



AWS is building a sustainable business in Japan, partnering with local communities, and investing in the region's future

Our sustainability work includes enhancing energy efficiency, transitioning to carbon-free energy, reducing embodied carbon, using water responsibly, driving a circular economy, and enabling sustainability for customers.

At AWS, we focus on efficiency across all aspects of our infrastructure. We use industry-standard metrics to measure efficiency and seek the optimal balance of energy and water use.

For more information, visit the [AWS Cloud Sustainability webpage](#).

Efficiencies of Scale

Our scale allows us to achieve higher resource utilisation and energy efficiency than the typical on-premises data centre. A study released by Accenture and AWS estimates running optimized workloads on AWS’s infrastructure is up to **4.1 times more efficient than on-premises**.

For more information, visit the full report, “[How moving to the AWS cloud reduces carbon emissions](#).”

Key Sustainability Metrics

AWS Asia Pacific (Tokyo)	2023	2024	2025
Average PUE	1.32	1.27	1.25
Average WUE (L/kWh)	--	0.91	1.22

AWS Asia Pacific (Osaka)	2023	2024	2025
Average PUE	--	--	1.46
Average WUE (L/kWh)	--	--	--

Power Usage Effectiveness (PUE) and Water Usage Effectiveness (WUE), in litres per kilowatt-hour) for data centres operated by AWS between January 1 and December 31 of each year

Water Replenishment and Forest Conservation in Japan

Replenishing Tokyo's Water Supply

Tabayama Village is within the watershed that serves Tokyo. Amazon is collaborating with the village to implement forest management activities like thinning, pruning, and managing young tree growth to reduce competition among trees. This project aims to improve forest health and enhance groundwater replenishment for Tokyo's water supply.

This 10-year forest conservation partnership is expected to return **130+ million litres of water to communities annually**.

" [...] We are pleased to collaborate with Amazon on this water source recharge project to improve forest conditions. Through this project, we will carry out forest conservation activities to enhance the water retention capacity of the forests, promote groundwater recharge, and support a sustainable water cycle. We look forward to this project with AWS further contributing to the sustainability of local communities."

- Mayor Yoshito Kinoshita of Tabayama Village

Water Positive

In 2025, AWS withdrew 735,963,932 litres of water in Tokyo and 3,093,249 litres in Osaka.

AWS is committed to being water positive by 2030, meaning we will return more water to communities than we use in our direct operations. As of the end of 2025, we were 75% of the way towards this goal.

To learn more, see the [Amazon Water page](#).

Carbon-Free Energy

In 2025, BloombergNEF again recognized Amazon as one of the world's leading corporate purchasers of carbon-free energy, in addition to building the largest carbon-free energy portfolio of any corporation globally. We have invested in over 700 carbon-free energy projects in 28 countries, with the capacity to generate 40+ gigawatts of electricity.

Local Projects in Japan

Amazon has now enabled a **total of 25 renewable energy projects in Japan** to date, including 9 offsite solar and wind farms as well as 16 onsite solar projects, including 4 recently-announced projects:

- 35MW solar farm in Fukushima Prefecture with EDP Renewables Japan
- 10MW solar farm in Hokkaido with HEXA Renewables Japan, another 10MW solar farm in Hokkaido
- 10MW solar farm in Yamaguchi Prefecture with X-ELIO Japan

Once all 25 projects are operational, they are expected to generate more than 320,000 megawatt hours (MWh), **enough energy to power the equivalent of more than 76,000 Japanese households each year.**

Supporting Local Communities

OVERVIEW

ENVIRONMENT

COMMUNITY

ECONOMIC IMPACT

Inspiring Local Talent

AWS Girls' Tech Day 2024: In 2024, AWS hosted a Girls' Tech Day in Sagami-hara City, Kanagawa Prefecture, targeting middle and high school girls. This program designed to give girls an enjoyable introduction to the world of Science, Technology, Engineering, Arts, and Mathematics (STEAM) and to broaden their possibilities for future academic paths and careers.

Amazon Japan – Next Generation & Senior Reskilling Programs: Amazon Japan has launched new community contribution programs focused specifically on two pillars: next-generation development and reskilling programs for seniors/elderly. These programs represent Amazon's commitment to inclusive economic participation across all age demographics in Japan.



Disaster Relief

Following the devastating earthquake on Japan's Noto Peninsula in 2024, Amazon activated its two Japanese Disaster Relief Hubs to send essential goods—including blankets, water, food, diapers, and baby formula—to the affected area.

Since 2017, Amazon has donated more than 26 million relief items to communities impacted by over 200 disasters worldwide. Over 23,000 Amazon team members coordinated volunteering opportunities by partnering with community organizations in 2025.



Being a Good Neighbour

Safety Considerations: AWS has been safely operating data centres for nearly two decades. Our facilities use standard electrical and networking equipment that operates well within established safety guidelines. AWS has Safety Management Program, which defines the policies for how our management system is executed and the standards we adhere to in order to meet or exceed regulatory commitments and to share best practices.

Sound Management: We are investing in advanced technology and engineering for industry-leading sound management across our data centres that demonstrates our commitment to being a responsible community partner. Our mitigation approach strives to reduce both low frequency and tonal sound characteristics to ensure comprehensive sound quality management. Our noise mitigation measures include sound-dampening building materials and insulation, strategic placement of equipment, visual screening, and acoustic enclosures and mufflers where needed.

Environmental Protection: AWS is committed to sustainable and environmentally responsible business practices, complying with all applicable environmental obligations, evaluating our performance relative to these obligations and finding opportunities to enhance that performance.

Air Quality: Our generators are carefully maintained and fully compliant with all environmental regulations. Beyond meeting these requirements, AWS voluntarily invests in advanced technology that significantly lowers emissions below required levels. These sophisticated emissions control technologies greatly reduce nitrogen oxide, particulate matter, and carbon monoxide to protect public health.

Water: Protecting water quality and local ecosystems is a top priority for AWS. When outside air isn't cool enough to air cool our data centres, we use water to cool the air through an efficient process called direct evaporative cooling. After use, we discharge this water to local treatment facilities or waterways. For all water that leaves our facilities, we work closely with local environmental regulators and comply with applicable water quality requirements, including any limits on water temperature.

Investing in Japan

¥3.77 trillion

Committed investment in existing cloud infrastructure in Tokyo and Osaka by 2027, to meet growing customer demand for cloud services in Japan.

¥5.57 trillion

Estimated contribution to Japan's Gross Domestic Product (GDP), according to AWS Economic Impact Study

30,500 full-time equivalent (FTE) jobs

Estimated roles created in local Japanese businesses each year, according to AWS Economic Impact Study, with 7,000+ attributable to AWS data centre development

47 prefectures

Covered by AWS Partner Network (APN) Partners, which includes over 100K local and international independent software vendors (ISVs) and systems integrators (SIs)

¥868 million

Offered to select Japan-based companies in the form of AWS credits to build and train LLMs on AWS, along with technical mentoring

Supporting National Priorities

“The development of digital infrastructure in Japan is key to strengthening the country's industrial competitiveness, and data centres play an important role to this end. It promotes the use of important technologies such as AI and improves the capabilities of research and development in Japan. I greatly welcome AWS's long-term investments in strategic areas for Japan, such as data centres, digital workforce development, AI, and renewable energy. These investments will create local jobs, improve productivity, grow markets for digital transformation and green transformation, and accelerate innovation for Japan. [...]”

- Takuya Hirai, former digital minister and current chair of headquarters for the promotion of a digital society, Liberal Democratic Party