



Sustainability Fact Sheet

Singapore

AWS is building a more sustainable business in Singapore, 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 (Singapore)	2023	2024	2025
Average PUE	1.30	1.32	1.30
Average WUE (L/kWh)	--	1.68	1.57

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

Carbon Free Energy

Our Investments in Singapore

Local Projects

In Singapore, Amazon has invested in two renewable energy projects that combined will generate enough renewable energy to power nearly 20,000 Singaporean homes each year. Amazon is the primary energy offtaker for both projects, which include:

- **A 62-megawatt (MW) solar project with EDPR:** This project is made up of a series of solar panels mounted on a ground system. A benefit of ground-mounted solar is the ability to optimally position the system to capture sun exposure as weather conditions change.
- **A 17.6 MW solar project with Sembcorp:** Now operational and contributing to the local grid, this project has 33,580 solar panels installed across two sites. The farm is highly mobile such that it can be packed up over four months and set up at another site in two months.

Scale of our Renewable Energy Investments

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.

Water Stewardship in Singapore

Water Positive

In 2025, AWS withdrew 1,796,931,761 litres of water in Singapore.

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

OVERVIEW

ENVIRONMENT

COMMUNITY

ECONOMIC IMPACT

Water Reclaim

AWS operates all its leased/owned data centers in Singapore using **NEWater**, the nation's reclaimed water, which eliminates the use of potable freshwater for cooling. Singapore has made water resilience a national priority, and AWS has aligned its operations with this agenda by achieving one of the lowest Water Usage Effectiveness (WUE) ratings in the region, setting a benchmark for water-cooled data center operations in the region.

AWS's leadership in responsible water stewardship has been recognized through **Singapore's Water Efficiency Award (WEA)** and **the Singapore Watermark Award (SWMA)**, both administered by PUB, Singapore's National Water Agency, honoring organizations that demonstrate exemplary leadership in advancing the nation's water sustainability goals. Through the 100% NEWater adoption and industry-leading water efficiency, AWS continues to champion Singapore's vision of a water-resilient future.

A 17.6 MW Sembcorp project that Amazon has invested in also has integrated a **rainwater harvesting system** that collects and treats up to 170,000 cubic metres of rainwater annually, which is equivalent to the amount required to fill 68 Olympic-sized swimming pools.

Supporting Cloud Skills and Innovation

- **400,000+ individuals trained in cloud skills since 2017** through the national Cloud Ready SG with AWS program, AWS Academy (21 member institutions including NTU, NUS, SMU, ITE, and all five polytechnics), and AWS re/Start—a free 12-week training program for unemployed/underemployed individuals launched in 2022 with Lithan Academy, NTUC e2i, and Tech Talent Assembly
- **AWS AI Spring Singapore (2024):** A multifaceted collaboration with the Singapore Government across six strategic pillars—Public Sector, Workforce, Enterprise, Startups, Communities, and R&D—to fast-track AI and generative AI adoption in support of Singapore's Smart Nation and National AI Strategy 2.0 (NAIS 2.0) goals.
- **STEM education for youth:** AWS InCommunities sponsored the Youth STEM Empowerment Programme with Science Centre Singapore (21 schools), and delivered AR/VR coding workshops with Junior Achievement Singapore reaching nearly 800 students—all focused on UN Sustainable Development Goals
- **AWS-IMDA Joint Innovation Center @ PIXEL,** Singapore's and Southeast Asia's first AWS JIC, and the AWS Cloud Innovation Centre (2021, first in ASEAN), co-innovate with nonprofits, education institutions, and government agencies.



Investing in Singapore

- **SG\$23.5 billion (US\$17.5 billion) total investment:** AWS invested SG\$11.5 billion (US\$8.5 billion) through 2023, with an additional SG\$12 billion (US\$9 billion) planned from 2024–2028
- **SG\$42 billion (US\$31.2 billion) combined GDP contribution:** SG\$18.3 billion (US\$13.6 billion) contributed through 2023, plus an estimated SG\$23.7 billion (US\$17.6 billion) from 2024–2028
- **12,300+ FTE jobs supported annually** at local businesses from 2024–2028 (up from 4,800+ annually through 2023):
 - **5,800+ direct jobs** in construction, facilities maintenance, electricity generation, and telecommunications
 - **3,400+ indirect jobs** across the AWS supply chain
 - **3,100+ induced jobs** in the broader Singapore economy
- **First AWS Region in Asia (launched 2010),** underscoring Singapore's strategic importance as a regional digital hub
- **Cloud adoption GDP multiplier:** A 1% increase in cloud penetration in Singapore yields a 0.15% GDP increase (US\$694 million)—the highest elasticity among all countries studied; cloud contributed 2.23% of Singapore's GDP in 2023 (~US\$13.8 billion)
- **Smart Nation alignment: Singapore Government's Smart Nation Group** was the first customer to deploy AWS Dedicated Local Zones
- **AI Singapore (AISG) built SEA-LION**, the first culturally localized LLM family for Southeast Asian languages, on AWS infrastructure—scaling from 3B to 7B parameters in just three months

Based on the [AWS Singapore Economic Impact Study 2024](#)