

SINGAPORE

Microsoft commitments

CARBON

Microsoft pledged to become carbon negative by 2030 and remove historical carbon since its 1975 founding by 2050. Microsoft will reduce Scope 1 and 2 emissions to near zero through energy efficiency work and by reaching **100 percent renewable energy supply by 2025.**

Microsoft has also committed by 2030 to be:

- Free of diesel
- Match 100 percent of electricity consumption, 100 percent of the time, with zero-carbon energy purchases
- Reduce our Scope 3 emissions by more than half

WATER

In 2020, Microsoft pledged to be water positive for our direct operations by 2030.

Through this commitment, we will replenish the water consumed by datacenter operations in water-stressed regions. We have also committed to **reduce water waste by 95 percent in our datacenter operations by 2024.**

WASTE

In 2020, Microsoft announced enhanced goals for waste reduction, circular supply chains, and zero-waste certification. We are working towards our goal of **90 percent reuse of servers and components by 2025** through our first-of-a-kind Microsoft Circular Centers.

Microsoft is using **circular economy** principles in our datacenters by implementing reuse and comprehensive recycling programs.

By 2030, Microsoft datacenters will be zero waste



ECOSYSTEMS

Microsoft has committed to **protecting more land than we use for direct operations by 2025.**

Microsoft is committed to community investment, pollution remediation, and fair economic inclusion initiatives, as well as investment in clean energy, broadband access, and water replenishment initiatives.



Singapore

As more people and businesses rely upon technology to stay connected, informed, and productive, digital needs in Singapore and around the globe are growing—and that means the need for datacenters is growing, too.

The Microsoft Cloud offers customers an energy-efficient and carbon-neutral alternative to running their own private datacenters. [Research](#) shows that Microsoft Cloud services can be up to 93 percent more energy efficient than traditional enterprise datacenters.

We're committed to providing a sustainable Microsoft Cloud, so we wanted to share information about how we take responsibility for our datacenter operations.

For Microsoft datacenters located in Singapore in the Southeast Asia region, we have included local sustainability investments and datapoints in support of meeting and exceeding our commitments around carbon, water, waste, and ecosystems.

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Local sustainability investments

CARBON

1.358

Power usage effectiveness (PUE)

January 2022–December 2022
Design PUE for new datacenters: 1.23



13%

Renewable energy coverage from solar power

Approximate energy procured through June 2022

Microsoft's new datacenter in Singapore is **LEED Gold certified**.

In 2018, Microsoft [signed a renewable energy agreement](#) with Sunseap Group marking the **largest-ever solar project in Singapore**.

[Learn about PUE](#)

WATER



2.06 $\frac{\text{L}}{\text{kWh}}$

Water usage effectiveness (WUE)

January 2022–December 2022

The Microsoft datacenter uses **NEWater and mechanical cooling** to keep servers at the proper temperature for operation. **NEWater is a reclaimed water source produced from further purifying treatment water**.

A second datacenter, which is currently being constructed, will use **indirect evaporative and mechanical cooling**.

[Learn about WUE](#)

WASTE

In June 2022, we **opened a Circular Center at the Singapore datacenter facilities**.

Microsoft Circular Centers can process up to



12,000

servers per month for reuse.

Globally, Microsoft datacenters **reuse 78 percent of our end-of-life assets and components**; the remaining 22 percent of materials are recycled.

COMMUNITY

Microsoft partnered with Generation Singapore, a nonprofit organization with a mission to prepare, place, and support people in previously inaccessible, life-changing careers.

#GetReadySG was launched with multiple government entities to address the demand-supply gap for local skilled talent in tech and a need to align government policies with employers' business models. Over a two-year pilot, they launched three priority tech programs and equipped 1,000 underserved jobseekers with relevant skills.

Since 2020, Microsoft has donated more than



\$370k

to projects supporting community priorities.

[Learn more](#)

Achieving your sustainability goals

Microsoft Azure enables operational agility, performance, efficiency, and sustainability so you can reduce your company's water usage, waste output, and carbon footprint—all while improving productivity and cost efficiency.


Microsoft Emissions Impact Dashboard

The Microsoft Emissions Impact Dashboard helps to quantify the impact of Microsoft Cloud services on your environmental footprint, factoring in Microsoft's Scope 1, 2, and 3 emissions as well as the efficiency of your on-premises environments.

Microsoft Cloud for Sustainability

The Microsoft Cloud for Sustainability allows you to more easily and effectively record, report, and reduce your emissions on a path to net zero. It integrates previously disparate solutions into a new system of record that delivers all the data you need to manage your business today while you transform.

[Learn more](#)



Whatever your sustainability goals, Microsoft can help you plan, implement, and attain measurable environmental and cost benefits.

Learn more about improving your sustainability with Microsoft:

Microsoft.com/Sustainability