#### Microsoft

# Microsoft datacenters in Malaysia

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.

# 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.



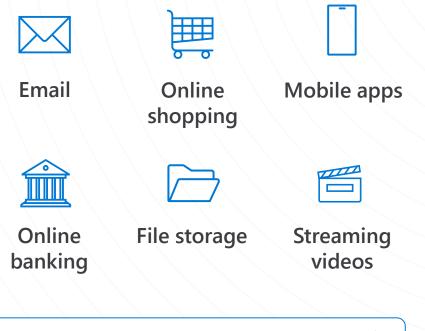
Compared to many other industrial facilities, datacenters do not create significant noise pollution or have a significant impact on traffic flow or congestion.



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 Malaysia currently employ 28 people.

We estimate it will take approximately 3.3 million work hours and more than 809 jobs during peak construction to complete construction of the new datacenters.

By the end of 2026, we project **82 full-time employees and contractors** will work across all operational facilities.

#### **Datacenter operations**

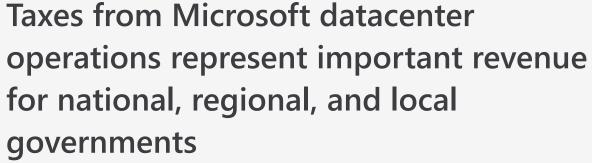
• Campus management

Microsoft

- 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



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**



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



#### **Income taxes**

From construction and operations workers.



Collected annually once land is purchased.

#### **Indirect taxes**





### Microsoft invests in Malaysian local priorities

Microsoft community investments support community-identified priorities across **5 projects** in Malaysia.

#### Bringing digital skill-building programs to Malaysian job seekers

The Microsoft Bersama Malaysia initiative aims to provide digital skills to 1 million Malaysians by end of 2023, with potential employment opportunities for participants.

Microsoft Malaysia is teaming up with SOCSO and Junior Achievement Malaysia to train 25,000 Malaysians through the Digital Skills for Tomorrow's Jobs Program. The initiative includes webinars and advanced training in data science, benefiting graduates and job-seekers. This effort supports Malaysia's MyDIGITAL and the National Fourth Industrial Revolution Policy that is committed to prepare 30,000 data professionals by 2025.

Both programs strive to equip Malaysians to meet the increasing demand for tech skills and succeed in Southeast Asia's growing digital economy.

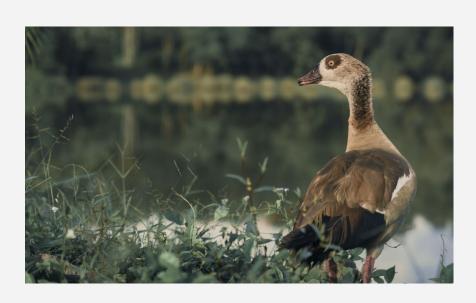
Learn more about Digital Skills for Tomorrow's Jobs

## Partnering with local government and nonprofits to improve water quality

There are multiple lakes in and around Cyberjaya and Putrajaya which serve as open spaces for community use. The lakes receive a lot of stormwater runoff from surrounding residential and commercial areas, containing high levels of nutrients, sediments, and pollutants, causing water quality issues and dangerous algal blooms.

In collaboration with the Society of Ecological Restoration (SER) and local partner, Majlis Perbandaran Selayang (MPS), Microsoft is working to improve water quality using nature-based solutions to rehabilitate the lakes' ecology and engage the community.

Learn more about the Putrajaya Wetland Park and Lake Restoration project



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#### 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.



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.

#### 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.

By 2030, Microsoft datacenters will be zero waste





#### Malaysia 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 Malaysia 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 Malaysia, our datacenters will be designed for our backup generators to be powered by a **renewable biofuel that reduces net carbon emissions**.

#### WATER

Our facilities use **water-cooled chillers**. Water-cooled chillers use water **100%** 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

