

Microsoft's Zero Waste Commitment

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Our core environmental sustainability commitments



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Our Commitment: Zero waste by 2030 across our direct waste footprint

2025

Increase reuse and recycling of servers & components though Circular Centers

By 2025, 90 percent of servers and components within our regional datacenter networks will be reused and recycled.

Eliminating single-use plastics

By 2025, we will eliminate single-use plastics in all Microsoft primary product packaging and all IT asset packaging in our datacenters.

2030

Driving to zero waste operations

We will achieve 90 percent diversion of operational waste at datacenters and campuses and 75 percent diversion for all construction and deconstruction projects by 2030.

Making fully recyclable products and packaging

We will design Surface devices, Xbox products and accessories, and all Microsoft product packaging to be 100 percent recyclable in OECD countries by 2030.

> Microsoft 2021 Environmental Sustainability Report Microsoft commits to achieve 'zero waste' goals by 2030 - The Official Microsoft Blog

Our progress

Circular Centers

We have planned five Circular Centers, with Amsterdam open, construction underway in Boydton, Virginia, and three more to be added in Dublin, Chicago, and Singapore in 2022. This has projected savings of \$100 million per year once fully scaled and will enable 90 percent reuse by 2025.

>15,200 metric tons

In FY21, we diverted more than 15,200 metric tons of solid waste otherwise headed to landfills and incinerators across our direct operational footprint.

18% reduction

We reduced single-use plastics in our Microsoft product packaging by 18 percent or from 5.7 percent to 4.7 percent by weight (on average) of plastic per package in FY21.

>90% recyclable

We achieved a 97 percent recyclable Xbox Series X and S, and a 93 percent recyclable metal Surface Laptop 4, in Organization for Economic Cooperation and Development (OECD) countries per the UL methodology ECVP 2789.

Zero Waste datacenters

Four datacenters are Zero Waste certified, with new certifications for the San Antonio, Texas and Quincy, Washington datacenters and renewed certifications for our Boydton, Virginia and Dublin, Ireland locations.

Zero Waste campus roadmaps

Eleven campuses now have customized roadmaps to achieve zero waste by 2030. Our Puget Sound campus has been Zero Waste certified since 2016.

Transformed waste accounting

We transformed our waste accounting using Microsoft technology, including PowerApps, Dynamics 365, and Power BI, increasing our collection of actual waste data and providing greater visibility into waste types.

Recycled waste materials

We introduced two new accessories that are made in part from recycled waste materials: several new Xbox Wireless Controllers, built using over 30 percent post-consumer recycled (PCR) materials; and the Ocean Plastic Mouse, which has a plastic shell made with 20 percent recycled ocean plastic.

Invested in Rheaply

We invested in circular economy startup Rheaply to help companies measure carbon emissions savings from reuse and fuel the circular economy.



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Circular Centers

Opened in

The Netherlands, Ireland, United States and Singapore

Planned for

Washington, Chicago, Sydney and more ...



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Fully Recyclable Products and Packaging

Zero waste for our devices and packaging means taking a circular economy approach to design out waste and keep materials in use longer.



Reducing waste in production

Material Stamping

Instead of cutting components out of a large block of raw materials and discarding the excess, we're introducing material "stamping" techniques that mold raw materials into the desired shape

25% reduction

in our aluminum manufacturing scrap rate by using this stamping approach in the production of our new Surface Laptop Studio



Increasing the use of post-consumer recycled (PCR) plastics PCR resins now in:

- The body and various internal components of the Xbox Series S (since late 2021) with about 28% PCR into the product's overall design
- 75% of all Design Lab Xbox controllers



100 percent recyclable and plastic-free packaging



Shell made with 20 percent recycled ocean plastic





Improved Repairability

Compared to device replacement:
potential waste avoidance has improved from 71% for the Surface Pro 6 to 92% for Surface Pro 8.
average GHG avoidance has improved from 72% for the Pro 6 to 89% for the Pro 8.

Executive Summary: An assessment of the greenhouse gas emissions and waste impacts from improving the repairability of Microsoft devices



Two Key Circularity Trends



Circularity supports decarbonization pathways

Implementing circularity activities like purchasing recycled materials, offering a service model, or keeping materials in use longer can reduce the embodied carbon of materials.

Circularity plays a key role in reaching our carbon negative commitment to reduce our Scope 3 emissions by half by 2030.



Circularity still lacks common standards needed to scale

Circular economy initiatives do not share a standard method of measurement across industries or product types and may not always accurately represent environmental impact.

To scale implementation in the long term, we need the enabling infrastructure to measure, monitor, and verify material origin and flows.



Thank You

