

# Circulaire-IT Community bijeenkomst

**Microsoft & CHG-MERIDIAN**

30 juni 2026



# Agenda

12:00 – 14:30

**12:00**

60 min

## Inloop & lunch

incl. Surface reparatie experience

**13:00**

20 min

## Windows: Driving Sustainable IT at Scale

Remco de Kramer & Ruben de Maere,  
Commercial Device Sales & Solutions

**13:20**

30 min

## MediaMarkt

Sadet Kahleogullari –  
update focus van MMSaturn op Refurbishing

**13:50**

40 min

## Microsoft Surface Engineering

Ervin Barabas, Surface Engineering –  
Discover how Surface designs for repairability

**14:30**

20 min

## Recommerce

Ab Seghrouchni, Country manager –  
update nieuw Samsung Refurb devices contract

14:50 – 17:30

**14:50**

20 min

## Break

**15:10**

20 min

## Standup-presentaties

Leden stellen zich kort voor

**15:30**

20 min

## Service Planet

Jeroen Sipsma CEO –  
update over het reparatie landschap in Nederland

**15:50**

30 min

## CHG-MERIDIAN

Soenil Ghirad  
As IT prices rise and hardware shortages loom

**16:30**

60 min

## Borrel

# Microsoft Windows: Driving Sustainable IT at Scale

**Remco de Kramer**  
Surface GTM

20min



# Sustainability advances with Windows and Intune



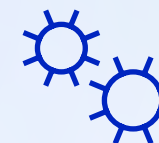
## More efficient

Automatically manage energy and battery usage and right-size your endpoint configurations



## Better insights

Gain valuable, cross-departmental metrics and insights to help you meet ESG goals, regulations, and standards.



## Expanded productivity

Increase flexibility with access to Windows solutions from anywhere, on any device.

# Windows 11: The first carbon-aware operating system



Use [Windows Update](#) to schedule changes at specific times when carbon-friendly sources are powering the grid to save carbon emissions.



Decrease energy consumption and improve battery life with [power-efficient settings](#) and [energy recommendations](#).



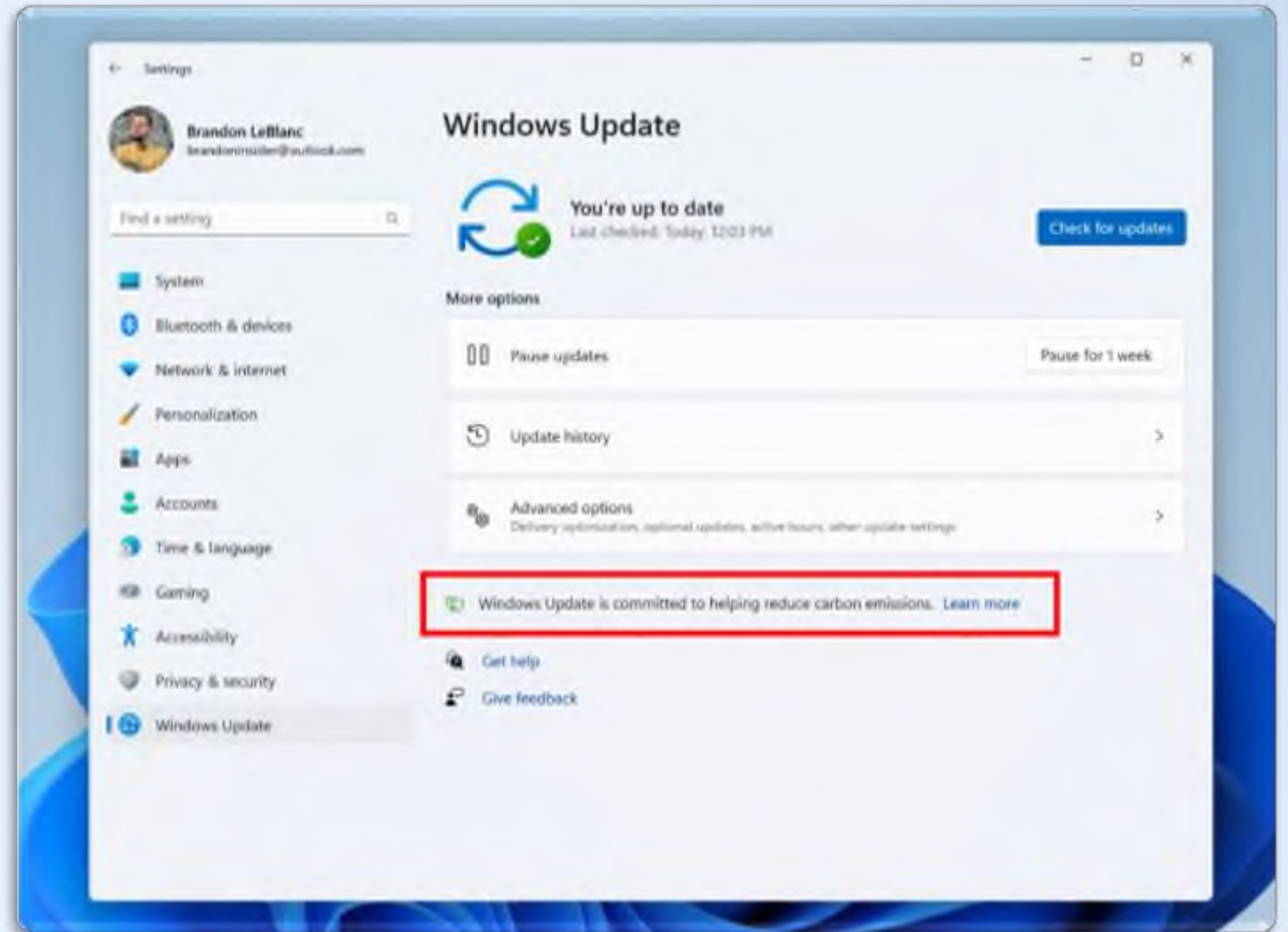
Lower energy consumption while maintaining a seamless, productive experience with [Energy Saver](#).



Chip level innovation: Benefits of NPUs in AI inference and Windows on ARM to reduce energy usage and lower cost



# What does this look like for the end user?



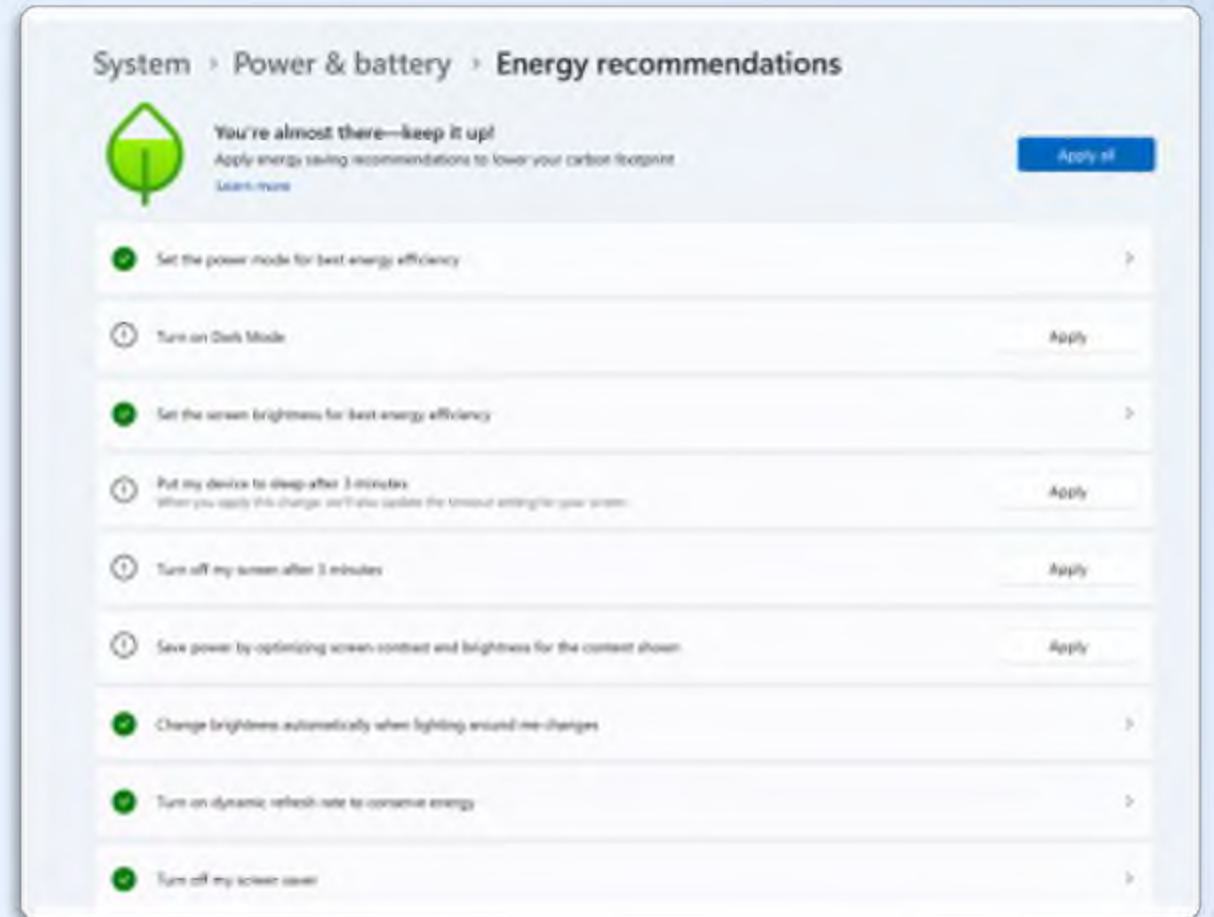
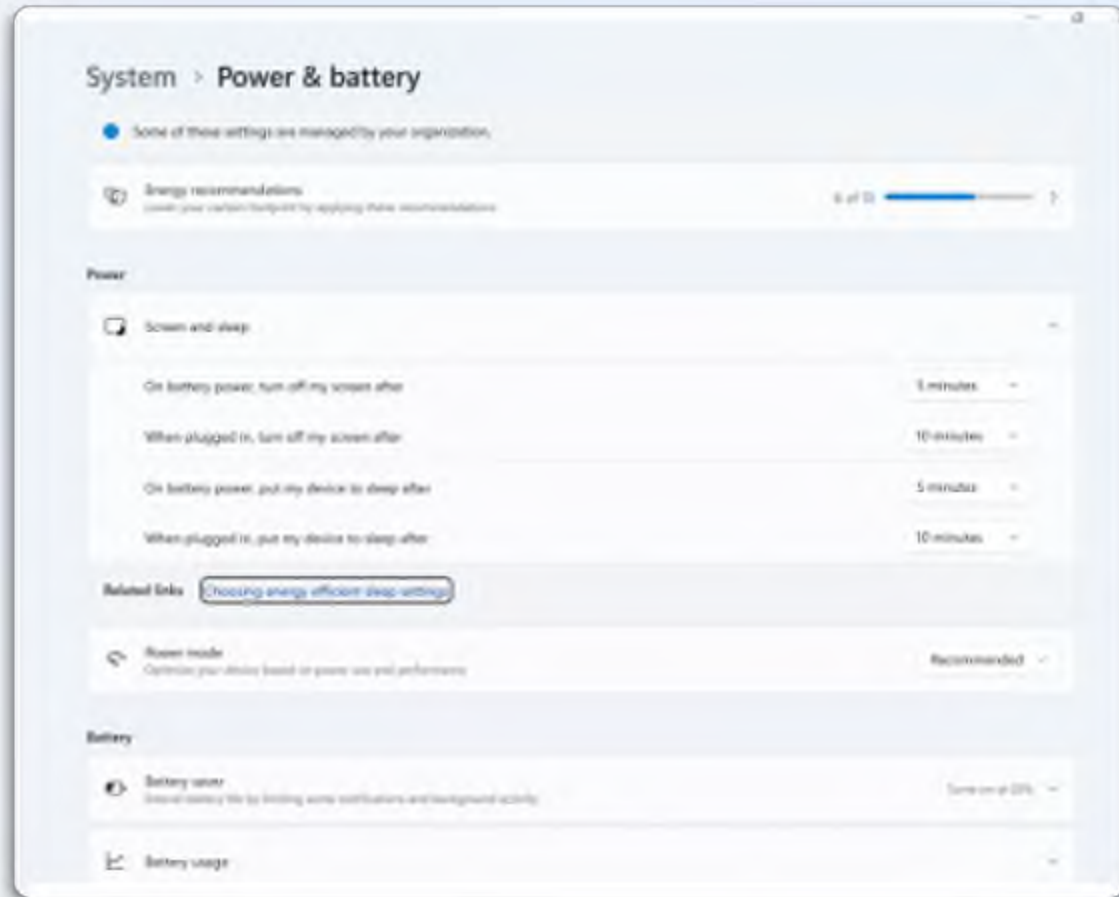
## Windows Update leverages more renewable energy

Windows Update will try to schedule update installations at specific times of day when doing so results in lower carbon emissions. Most electrical grids are powered by multiple sources, including renewables and fossil fuels. Whenever possible, Windows 11 will now prioritize installing updates in the background at times when greater amounts of clean energy sources (like wind, solar, and hydro) are available. Users can always choose to install updates immediately by navigating to Settings > Windows Update and choosing "Check for Updates".

This feature will only be enabled when your PC is plugged-in and regional carbon intensity data is available from our partners [ElectricityMap](#) or [WatTime](#). If enabled, users will see the text shown below on the Windows Update settings page. We're still working on the content that the text links to – stay tuned for future updates.



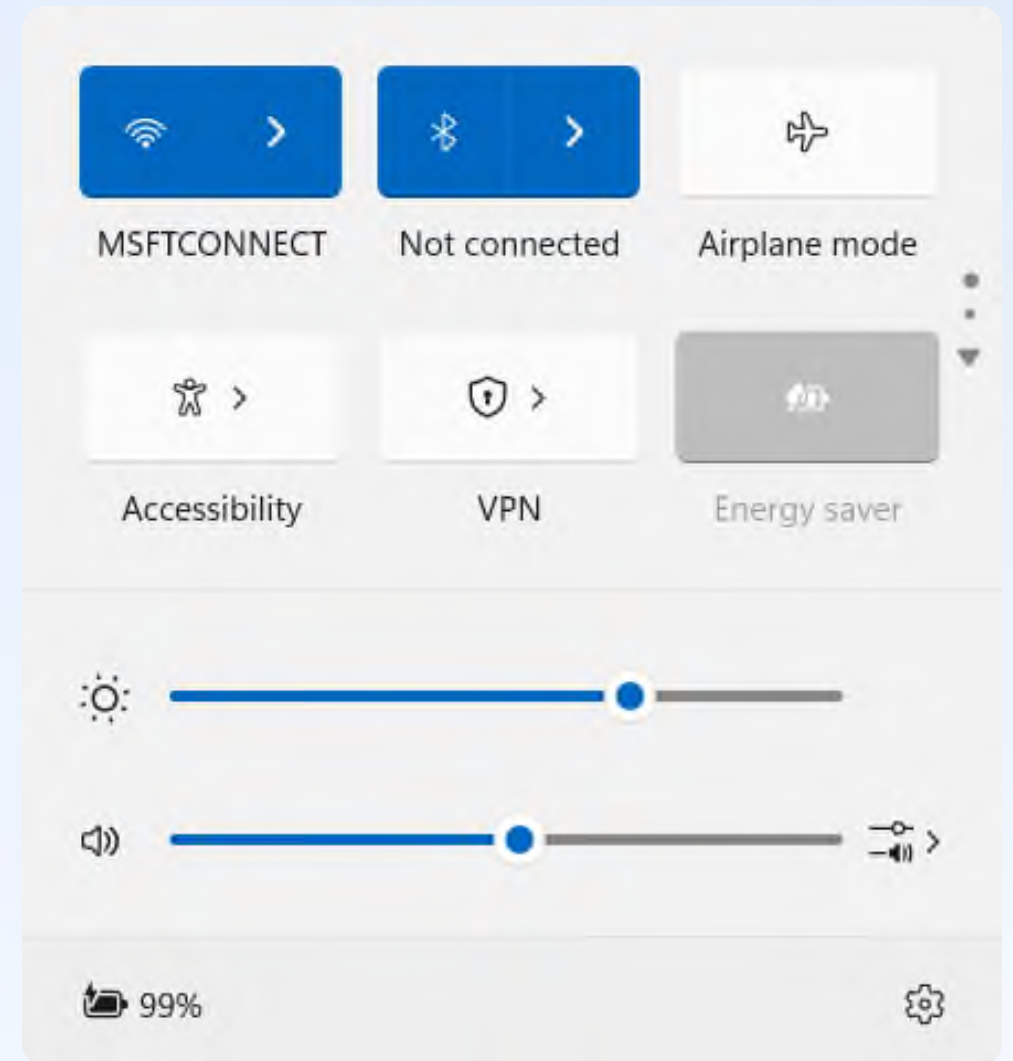
# What does this look like for the end user?



# Improving battery life and sustainability for commercial customers

We have brought the ability to manage Windows 11 Energy Saver mode in Windows 11 -- formerly called Battery Saver -- to Microsoft Intune. Now IT administrators can control Energy Saver settings through group policies and Mobile Device Management (MDM) configurations.

Energy Saver includes several features such as reducing the screen brightness by up to 30% and pausing background apps. These are designed to empower you to achieve your organization's sustainability goals.



# How to use Energy Saver in Microsoft Intune

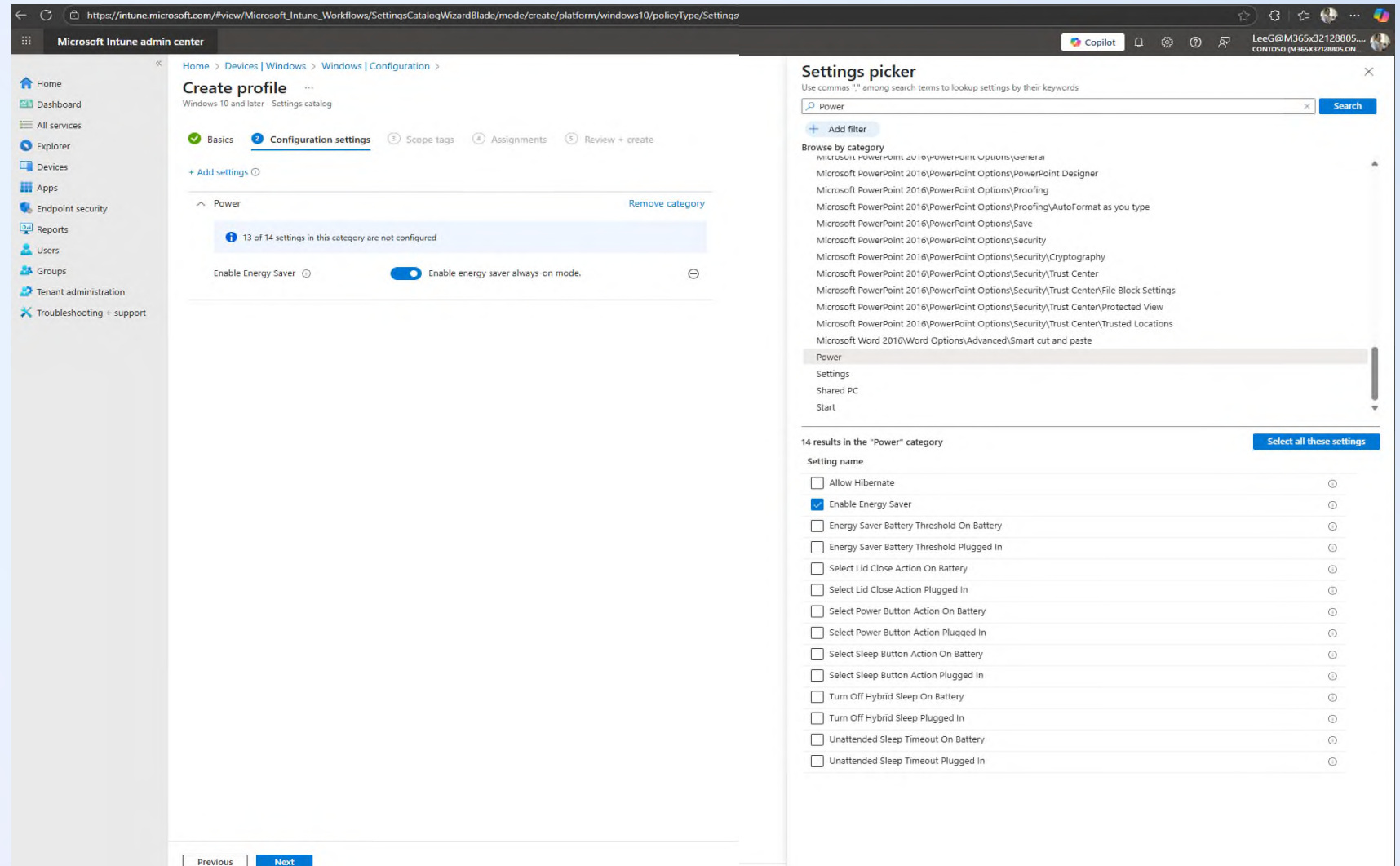
Enable Energy Saver MDM Policy  
- [Power Policy CSP | Microsoft Learn](#)

Search for Power in the policy settings picker

Look for the [Enable Energy Saver](#) configuration under power policy

Activate the configuration for any of your device groups

Once activated, the targeted devices will have Energy Saver enabled by default



# Microsoft Authorized Refurbisher Program (MAR)

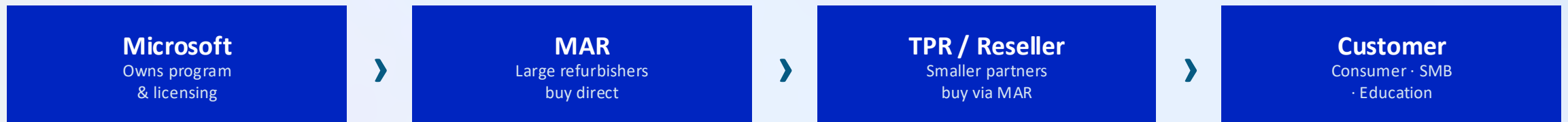
- **Microsoft Authorized Refurbisher (MAR) Program:**

Partnership that enables large refurbishers to refurbish used devices and preinstall genuine Windows licenses at reduced cost, ensuring compliant and secure devices for resale. )

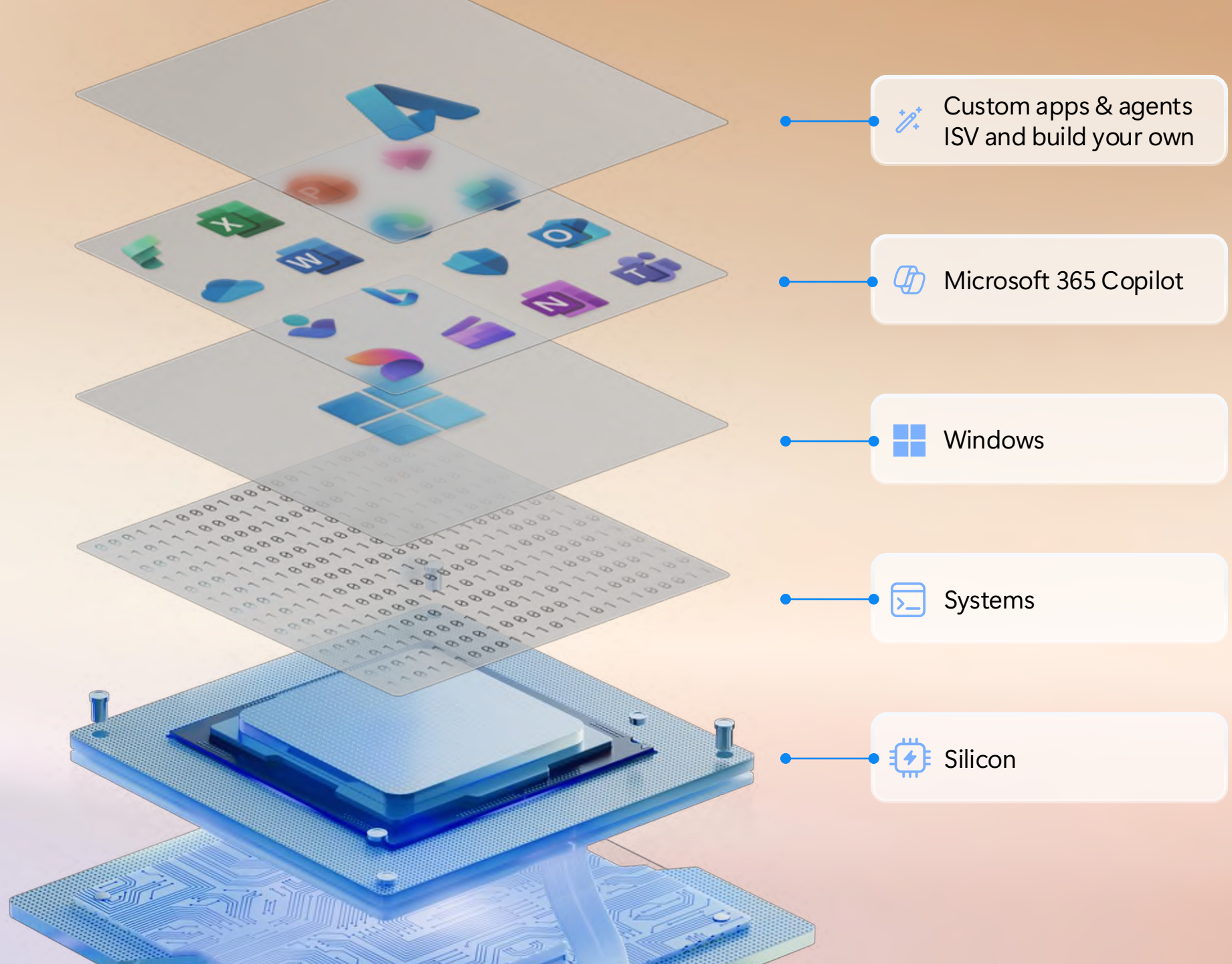
- **Business impact:**

Drives affordable PC access (for businesses, education, consumers) while allowing partners to differentiate, increase margins, and sell trusted devices with genuine software.

## HOW THE CHANNEL WORKS

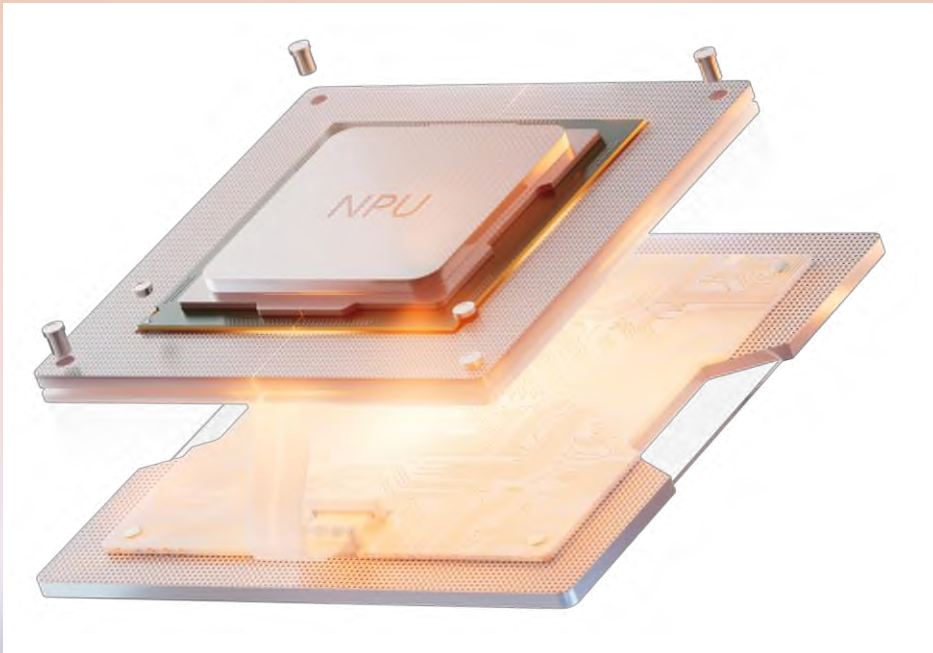


Copilot+ PCs are the foundation for a flexible, AI-enabled technology stack tailored for unique business needs



# AI inferencing at the edge on Surface Copilot+ PC

## Hardware Innovation



### Neural Processing Unit (NPU):

- Dedicated AI processor with +40 TOPS NPU
- Up to 20x more powerful and 100x times more efficient for running AI workloads than GPU<sup>1</sup>
- Up to 60% cost reduction vs. LLMs

<sup>1</sup>Phi Silica, small but mighty on-device SLM | Windows Experience Blog

# Why AI inferencing at the edge on Surface Copilot+ PC

## Stop defaulting to cloud-based LLMs



Cloud-based AI features are:

- Always-on or frequently triggered
- Memory and CPU-intensive
- Energy intensive
- Costly

Without an NPU, running these on the CPU or GPU competes directly with apps like Teams, Outlook, browsers, IDEs, and our system memory and caches

Harness with power of Small Language Models like Phi Silica:

- Context processing consumes only 4.8mWh of energy on the NPU<sup>1</sup>
- Token iterator exhibits a 56% improvement in power consumption compared to operation on the CPU<sup>1</sup>
- ~60% reduction in memory usage<sup>1</sup>

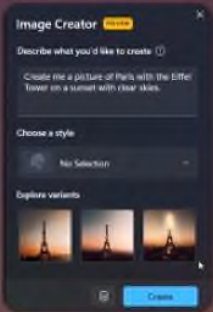
<sup>1</sup> [Phi Silica, small but mighty on-device SLM | Windows Experience Blog](#)

# Benefits of NPUs in AI inference

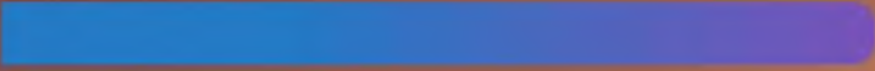
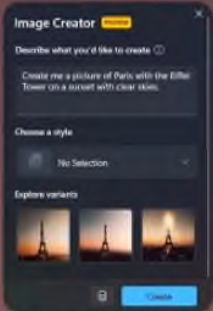
Lower energy consumption and balancing workloads for efficient performance



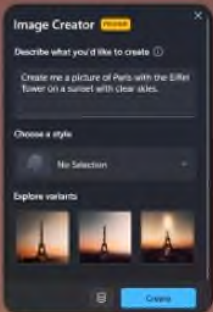
65W  
Power



120W  
Power



5W  
Power



Time per inference



## Video AI features



Automatic framing



Eye contact



Portrait blur



Background blur

## Audio AI features



Voice focus



Live Captions

# What performance benefits do NPUs bring to AI?

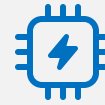
Hyper-fast inference for real-time, efficient, high bandwidth AI



**CPU**



**GPU**



**NPU**



# Why AI inferencing at the edge on Surface Copilot+ PC

## Business and Technical Drivers



### Data-handling constraints

- Privacy and security challenges
- Data residency concerns
- Industry regulations and compliance



### Proximity to sensors

- Process outputs from camera, microphones closest to the source
- Real time inferencing



### Latency, performance & network

- Enable offline scenarios
- Overcome network instability
- AI anywhere



### Local context & content

- Work closer to your data
- Securely access user data
- Faster and more responsive AI



### Inference Economics

- Avoid costly PAYG Token Utilization
- Reduce need for subscription AI services



### Sustainability

- Reduce CO2 footprint
- Limit energy consumption

# The future of AI is hybrid



## Cloud

AI in the cloud:

- Cloud-scale compute, storage, and analytics
- Access to largest models and massive data sets
- Highly scalable to any connected device

Ex: Microsoft Copilot



## Hybrid

AI optimized for available tech:

- Target the best location for each workload
- Optimize cost, performance, and data control
- Hardware ready and optimized for AI experiences

Ex: Windows AI Foundry



## Hardware

AI on the device:

- Run specialized models locally with low latency
- Offers offline, privacy, and security benefits
- High AI performance per watt with NPU

Ex: Windows Studio Effects



← ... to get there, we need to enable local AI. →

# Current silicon diversity in Windows devices

The decision-making process



Cross segments

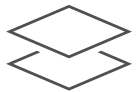


Performance, power, and CPU are top decision drivers for device selection

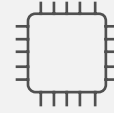
# What is ARM?



**Arm** | An organization that develops and licenses IP solutions for CPUs, GPUs, NPUs, and interconnect technologies for OEMs to develop products. Arm licenses the ARM instruction sets to partners (e.g. Qualcomm) who then make chips with customization for their unique needs.



**ARM** (Advanced RISC Machines) | Licensed architectures that follow the reduced instruction set computer (RISC) design philosophy for computer processors.



Benefits of adopting ARM CPU architecture include

- Security built directly into the System on Chip (SoC)
- High performance potential balanced with energy efficiency
- Large ecosystem of device form factors pervasive in numerous markets and locations

## 70%

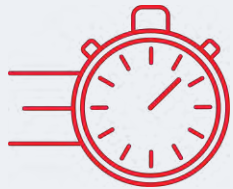
of the world's population uses Arm-based products

## 280B+

Arm-based chips shipped to date

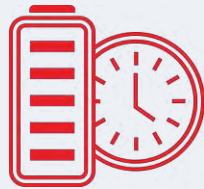


# Snapdragon is built for what's next



## Max performance

Up to 90% faster than other processors when unplugged<sup>1</sup>.



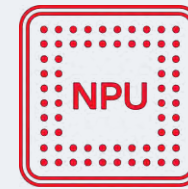
## Multi-day battery life

long-lasting without a performance drop<sup>1,2</sup>.



## Cool and quiet

Lower temperatures by 7°C when running AI workloads<sup>3</sup>.



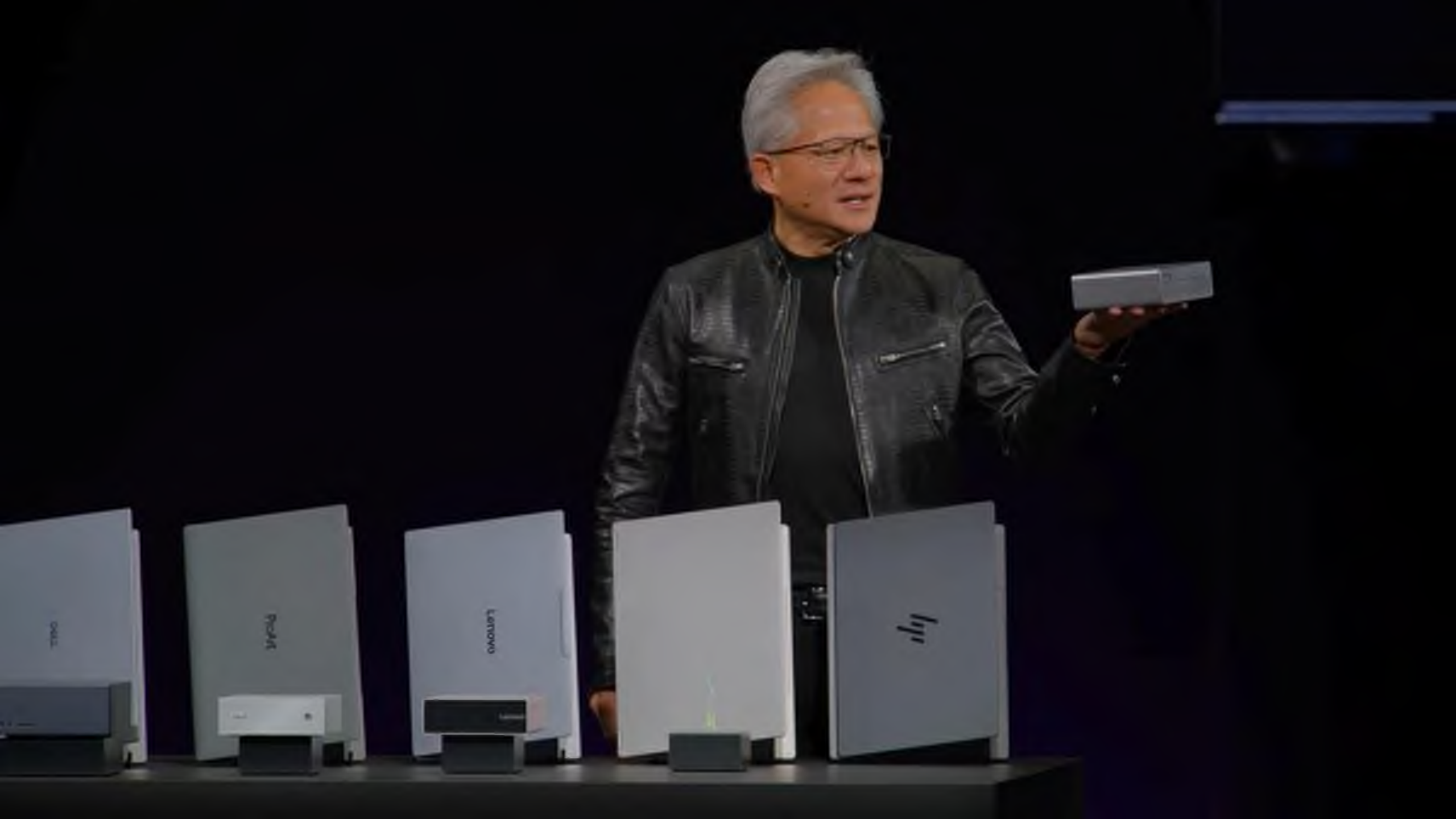
## 80 TOPS

Up to 60% greater NPU performance than Intel<sup>3</sup>.

1. CPU Performance is based on Geekbench v6.2 Single-Core on Windows 11 OS run in October 2024. Snapdragon X Elite (X1E-80-100) was tested using a Dell XPS 13 (9345) on "Balanced" Power Mode in Windows and "Optimized" in Dell Power Manager. Intel Core Ultra 7256V was tested using a Dell XPS 13 (9350) on "Balanced" Power Mode in Windows and "Standard mode" in Windows and "Optimized" in Dell Power Manager. The AMD Ryzen AI 9 HX 370 was tested using an ASUS Vivobook S14 (M5406WA) on "Balanced" Power Mode in Windows and "Standard mode" in MyASUS. Power and performance comparison reflects results based on measurements and hardware instrumentation of given devices. 2. Battery life varies significantly based on device, settings, usage, and other factors. 3. Performance & device temperature measured while running UL Procyon AI Computer Vision on the NPU in run in Windows 11 in October 2024. Snapdragon X Elite (X1E-80-100) was tested using a Dell XPS 13 (9345). The Intel Core Ultra 7256V was tested using a Dell XPS 13 (9350). On battery performance measured on "Balanced" Power Mode in Windows and "Optimized" in Dell Power Manager for both devices. Power, thermal, performance comparison reflects results based on measurements and hardware instrumentation of given devices.







A growing ecosystem of hardware partners are delivering devices designed with sustainability in mind\*

acer

ASUS®



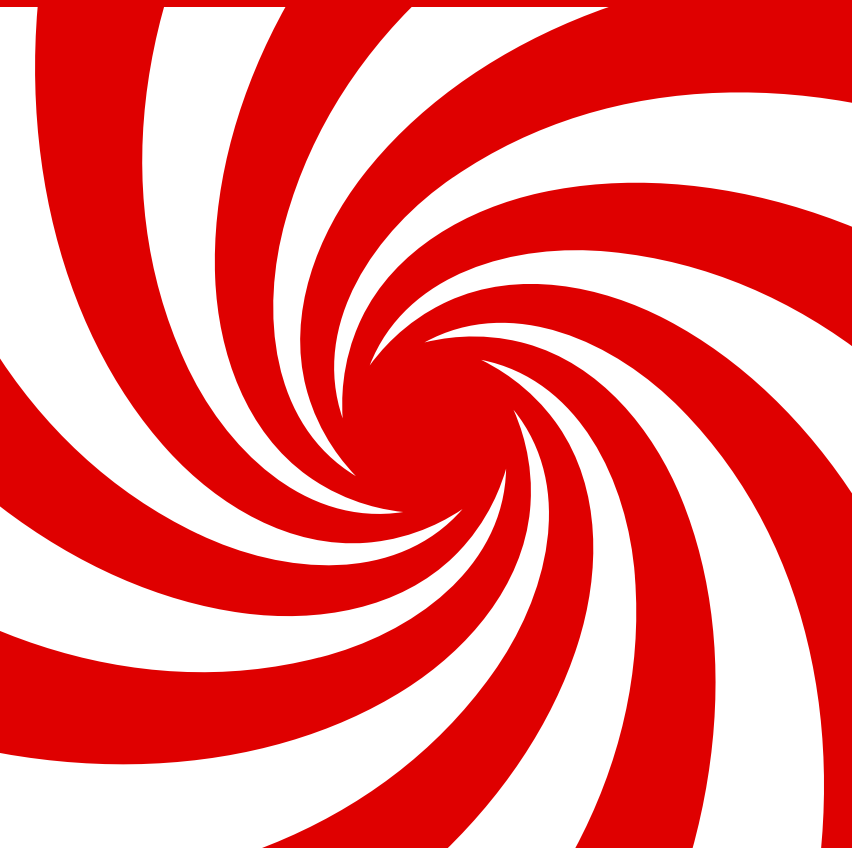
intel.

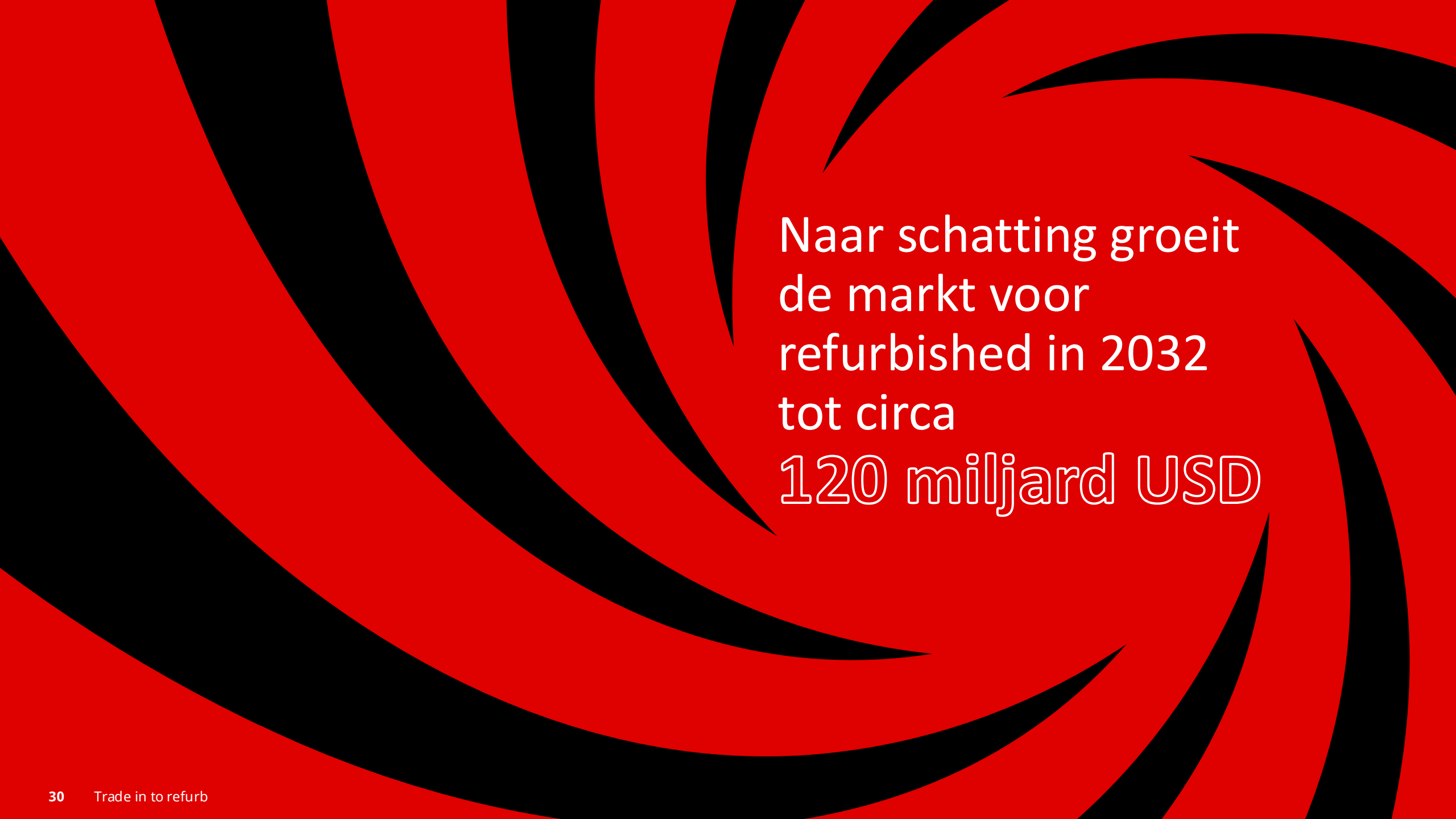
Lenovo

# Update focus van MMSaturn op Refurbishing

Sadet Kahleogullari







Naar schatting groeit  
de markt voor  
refurbished in 2032  
tot circa  
120 miljard USD

# Waarom?

Trade-in en refurbishment zijn de combinatie van drie belangrijke marktbevingen

## Betaalbaarheid

Consumenten worden steeds meer waardebewust en zoeken goedkope opties zonder functionaliteiten kwijt te raken.

## Duurzaamheid

Minder e-waste en grondstoffengebruik door hergebruik en langere productlevensduur.

## Vertrouwen

Refurbished wordt gezien als een “smart choice”, ondersteund door kwaliteit, grading en garantie.

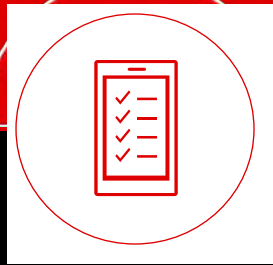


# Trade-in proces

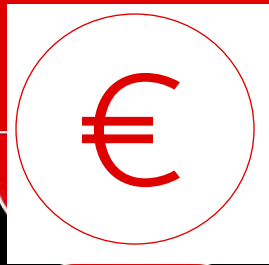
Klant brengt oude  
apparaat naar  
MediaMarkt



Kritische analyse  
van het  
apparaat



Inruilwaarde van  
het apparaat  
wordt bepaald



De order wordt  
afgerond en de  
cadeaukaart wordt  
aangemaakt



Klant kan de korting  
gebruiken bij  
eerstvolgende aankoop

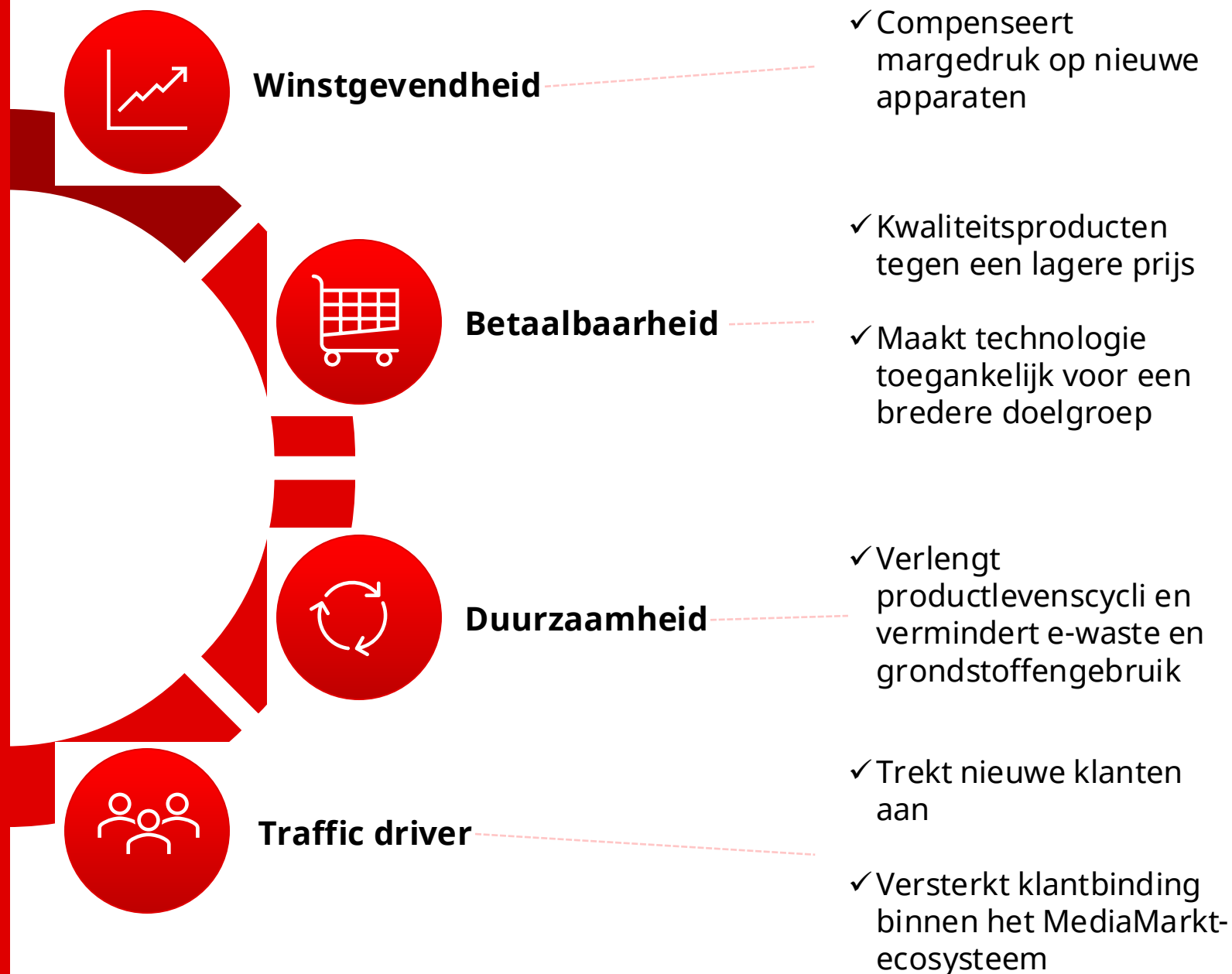


Ingenomen  
toestellen worden  
als refurbished  
verkocht



# Van circulair initiatief naar groeimotor

**Trade-in en refurbishment combineren duurzaamheid, betaalbaarheid en winstgevendheid in één businessmodel.**



# Van oude apparaten naar nieuwe waarde

## Door technologie een tweede leven te geven:

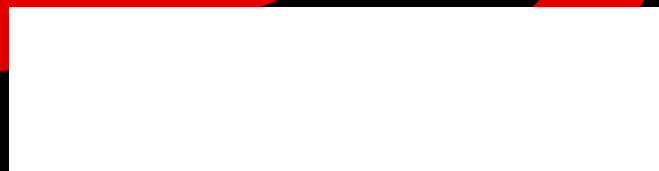
-  Creëren we waarde voor klanten met **betaalbare en hoogwaardige apparaten**
-  Versterken we **customer loyalty** over meerdere product life cycles
-  Genereren we nieuwe **revenue- en margekanalen**
-  **Verminderen we e-waste** en verlengen we productlevenscycli
-  Ondersteunen we de ambitie van MediaMarkt om leader te worden in **circulaire consumentenelektronica**

LET'S GO! LET'S GO  
LET'S GO! LET'S GO  
LET'S GO! LET'S GO  
LET'S GO! LET'S GO  
LET'S GO! LET'S GO  
LET'S GO! LET'S GO  
LET'S GO! LET'S GO  
**LET'S GO! LET'S GO**  
LET'S GO! LET'S GO  
LET'S GO! LET'S GO



THANK

YOU



# Discover how Surface designs for Repairability



**Ervin Barabas**

Sr. Customer & Partner Experience Program Manager  
Microsoft Engineering

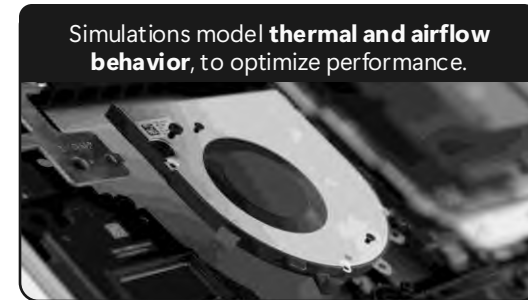




**1165 packaging prototypes** provide a premium unboxing experience, while reducing plastic



1160 hours of machining studies ensure devices remain thin, light, strong, and durable.



Simulations model **thermal and airflow behavior**, to optimize performance.



**Human-factors and user research** make interactions feel intuitive and effortless



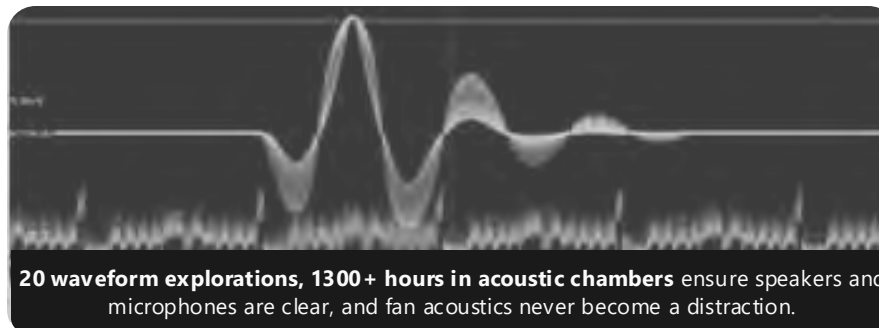
# Attention to every detail



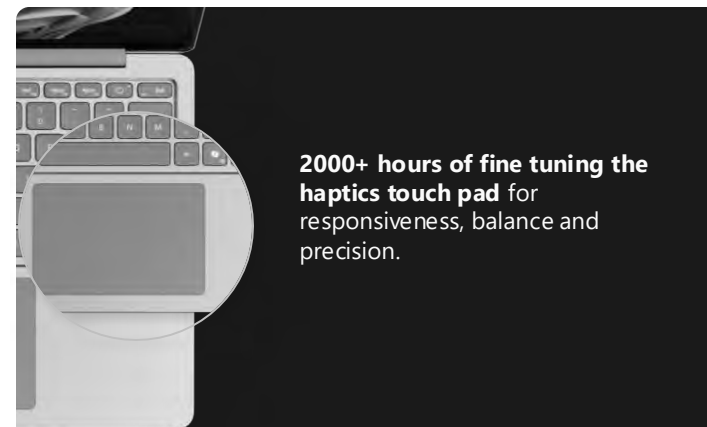
**650 simulations, 5,800 CPU hours and 13 terabytes of data** digitally test real-world usage and design scenarios.



Immersive 3:2 aspect ratio offers more usable space for productivity and comfort.



**20 waveform explorations, 1300+ hours in acoustic chambers** ensure speakers and microphones are clear, and fan acoustics never become a distraction.



**2000+ hours of fine tuning the haptics touch pad** for responsiveness, balance and precision.

# Microsoft Quality Labs

# Sustainability across the product lifecycle

Surface Pro and Surface Laptop – designed with sustainability in mind.



## More recycled materials

Enclosures now with 100% recycled aluminum alloy, 100% recycled rare earth metals<sup>1</sup>

Build



## Thoughtful packaging

Made with >70% recycled content

Ship



## More energy efficient

Higher performance with less energy<sup>2</sup> and new Windows 11 software features

Use



## Increased repairability

Easier to repair with built-in access to repair instructions<sup>3</sup>

Re-use

<sup>1</sup>Surface Laptop (7<sup>th</sup> Edition) enclosure includes A Cover, C Bucket and D Cover. 100% recycled aluminum alloy in A Cover and C Bucket. 100% recycled rare earth metals in magnets. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure (ECVP) for Recycled Content, UL 2809-2, Second Edition, November 7, 2023. Surface Pro (11<sup>th</sup> Edition) enclosure includes Bucket and Kickstand. 100% recycled aluminum alloy in Bucket and Kickstand. 100% recycled rare earth metals in magnets. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure, UL 2809-2, Second Edition, November 7, 2023. | <sup>2</sup>Based on comparison of ENERGY STAR® ratings | <sup>3</sup>Replacement components available through Surface Commercial authorized device resellers. 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. See [\[Surface service options - Surface | Microsoft Team\]](#). 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.

# More recycled materials

**Surface Laptop (7<sup>th</sup> Edition):** 67% of enclosure made with recycled content<sup>1</sup>

**Surface Pro (11<sup>th</sup> Edition):** 72% of enclosure made with recycled content<sup>2</sup>

100% Recycled aluminum alloy in part of the enclosure<sup>1,2</sup>

100% Recycled rare earth metals in all enclosure magnets  
Continued!

<sup>1</sup>Enclosure includes A Cover, C Bucket and D Cover. 100% recycled aluminum alloy in A Cover and C Bucket. 100% recycled rare earth metals in magnets. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure (ECVP) for Recycled Content, UL 2809-2, Second Edition, November 7, 2023. | <sup>2</sup>Enclosure includes Bucket and Kickstand. 100% recycled aluminum alloy in Bucket and Kickstand. 100% recycled rare earth metals in magnets. Based on validation performed by Underwriter Laboratories, Inc. using Environmental Claim Validation Procedure, UL 2809-2, Second Edition, November 7, 2023.

# Thoughtful packaging

On track to meet our goals to eliminate single-use plastic in packaging.

## Highlights

Paper-based, minimizing plastic use

Made with less materials, lighter

Made with >70% recycled content in wood-based fiber packaging<sup>1</sup>

100% of virgin paper sourced from responsibly managed forests<sup>2</sup>

Substantially reduced single-use plastics to just 0.07% across primary device packaging[iii].



<sup>1</sup> Applies to sales packaging. Based on internal analysis using IEEE Std 1680.1-2018. IEEE Standard for Environmental and Social Responsibility Assessment of Computers and Displays. 4.7.3.1 Required—Recycled content in wood-based fiber packaging. <sup>2</sup> Sources must be Forest Stewardship Council certified. [iii] For product packaging, single-use plastic metrics cover all Microsoft hardware packaging (retail and commercial) and consumer software packaging, and exclude impact from inks, adhesives, coatings, label liner material I material that is removed before a label is applied, and electrostatic discharge (ESD) packaging components. More information can be found here: [2025 Environmental Sustainability Report | Microsoft](#)

# More Energy Efficient

Surface Laptop (8<sup>th</sup> Edition) and Surface Pro (12<sup>th</sup> Edition) are more energy efficient than their predecessors Surface Laptop 5 and Surface Pro 9 (Wi-Fi only models)<sup>1</sup>

- ENERGY STAR® certified
- EPEAT Gold

## More Windows 11 settings for power savings

- Energy Recommendations
- Carbon Aware
- Energy Saver

<sup>1</sup> Comparison based on product energy consumption vs. ENERGY STAR® certification limits. Actual performance varies by configuration and usage.



Surface Pro uses **46% less energy** than ENERGY STAR® limits

Surface Laptop uses **58% less energy** than ENERGY STAR® limits



We're not perfect; things can go wrong!

## iFixit Labels the Surface Laptop a 'Glue-Filled Monstrosity'

According to iFixit, the Surface Laptop isn't repairable at all. In fact, it got a 0 out of 10 for repairability and was labeled a "glue-filled monstrosity." Ouch.

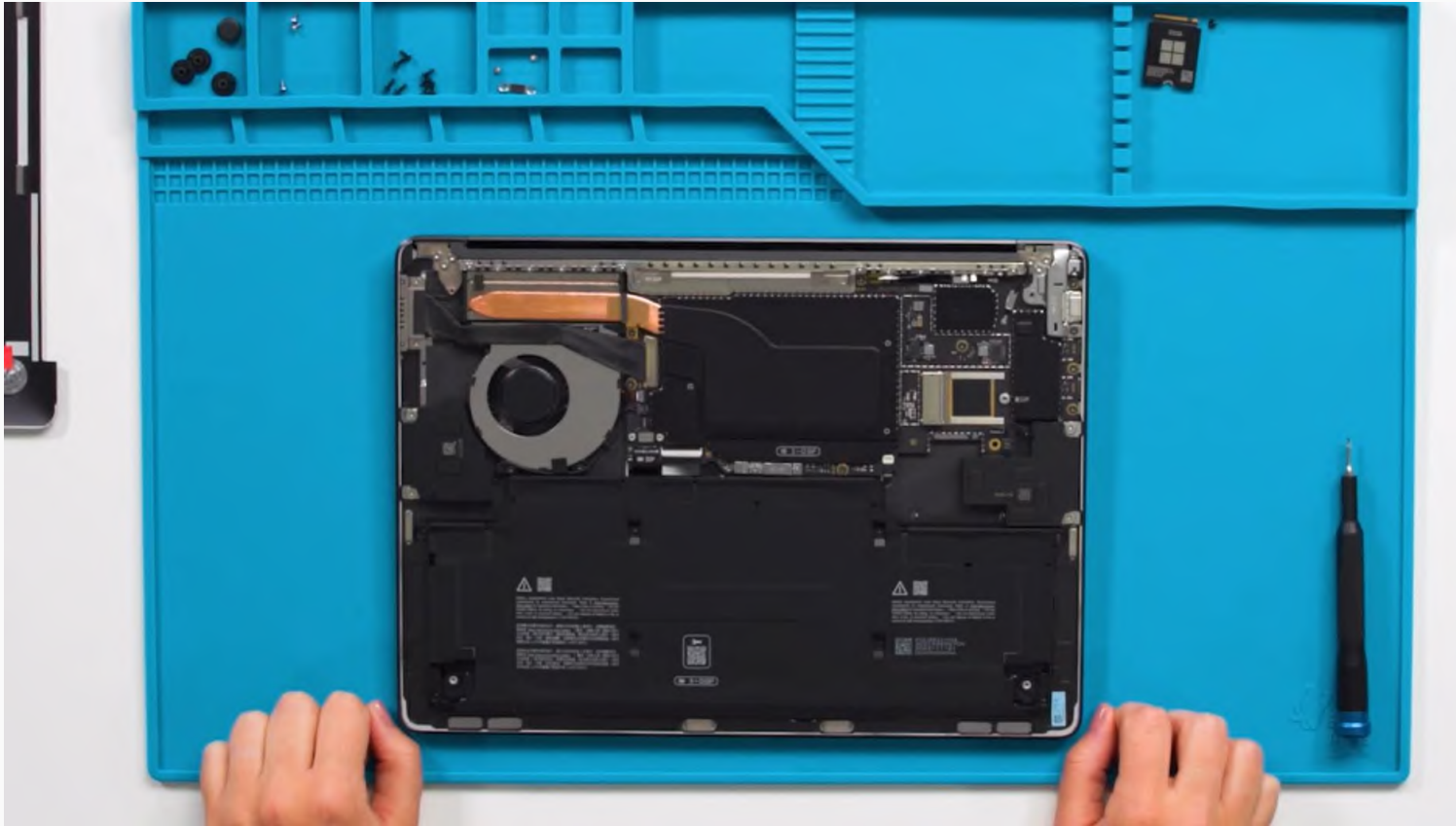
By Ryan Whitwam June 16, 2017



## iFixit gives Surface Laptop repairability score 0/10: "It's a glue-filled monstrosity"

Christian Zibreg · June 19, 2017





Microsoft has pulled a miracle: its Surface Copilot PCs are now the most repairable in the market

**News** By [Allisa James](#) published June 25, 2024



The new Surface Laptop whips the MacBook in this important test

By [Willow Roberts](#) Published June 24, 2024

 Save

*“The Surface line of devices have performed such a **stunning and swift U-turn** from unrepairable to very repairable that we can’t help but be impressed” – iFixit*



# Surface Pro and Surface Laptop

# Support & Repairability experiences

Exchange only

Fully repairable



# Repairable Surface Devices



**Surface Laptop Studio 2**

|                            |                    |
|----------------------------|--------------------|
| Display Assembly A/B-Cover | Cosmetic Plate     |
| Keyboard Assembly C-Cover  | Non-Skid Feet      |
| Surflink Port              | D-Bucket + Battery |
| USB C                      | Motherboard        |
| USB A                      | Micro SD Reader    |
| Audio Jacks                |                    |
| Solid State Drive          |                    |



**Surface Laptop Go 3**

Display Assembly  
Keyboard Assembly  
rSSD (removeable solid-state drive)  
Feet  
Battery  
Surflink Assembly  
Motherboard (PCBA)



**Surface Laptop 5**

SSD  
Display Module  
Keyboard (c-cover)  
Feet  
Motherboard  
Surface connect port (Surflink)  
Battery + Bucket  
Thermal module



**Surface Laptop 6**

|                                 |                     |
|---------------------------------|---------------------|
| Display Assembly (incl. camera) | Audio jack speakers |
| Keyboard Assembly               | Enclosure           |
| SSD                             | Feet                |
| Battery                         |                     |
| Motherboard                     |                     |
| Surface connect                 |                     |
| Thermal module                  |                     |



**Copilot+PC**

|                                     |                    |
|-------------------------------------|--------------------|
| Display Assembly (including camera) | Audio jack         |
| Keyboard Assembly                   | Speakers           |
| SSD                                 | Enclosure (bucket) |
| Battery                             | Feet               |
| Motherboard                         |                    |
| Surface connect                     |                    |
| Thermal module                      |                    |
| MicroSD reader (15")                |                    |



**Surface Pro 9 / Pro 9 5G**

|                        |                       |
|------------------------|-----------------------|
| SSD                    | Thermal module        |
| SSD door               | Front and rear camera |
| Kickstand              | Motherboard           |
| Screen (TDM)           |                       |
| Charge Port (Surflink) |                       |
| Camera deck (Pro 9 5G) |                       |
| Power/volume button    |                       |
| Back cover (bucket)    |                       |
| Speaker                |                       |
| Wi-Fi Deck (Pro 9)     |                       |
| Battery                |                       |



**Surface Go 4**

|                            |                 |
|----------------------------|-----------------|
| Touch Display Module       | Speakers        |
| Battery (including bucket) | Hinge           |
| Motherboard (PCBA)         | Kickstand       |
| Front Camera               | SDXC Connector  |
| Rear Camera                | Blade Connector |
| IR Camera                  |                 |



**Surface Studio 2+**

SSD  
Display Module  
Thermal module  
Motherboard  
Feet  
Internal PSU



**Surface Pro 10**

|                      |                          |
|----------------------|--------------------------|
| Touch Display Module | Rear camera              |
| SSD                  | Power and volume buttons |
| Battery              | Kickstand                |
| Motherboard          | Device entry kit         |
| Surface Connect      |                          |
| Thermal module       |                          |
| Microphone module    |                          |
| SSD door             |                          |
| Speakers             |                          |
| Enclosure (bucket)   |                          |
| Front camera         |                          |



**Copilot+PC**

|                        |                          |
|------------------------|--------------------------|
| Touch Display Module   | Front camera             |
| SSD                    | Rear camera              |
| Battery                | Power and volume buttons |
| Motherboard            | Kickstand                |
| Surface Connect        | Device entry kit         |
| Thermal module         |                          |
| Microphone module      |                          |
| Solid-state drive door |                          |
| Speakers               |                          |
| Enclosure (bucket)     |                          |

# Redesigning Surface for repair

## Enhanced Repairability Score

Surface devices have a much higher repairability score, reflecting major improvements in engineering for easy repairs.

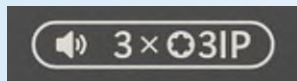
## Clear Component Labeling

Components now feature clear labels detailing screw types and quantities, simplifying part identification and the repair process.

## Integrated QR Code Guides

QR codes on components link directly to [repair guides](#) and [videos](#), making instructions instantly accessible and repairs more efficient.

Number of screws

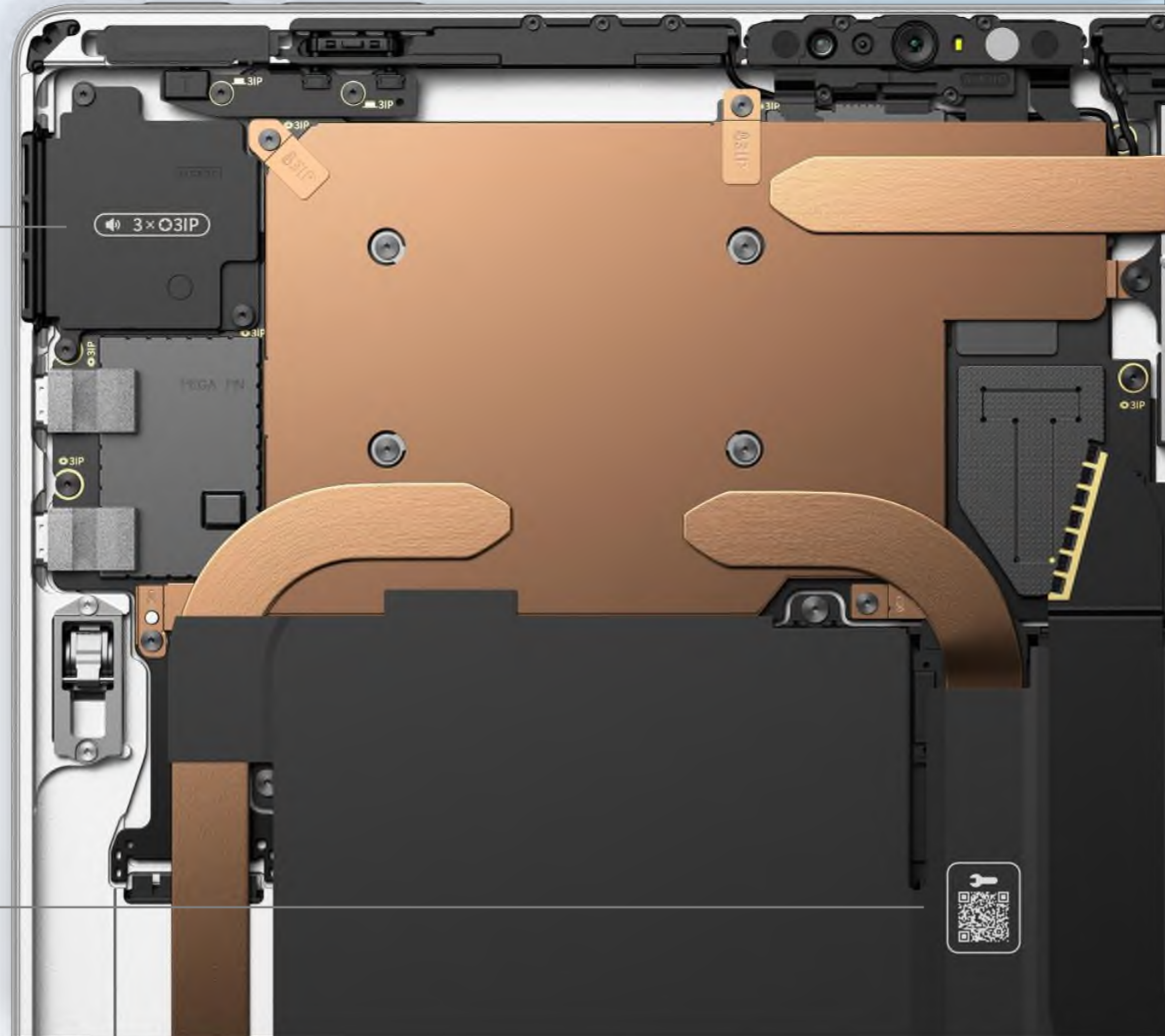


Component

Driver type

The speaker module has three screws and uses a 3IP driver.

QR code links to digital manual.



# Modular components enable targeted repair at scale



Targeted component repair supports lower costs than full device replacement

---

Modular hardware enables efficient, waste-reducing service

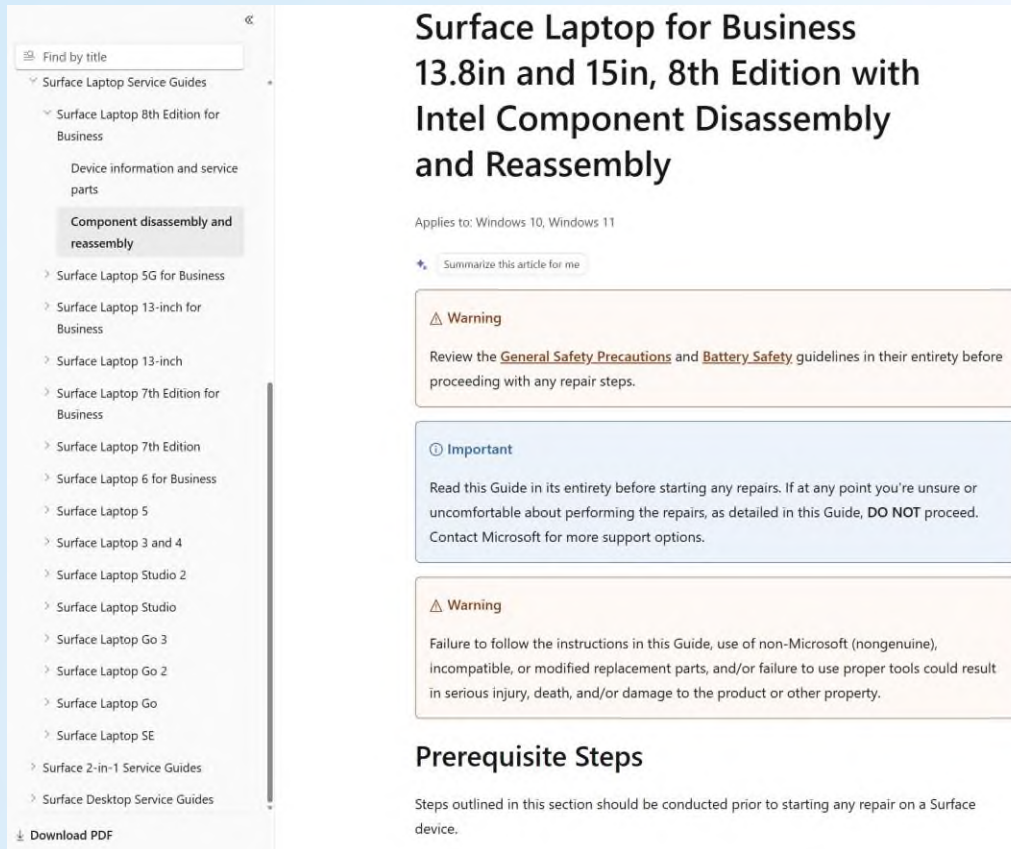
---

Enterprise repair supported enabled with full data control

---

Self repair, work with authorized service providers, or repair directly through Microsoft

# Surface Service Guides



The screenshot shows the Microsoft Surface Service Guides website. On the left is a sidebar with a search bar and a list of guides categorized by device type and generation. The main content area displays the title 'Surface Laptop for Business 13.8in and 15in, 8th Edition with Intel Component Disassembly and Reassembly'. Below the title, it states 'Applies to: Windows 10, Windows 11' and includes a 'Summarize this article for me' button. There are three callout boxes: a 'Warning' box about safety guidelines, an 'Important' box about reading the guide fully, and another 'Warning' box about using genuine parts and proper tools. Below these is the 'Prerequisite Steps' section, which states that steps should be conducted prior to starting any repair.

Find by title

- Surface Laptop Service Guides
  - Surface Laptop 8th Edition for Business
    - Device information and service parts
    - Component disassembly and reassembly**
  - Surface Laptop 5G for Business
  - Surface Laptop 13-inch for Business
  - Surface Laptop 13-inch
  - Surface Laptop 7th Edition for Business
  - Surface Laptop 7th Edition
  - Surface Laptop 6 for Business
  - Surface Laptop 5
  - Surface Laptop 3 and 4
  - Surface Laptop Studio 2
  - Surface Laptop Studio
  - Surface Laptop Go 3
  - Surface Laptop Go 2
  - Surface Laptop Go
  - Surface Laptop SE
- Surface 2-in-1 Service Guides
- Surface Desktop Service Guides

Download PDF

## Surface Laptop for Business 13.8in and 15in, 8th Edition with Intel Component Disassembly and Reassembly

Applies to: Windows 10, Windows 11

Summarize this article for me

**Warning**

Review the [General Safety Precautions](#) and [Battery Safety](#) guidelines in their entirety before proceeding with any repair steps.

**Important**

Read this Guide in its entirety before starting any repairs. If at any point you're unsure or uncomfortable about performing the repairs, as detailed in this Guide, **DO NOT** proceed. Contact Microsoft for more support options.

**Warning**

Failure to follow the instructions in this Guide, use of non-Microsoft (nongenuine), incompatible, or modified replacement parts, and/or failure to use proper tools could result in serious injury, death, and/or damage to the product or other property.

### Prerequisite Steps

Steps outlined in this section should be conducted prior to starting any repair on a Surface device.

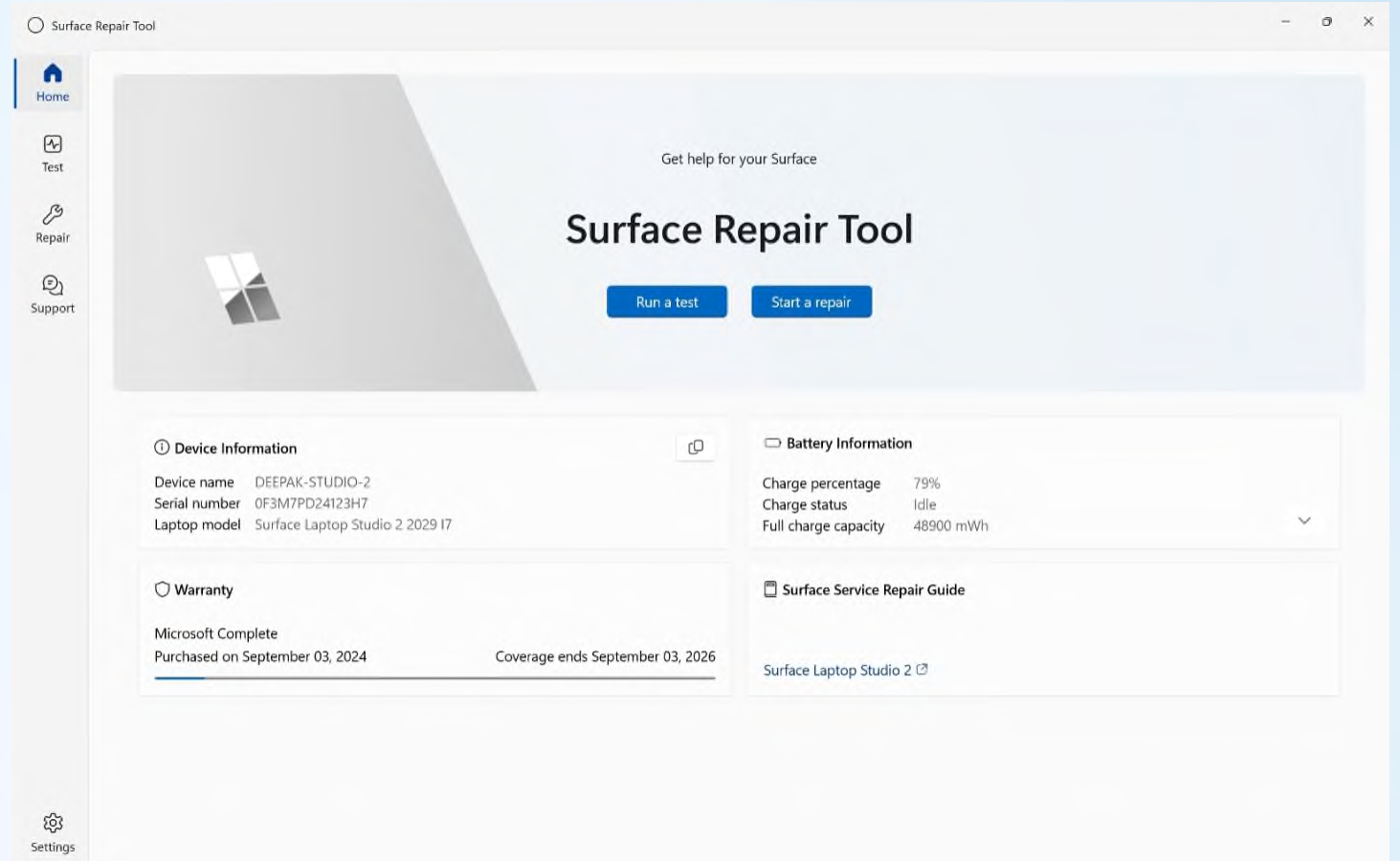


- Multi-language
- Online and offline (PDF download)
- Copilot integration

# Surface Repair Tool

## Get help for your Surface

The Surface Repair Tool empowers users, independent repairers, and ASPs to safely diagnose and repair key components of Surface devices—like batteries, displays, and motherboards—using the same guided workflows Microsoft uses internally.



# Customer-centric device repair options

Depending on business need, a customer can select either in-house self-repair, a trusted in-region repair facility or, for more customized support, use a third-party Microsoft Authorized Service Provider (ASP).

## ASP repair

### Customized repair services

Surface ASPs<sup>1</sup> are authorized by Microsoft to help resolve issues that may occur with a Surface device. ASPs perform repairs on behalf of Microsoft, have direct access to Microsoft support, and use genuine Microsoft replacement components.

## Microsoft repair

### Trusted in-region repair

Microsoft can repair many commercial Surface devices via in-region repair facilities. If troubleshooting or diagnostics determine that your Surface device needs repair and is eligible for mail-in repair services<sup>1</sup>, customers can ship it to Microsoft for repair and return.

## Self-repair

### Maximum efficiency

The self-service repair option helps customers maximize efficiency and maintain productivity by reducing device downtime, giving their own staff of technically inclined<sup>2</sup> individuals the ability to quickly assess and bring user devices back online.

<sup>1</sup>Service and repair facilities vary by region. <sup>2</sup>Device damage caused during self-service repair will not be covered under Microsoft's Limited Hardware Warranty or Protection Plans.



# Published lifecycle policies support Surface planning

Plan deployments, refresh cycles, and audits with support and servicing timelines for Windows and Surface devices

Know how long Surface devices remain supported and serviceable with Microsoft lifecycle policies for Surface drivers and firmware

Avoid unsupported device states by clarifying when updates continue and when transition planning is required with lifecycle documentation



| Surface device                                                   | Release date  | End-of-servicing date for firmware & drivers |
|------------------------------------------------------------------|---------------|----------------------------------------------|
| Surface Laptop for Business 13-inch 1st Edition, Intel processor | May 19, 2026  | May 19, 2032                                 |
| Surface Pro for Business 12th Edition, Intel processor           | May 19, 2026  | May 19, 2032                                 |
| Surface Pro 12th Edition, Snapdragon processor                   | June 16, 2026 | June 16, 2032                                |
| Surface Laptop 8th Edition, Snapdragon processor                 | June 16, 2026 | June 16, 2032                                |

# Microsoft core environmental sustainability commitments



Carbon

**Carbon  
negative  
by 2030**



Water

**Water  
positive  
by 2030**



Waste

**Zero  
waste  
by 2030**



Ecosystems

Protect more  
land than we  
use and Build the  
**Planetary  
Computer**

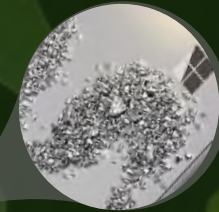
Reducing carbon impact



# Designing Out Carbon Emissions

## Material efficiency

Enclosure is made with a minimum of 72% recycled content, including 100% recycled aluminum alloy and 100% recycled rare earth metals



## Eco Design

material interventions drive a 73 kgCO<sub>2</sub>eq. carbon footprint reduction from baseline



## Battery

Battery cell to make use of 100% recycled cobalt

## Built to last

designing for and promoting repair, refurbishment and reuse of devices

## Reducing carbon impact



### Example

Touch display module, our supply chain engagement extends to tier 4 suppliers.

---



### Impact

Pro 10

The carbon free electricity transition implemented so far drives 21 kgCO<sub>2</sub>eq. carbon footprint reduction from baseline.

---

Reducing carbon impact



Surface Laptop 4 – 265 kg



Surface Laptop 5 – 237 kg



Surface Laptop 6 – 221 kg



Surface Laptop 7 – 162 kg

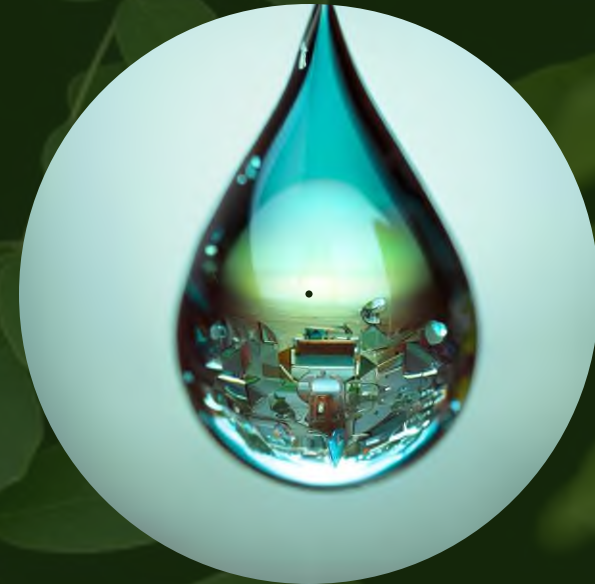


Surface Laptop 8 – 154 kg





VS



How many dollars were spent

*"Hey the I got a nice 20% discount so now our Co2 went down..."*

**What was the impact based  
in LCA and primary data**

Integrity built-in



# LCA

Life Cycle Assessment



Integrity built-in



# LCA

Life Cycle Assessment



## Process

### Liquid Cristal Module (LCM)

- LCM assembly
- LCM testing

### Touch Sensor Panel (TSP)

- TSP assembly
- TSP testing
- Film lamination

### Cover Glass (CG)

- CG assembly
- CG testing

### Final assembly

- TDM assembly

Integrity built-in



# DATA Collection



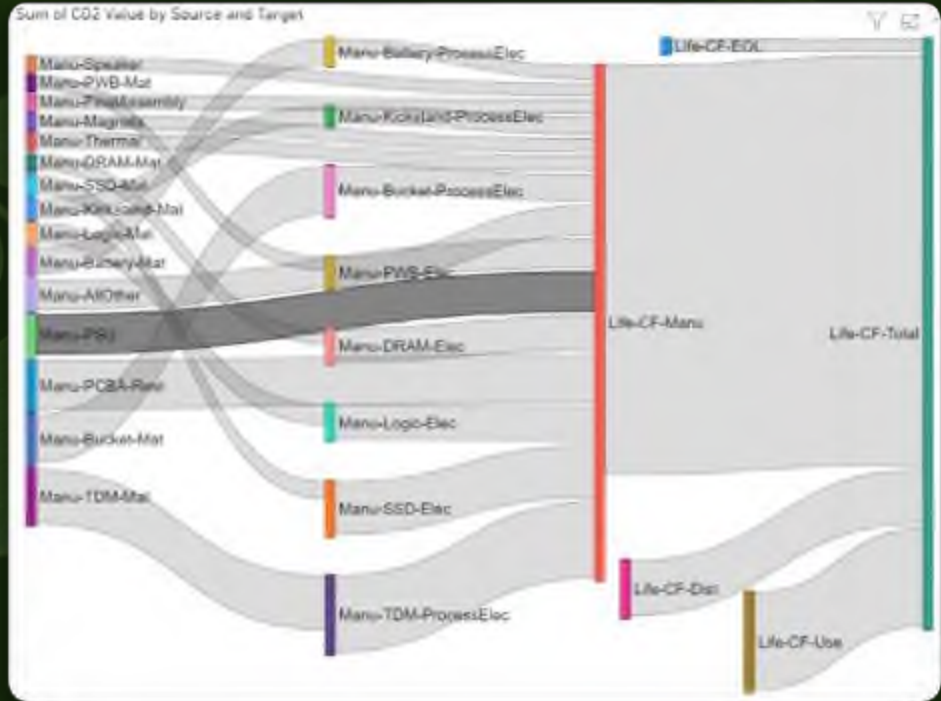
Secondary data (Eco invent)

Primary data (~70%)

28k\* rows of data

LCA tool (Software)

# Integrity built-in



Integrity built-in



# Microsoft Devices LCA Methodology Version 2.1



## Microsoft Consumer Devices Life Cycle Assessment Methodology Overview

Updated in April 2024

### Executive Summary

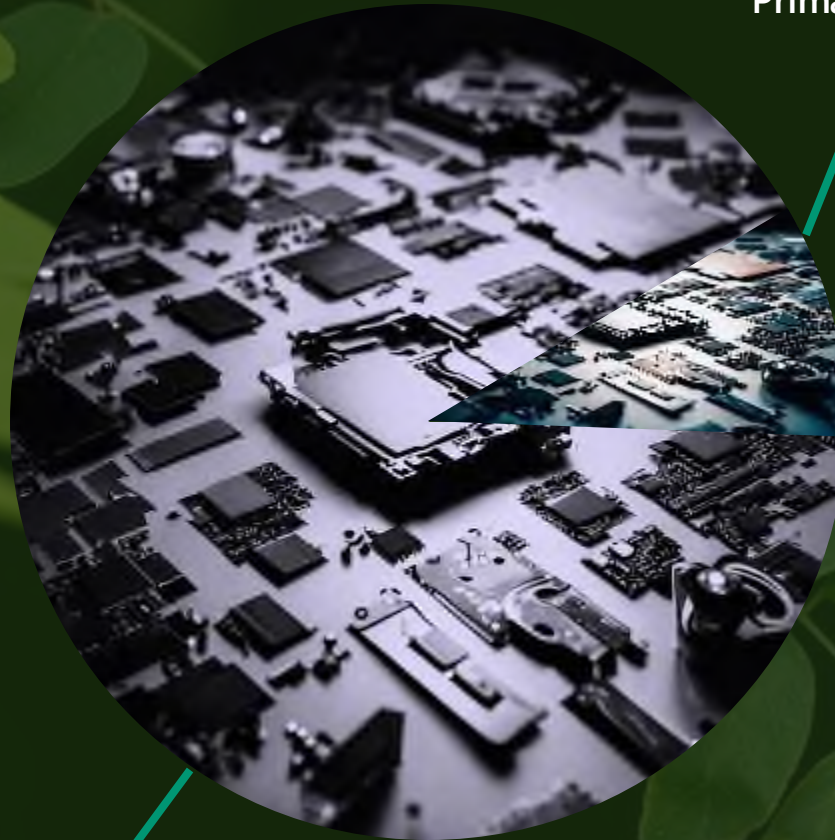
At Microsoft, we seek to reduce our environmental footprint by implementing a structured approach that considers a balance of technical, economic, and environmental factors.

The process we use to quantify the environmental impacts of our hardware devices and measure environmental improvements is called "Life Cycle Assessment." Life Cycle Assessment, or LCA, is the systematic assessment of environmental impacts associated with all life cycle stages of the product, process, or service that is being assessed. We follow recognized procedures for conducting LCAs, which are associated by ISO 14040 and ISO 14064 standards, along with additional guidance available through various initiatives, including the Product Environmental Footprint (PEF) Initiative led by the European Commission.





Primary  
data  
0-20%



Primary data



Secondary data

LCA tool (Software)  
PAIA  
Gabi etc

# LCA In 20 min





# industry-average notebook computer

Integrity built-in



# Surface Emissions Estimator

Microsoft

Surface for Business

Devices

Support

Help

Feedback

Sign out

Learn More

Microsoft Surface Emissions Estimator Report

AI Chat (GPT)

Back to Edit

Overall Summary

Product Selection by Scenario

Production Estimate

Packaging Estimate

Transportation Estimate

Product Use Estimate

End of Life Estimate

Particle Emissions: Total Emissions Estimates per Device

Microbiology

Overall Summary

Total Estimated CO<sub>2</sub> Emissions of Your Selections

66.01

Metric Tons CO<sub>2</sub> (MTCO<sub>2</sub>)

End of Life

0.13 MTCO<sub>2</sub>

Product Use

6.8 MTCO<sub>2</sub>

Transport

0.53 MTCO<sub>2</sub>

Packaging

0.25 MTCO<sub>2</sub>

Production

58.3 MTCO<sub>2</sub>

66.01

Total Estimated Emissions

6.8 MTCO<sub>2</sub>

Product Use

59.21 MTCO<sub>2</sub>

Product Use

We estimate carbon emissions associated with product usage based on two elements:

- Product energy use based on Windows data from Windows users who have agreed to and participated in programs to improve their own and our AI analysis. This data is minimum average or typical use profiles. For comparison, we also include ENERGY STAR estimates, which are available for Windows users. These values are based on the latest Energy Star and Product Energy's Energy Efficiency standards.

Whats Next



# SKU level Impact



# Q&A



# Update nieuw Samsung Refurb devices contract

**Ab Seghrouchni**  
**Country manager**



SECOND LIFE MARKET • A NEW OEM STRATEGY

# How OEMs are taking control of the second life market

*A practical example: **Samsung's** Authorized Refurbished Partner (ARP) Program*



# European circular market leader

## Performance & footprint



**210M€**

Revenue in  
2025

**+80%**

Growth the last 3  
years – 20% in 2025

**230**

Employees

## A strong ecosystem

One of the only pan-European players on high tech  
Capability to trade-in 30+ product categories

### Buyback & repair partner of main OEMs



- » Pan-European partner of Xiaomi, Microsoft, Honor & Moto
- » Managing OEM Bonuses for most of them
- » **Certified repair** of Apple & Samsung

### Buyback, FTI & resell partnership with Telco



- » Pan European partnerships with Vodafone, Orange, T-Mobile, Swisscom...

### and retail + eetail



- » Pan-European partnership with Amazon, Euronics, MediaMarkt...

# Our circular model

01



## Buy back / sourcing

- Trade-in program's
- Operators & retailers
- AI-assisted grading
- Corporate sourcing
- International sourcing network

02



## Refurbishment

- Diagnostics & testing
- Repair capabilities
- Certified data wiping
- Grade optimization
- Lifecycle extension

03



## Resale / second life

- Premium refurbished devices
- Multi-channel resale
- Marketplace ecosystem
- International distribution
- Giving devices a second life

*1.2 MIO devices processed in 2025*

## CONTEXT

# The market has changed

01

### Devices last longer

Longer lifecycles increase residual value.

02

### Refurbished goes mainstream

Consumers increasingly choose refurbished devices.

03

### Residual value becomes strategic

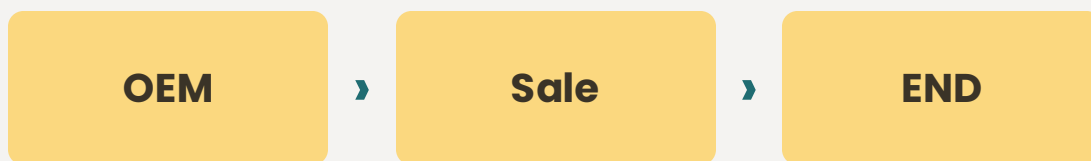
Higher trade-in values encourage customers to upgrade sooner.

*"The second life market is no longer a side business. It has become a strategic part of the smartphone lifecycle."*

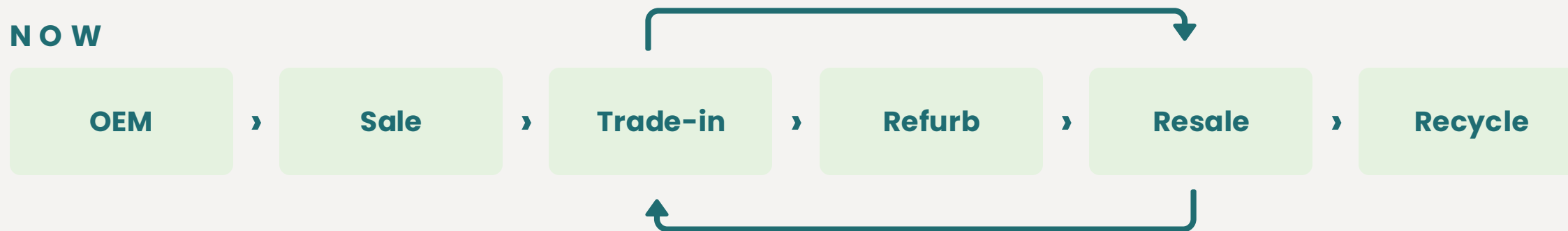
## SHIFTING MODEL

# The device lifecycle has changed

### BEFORE



### NOW



- **Residual value becomes strategic**

Drives new device sales.

- **Circularity becomes a business model**

Creates value beyond first ownership.

- **Quality becomes a competitive advantage**

Certified quality builds trust.

PLACEHOLDER • REPLACE WITH YOUR EXISTING SLIDE

# Why Samsung decided to act

1

## Repair

Protect quality

2

## Trade-in

Secure supply

3

## Authorized resell

Protect residual value

*"Protecting residual value has become as important as selling new devices."*

Samsung

Refurbished Galaxy S24  
(dual sim) 128GB black

★★★★★ 4.7 / 5 - 55 reviews

Certified



Included with your purchase

Maximum load capacity > 85%

Unlocked smartphone

Charging cable

Detailed test report

## THE PROGRAM

# What the Refurb Devices Program actually is

- ✓ Certified refurbishment
- ✓ Original Samsung parts
- ✓ Samsung approved tools
- ✓ Samsung audited process

**European sourcing only**

Samsung

## Refurbished Galaxy S24 (dual sim) 128GB black

★★★★★ 4.7 / 5 - 55 reviews

Certified



### Included with your purchase

- Maximum load capacity > 85%
- Unlocked smartphone
- Charging cable
- Detailed test report

### Cosmetic condition

|                               |                                 |                            |                            |
|-------------------------------|---------------------------------|----------------------------|----------------------------|
| Perfect condition<br>469,90 € | Very good condition<br>429,90 € | Good condition<br>419,90 € | Good condition<br>409,90 € |
|-------------------------------|---------------------------------|----------------------------|----------------------------|

Perfect condition : Excellent overall condition of the screen, casing and edges  
[Learn more](#)

### Premium

€483.90



- Genuine Samsung parts
- Perfect condition: no signs of wear
- [Learn more](#)

### Ability

- 128GB
- 256GB
- 512GB

### Color: Black



As an example, on [recommerce.com](https://recommerce.com), customer can select the regular device gradings.

Samsung

## Refurbished Galaxy S24 (dual sim) 128GB black

★★★★★ 4.7 / 5 - 55 reviews

Certified



Refurbishment  
Partner  
**Samsung**



### Included with your purchase

- Maximum load capacity > 85%
- Unlocked smartphone
- Charging cable
- Detailed test report

Premium

€483,90

- Genuine **Samsung** parts
- Perfect condition; no signs of wear
- [Learn more](#)

### Ability

128GB

256GB

### Color: Black



### Sim

Mono sim

Dual SIM



### Cheaper with the trade-in

Give your old device a second life and lower the price of your purchase

[What is recovery?](#)

Estimate the buyback value

When customer selects this premium option all information regarding the product is displayed.

Including the trusted label

## THE BUSINESS CASE

# Residual value becomes a growth engine

Higher resale value

>

Higher trade-in value

>

Higher affordability

^

More APR devices

<

More Galaxy trade-ins

<

More Galaxy sales

v

*Samsung isn't investing in refurbishment.  
Samsung is **investing in residual value.***

## KEY TAKEAWAY

**RESIDUAL VALUE IS  
BECOMING A CRITICAL PART  
OF THE SALES STRATEGY.**

Let's connect :



**Ab Seghrouchni**  
Country Manager Netherlands

Break

14:50-15:10

# Agenda

12:00 – 14:30

**12:00**  
60 min

## Inloop & lunch

incl. Surface reparatie experience

**13:00**  
20 min

## Windows: Driving Sustainable IT at Scale

Remco de Kramer & Ruben de Maere,  
Commercial Device Sales & Solutions

**13:20**  
30 min

## MediaMarkt

Sadet Kahleogullari –  
update focus van MMSaturn op Refurbishing

**13:50**  
40 min

## Microsoft Surface Engineering

Ervin Barabas, Surface Engineering –  
Discover how Surface designs for repairability

**14:30**  
20 min

## Recommerce

Ab Seghrouchni, Country manager –  
update nieuw Samsung Refurb devices contract

14:50 – 17:30

**14:50**  
20 min

## Break

**15:10**  
20 min

## Standup-presentaties

Leden stellen zich kort voor

**15:30**  
20 min

## Service Planet

Jeroen Sipsma CEO –  
update over het reparatie landschap in Nederland

**15:50**  
30 min

## CHG-MERIDIAN

Soenil Ghirad  
As IT prices rise and hardware shortages loom

**16:30**  
60 min

## Borrel

# Standup-presentaties

Leden stellen zich kort voor



# Het reparatie landschap in Nederland

Jeroen Sipsma  
CEO Service Planet





# Circulaire IT in de Benelux

Kansen · Achterstanden · Wetgeving · Innovatie

Nederland · België · Luxemburg · Europa · 2026

CIRCULAIR IT EVENT · MICROSOFT · 30 JUNI 2026

GEPRESENTEERD DOOR SERVICE PLANET — CARE-FREE COMPUTING

# Agenda — Van Achterblijver naar Koploper

30 minuten · 16 slides



## EU-wetgeving & Green Deal

Right to Repair · Circulair Economy Act · Ecodesign · verplichtingen



## Geopolitiek & handelstarieven

Prijsdruk · schaarste · kansen voor refurb



## NL: lang stuurloos

Politieke vertraging Den Haag · achterstanden · nu kansen



## België & Luxemburg

Wat doen burens beter? Vergelijking Benelux



## AI & innovatie

Visuele grading · predictief onderhoud · kansen



# Nederland: Lang Stuurloos — Een Gemiste Kans

## Politieke context

- 5 kabinetsformaties in 8 jaar → beleid circulaire economie steeds uitgesteld
- NPCE 2023 verscheen laat; actualisatie 2025 pas na aandringen
- Structurele financiering ontbrak jarenlang
- Den Haag stuurloos terwijl Europa wél doorpakte

## Plan Bureau voor de Leefomgeving 2025: niet op schema

- Nederland ligt niet op koers voor circulaire economie 2050
- Grondstoffengebruik daalt onvoldoende
- EU Rekenkamer 2025: NL behoort op **geen enkel** circulariteitscriterium tot de EU-top

## Maar: unieke Nederlandse troeven

- Eerste EU-land met Nationaal Reparateursregister (NRR)
- Keurmerk Refurbished (TÜV gecertificeerd)
- NPCE 2025: levensduurverlenging als speerpunt

**23%**

SE Zweden

Elektronica tweede leven

**18%**

BE België

Elektronica tweede leven

**15%**

EU EU-gemiddelde

Elektronica tweede leven

**12%**

NL Nederland ⚠

Elektronica tweede leven

# Right to Repair: 31 Juli 2026

EU Richtlijn 2024/1799 — Break-fix wordt afgedwongen

## De drie pijlers

### Richtlijn 2024/1799

Implementatiedeadline alle EU-lidstaten: **31 juli 2026**

### Reparatieplicht fabrikant

Spare parts 7–10 jaar · diagnose-info toegankelijk · parts pairing verboden

### +12 maanden garantie

Garantieverlenging na succesvolle reparatie buiten garantieperiode

## Circular Economy Act (CEA) — H2 2026

- Von der Leyen: CEA verwacht eind 2026
- Circulair materiaalgebruik: **11,8%** → **24%** in 2030
- Digitaal Productpaspoort (DPP) verplicht
- Single market voor secundaire grondstoffen

## Ecodesign & Repareerbaarheidsscore

- Score 1–10 verplicht op verpakking
- Verbod softwarematige veroudering (in lobby)
- NRR koppeling EU RepairEU-platform 2027

# Wat Doen Onze Buren Beter?

Benelux & EU-koplopers — succesmodellen die Nederland nog niet heeft overgenomen



## BE België

- BOok BTW verlagingslobby naar 6%
- Repair Cafés verankerd in gemeentelijk beleid
- 18% elektronica krijgt tweede leven
- Federaal repair-fonds in voorbereiding 2026



## LU Luxemburg

- Groen IT-inkoopbeleid overheid
- ITAD + CO<sub>2</sub>-rapportage overheidshardware verplicht
- Circul'R platform voor B2B hergebruik
- Snelle implementatie EU-richtlijnen



## SE Zweden — de benchmark

- Reparationsavdraget: fiscale aftrek voor consumenten
- **23%** elektronica tweede leven



## FRAT Beste EU-praktijken

- **Bonus Réparation** (FR): €25–€45 korting · 1,5 mln reparaties 2023–25
- **Reparaturbonus** (AT): 50% korting max. €200 · €60M · 330.000+ reparaties



# Geopolitiek & Handelstarieven

Dreiging én kans voor de circulaire IT-sector

## ⚠ Bedreigingen

- Stijgende inkooprijzen spare parts
- Verstoorde supply chain voor componenten
- Geopolitieke onzekerheid remt investeringen
- Windows 10 EOL november 2025 → miljoenen laptops 'at risk' met end of support eind 2027

## ✅ Kansen voor repair & refurbishment

- Hogere nieuwprijs = refurbished relatief veel aantrekkelijker
- Critical Raw Materials Act stimuleert circulaire keten
- Consument kiest bewuster voor levensduurverlenging
- Back Market lanceert repair-platform naast refurb-aanbod

# 104%

**Trump-tarieven**

Op Chinese elektronica (piek 2025)

# 98%

**EU-import**

Zeldzame aardmetalen uit China

# +30%

**Prijsstijging**

Mogelijke stijging nieuwe elektronica

# Den Haag: Eindelijk Richting

NL kabinetsbeleid & het Nationaal Reparateursregister

## Nationaal Reparateursregister (NRR)

Eerste in Europa · gelanceerd maart 2025 ·  
**386+ bedrijven** · koppeling EU-platform 2027

## NPCE 2025 actualisatie

Levensduurverlenging als speerpunt ·  
refurbishment expliciet benoemd · 50% minder  
primaire grondstoffen 2030

## Implementatiewet R2R

Ministerraad akkoord · Raad van State advies ·  
behandeling TK/EK H2 2026 · deadline 31 juli  
onveranderd

## Btw-verlaging: de oproep

- Techniek Nederland & Raad Leefomgeving: **0% btw** op repair elektronica (nu 21%)
- Taskforce CE: **9% btw** op refurbished
- NL wacht terwijl België en Zweden al vergevorderde plannen hebben
- Verleden week reageerde de minister met bevestiging op fiscale actie vanuit de overheid

## Kanttekening

- Vorig kabinet had minder nadruk op green agenda
- Financieringsregelingen historisch onderbenut
- Zonder BTW-maatregel blijft NL structureel achter

# Consolidatie in Repairland

Minder spelers, hogere waarde — de Green Deal verandert repair fundamenteel

## De trend

- EU repair-markt: **€2,9 miljard** maar sterk gefragmenteerd
- Geen enkele speler heeft meer dan 5% marktaandeel
- Kleine zelfstandigen vallen weg: lage marges, regeldruk, geen opvolging
- MSP markt NL: 206 transacties 2023–2025, **88% via private equity**
- Repair markt is kaal met weinig partijen

## Repair als sluitstuk (historisch)

- Ingezet om retourkosten te drukken — niet als product
- Tarieven te laag voor duurzame businesscase
- Vakmanschap slijt weg; opleidingsvolume gedaald

## Green Deal als keerpunt

- R2R 31 jul 2026 → erkende reparateurs krijgen juridische status
- Toegang spare parts & diagnose-info afgedwongen door wet
- NRR als kwaliteitsfilter — professionalisering van de sector
- BTW kans verbetert businesscase fundamenteel

## Schaarste creëert waarde

- Minder aanbieders = hogere waarde voor wie overblijft
- Keurmerk & betrouwbaarheid worden cruciale differentiators
- Gestandaardiseerde tools (zoals Cyric) helpen reparateurs professionaliseren

# Retail & E-commerce: De Markt Beweegt

## **Grootste winkelketen Benelux**

Elke vestiging heeft een gestandaardiseerde computertesttool voor installatie, verificatie & startklaar-service. Lifecycle begint al in de winkel — mainstream retail omarmt circulaire IT.

## **Grootste online reseller Benelux**

Gekozen voor gecertificeerde refurbishment-partner · 2 jaar garantie op refurbished. Per 31 juli 2026: EU-merkautorisatie & EU-sourcing verplicht — sluit niet-gecertificeerde aanbieders uit.

## **Productgerichte webshop — binnenkort**

Circulaire werkplek met AI-analyse · lifecycle dashboard voor B2B-klanten · refurbished hardware als volledig product · integratie met HP Workspace ProConnect.

 Retailers bewegen van "nieuw verkopen" naar "product als dienst" — refurbished wordt mainstream. EU-wetgeving versterkt deze trend structureel en permanent.



# Zakelijke Markt & Tenders

Levensduurverlenging als KPI — van hardware-verkoop naar beheerd lifecycle-platform

## CSRD dwingt mee

- Corporate Sustainability Reporting Directive — verplicht voor grote bedrijven
- Hardware lifecycle data nodig → repair & refurb = meetbaar duurzaamheidsvoordeel

## Overheid als launching customer

- Aanbestedingsbeleid verplicht circulair inkopen
- Tenders specificeren levensduureis expliciet
- NL loopt achter op België & Luxemburg — maar het komt

## Top-20 resellers omarmen lifecycle

De 20 grootste IT-resellers van de Benelux integreren lifecycle- en repair-diensten. Repair als onderdeel van het contract — niet als uitzondering.

## HP Workspace ProConnect + AI

- Device-as-a-Service met AI-monitoring
- HP WXP: proactieve defectdetectie
- Vaste prijs per toestel per maand · next-business-day vervanging
- Poly Lens geïntegreerd voor communicatiehardware

## De businesscase

- 1 jaar extra gebruik laptop = **30% minder grondstofvraag**
- Predictief onderhoud verlaagt onverwachte uitval
- Reparatie rendeert als het in het contract zit
- Break-fix wordt afgedwongen én betaald

# AI Maakt Repair Schaalbaar



## AI Visuele Grading

Computer vision detecteert krassen, deuken, schermschade via 14 beelden per toestel. Output: A/B/C-grade in seconden — objectief, reproduceerbaar & schaalbaar.



## Digitaal Productpaspoort (DPP)

EU Ecodesign verplicht DPP voor meerdere categorieën. AI voedt lifecycle-data automatisch. NFC/QR-code op toestel: consument scant complete geschiedenis.



## Predictieve Diagnostiek

AI herkent defectpatronen vóór uitval optreedt. Automatische triage: repair / refurb / recycle. HP WXP AI: proactief onderhoud op wagenparkschaal · uptime >99% als KPI. met next businessday SWAP.

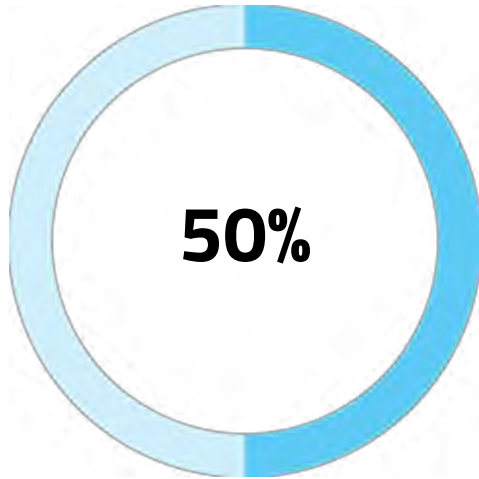


## De Kans voor de Sector

AI verlaagt kosten per reparatie drastisch. Schaalgroei zonder evenredige personeelsgroei. Data voor CSRD-rapportage automatisch beschikbaar — van kostenpost naar data-gedreven dienst.

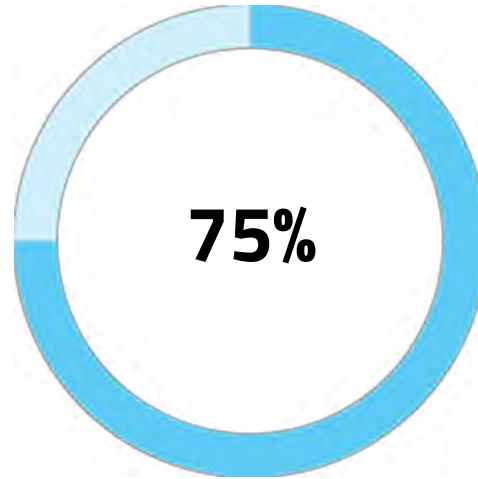
# Consumenten- & Zakelijk Vertrouwen

Het kantelpunt is bereikt



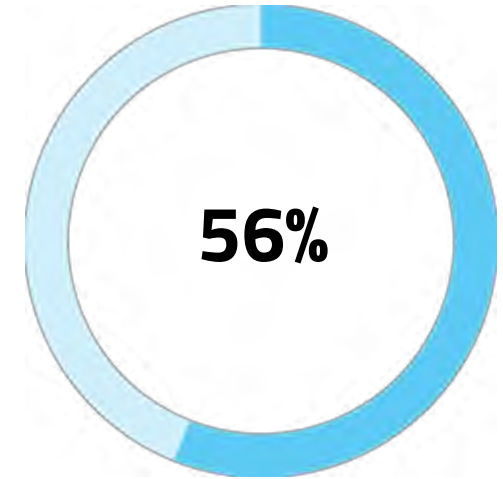
## Overweegt refurbished

Van Nederlanders (Techniek Nederland)



## Circulariteit belangrijk

Van bedrijven (WEF 2024 — was 40% in 2021)



## Verwacht lagere kosten

Van bedrijven door circulariteit

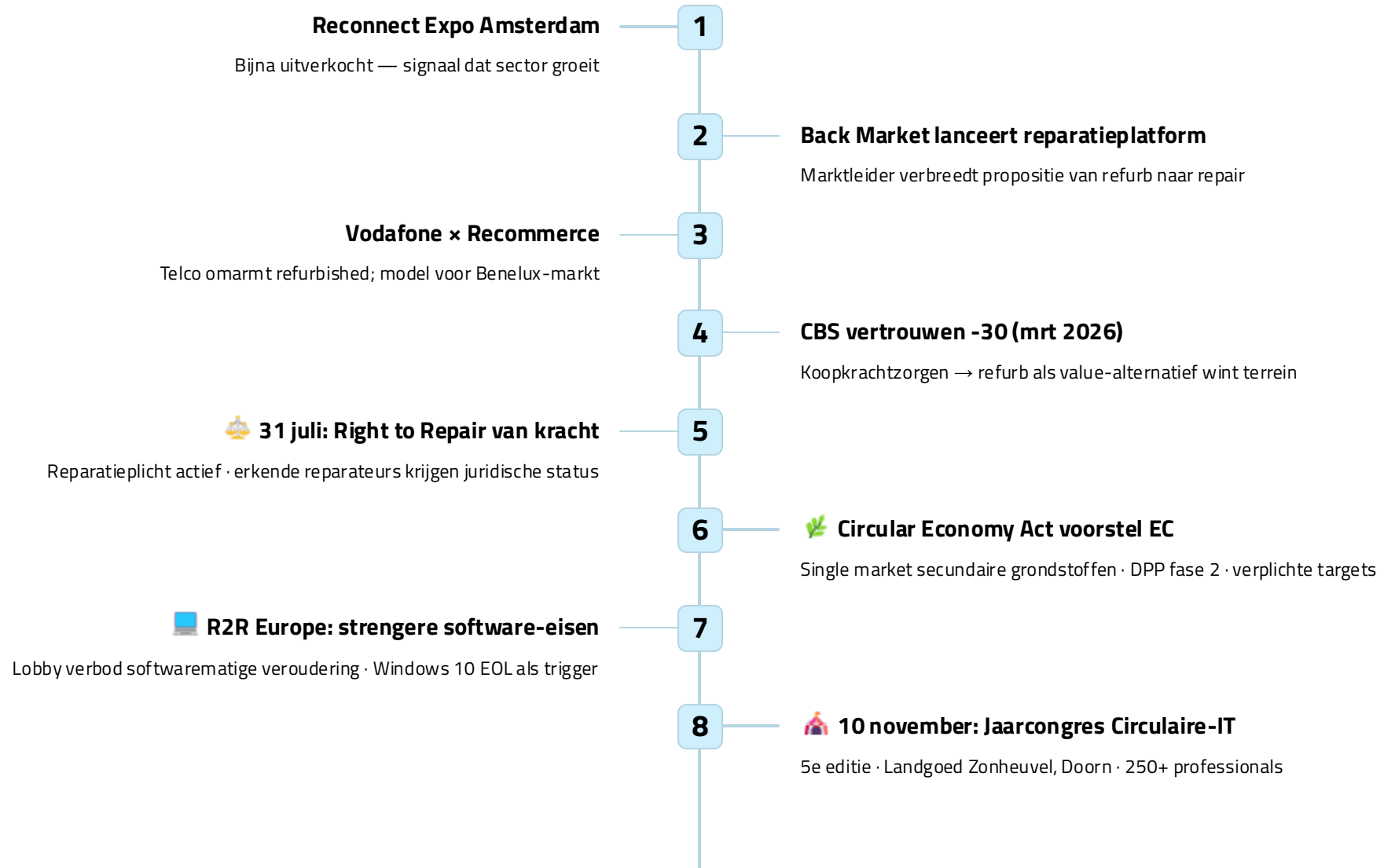
### B2C: vertrouwen opbouwen

- Keurmerk Refurbished (TÜV Rheinland): objectieve kwaliteitsstandaard
- AI-grading: "wat je ziet is wat je krijgt" — geen verrassingen
- 24 maanden garantie inclusief accu
- Onduidelijkheid over kwaliteit = kooldrempel nr. 1

### B2B: lifecycle als KPI

- CSRD: circulariteit verplicht in jaarverslag
- Prestatiecontracten: levensduur als meetbare KPI
- Overheid koopt circulair via tenders
- 3 Step IT / BNP Paribas: leasing ICT-hardware Benelux groeit sterk

# Tijdlijn 2026 — Afgelopen & Komende 6 Maanden



# De Kansen Zijn Tastbaar



## Wetgeving als structurele drijver

R2R · CEA · Ecodesign · CSRD · DPP — voor het eerst dwingt de EU de markt structureel naar levensduurverlenging. Dit is geen voornemen meer, dit is wet.



## Economische druk versterkt de businesscase

Tarieven + schaarste verhogen de prijs van nieuw. **€7 miljard** potentieel voor de Nederlandse economie (PBL) · **50.000** nieuwe banen mogelijk.



## AI verlaagt de drempel

AI-grading, predictief onderhoud en DPP-data maken repair schaalbaar, meetbaar en rendabel.



## Retail & overheid bewegen

Winkelketens, webshops en overheid bewegen naar circulaire propositie. DaaS + repair als kernpropositie in tenders en zakelijke markt.



## Nederland: unieke positie

Enige EU-land met NRR + Keurmerk Refurbished · nu inlopen op België en Zweden · kans om Europees richtinggevend te worden.

# Stijgende Prijzen: De Nieuwe Realiteit

## +30%

### Prijsstijging smartphones

Potentiële stijging door aanhoudende  
handelstarieven



### Supply risk

Component schaarste · supply chains  
herstructureren · levertijden langer



### Kans!

Hogere prijs nieuw = repair, refurbished & DaaS  
relatief veel aantrekkelijker

"Hoe hoger de prijs van nieuw, hoe sterker het verhaal van levensduurverlenging wordt."



# Levensduur Loont

## Service Planet — care-free computing

De Benelux heeft de infrastructuur, de wetgeving én de innovatiekracht. Nu is het zaak de achterstand om te zetten in voorsprong. Sinds 2021 structurele groei van de sector (SBI 95.11/95.12).

|                                                                                                                                               |                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>Wetgeving</b><br>R2R · CEA · Ecodesign · DPP             |  <b>Markt beweegt</b><br>Retail · e-commerce · zakelijk |
|  <b>Innovatie</b><br>AI-grading · DaaS · lifecycle-platforms |  <b>NL-troeven</b><br>NRR · Keurmerk · EEA-coalitie     |

  **Save the date:** 10 november 2026 · Jaarcongres Circulaire-IT · Landgoed Zonheuvel, Doorn · 5e editie · 250+ professionals · [circulaire-it.nl](https://circulaire-it.nl)

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# As IT prices rise & hardware shortages loom

Soenil Ghirad  
CHG-MERIDIAN



# Impact on IT hardware prices all OEM's

**13%**

Average price increase  
for smartphones

**20%**

**even up to 100%**

Average price increase

**Server RAM 32GB 450,-€  
(before) now 6.500,-€ (today)**



# Secure certainty in an unpredictable market

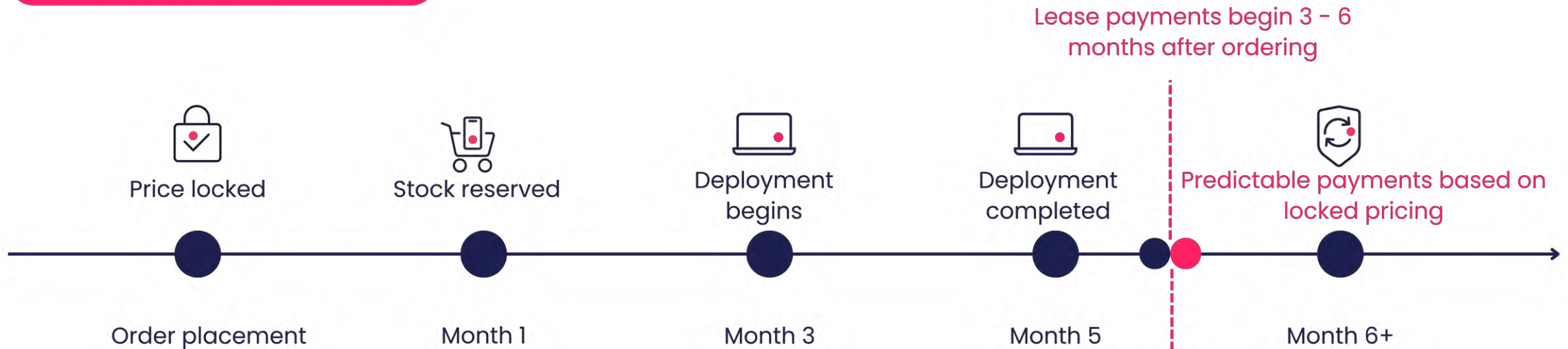
Rising costs and supply challenges are increasing IT risk

Delayed procurement decisions can lead to higher costs



**CHG-MERIDIAN can help you take control, without forcing your deployment timeline.**

Secure pricing with CHG-MERIDIAN



# Group financial results

## 2025





+ 45

years of experience

€ 12.59 billion

Total technology portfolio  
financed and managed



69%



24%

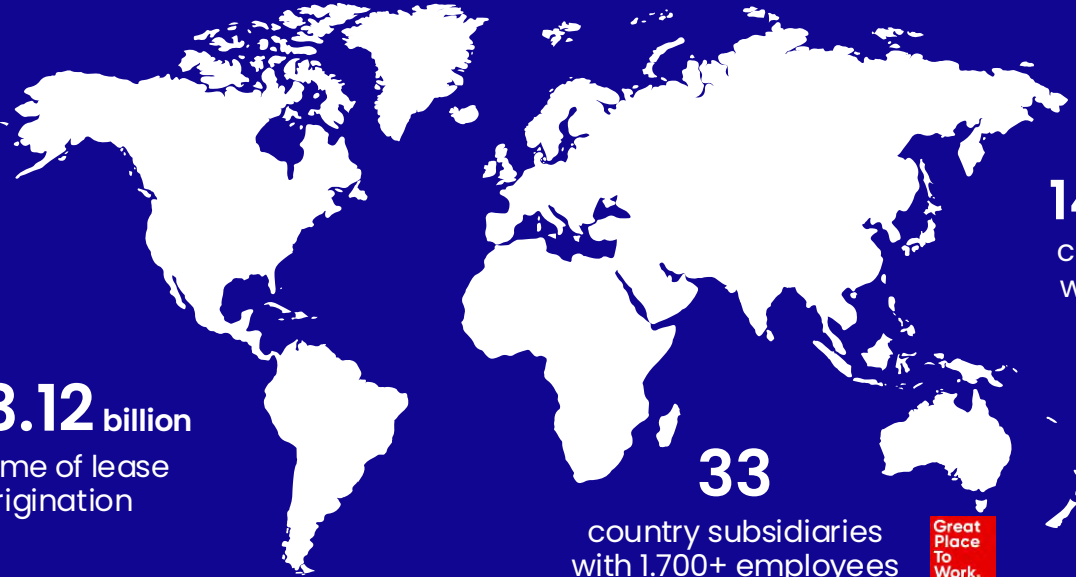


7%

Volume of lease originations  
by technology sector

€ 3.12 billion

volume of lease  
origination



Over  
14.500  
customers  
worldwide

33

country subsidiaries  
with 1.700+ employees





over  
1 million

IT assets were  
refurbished and remarketed



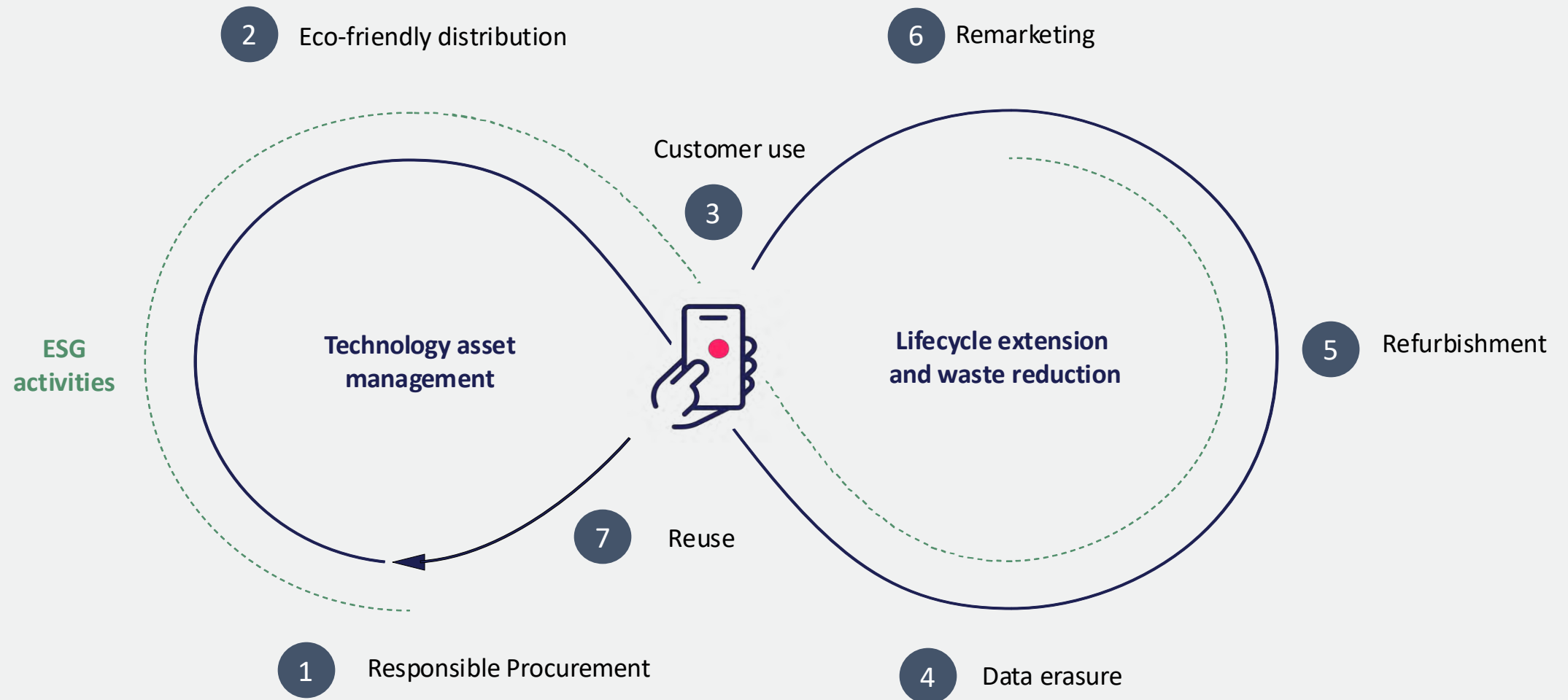


96%

of all returned assets receive a  
second product life from  
CHG-MERIDIAN

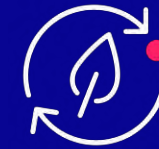


# Lifecycle thinking



# Sustainability

## Data erasure and remarketing



**1,000,000+**  
Remarketed IT lease  
returns in 2025

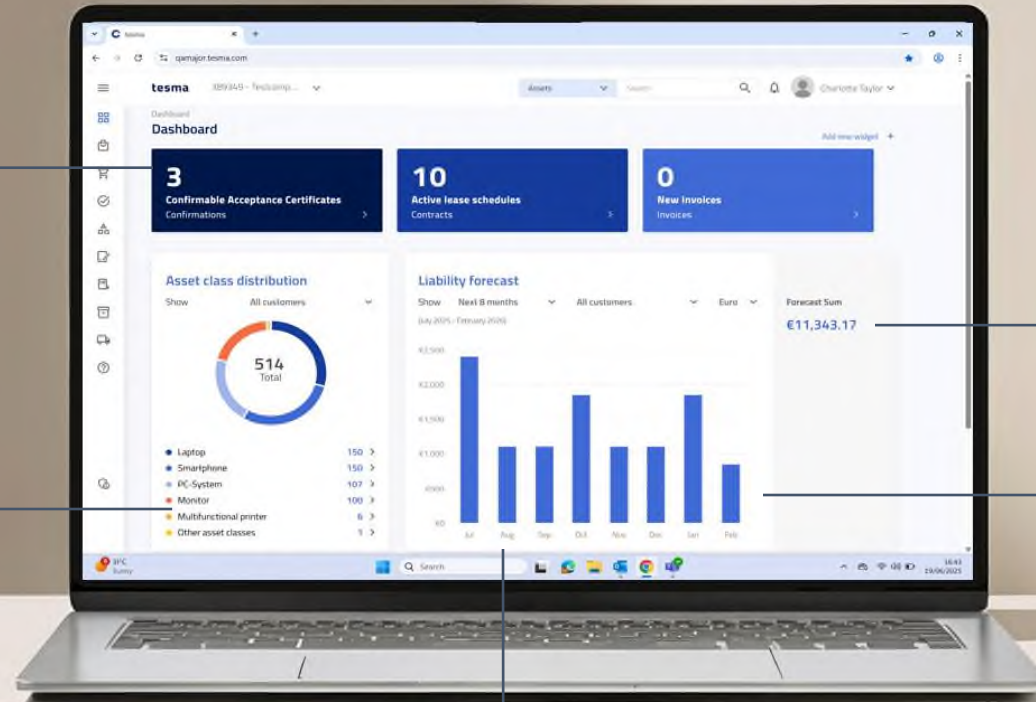


**Top 1%**  
of all assessed companies  
globally

# Lifecycle visibility with tesma

Full lifecycle  
transparency

Refresh planning  
& reporting



Device tracking  
& status visibility

Consistency  
across markets

Governance  
& scalability

# Added value for you

Purchase

Leasing



Saving &  
More profitability

1.

100%



85%



IT refresh

2.



End of Lease solution

3.



# A concrete example



## Purchase

**€ 1.319,-**

*incl. vat*

## Circular usage with recurring payments

From

**€ 31,-**

*incl. vat*

## Circular usage with one payment

From

**€ 1.050,-**

*incl. vat*

**NEW**

*The circular usage models are based on a rental period of 36 months.*

# What this looks like in practice



**Automotive  
Services  
Company**

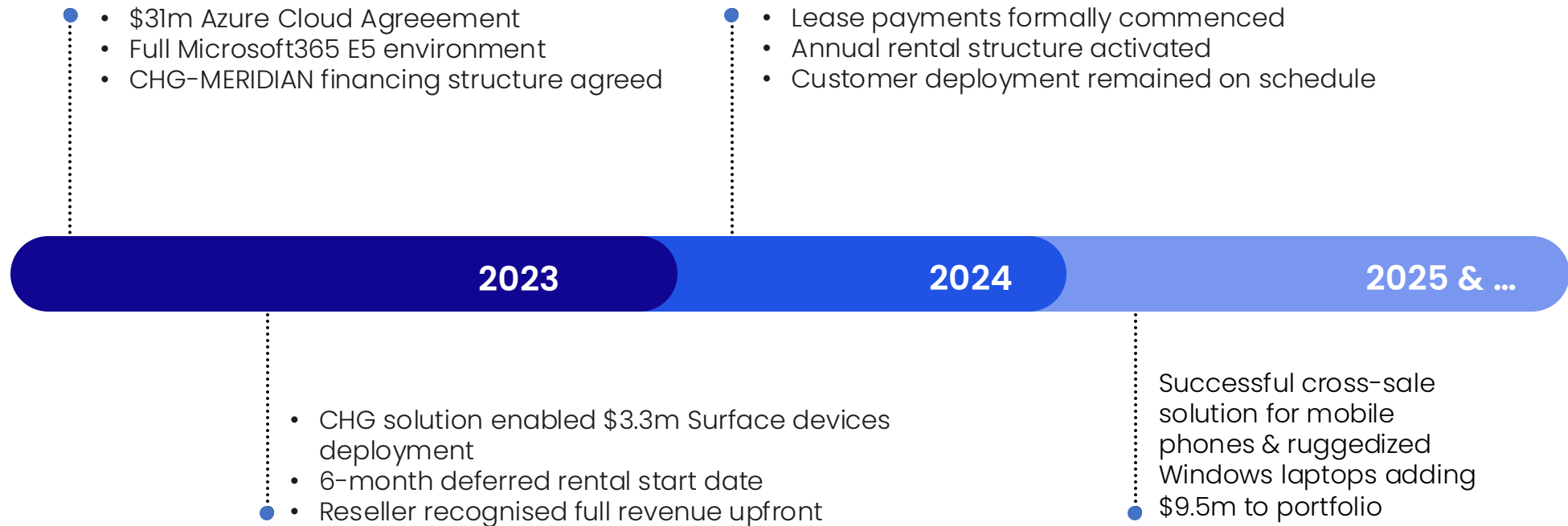


**Major  
Telecomms  
Company**



# Customer success story #1

Automotive services company in Europe



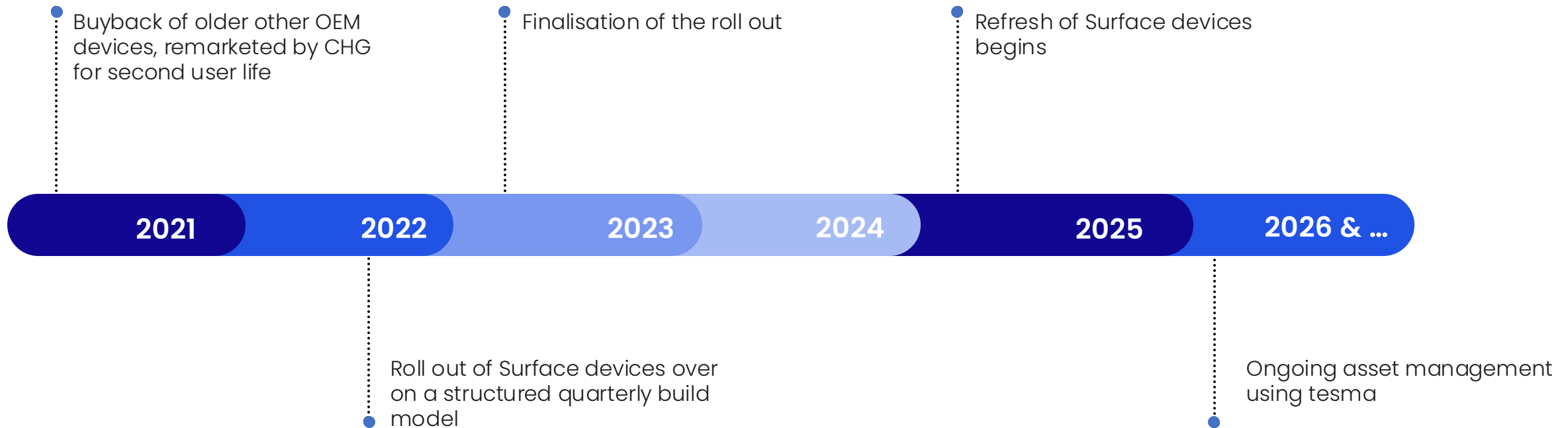
***"Working with Microsoft SSP and our partner, we turned software investment into real user impact by upgrading laptop devices. The strength of that partnership directly created further opportunity, enabling a separate rollout across mobile devices and ruggedized Windows laptops as a strategic cross-sell, all underpinned by tesma"***

Sam Thomson, Senior Key Account Manager, CHG



# Customer success story #2

## Major Telecommunication Company in Europe



***“It’s been an incredible experience collaborating with Microsoft to create a solution that truly delivers for the customer. This deal highlights the power of strong partnerships and trusted technology”***

Jan Van Assche, Senior Key Account Manager, CHG

# Thank you



# Reach out to our team

**Soenil Ghirad**  
**Vice President Sales**

soenil.ghirad@chg-meridian.com  
Phone: +31652494932

CHG-MERIDIAN Nederland  
Fascinatio Boulevard 522 (unit 5.1)  
2909 VA Capelle aan den IJssel

# Drinks

16:30-17:30