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.

# Microsoft datacenters in Greece

As more people and businesses rely upon technology to stay connected, informed, and productive, digital needs in Greece 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.

## 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 Greece 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.

ΚΩΤΣΟΒΟΛΟΣ

LOULIS mills

viva wallet

MYTILINEOS

opap

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.

# 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 datacenters in Greece 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 Greece **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 datacenters in Greece. 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 15 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 facilities in Greece are designed for an **average WUE of 0.102 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 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.

In 2020, we opened our **first Microsoft Circular Center in our North Holland datacenters**, which is designed to extend the life cycle of servers through reuse and support. Because it takes five to six years from when a datacenter is operational to generate reusable assets, we are planning to use the closest available Circular Center once the new datacenters are in use and servers are ready to be decommissioned. Microsoft Circular Centers are able to process 3,000 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.** 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 making skill-building investments in Greece

**The GR for GRowth initiative** is designed to help support people, government, and businesses of all sizes in Greece with technology and resources to create new opportunities for growth. In addition to building new datacenters, Microsoft plans to support citizens in both professional and personal ambitions by providing resources to skill approximately 100,000 people in Greece in digital technologies by 2025. Two examples of the GR for GRowth initiative include these programs:

**The DigiYouth Initiative** is the third edition of ReGeneration's flagship program with funding from Microsoft. The program helps to increase job opportunities within the underserved community of young people in the country and empower the underrepresented target group of women in tech.

**Upskilling Greek Youth for the Digital Era** is another program from ReGeneration. The program targets young graduates and includes curriculum to develop soft skills and areer preparation. Nearly 60 percent of participants have been placed into jobs upon program completion.

To date, more than 34,000 business executives, new graduates and public sector employees have been trained as part of the GR for GRowth initiative. Additionally, Microsoft Hellas and the state's Manpower Organization (OAED) have signed a memorandum of cooperation on the development of digital skills. Under this agreement 1,000 unemployed people have been trained.

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

Microsoft datacenters represent a capital-intensive investment and long-term commitment to the community. We estimate it will require 290 construction roles and **1.19 million work hours** to build the new datacenters in Greece. We intend to fill **25 to 30 percent of positions with local contractors.**

Once fully operational, we anticipate an additional **45** full-time employees and contractors will work at the new datacenters.

### 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