IOWA, USA

Microsoft commitments

CARBON

Microsoft pledged to become carbon negative by 2030 and 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 supply 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. We have also committed to **reduce water waste by 95 percent in our datacenter operations by 2024**.

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 of servers and components by 2025** through our first-of-a-kind Microsoft Circular Centers.

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

By 2030, Microsoft datacenters will be zero waste

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.

Iowa, USA

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

The Microsoft Cloud offers customers an energy-efficient and carbon-neutral alternative to running their own private datacenters. Research shows that Microsoft Cloud services can be up to 93 percent more energy efficient than traditional enterprise datacenters.

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 Des Moines, Iowa, in the Central US region, we have included local sustainability investments and datapoints in support of meeting and exceeding our commitments around carbon, water, waste, and ecosystems.

Published March 2023. 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.

Local sustainability investments

CARBON

1.16

Power usage effectiveness (PUE)

January 2022–December 2022
Design PUE for new datacenters: 1.12

100%

Renewable energy coverage from wind, solar, and hydro power

Approximate energy procured through June 2022

Agreements for renewable energy were made with AES, EDF, EDPR, and Volt.

In Des Moines, we are transitioning from petroleum-based diesel to power our backup generators to a **renewable biofuel blend that reduces net carbon emissions**.

Microsoft datacenters in Iowa have renewed **LEED Gold certification**.

WATER

0.19 L/kWh

Water usage effectiveness (WUE)

January 2022–December 2022

Microsoft will use **adiabatic cooling** at our Des Moines datacenter.

These datacenters use **outside air and zero water** when temperatures are below 29.4 degrees Celsius, **reducing cooling water use to less than 10 percent of the year**.

Learn about PUE and WUE

WASTE

Microsoft Circular Centers can process up to

12,000

Servers per month for reuse.

It takes five to six years from when a datacenter is operational to generate reusable assets.

Once servers are ready to be decommissioned in this region, Microsoft is planning to open a **Des Moines Circular Center**.

COMMUNITY

Since 2017, Microsoft has invested more than

$2.5M

to support community-identified priorities across 73 partners in the Greater Des Moines community.

We support environmental education and stewardship.

With Polk County Conservation Youth Corps, Microsoft is working to engage and inspire diverse youth through hands-on environmental stewardship projects, outdoor recreation, and ecology education through a fun and challenging conservation experience for young people. Youth earn money, gain skills, and help Polk County parks and trails.

Learn more

Achieving your sustainability goals

Microsoft Azure enables operational agility, performance, efficiency, and sustainability so you can reduce your company's water usage, waste output, and carbon footprint—all while improving productivity and cost efficiency.

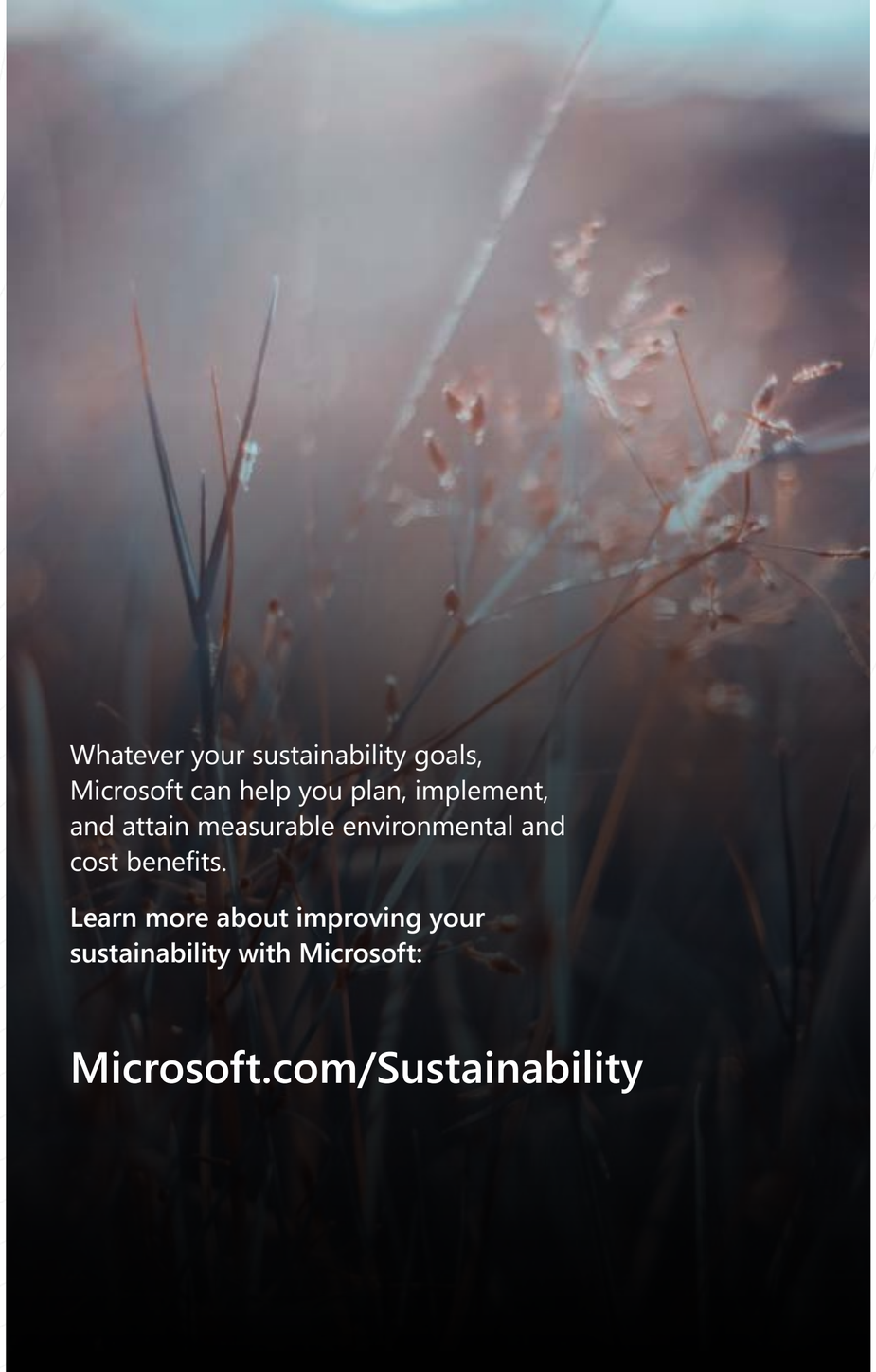
Microsoft Emissions Impact Dashboard

The Microsoft Emissions Impact Dashboard helps to quantify the impact of Microsoft Cloud services on your environmental footprint, factoring in Microsoft's Scope 1, 2, and 3 emissions as well as the efficiency of your on-premises environments.

Microsoft Cloud for Sustainability

The Microsoft Cloud for Sustainability allows you to more easily and effectively record, report, and reduce your emissions on a path to net zero. It integrates previously disparate solutions into a new system of record that delivers all the data you need to manage your business today while you transform.

Learn more



Whatever your sustainability goals, Microsoft can help you plan, implement, and attain measurable environmental and cost benefits.

Learn more about improving your sustainability with Microsoft:

Microsoft.com/Sustainability