Water Stewardship

AWS has multiple initiatives underway to use water more efficiently and use less potable (drinking) water to cool our data centers. AWS develops our water-use strategy by evaluating climate patterns for each AWS Region, local water management and availability, and the opportunity to conserve drinking water sources.

Water Use Strategies

Taking a holistic approach, we assess both the water and energy usage of each potential cooling solution to select the most efficient method.

Evaporative Cooling   ›

When possible, AWS incorporates direct evaporative technology to cool our data centers, reducing energy and water consumption. During cooler months, outside air is supplied directly to the data center without using any water. During the hottest months of the year, outside air is cooled through an evaporative process using water before being pushed into the server rooms, and we have optimized these cooling systems to minimize water usage. AWS is constantly innovating the design of our cooling systems to further reduce water use, and we adapt to changing weather conditions based on real-time sensor data.

Recycled Water ⟩

On-Site Water Treatment ⟩

Water Efficiency Metrics ⟩

Using Renewable Energy to Save Water

Shifting to renewable energy has environmental benefits beyond lowering carbon emissions. According to the International Energy Agency, the energy sector is responsible for 10% of global water withdrawals, used for operating thermal power plants and producing fuels. Unlike thermal power plants, wind and solar plants do not require large amounts of water to operate. In 2020, Amazon's renewable energy generation helped to avoid the withdrawal of about 480 billion liters of water—enough to supply 1 million American households or fill up 190,000 Olympic-sized swimming pools each year.

Community Water Programs

Along with reducing our water usage, AWS looks for opportunities to return water to the community.

Water for Irrigation

In our U.S. West (Oregon) Region, we partnered with the City of Umatilla and the West Extension Irrigation District to deliver water to farmers. Since our cooling water is not dirty, instead of sending it to a wastewater treatment plant, we deliver it to the local community to be repurposed for irrigation.
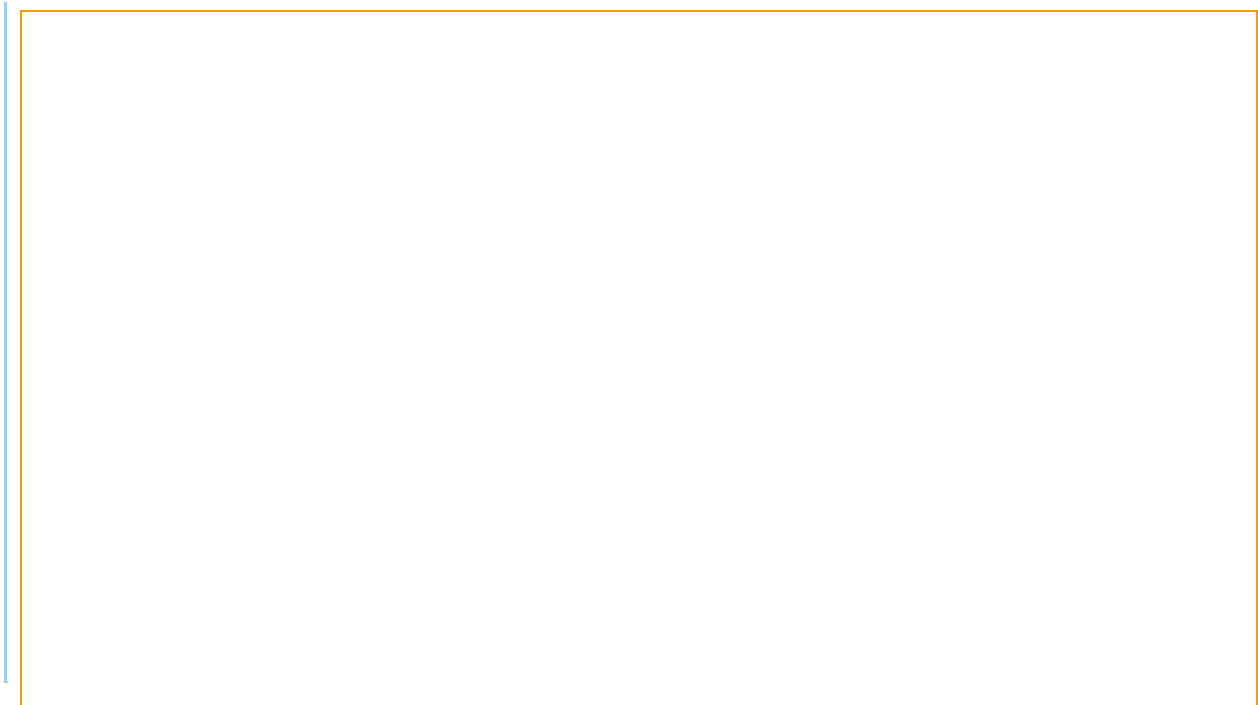
Community Water

We are partnering with Water.org and WaterAid in India and Indonesia, where water filtration plants, rainwater harvesting systems, and groundwater recharge projects will bring a combined 250 million gallons of water per year to 165,000 people.
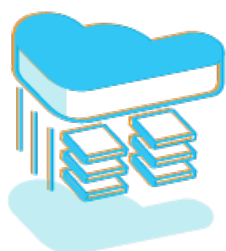
Watershed Restoration

We are funding watershed restoration efforts with The Nature Conservancy in Cape Town and São Paulo that will increase water supply availability by 41 million gallons per year.

Water Conservation in Sweden

AWS is working with the Swedish municipality of Katrineholm and local water supply company Sörmland Vatten to support a vital upgrade of the town's stormwater infrastructure, creating a new wetland just outside of Katrineholm in Stora Djulö. The project is due for completion in 2026 and will help reduce flooding, improve water quality and biodiversity, and provide citizens with a new recreational space for outdoor activities, such as hiking, biking, and birdwatching.
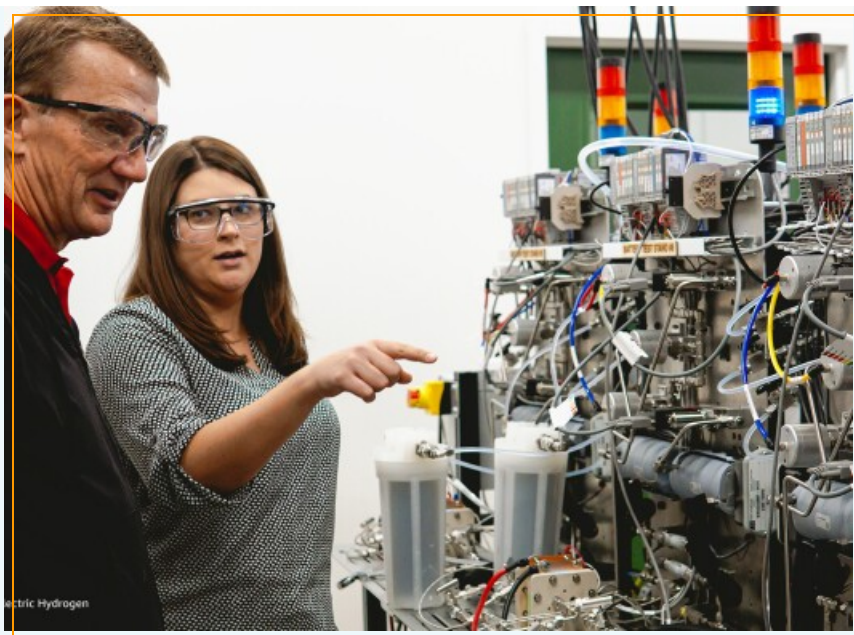
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Latest News

See how we put our scale and inventive culture to work on building a sustainable future.

New Amazon program grants $20,000 to up to five small businesses

New program supports small businesses that offer innovative, high-quality products built with sustainability in mind. Selected recipients receive $20,000, access to Amazon Launchpad, guidance, and selling opportunities.

Amazon invests in green hydrogen companies

The Climate Pledge Fund's latest investments in green hydrogen will help reduce global carbon emissions from heavy-duty transport and industries such as steel production.

BETA Technologies receives new funding from The Climate Pledge Fund

BETA's ALIA electric aircraft conducted a test flight between Amazon Air hubs as it continues to advance its mission of decarbonizing air transportation.

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