Microsoft

ECOPROFILE

Surface Pro 10 for Business

epeat GOLD

ENERGY STAR

Our goals

In 2020 Microsoft committed to becoming carbon negative, water positive, and zero waste by 2030[1]. Surface plays a key role in helping Microsoft achieve these goals, so we are working to reduce the environmental impacts of our Surface products. Our approach embeds sustainability into the design, manufacturing, distribution, use, and end-of-life management of our devices. We will continue to innovate to meet our targets and we will share our progress along the way.

We need to act quickly to meet our 2030 goals. That's why Surface is driven by the following priorities:

1. Reducing carbon emissions
2. Designing with circularity in mind
3. Building with integrity

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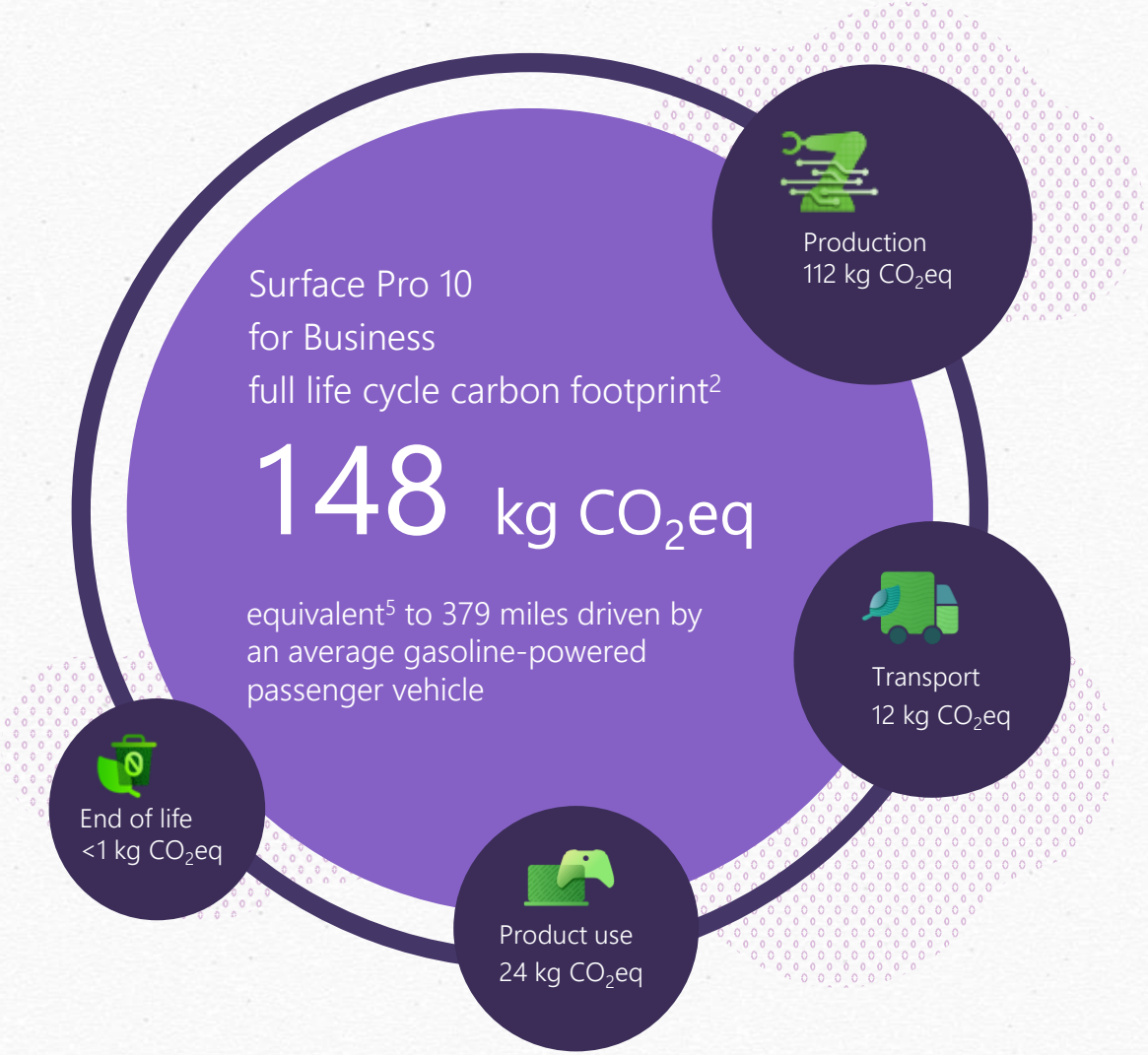
Transparency to impact

We have made significant investments to improve our life cycle assessment (LCA) approach. That's because quantifying the environmental impacts of our products is critical to make and track progress toward our carbon reduction goal. We use LCA to identify and prioritize opportunities to minimize the carbon footprint across the full life cycle of our devices.

The life cycle assessment[2] of Surface Pro 10 for Business includes production of one device, distribution to customer, 4.5 years of product use[3], and end-of-life management. The estimated annual electricity consumption[4] in use is 13.1 kWh per year.

The carbon footprint[2] of one year of computing using Surface Pro 10 for Business is 33 kg CO_2eq, assuming a 4.5-year total use period[3].



The production life cycle stage includes extraction of raw materials, upstream materials preparation, electronic component manufacturing, subassembly manufacturing and assembly, and final assembly.

Calculations are based on the US configuration of Surface Pro 10 Intel® Core™ Ultra 5 Processor 135U, 8GB LPDDR5x, 256GB SSD. Included in the assessment are the device, power supply unit, and packaging. Other accessories are not included.

LCA methodology details are included in the Resources and notes page of this document.

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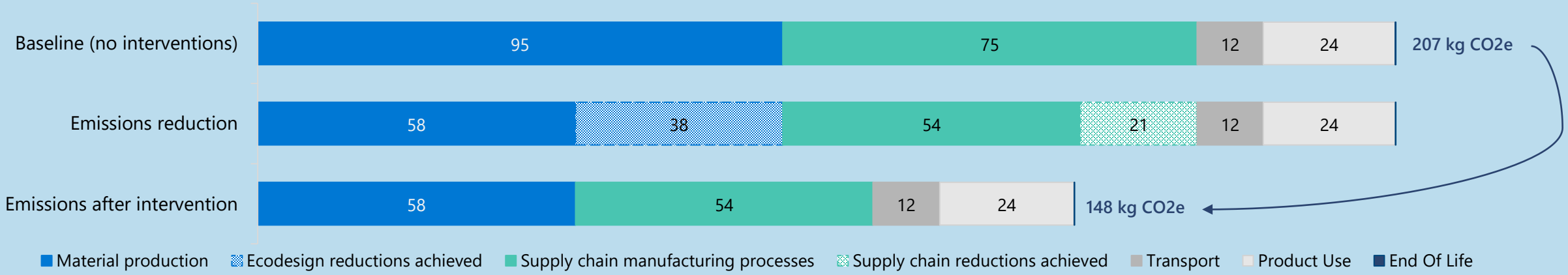
Reducing manufacturing carbon emissions



The lifecycle carbon footprint of Surface Pro 10 for Business was reduced by 28% compared to a baseline (no interventions)* scenario through a series of ecodesign (material & design) and supply chain interventions.

The enclosures of Surface Pro 10 for Business are made with a minimum of 72% recycled[6] content, including 100% post-industrial[7] recycled aluminum in the Bucket and Kickstand. The rare earth magnets in the enclosure assemblies are made with 100% recycled[6] rare earth metals. These material interventions drive a 38 kg CO_2eq carbon footprint reduction from baseline. We are working with our suppliers to transition key manufacturing processes to 100% carbon free electricity[8]. The carbon free electricity transition implemented so far drives another 21 kgCO_2 eq carbon footprint reduction from baseline.

Calculations are based on the US configuration of Surface Pro 10 for Business Intel® Core™ Ultra 5 Processor 135U, 8GB LPDDR5x, 256GB SSD. Chart includes Production, Distribution, Use, and End of Life of the device, power supply unit, and packaging.

*The baseline (no interventions) scenario models the same product without any sustainability interventions in the production phase of the device: (a) no additional renewable energy in the supply chain beyond what is already modeled in the regional grid mixes from Ecoinvent v3.9.1, (b) the carbon footprint of materials and manufacturing processes assuming no recycled content or additional ecodesign interventions as of the date of Ecoprofile, and (c) the default US distribution, use, and end of life modeling assumptions of Surface Pro 10 for Business.

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Circular by design

The linear 'take, make, and waste' approach is no longer viable. That's why we design products with circularity in mind, meaning we follow a 'reduce, reuse, and recover' model to minimize waste and maximize the reuse of resources.

Surface Pro 10 for Business is the most

easily serviceable

Surface Pro ever.

14
replaceable[10] components

72%
minimum recycled[6] content in enclosures*

78%
recycled content in wood-based fiber packaging

20%
post-consumer recycled[6] plastic content in power supply unit enclosure

*Enclosure includes Bucket and Kickstand. 72% recycled content consists of 100% recycled aluminum in Bucket and Kickstand and 100% recycled rare earth metals in magnets.

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What we've done

Low carbon & circular product design

Sustainability in design and manufacturing

We continue to develop opportunities to recycle and reuse aluminum manufacturing scrap in device production, allowing us to use lower-carbon 100% post-industrial[7] recycled[6] aluminum for Surface computer enclosures.

The Bucket and Kickstand of Surface Pro 10 for Business are made from 100% post-industrial[7] recycled[6] aluminum. In addition, the magnets used in the enclosures contain 100% recycled[6] rare earth metals.

The power supply unit that ships with Surface Pro 10 for Business also includes 20% post-consumer recycled[6] content plastic in its enclosure.

Commercial all-in-one packaging for Surface Pro 10 for Business contains a minimum of 78% recycled content in wood-based fiber packaging.

Our goals for our packaging are to be 100% recyclable by 2030 and to contain zero single-use plastics by 2025.

Supply chain reductions

Transitioning to carbon free electricity[7] in the supply chain

We continue to work with our suppliers to build action plans of emission reduction activities leading up to 2030. We apply a carbon footprint-based prioritization approach to identify and engage on key supply chain activities and work with our priority suppliers to transition to 100% carbon free electricity for Microsoft-specific activities[8].

The machining and finishing of metal enclosure parts and the final assembly of Surface Pro 10 for Business now use 100% carbon free electricity[8].

Microsoft is also working to meet delivery demand without increasing our carbon footprint by:

- Powering key distribution centers with 100% renewable energy.
- Offering a lower carbon shipping option to Microsoft Stores customers by providing customers the option to avoid air freight (a higher carbon option) and select ground shipment when ordering from Microsoft.

Product Use

More energy efficient than Surface Pro 9 (Wi-Fi only models)

All Microsoft Surface computers are ENERGY STAR® certified and designed to be energy efficient while delivering the performance customers expect.

Surface Pro 10 for Business is estimated to use 71% less energy than the current ENERGY STAR® computer specification requirement[4], reflecting energy savings without sacrificing features or functionality.

Where available, Windows update can schedule installations at specific times of day when lower carbon electricity options are powering the grid, resulting in lower carbon emissions[11].

Repairability

Our most easily serviceable Surface Pro ever

Extending the life of products through repairability is a key part of our carbon reduction strategy.

A list of Surface Pro 10 replaceable components[10] can be found under product tech specs. Replacement components are available through Surface Commercial authorized device resellers. Components can be replaced on-site by a skilled technician following Microsoft's Service Guide. Microsoft offers customers service options for Surface devices.

Microsoft makes trade-in convenient and secure for our commercial customers in the USA at Microsoft Trade-in Program.

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Building with integrity

Responsibly made

Our values of integrity, accountability, and respect provide the foundation for responsible sourcing. Engaging with our suppliers around issues of human rights, sustainability, and ethics helps us understand and mitigate risk, increase transparency, build capacity, and create shared value for society. Read our Responsible Sourcing Report for more information.

We take a precautionary approach to substance management. We follow legislative developments and research regarding chemical impacts on health and environment and update our specifications with new product and manufacturing substance restrictions to address risks.

Labels and certifications

Surface Pro 10 for Business is EPEAT registered in many countries at the Gold level, the highest available rating. EPEAT criteria cover topics including material selection, product design for repair and longevity, energy efficiency, chemicals of concern, distribution, packaging, responsible end-of-life management, responsible manufacturing, corporate performance, transparency, and reporting. For more information, visit the EPEAT registry.

Surface Pro 10 for Business is ENERGY STAR® certified. Visit the ENERGY STAR website for more information.

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More to come

Microsoft made commitments to be carbon negative, water positive, and zero waste by 2030. We will also continue to be transparent about our progress, our challenges, and our learnings to help others on their journey.

Our history 2009-2019

Our commitments 2020-2050

2009
First carbon emission reduction goal

2012
100% carbon neutral
(Scope 1 and 2) Internal carbon fee instituted

2016
Zero-waste campus certification

2017
AI for Earth launch
LEED Gold certification for new datacenters

2018
Supplier carbon engagement in China launched.
Net-zero portable water Silicon Valley Campus groundbreaking

2019
Carbon fee raised to $15
Water replenishment goal set

2020
2025-2050 sustainability commitments made

2025
Operate with 100% renewable energy
Protect more land than Microsoft uses
Eliminate single-use plastics in product packaging

2030
Become carbon negative (Scope 1, 2, 3), zero waste, water positive
100% recyclable product packaging

2050
Remove an amount of carbon equivalent to all our historical emissions (Scope 1 and 2)

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Resources and notes

1 For more information on Microsoft's sustainability commitments, approach, and progress visit our corporate sustainability website and read our annual Sustainability Report.

2 The product carbon footprint and other environmental impacts are calculated in accordance with ISO 14040 and ISO 14044 using Microsoft Devices LCA Methodology v2.1 (available with our Ecoprofiles) and are not directly comparable to results calculated using Methodology v1.0-2.0 nor to results calculated by other companies. Our new methodology enables us to model complex electronic products with greater accuracy, transparency, and supply chain representativeness. The Life Cycle Inventory (LCI) data is based on our own measurements, collected from suppliers, and content supplied by Makersite and ecoinvent along with other internationally available LCI databases. Uncertainties are inherent in all LCA methodologies. We continually work to improve our data and models, and our results may be updated to reflect these improvements.

LCA results are reported for a representative configuration of the product. The production result may vary by hardware configuration. The transport, product use, and end of life management results may vary by region.

The carbon footprint is reported as carbon dioxide equivalent (CO2eq), a measure of global warming potential that converts all greenhouse gases to the equivalent amount of carbon dioxide with the same global warming potential over 100 years.

3 The product use period is an estimate of average product lifetime for the purpose of the life cycle assessment (LCA). We estimate the use period based on reliability and repairability of the device. Disclosure of the use period estimated for LCA does not imply a guarantee or warranty.

4 The estimated annual electricity consumption and energy efficiency are calculated using ENERGY STAR® Computer Specification version 8.0.

5 Equivalency to passenger vehicle miles is calculated using US EPA's Greenhouse Gas Equivalencies Calculator.

6 Recycled content calculated based on mass of recycled material as a percentage of total device, part, or material mass. Recycled content in the product is based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure for Recycled Content, UL 2809-2, Second Edition, November 7, 2023.

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Resources and notes

7 Post-industrial recycled content refers to materials that are recycled after the manufacturing process but before reaching consumers.

8 Microsoft defines carbon free electricity (CFE) technologies as including technologies with zero direct emissions and biogenic technologies with life-cycle emissions equivalent to renewables. CFE technologies include wind; solar; geothermal; sustainable biomass; hydropower; nuclear; fossil with complete carbon capture, utilization, and sequestration (CCUS); and storage charged with CFE generation. Microsoft acknowledges that CFE technologies have indirect carbon dioxide emissions and these are accounted for in our LCAs. CFE transition in the supply chain includes the onsite generation and purchase of verified Energy Attribute Certificates (EACs) by suppliers that are allocated to Microsoft-specific production volumes.

9 Recyclability percentages reported in this document are valid in Organization for Economic Cooperation and Development (OECD) countries.

10 Components can be replaced on-site by a skilled technician following Microsoft's Service Guide. Microsoft tools (sold separately) may also be required. Availability of replacement components and service options may vary by product, market and over time. Opening and/or repairing your device can present electric shock, fire and personal injury risks and other hazards. Use caution if undertaking do-it-yourself repairs. Unless required by law, device damage caused during repair will not be covered under Microsoft's Hardware Warranty or protection plans.

11 When devices are plugged in, turned on, connected to the Internet and where regional carbon intensity data is available from WattTime. See site for details.

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