

# Microsoft datacenters in Mexico

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

*Hyperscale brings hyper efficiency.* Microsoft cloud services offer customers an energy efficient and carbon neutral alternative to running their own private datacenters. [Research](#) shows that Microsoft cloud services are up to 93 percent more energy efficient than traditional enterprise datacenters.

Microsoft strives to empower the communities where our employees live, work, and operate our datacenters. With that, it's important we share information to ensure you understand why datacenters are needed, Microsoft's approach for responsible operations, and the benefits of hosting a datacenter in your community.

[Why datacenters >](#)

[Microsoft commitments >](#)

[Community benefits >](#)

Published June 2022. 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.

## The cloud powers our digital world

Cloud computing is the delivery of computing services over the internet. Common daily activities are made possible through cloud computing, such as:



Email



Online banking



File storage



Streaming videos



Collaboration



Online shopping



Mobile apps

Cloud computing can provide consumers and businesses with the benefits of enhanced security, privacy, compliance protection, lower costs, easier access, higher reliability, and a lower carbon footprint.

## The Microsoft Cloud is for everyone

The Microsoft Cloud serves over 1 billion customers and 20 million companies worldwide.

Organizations in Mexico relying on the Microsoft Cloud are made up of a variety of sectors, such as large enterprises, startups, governments, hospitals, banks, schools, or other organizations that contribute to a modern society.



# When Microsoft joins a community, we bring our commitments for a better world

Support inclusive economic opportunity

Commit to a sustainable future

Earn trust

## Microsoft datacenters are key to our sustainability goals

### Carbon negative by 2030

[Power usage effectiveness \(PUE\)](#) measures cloud energy efficiency. The calculation is total power consumption divided by IT power consumption. A lower PUE score indicates more energy-efficient datacenters, with a PUE of 1.0 being the best score. Our Mexico datacenters are under construction and not in operation. They will have a **design average PUE of 1.12**.

Globally, Microsoft datacenters use fossil fuel generators for backup power and account for **less than 1 percent of our overall emissions**. In specific regions, Microsoft is **piloting running backup generators with renewable blend, cleaner-burning fuels**, and is also **piloting the replacement of datacenter generators with long-duration batteries**.

[Leadership in Energy and Environmental Design \(LEED\)](#) is the world's largest green building certification program. LEED provides the framework for healthy, highly efficient, and cost-saving green buildings with lower carbon emissions. LEED certification is a globally recognized symbol of sustainability achievement and leadership. **New Microsoft datacenters being built are designed to earn LEED Gold certification.**

Microsoft operations in Mexico **comply with applicable air quality requirements**.

### Water positive by 2030

[Water usage effectiveness \(WUE\)](#) is another key metric relating to the efficient and sustainable operations of our datacenters and is a crucial aspect as we work towards our commitment to be water positive by 2030. WUE is calculated by dividing the number of liters of water used for humidification and cooling by the total annual amount of power (measured in kWh) needed to operate our datacenter IT equipment.

Microsoft will use outdoor air with direct evaporative cooling at the Mexico datacenters. This method of cooling **uses outside air and zero water** for cooling when temperatures are below 29.4 degrees Celsius, reducing water for cooling to less than 20 percent of the year. This system is highly efficient, using less electricity and a fraction of water used by other water-based cooling systems, such as cooling towers.

The new datacenter facility in Mexico was designed for an **average WUE of 0.056 L/kWh**.

### Zero waste by 2030

Microsoft has a goal to achieve 90 percent diversion of datacenter operational waste by 2030. To reach this goal, we're working closely with our waste haulers to optimize waste diversion programs across our global datacenter portfolio. We have achieved Zero Waste certifications for our San Antonio, Texas; Quincy, Washington; Boydton, Virginia; and Dublin, Ireland datacenter locations.

Globally, Microsoft datacenters reuse **78 percent of our end-of-life assets and components; the remaining 22 percent of materials are recycled**. Additionally, Microsoft is conducting research and development to improve waste diversion by determining new recycling solutions for used air filters and fiber optic cables.

## Microsoft is helping to build the workforce of the digital future in Mexico



**Training the digital skill trainers in Queretaro State:** Through the Microsoft Global Skilling Initiative, Microsoft Philanthropies works in collaboration with Queretaro State to train job seekers in digital skills. In addition, in partnership with Queretaro's Secretariat of Labor and public universities, the Microsoft Train the Trainers initiative helped more than 2,500 students to perform their mandatory social service as instructors. The local Employability Service used these students trained as instructors to help the job seekers attached to the Service. More than 6,520 final beneficiaries have been trained by the student instructors and the Employability Service reports that to date, more than 1,956 people have found employment.

**Partnership with the Secretariat of Economy:** In partnership with the Secretariat of Economy, we have trained 6,948 people in Microsoft Technology Workshops on microenterprises and self-employment. Microsoft joined the "Secretary of Economy Technology Week" having 2,749 participants and 399 diplomas delivered. Recognizing a need for digital skills training for the economically active population, the partnership worked with the Productive Development Unit to develop streaming webinars, with 4,200 reproductions for the two webinars created.

## Microsoft datacenters create family-wage operations and construction jobs as well as positive impacts to the local economy

When construction begins for the new facilities, we estimate it will require **1,080 construction roles and approximately 4.4 million work hours to complete the project.** We intend to fill **25 to 30 percent of positions with local contractors.**

Once the initial datacenter is operational, we anticipate **22 full-time employees** will work at the facility with more jobs becoming available as the datacenter expands.



### Construction jobs

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



### Datacenter operations

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