

# Integrity built-in.

Microsoft Devices  
Sustainability Report FY20  
Executive Summary



## What does integrity built-in mean to me?

“The integrity we build into our products is the reason we share them with the world. We believe in these products 100%. If we don’t believe in them, then why should the world believe in them?”



Our mission is to empower every person and every organization on the planet to achieve more.

It depends on continuously pushing the boundaries of technology in almost every facet of the product and processes we use, and more importantly, in the ways we can sustain a healthy planet.

We believe that our products reflect the people that make them and that use them. That’s why we continue to push ourselves to set higher standards and goals to further reduce the impact our products have on the world around us.

During the last year, we’ve seen our Windows and Devices business continue to grow as people use our products to safely connect, work, and learn. From frontline healthcare workers developing new tele-health protocols with patients, to communities collaborating on social justice, to students using our products to continue learning remotely from home... our customers inspire us every day.

We are committed to driving innovation that helps people accomplish more and fosters a more sustainable future together with our customers, suppliers, and partners.

Earlier this year, Microsoft made a commitment to become carbon negative by 2030. To contribute towards achieving this goal, integrity must be built into every product we make. That means our design process integrates our focus on the customer and building products of the highest quality, with a responsible supply chain that meets higher ethical and environmental standards.



▲ The Surface Pro X is the most efficient Pro Microsoft has made when using the ENERGY STAR Computer Specification version 8.0 test method.

This includes our growing efforts to reduce carbon emissions, design waste out of our products, use renewable resources, hold suppliers to higher ethical standards in our sourcing, and expand protocols to ensure workers’ health and safety.

We know that we have only just begun our journey with much to learn. With every challenge, we find opportunities to learn, adapt, and aspire to bigger goals. The passion and commitment you all have for sustainability will help us further our efforts and enable us to set higher standards year on year.

Thank you for grabbing an oar with us. Together we’ll continue to collaborate on the policies, practices, and products for our customers and a sustainable future.

A handwritten signature in black ink, appearing to read 'Panos Panay'.

Panos Panay, Chief Product Officer

Download our Sustainability Report FY20

Product design

Key results and goals

100%\*

recyclable packaging and Surface devices by 2030



20%\*

post-consumer recycled content in new Surface Dock 2

10%\*

Pilot project to develop new material containing 10% ocean plastic

▶ 6 Find out more

Responsible sourcing

Key results

99.5%

of audited factories in China have access to the Workers' Voice Hotline for grievance reporting



100%

new suppliers are qualified and reviewed prior to onboarding

5.4k

factory workers were reimbursed \$275k in recruitment fees and insufficient payments

▶ 7 Find out more

Product use

Key results and goals

37%

of units fulfilled by carbon neutral fulfillment centers by 2021

825k

Xbox consoles obtained Carbon Neutral® certification

1b

Windows 10 powering 1 billion active devices monthly

▶ 8 Find out more

Climate and environment

Key results and goals

91%\*

Surface Laptop 3 assessed to be 91% recyclable



2030

Microsoft carbon negative

2x

Surface Pro 7 and packaging contain more than 2x the average global circular resources

▶ 9 Find out more



\* (w/w)

**Our mission: Build extraordinary products that create and complete magical experiences to empower every person and every organization on the planet to achieve more.**

### Our organization

We are responsible for the ideation, compliance, design, development, sourcing, manufacturing, packaging and distribution of Microsoft's hardware, packaging and related software products.

Devices is committed to increasing the sustainability of Microsoft's products and supply chain. Our mission pushes us to create technologies that unlock potential for people, the planet and organizations.

▶ Find out more about the journey of our products on page 8 of our Sustainability Report FY20

**100+**  
countries of operation

**2,748**  
employees

**418**  
directly contracted supplier factories

**94**  
different products shipped<sup>1</sup>

<sup>1</sup> Excluding variants and SKU bundles.

### Our products

Our products include Windows, Surface computers, Surface accessories, Xbox, other intelligent devices and PC accessories.



#### 1. Surface Pro X

Built for web-first experiences, ultra-thin and always connected, combining blazing-fast LTE with 2-in-1 versatility.

#### 2. HoloLens

An untethered mixed reality device with apps and solutions that enhance collaboration.

#### 3. Arc Mouse

Slim, light and ready to travel.

### How are we doing?

**#3**

Forbes World's Most Reputable Companies for Corporate Responsibility 2019

**#6**

Corporate Responsibility Magazine's 100 Best Corporate Citizens 2019

**#1**

Responsible Sourcing Network Mining the Disclosures 2019: Application Software category

**A List**

for corporate Climate Action, CDP

## We're launching an ambitious new strategy for 2030 and raising our level of commitment to have a positive impact on people, the planet and organizations.

### Microsoft's bold environmental commitments for 2030

#### In 2020, Microsoft announced three bold commitments:

- To be carbon negative by 2030 and, by 2050, to remove from the environment all the carbon the company has emitted either directly or by electrical consumption since it was founded in 1975.
- To preserve and protect the species, biodiversity and ecosystems that are vital to the planet's health.
- Achieve zero waste for Microsoft's direct operations, products and packaging by 2030.<sup>1</sup>

As a business group within Microsoft, we are aligning our strategy and goals to support these commitments.

<sup>1</sup> Microsoft commits to achieve 'zero waste' goals by 2030 <https://blogs.microsoft.com/blog/2020/08/04/microsoft-direct-operations-products-and-packaging-to-be-zero-waste-by-2030/>

As we reach the end of our 2020 Sustainability Goals, we are setting our sights on a bold new environmental sustainability strategy and targets for 2030, while continuing to deliver our Responsible Sourcing commitments.

Healthy Design, Healthy Planet is how Devices will deliver Microsoft's environmental sustainability commitments beyond 2020.

### Healthy Design

Our Healthy Design strategy embeds sustainability into product and packaging design and development. Healthy Design drives innovation to reduce environmental impacts and address challenges across the value chain – from extraction of raw materials to production, distribution, product use and end-of-life.

We use ecodesign to guide our approach and product environmental lifecycle assessments to inform our decisions, from concept to manufacturing.

Healthy Design shapes our customer solutions, such as finding ways to bring repair closer to the customer.

We've launched new targets to reduce hazardous substances and increase repairability, recyclability and circularity.

### Healthy Planet

Our Healthy Planet strategy addresses carbon emissions, waste and water across the product lifecycle – from sourcing to end-of-life.

In FY19, we set a science-based target for Scope 3 carbon reductions to be achieved by 2030. Approved by the Science Based Targets initiative (SBTi), in September 2019, our target establishes how we will help tackle the climate crisis by reducing emissions across our value and supply chains, in line with what is needed to keep global warming below 2°C from pre-industrial levels.

We've also set a 2030 "zero waste" goal for Surface devices and packaging and we have committed to expand our consumer mail-back program for hardware and packaging worldwide.

 Read more about our strategy and Microsoft's bold, new environmental commitments on page 11 of our Sustainability Report FY20

We will announce more Sustainability 2030 goals throughout FY21, bringing our ambitions to life with measurable targets and commitments.

### Our Sustainability 2030 ambitions

#### Healthy Design

##### Sustainable design

Increase recycled content and renewable materials across the portfolio

Incorporate 100% recycled, renewable or responsibly sourced content in packaging

##### Reduce hazardous substances

Replace brominated flame retardants in resins

Eliminate beryllium from metal alloys

Reduce volatile organic compounds in coatings

#### Healthy Planet

##### Carbon negative

Reduce Scope 3 carbon emissions by 30% and aspire to reduce carbon emissions by more than half

##### Zero waste products and packaging

Achieve 100% recyclable Surface devices

Accomplish 100% recyclable packaging

Expand mail-back program for Microsoft branded electronics and packaging worldwide

Increase the circularity of our products and packaging

# Why does sustainability start with design?

“From choosing the right materials to designing out waste, the design decisions we make determine the impact of a product across its lifecycle.”

Patrick Gaule, Lead Product Designer



The sustainability of our products and packaging begins with their design. We focus as much of our innovation effort on what our devices are made of, and how they are made, as on what they can do for our customers.

Our approach focuses on three key areas: increasing recycled content, selecting recyclable materials and designing out waste; reducing hazardous materials; and extending product life.

- ▶ Find out more about our approach to design for sustainability on page 22 of our Sustainability Report FY20
- ▶ Read a Q&A with a Lead Product Designer on page 24 of our Sustainability Report FY20

1 <https://www.pewtrusts.org/en/about/news-room/press-releases-and-statements/2020/07/23/research-finds-plastic-flows-into-the-ocean-expected-to-triple-by-2040>

\* (w/w)

## Using ocean plastics in consumer products

Every year, about eight million metric tons of plastic ends up in the ocean. This could nearly triple by 2040.<sup>1</sup> The enormity of the issue requires urgent action.

We set out to see how plastic waste could be recovered from oceans, waterways and beaches (mainly PET) can be processed and used in consumer products. We’ve been working with suppliers to develop a material that is made of at least 10% ocean plastic, which can pass the mechanical and chemical reliability tests required for our devices. The initial results look promising. We’ve committed to make any material that results from the research available through our suppliers to any other organization that wishes to use it.

- ▶ Get the full story on page 27 of our Sustainability Report FY20



## Key outcomes in FY20

**58%**  
recycled content in our packaging, up 5.6% on FY19

**20%\***  
Surface Dock 2 containing 20% post-consumer resin (PCR) material

**91%\***  
Surface Laptop 3 assessed to be 91% recyclable.

## Next steps

We will maintain our focus on improving material efficiency and selecting materials that are suitable for recycling and circularity. We’ll also continue to find ways to reduce hazardous substances used in our products.

# How do you continue raising standards in your supply chain?

“Achieving meaningful change means sharing problems and finding solutions together – we have to keep learning to understand and manage the risks. This is how we build trusting relationships with our suppliers.”

Ephi Banaynal dela Cruz, Senior Director, Responsible Sourcing



Our values of integrity, accountability and respect provide the foundation for responsible sourcing. We don't compromise when it comes to high standards of safety and treating workers in our supply chain fairly and with dignity.

We have relationships with thousands of suppliers – from raw materials suppliers to the factories that make our devices. We set high standards for all our suppliers and we work with them to support their people and improve their operations.

During the COVID-19 outbreak, we worked with our supplier factories to ensure worker safety and compliance with our human rights and labor standards. We also partnered with the Initiative for Responsible Mining Assurance (IRMA) to maintain transparency of mining supply chains.

Find out more on our Responsible Sourcing website

## Ensuring workers' voices are heard



The Microsoft Workers' Voice Hotline provides an external channel through which workers in our supply chain can report concerns anonymously and without fear of retaliation.

We've extended the hotline to 188 factories, including 99.5% of audited factories in China. This means it is available to 300,334 workers, up 24.5% on last year. We received 160 inquiries and resolved 156 issues in FY20, with four cases still under investigation.

Get the full story on page 42 of our Sustainability Report FY20

## Key outcomes in FY20

648

audits and assessments of 418 supplier factories

100%

of reported Hotline allegations mitigated or under investigation

96%

Conflict Minerals smelter compliance, up from 85% in FY19

## Next steps

We'll continue to contribute technology and support industry-wide partnerships to enhance due diligence and drive positive change in global supply chains. At the same time, we're increasing our touchpoints with suppliers and increasing transparency by publishing the results of audits on our interactive [Power BI dashboard](#).

# What are you doing about the energy efficiency of your products?

“We are constantly improving the energy efficiency of our products by embedding energy-saving features in our hardware and software – helping customers to save energy while they use them.”

Ted Eckert, Principal Engineer



Microsoft’s high performance technology has transformed the way people work, play and connect. Our customers expect high standards of durability, safety, security, accessibility and energy efficiency when they use our devices.

Improving energy efficiency is one of the best ways we can help tackle climate change while our products are in use. We’re also advancing the safety and security of our Surface devices, along with Microsoft 365, and applying the Microsoft Inclusive Design Principles to ensure they are accessible.

- ▶ Find out what we are doing to make Gaming more sustainable on page 51 of our Sustainability Report FY20
- ▶ Read about how we are enabling repair and refurbishment of devices on page 53 of our Sustainability Report FY20

<sup>2</sup> Based on ENERGY STAR Computer Specification 8.0 measurements at 115 VAC, 60 Hz.

## Energy efficiency improvements in the Surface Pro X

Launched in 2019, the Surface Pro X combines the computing power of the Surface Pro line with the energy efficiency of modern mobile devices.

The total energy consumption for the Surface Pro X is estimated at 13.1 kWh/year, a 28% reduction compared with the Surface Pro 6.<sup>2</sup> This is made possible by the innovation of Windows 10 for mobile ARM devices and Universal Windows Platform (UWP). These platforms allow users of energy-saving ARM-powered devices to run Windows wherever they go, using a cellular data connection.

- ▶ Find out more on page 49 of our Sustainability Report FY20



## Key outcomes in FY20

# 28%

reduction in estimated total annual energy consumption of the Surface Pro X compared with the Surface Pro 6

# 825,000

Xbox consoles certified as CarbonNeutral®, saving 616,000 tons of CO<sub>2</sub>e a year

# 7,000+

visitors to our Inclusive Tech Lab

## Next steps

We’ve set a target to reduce the energy consumption of our Surface portfolio by 3% by 2030. In FY21, we’ll focus on reducing the energy consumption of the top 20 most used Windows experiences, which together represent 90% of active Windows energy usage, as part of the Windows Software Sustainability initiative.



# How will you meet your goal of being carbon negative by 2030?

**“It’s an ambitious goal and we don’t yet have all the answers. We’ll be analyzing every area of our business, from working with suppliers to set science-based targets to improving the energy efficiency of our portfolio.”**

Elizabeth Willmott, Carbon Program Manager



A healthy society requires a healthy planet. Our Healthy Planet strategy addresses two of the most pervasive challenges facing society: climate change and waste.

We can have a significant positive environmental impact by reducing end-to-end carbon emissions and waste across the lifecycle of our products. While every stage of a product’s lifecycle contributes to carbon emissions, manufacturing represents the highest carbon emissions in the Surface product lifecycle – and this is where we are focusing our efforts.

At the same time, electrical and electronic equipment (EEE) waste has become one of the most critical waste challenges facing society. Waste prevention and recycling offer huge potential for reducing emissions.

## Developing circular processes for recycling aluminum

Achieving the premium finish of Microsoft’s Pro and Laptop aluminum enclosures requires a very precise process that generates a lot of waste.

We’ve launched a project to develop a closed-loop recycling process for aluminum waste. Initial proof-of-concept studies have shown the recycled alloy passes our quality requirements. The next steps will be to qualify the process and material and then to apply it to our product portfolio.

▶ Get the full story on page 65 of our Sustainability Report FY20



## Key outcomes in FY20

# 8.9%

reduction in Scope 3 carbon emissions (-524k mTCO<sub>2</sub>e) from a 2017 base year

# 88%\*

of our packaging portfolio is recyclable

## Next steps

We have committed to achieve 100% recyclable Surface devices and packaging by 2030, and to stop using single use plastics by 2025. By the end of FY21, two of our largest fulfillment centers, covering 37% of units fulfilled, will be carbon neutral.

▶ Read more about smarter fulfillment and logistics on page 63 of our Sustainability Report FY20


▶ Find out more about our circular transition on page 64 of our Sustainability Report FY20


\* (w/w)

# We'd love to hear from you.

Please get in touch if you have any questions or comments regarding this report.

[AskSEA@microsoft.com](mailto:AskSEA@microsoft.com)

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