

Amazon joined the Corporate Eco Forum (CEF), an invitation-only membership group for large companies that demonstrate a serious commitment to sustainability as a business strategy issue. CEF's mission is to help accelerate sustainable business innovation by creating a neutral space for senior business leaders to strategize and exchange best-practice insights.

Green Chemistry and Commerce Council

In 2017, Amazon joined the Green Chemistry and Commerce Council (GC3), a multi-stakeholder collaborative that drives the commercial adoption of green chemistry by catalyzing and guiding action across all industries, sectors, and supply chains.

International Safe Transit Association

Amazon is a member of the International Safe Transit Association (ISTA), an organization focused on the specific concerns of transport packaging. ISTA is a nonprofit, member-driven association that sets the

standards for optimizing the resources in packages that are designed to be survivable, sustainable, and successful.

RE-Source Platform

To advocate for issues related to clean energy purchasing, Amazon is a member of the RE-Source Platform. RE-Source is a European alliance of stakeholders representing clean energy buyers and suppliers for corporate renewable energy sourcing. It is the first and only multi-stakeholder platform in Europe bringing together the interests of both buyers and sellers in order to unlock the potential of new business models, accelerate the transition to affordable renewable energy sources, and help combat climate change.

Responsible Business Alliance

Amazon joined the Responsible Business Alliance (RBA), a nonprofit coalition of companies committed to supporting the rights and wellbeing of workers and communities worldwide affected by the global electronics supply chain. The RBA is the world's largest industry coalition dedicated to electronics supply chain responsibility.

Renewable Energy Buyers Alliance

To support a resilient clean energy system, Amazon joined the Renewable Energy Buyers Alliance (REBA). REBA is an alliance of large clean energy buyers, energy providers, and service providers that, together with NGO partners, is unlocking the marketplace for all non-residential energy buyers to lead a rapid transition to a cleaner, prosperous, zero-carbon energy future.

SolarPower Europe

Amazon joined SolarPower Europe (SPE) to help advance solar energy development across Europe. SPE works to ensure solar-based energy solutions have access to financing and funding across Europe, positioning these solutions with policymakers at the European and national levels, effectively communicating the benefits of solar power and more.

Supplier Ethical Data Exchange

In 2017, we joined the Supplier Ethical Data Exchange (Sedex), a global nonprofit organization that provides manufacturers and retailers a platform to manage responsible sourcing data and monitor continuous improvement across their supply chains.

Sustainable Apparel Coalition

In 2019, Amazon joined the Sustainable Apparel Coalition (SAC), an industry alliance on sustainable production for apparel, footwear, and textiles. The Coalition uses the Higg Index, a standardized value chain measurement suite of tools for all industry participants. These tools measure environmental and social labor impacts across the value chain. With this data, the industry can address inefficiencies, improve sustainability performance, and achieve the environmental and social transparency consumers are demanding.

Sustainable Packaging Coalition

Amazon joined the Sustainable Packaging Coalition® (SPC), an industry working group dedicated to a more robust environmental vision for packaging. SPC uses strong member support, an informed and science-based approach, supply chain collaborations, and continuous outreach to build packaging systems that encourage economic prosperity and a sustainable flow of materials.

The Recycling Partnership

Amazon joined The Recycling Partnership to increase access to and improve curbside recycling in the United States. The Recycling Partnership supports communities and local governments with education, infrastructure, and measurement related to curbside recycling.

U.S. Partnership for Renewable Energy Finance

Amazon joined the U.S. Partnership for Renewable Energy Finance (U.S. PREF), a program of ACORE, to support our work with state and federal policymakers and other stakeholders to enable more renewable energy opportunities for cloud providers. U.S. PREF is an educational program that provides expert input on how the renewable energy finance market works.

Learn more about Amazon's [sustainability partnerships](#).

What are some examples of AWS's sustainability initiatives?

AWS focuses on energy efficiency and continuous innovation in our data centers, and our scale allows us to achieve higher resource utilization and energy efficiency than the typical on-premises data center. In addition to the environmental benefits inherently associated with running applications in the cloud, AWS is committed to achieving 100% renewable energy usage for our global infrastructure and exceeded 50% renewable energy usage for 2018. AWS also focuses on reducing water usage in our data centers, and we evaluate climate patterns for each AWS Region to select the most energy and water efficient cooling method. We are also implementing on-site water treatment technologies that allow us to further reduce water consumption. To help conserve drinking water supplies, AWS utilizes non-potable, recycled water for cooling when possible.

Learn more about AWS and sustainability [here](#).

How does AWS help customers meet their sustainability goals?

AWS focuses on energy efficiency and continuous innovation in our data centers. AWS is committed to achieving 80% renewable energy usage for our global infrastructure by 2024 and 100% renewable energy usage by 2030. AWS customers also use AWS services to make faster progress on their own sustainability goals. In addition to our analytics, IoT, and Machine Learning services, AWS hosts geospatial and environmental datasets (Earth on AWS), and AWS Cloud Credits for Research are available to support research using this earth observation data on AWS.

Learn more about the carbon reduction opportunity of moving to Amazon Web Services in a 451 Research report [here](#).

Does AWS have programs in place to reduce its water consumption?

Yes. In addition to our efforts on energy efficiency and commitment to renewable energy, AWS focuses on reducing water usage in our data centers. AWS evaluates climate patterns for each AWS Region to select the most energy and water efficient cooling method. We are also implementing on-site water treatment technologies that allow us to further reduce our water consumption. To help conserve drinking water supplies, AWS utilizes non-potable, recycled water for cooling when possible. AWS will continue to implement these strategies and test new technologies to reduce our water consumption and preserve potable water sources.

Learn more about our efforts to reduce water used for cooling in AWS data centers [here](#).

Does AWS have initiatives to reduce its environmental impact?

AWS focuses on energy efficiency and continuous innovation in our data centers, and we are committed to achieving 100% renewable energy usage for our global infrastructure by 2030. In addition to these efforts,

AWS focuses on reducing water usage in our data centers. AWS evaluates climate patterns for each AWS Region to select the most energy and water efficient cooling method.

Learn more about AWS and sustainability [here](#).

What is Amazon's Sustainability Data Initiative?

In 2018, Amazon launched the [Amazon Sustainability Data Initiative](#) to promote social and environmental research, innovation, and problem solving by making key data more widely available and easier to access. This initiative significantly reduces the cost, time, and technical barriers in analyzing large datasets to generate sustainability insights, regardless of an organization's size or computing power.

The Amazon Sustainability Data Initiative was launched to work with sustainability decision makers, researchers and innovators to identify their data-related challenges and enable them to use Amazon Web Services' technology and scalable infrastructure to stage, analyze, and distribute data. Those focusing on complex sustainability issues such as the impacts of climate change and weather extremes face many challenges in trying to find, access, and analyze massive (i.e., petabyte scale) datasets. In addition, independent groups working on common issues are duplicating efforts to locate and prepare data for analyses. The Amazon Sustainability Data Initiative leverages the AWS Public Dataset program to host large sustainability-relevant datasets in the AWS Cloud and support researchers and developers in analyzing these datasets more efficiently with AWS's flexible and scalable computing resources. Amazon is also granting AWS Cloud Credits to provide computing resources to innovators seeking to prototype sustainability-focused solutions.

Examples of sustainability-relevant datasets already available through the Amazon Sustainability Data Initiative include weather observations and forecast data, climate projections data, satellite imagery, hydrological data, air quality data, country-level social and environmental indicators, and ocean forecast data. You can view all of the available datasets on the [Registry of Open Data on AWS](#). For more information, please visit [this page](#).

How does AWS reduce water usage in its data centers?

AWS evaluates climate patterns for each AWS Region to select the most energy and water efficient cooling method. During the hottest months of the year, we have optimized our cooling units to minimize water use while maintaining low energy consumption. We are also implementing on-site water treatment technologies that allow us to further reduce water consumption. To help conserve drinking water supplies, AWS utilizes non-potable, recycled water for cooling when possible. As an example, we have partnered with a local utility in Oregon to use non-potable water for cooling in up to eight new data centers. AWS was also the first data center operator in Virginia to be approved to use recycled water with direct evaporative cooling technology.

Learn more about our efforts to reduce water used for cooling in AWS data centers [here](#).

How does AWS approach energy efficiency in its data centers?

AWS focuses on energy efficiency and continuous innovation in our data centers, and our scale allows us to achieve higher resource utilization and energy efficiency than the typical on-premises data center. In addition to the environmental benefits inherently associated with running applications in the cloud, AWS is committed to achieving 100% renewable energy usage for our global infrastructure by 2030.

Learn more about the carbon reduction opportunity of moving to Amazon Web Services in a 451 Research report [here](#).

Does AWS track water consumption?

Yes. AWS measures our water consumption, and we use this data to develop water efficiency metrics and set water reduction goals.

Learn more about our efforts to reduce water used for cooling in AWS data centers [here](#).

What is The Climate Pledge?

The Climate Pledge is a commitment to meet the Paris Agreement 10 years early. It calls on companies to be net zero carbon across their businesses by 2040, a decade ahead of the Paris Agreement goal of 2050. The Climate Pledge was founded on September 19, 2019 by Amazon and Global Optimism, and announced in Washington DC.

Learn more about [The Climate Pledge](#).
