Microsoft datacenters in Poland

As more people and businesses rely upon technology to stay connected, informed, and productive, digital needs in Poland 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 Poland 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. **The datacenter facilities in Poland 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 Poland **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 uses outdoor air with direct evaporative cooling at our Poland 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 2 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 Poland are designed for an average WUE of 0.023 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.

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 a circular economy for the Microsoft Cloud. 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 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**. 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

Why datacenters >

Microsoft commitments >

Community benefits >

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Since 2020, Microsoft has been collaborating with the Warsaw Information Society Development Foundation to create digital skill building and sustainability education opportunities

In collaboration with the Warsaw Information Society Development Foundation, Microsoft provided funding to help implement comprehensive activities aimed at raising awareness in the local communities about protecting the environment, with a focus on air pollution. The project uses the Clouds on Mars solution, based on Microsoft Azure AI services, to project the level of pollution, making all relevant data available for people through the online application. The project includes a social campaign by local non-profit partners providing education in schools and libraries about environmental protection, and enables people to use EU funds for replacement of their furnaces that use fossil fuels.

In a second project with the Warsaw Information Society Development Foundation, Microsoft funding will help implement comprehensive digital transformation and environmental sustainability projects. Projects include equipping local organizations with cyber security training, website design, and software delivery, as well as classes and events run by the Center of Ecological Activities to teach local residents about sustainability.

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 **230 construction roles** and approximately **950,000 work hours** to build the new datacenters. We intend to fill **25 to 30 percent of positions with local contractors**.

Once fully operational, we plan to hire **60 full-time employees** to work in the new datacenter facilities in Poland.

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