Microsoft

Microsoft datacenters in Korea



Datacenters provide the physical infrastructure for the technology we depend on at work and in our personal lives

A datacenter building houses thousands of computer servers and data storage devices connected to the internet



These buildings are similar in size and appearance to a distribution warehouse.



Microsoft aims to build datacenters that are best in class in performance, reliability, safety, aesthetics, and sustainability.



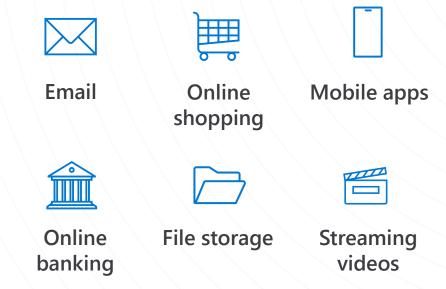
Compared to many other industrial facilities, datacenters do not create significant noise pollution or have a significant impact on traffic flow or congestion.



Microsoft operates more than 300 datacenters in over 34 countries.

Datacenters are part of everyday life

Whenever you open an app on your phone, join a virtual classroom or meeting, snap and save photos, or play a game with your friends online, you are using a datacenter.



Take a virtual tour of a datacenter



Microsoft datacenters create local operations and construction jobs

Microsoft datacenters in Korea currently employ 51 people.

We estimate it will take approximately **3.5 million work hours** and more than **858 jobs** during peak construction to complete construction of the new datacenters.

By the end of 2026, we project **85 full-time employees and contractors** will work across all operational facilities.

Datacenter operations

- Campus management
- People management
- Learning and development
- IT operations
- Mechanical engineers
- Electrical engineers
- Security contractors
- Building maintenance
- Critical environments

Construction jobs

- Electricians
- Plumbers and pipefitters
- Carpenters
- Structural iron and steel workers
- Concrete workers
- Earth movers

Find Microsoft jobs in your community

Taxes from Microsoft datacenter operations represent important revenue for national, regional, and local governments

Microsoft datacenters represent a capital-intensive investment and long-term commitment to the community. This investment grows the commercial property tax base, increasing revenue for municipal services that benefit local citizens.

Examples of country, provincial, and local taxes that support cities, municipal services, schools, and colleges include:



Property taxes

Collected annually once land is purchased.



Indirect taxes

From construction and operation expenses. Examples include VAT, GST, and sales tax.



Income taxes

From construction and operations workers.





Microsoft is investing in local priorities in Korea

Microsoft community investments support community-identified priorities across **2 projects** in Korea.

Investing in people of all ages through local skill-building programs

Microsoft and JUMP unveiled a digital skills program at Korea Polytechnic. This initiative features AI training for 100 job seekers and Training the Trainers program on AI+Cloud skills, pioneering the integration of Microsoft Cloud AI into its curriculum. Furthermore, it introduces Cloud AI education to Busan high school students, bolstering their employment prospects, aiming to bridge the digital divide, democratize access to AI, and boost the local economy.



Partnering with environmental sustainability programs for local impact

Microsoft works with the Society for Ecological Restoration and the National Research Foundation of Korea (NRF) to conserve the Gwanaksan Mountain ecosystem. The project aims to enhance native biodiversity and ecological processes by diminishing invasive plant presence and augmenting ecosystem functions. The project will serve as a model for similar areas grappling with ecological challenges.



Published April 2024.
This document shares information we have as of the publication date, and it includes estimated information and projections. The information is provided as is and may change without notice.

Microsoft global commitments



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CARBON

Microsoft pledged to become carbon negative by 2030 and to 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 coverage 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.

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 and recycle of servers and components by 2025 through our first-of-akind Microsoft Circular Centers.

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

protecting more land than we use for direct operations by 2025.

Microsoft has committed to

ECOSYSTEMS

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.

By 2030, Microsoft datacenters will be zero waste





Korea

Datacenter operations sustainability investments

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 Korea 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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CARBON

We've committed to have 100% renewable energy coverage globally by 2025.

In Korea, we are prepared to transition our datacenters' backup generators to be powered by a **renewable biofuel that reduces net carbon emissions**, when the product becomes regionally available.

The datacenter in Korea is **LEED Gold certified**.

WATER

Our facilities use **direct evaporative cooling (DEC)** and **indirect evaporative with fluid coolers**. DEC uses water for cooling approximately **10%** of the year.

Datacenter cooling water is typically not treated with any chemicals or additives.

When quality of the available water is not adequate for use in cooling systems, water treatment is pursued in the same way municipal drinking water is treated to remove excessive hardness or to prevent harmful bacterial growth.

Water from our cooling systems is discharged back to the local wastewater utility treatment plant, following local regulations.

This system is highly efficient, using **less electricity and a fraction of water used** by other water-based cooling systems, such as cooling towers.



Globally, Microsoft reuses or recycles **90%+** of end-of-life assets.

Microsoft is conducting research and development to improve waste diversion and increased recycling efficiency by identifying new recycling solutions for used air filters and fiber optic cables.

Learn more about datacenter efficiency metrics including PUE and WUE

