DELL Technologies

Brochure

# Sustainability in the PC ecosystem

Leading the industry in sustainable practices to reduce the environmental impact of our products and packaging.

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# Advancing our sustainability goals

We are working across all areas of our business to drive sustainable progress and innovation at every opportunity. Our climate and circular economy goals are how we track our progress and long-term impact on our business, our customers, and the planet.

## CLIMATE ACTION

### Net Zero by 2050

We will reach net zero greenhouse gas emissions across scopes 1, 2 and 3 by 2050.

By 2030, we will reduce:

- Scopes 1 and 2 GHG emissions by 50%
- Absolute scope 3 GHG emissions from purchased goods and services by 45%
- Absolute scope 3 GHG emissions associated with the use of sold products by 30%

## CIRCULAR ECONOMY

### 2030 Goals

- For every metric ton of our products a customer buys, one metric ton will be reused or recycled
- 50+% of our product contents will be made from recycled, renewable or reduced carbon emissions material
- 100% of our packaging will be made from recycled or renewable material, or will utilize reused packaging

# Achieve your goals sustainably

We're accelerating climate action and circular design so you can achieve your goals stustainably. For 30 years, Dell Technologies' commitment to climate action and the circular economy has helped us drive innovation for our industry, customers, and the communities we serve.

### Drive circular IT

Use devices that are designed with recycled, renewable or low emissions materials and built to last longer

### Take climate action

Lower emissions with energy efficient hardware that meets key environmental standards

# Circular design principles

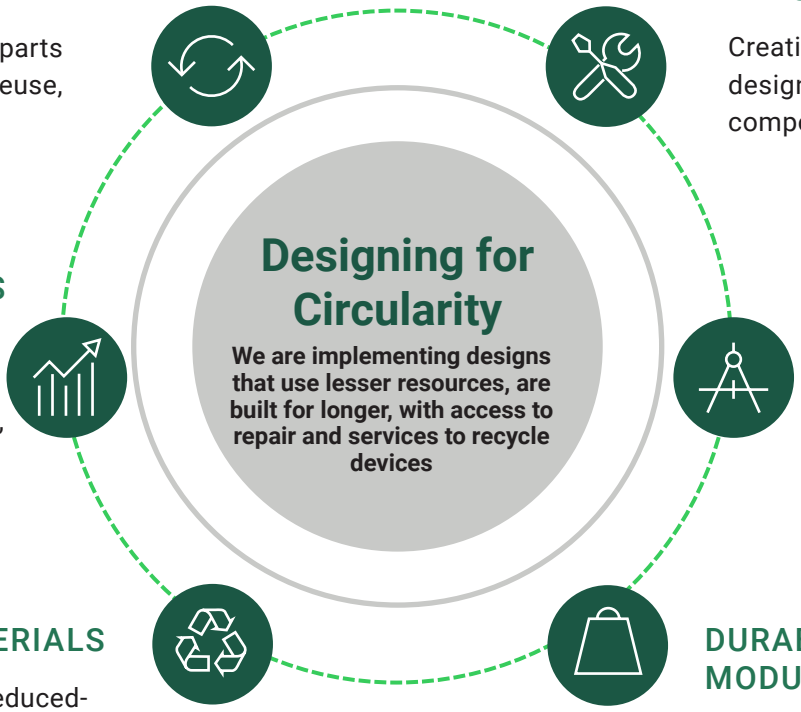
To reduce the impact of our business on people and the planet, we implement circular design principles to make our products easy to repair, reuse, and recycle. By using sustainable materials, we extend product longevity and continuously recover materials creating a circular economy.

### DESIGN FOR HARVEST

Making it easy to harvest parts and recover materials to reuse, recreate, and recycle

### REPAIR/ REFURBISHMENT

Creating with modular designs, simplified access to components




### EVOLVED BUSINESS PRACTICES

Providing product take-back, cascade ownership, and as-a-service programs

### DEMATERIALIZED/ OPTIMIZED

Reducing materials needed, optimizing and streamlining architecture

### RESPONSIBLE MATERIALS

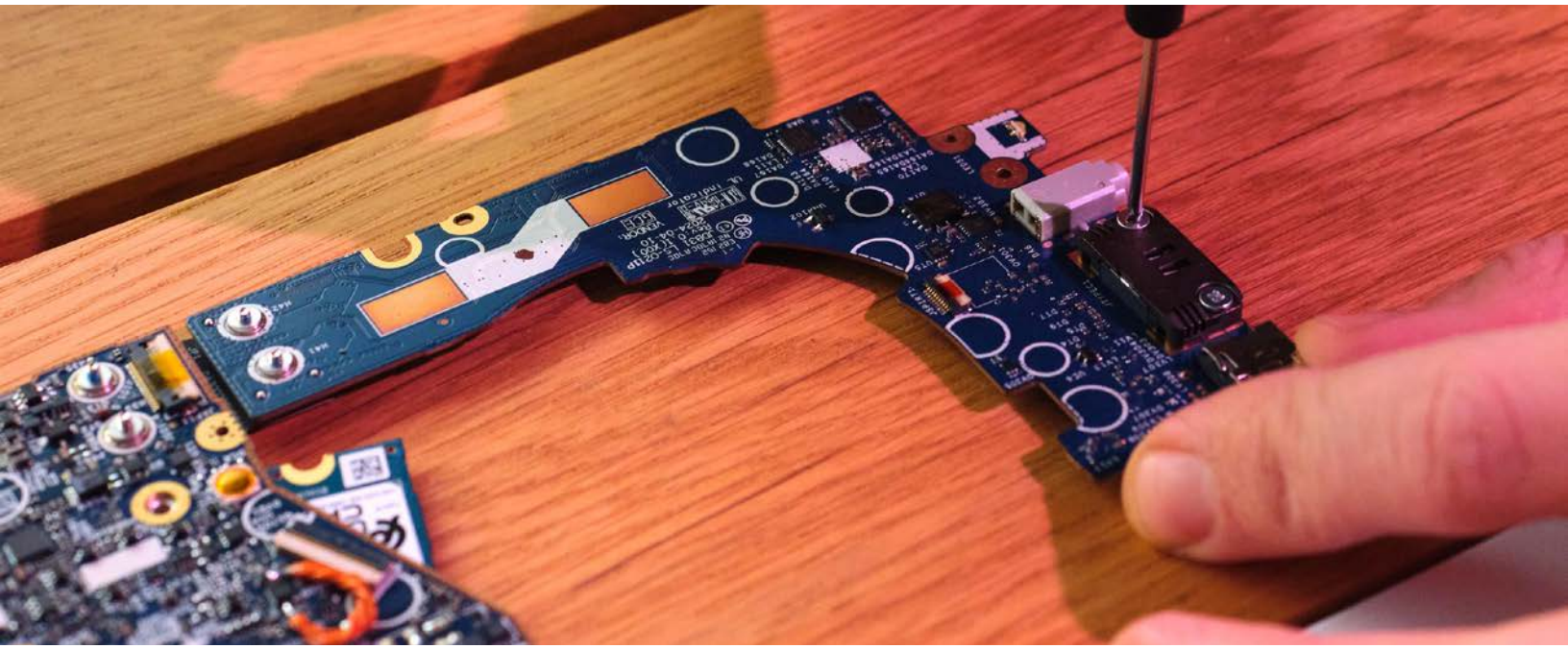
Building with circular or reduced-impact materials choices, using high-grade materials streams

### DURABILITY/ MODULARITY

Engineering to withstand more during use, extending life where possible

# Inspired by Concept Luna

Our proof-of-concept device, Concept Luna, provided us with a visionary perspective in exploring sustainable product designs that accelerate the circular economy through emissions reductions, modular designs, intelligent telemetry, and enhanced repairability.



Devices and solutions shown are concept design and not available for purchase

## Concept Luna

A proof-of-concept developed in collaboration with Intel, Concept Luna explores revolutionary design ideas to make components immediately accessible, replaceable and reusable—reducing resource use and keeping even more circular materials in the economy

Part of an aspirational workstream led by our design engineers that asks the “what if” questions, Concept Luna provides the freedom and flexibility to test innovative ideas outside of regular design cycles.

## Innovation inspired by Concept Luna

Although initially designed for exploratory purposes rather than commercialization, the innovations stemming from Concept Luna have ultimately led to innovations in our product portfolio.

Modular design and repairability were key components of Concept Luna, an innovation that has taught us valuable lessons in circular design. This year, we’re taking it to the next level by incorporating the world’s first modular USB-C port into our new Dell Pro Laptops[1] and select Dell Pro Max Laptops[2]. This feature not only enhances durability but also streamlines repairs, allowing for faster and more efficient maintenance with reduced downtime. Additionally, our Mainboard, I/O boards, and battery designs are also modular, making it easier and quicker to repair them if needed.

# Responsible materials

We are investing in recycled, renewable and low-emissions materials to reach our goals. By 2030, 100% of our packaging and more than 50% of our product content will be made from recycled or renewable materials.

**Bio-Based Plastic**

Castor beans, tall oil and POM Eco B are naturally-replenishing alternatives to plastic.

**Paper Fibers**

Our packaging is created from bamboo, recycled paper pulp, and sugarcane fibers.

**Recycled Glass**

We are using recycled glass as an alternative to traditional glass; conserving resources and reducing waste.

**Closed-Loop Materials**

Recovered e-waste is used to make parts for new devices and keeps components in the circular economy.

**Post-Consumer Recycled Plastic**

Post-consumer recycled plastic allows us to reuse existing materials, decreasing our need for new plastic.

**Reclaimed Carbon Fiber**

Carbon fiber reclaimed from the aerospace and other industries is recycled for use in our laptops.

**Recycled Ocean-Bound Plastic**

We've saved over 443,000 pounds of plastics from the ocean, recycling them for use in our products and packaging.

**Recycled Metal**

Using recycled metal reduces our dependence on mining and processing new materials.

**Recycled Cobalt**

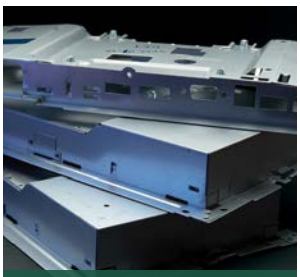
We are shipping batteries with around 80% lesser cobalt and batteries with around 50% recycled cobalt[3]. Recycling and reducing the use of cobalt helps to conserve resources and reduce pollution. All without compromising the performance of our PCs.

**Sustainable Aluminum**

Our products feature sustainable aluminum sourced from low-emissions, low-carbon, and recycled materials. Our use of hydropower-produced aluminum reduces carbon emissions by 70% compared to coal powered production.

**Recycled Copper**

We are using recycled copper in more than 1 million power cables with a goal to impact more than 20 million over the next few years.



**Recycled Steel**

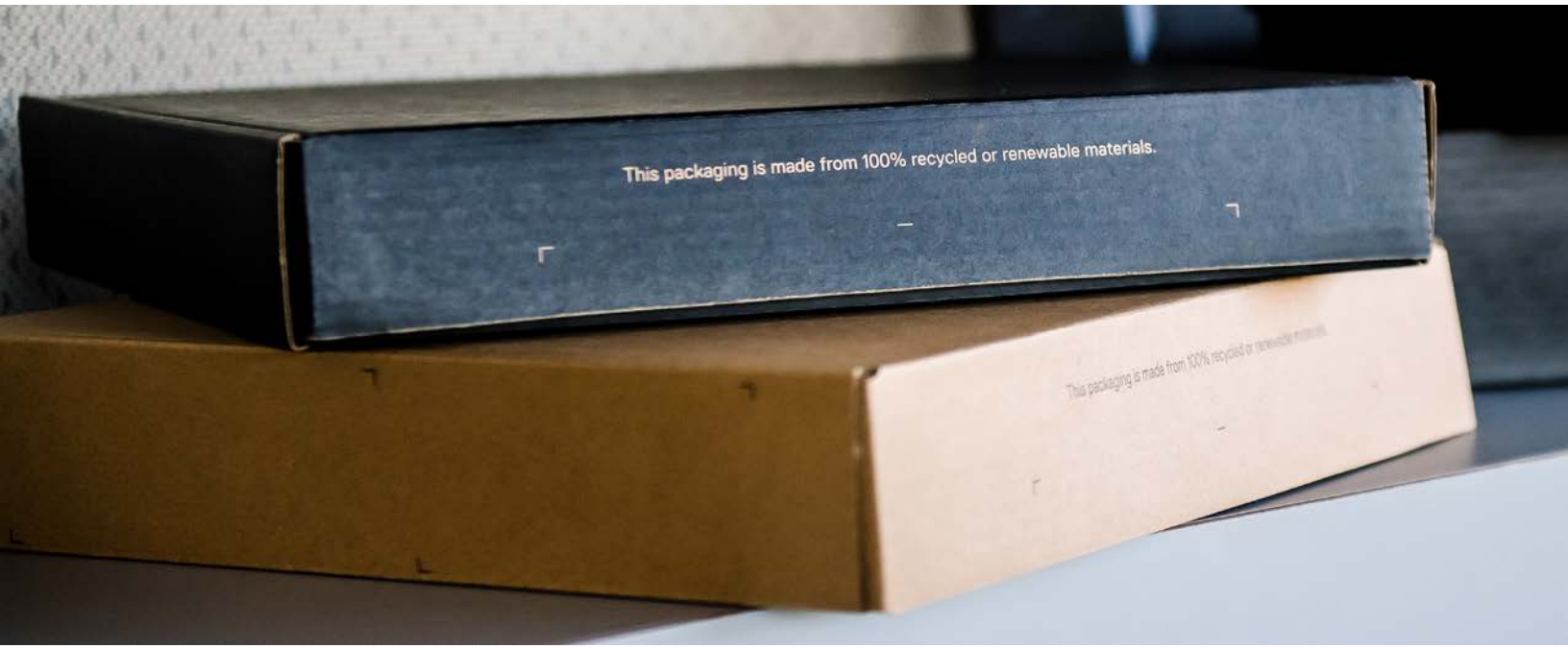
World's first desktop PC designed with 50% recycled steel in the chassis.

**Recycled Magnesium**

Recycling magnesium involves melting down and reusing existing magnesium product or scraps – a much more energy-efficient process than the extraction of primary magnesium from raw ore.

# Responsible packaging

As a leader in responsible packaging, we strive to reduce waste and drive innovation to find recycled and renewable alternatives that protect our products while in transit. We aim to deliver all our products in packaging made from 100% recycled or renewable materials by 2030.




## Sustainable Packaging

Our packaging is designed to maximize its recycling potential by using recycled and renewable materials. From PC devices, displays, and peripherals, to servers, storage, and networking — we design and package our products using recycled or renewable materials where possible.


We have packaging made from 100% recycled or renewable materials in our notebook[4] PC accessories[5] and multipack packaging[6]

## Multipack Solutions

**Simplified Unboxing:** To save time when deploying and installing new equipment, shipping multiple products in a single package reduces the time it takes to unbox and clean up packaging materials.

**Easier to Manage, Less to Organize:** Multipack increases the number of products on each pallet resulting in significant space savings with less packages to account for in planning and organization.

**More Sustainable:** By efficiently packing and shipping our products with fewer boxes and increased pallet sizes, we reduce the amount of goods transported and create less waste for our customers. New Multipack notebook design is now available in 100% recycled, renewable and recyclable packaging.

# Energy efficiency

By 2050, we have committed to achieving net zero greenhouse gas emissions and reduce the environmental impact of our products without compromising the power and performance of our technology.

## Ecolabels

We adhere to the highest standards of sustainability set by the following ecolabels:

- ENERGY STAR
- EPEAT
- TCO
- 80 PLUS
- China Environmental Labeling Program (CELP)

**189+**
EPEAT Climate+ registered Client devices[7]

## An EPEAT Climate+ champion

Dell Technologies has the industry's widest portfolio of product types that have achieved the EPEAT Climate+ designation:

**100%**
Commercial and non-gaming consumer laptops

**100%**
Displays

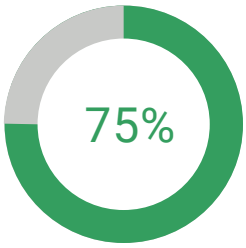
**100%**
Desktops

### Efficient Client Devices

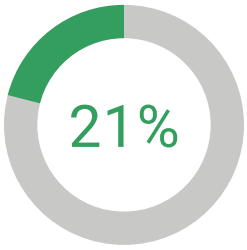
**Energy Efficiency:** To drive down the power consumption of our devices, we use energy-smart fans and efficient circuit boards, processors, power supplies, and memory.

**Intelligent Devices:** Our AI-based optimization software, Dell Optimizer – learns and responds to how users work, so you never have to compromise on performance or efficiency.

**Efficient Workspaces:** Using energy efficient devices beyond the PC, such as displays and peripherals with built-in eco settings, reduces wasted energy whether at home or in the office.




75% improvement in power consumption[8] in standby mode for new Dell Pro Docks




21% improvement in performance per watt with Dell Optimizer when Thermal Management feature is set to Quiet mode.[9]

# AI and sustainability

Save energy, access tailored solutions, gain a competitive edge, and drive societal progress

## More energy efficient devices

Hardware designed to be more energy efficient and balance workloads with energy consumption as well as using pre-trained AI models can better meet your needs while saving energy and optimizing resources

- **Energy-efficient PCs & workstations:** Match AI workloads with energy-efficient AI PCs
- **Dell's open-source tools:** Simplify adoption with AI PC templates for AI workloads
- **Right-sized infrastructure:** Choose infrastructure based on data set sizes and needs

## Choose more sustainable devices

We're making our products more sustainable while ensuring they are built using recycled, renewable or low emissions materials while ensuring repairability, upgradability and extending lifecycles.

## Responsibly retire unneeded devices

Recycle your old tech with our Asset Recovery services to reduce e-waste and upgrade to AI-ready devices for the future.

# Sustainability services

Creating and providing services that assist customers in achieving their environmental objectives while remaining profitable.

**RECOVER & RECYCLE**

## Recovery & Recycling Services

Comprehensively handles all facets of asset retirment, offering reuse, resale or recycling solutions alongside secure data sanitization services.

**DESIGN & BUILD**

## Professional Services

Assists in reducing your carbon footprint and cutting energy expenses. Aids in constructing environmentally-conscious ecosystems by leveraging sustainable technology, meticulously designed and built for long-term sustainability.

**USE & MANAGE**

## Support & Managed Services

Evaluates and enhances energy efficiency to minimize energy consumption and carbon emissions, resulting in cost-effective solutions and positive environmental impacts.

**CONFIGURE & SHIP**

## Deployment Services

Efficiently deploys new systems while minimizing environmental impact through streamlined logisitics and the use of rapidly renewable packaging materials.

# Responsible asset retirement

We offer convenient retirement solutions, accepting all brands, while protecting customer data, providing value back and reusing materials to extend product lifecycles and accelerate the circular economy. By 2030, for every product we sell, we will reuse or recycle an equivalent product.

## Asset Recovery Services (ARS)

Dell's Asset Recovery Services manages the entire asset disposition process, regardless of the brand. We sanitize devices and prioritize reuse to minimize waste and maximize value. Assets with no value are responsibly recycled, creating a feedstock for the circular economy. We provide a comprehensive report of the process, including the ability to manage and track the entire process online via our TechDirect portal.

## Dell Trade In

Consumers and small business can easily retire their eligible used electronics — of any brand, in any condition — for instant credit to purchase Dell products and services. By trading-in, customers are contributing to reducing e-waste and keeping materials within the circular economy.

# Lifecycle management payment solutions

Organizations can access all the benefits through services via lifecycle management payment solutions that provide customers with sustainable IT services, and flexible payment solutions from one trusted provider, at a single predictable price per unit per month.

### APEX PC as a Service:

For client customers, APEX PC-as-a-Service combines sustainable hardware, software and lifecycle services, with an as-a-service flexible pricing, to maximize performance and right-size their current IT environments.

# Featured products

### Dell Pro Premium

World's first Modular USB-C port for improved durability and easier repairs.[10] Recycled materials in the build like recycled magnesium, plastic and cobalt.[11]

### Dell Pro Max

Designed with recycled materials like post-consumer recycled plastic, bio-based plastic, reclaimed carbon fiber, recycled ocean-bound plastic and recycled cobalt.[12]

### Dell Pro Micro

Industry leading in the use of a 50% recycled steel chassis.[13] Other recycled materials include post-consumer recycled plastic, closed loop plastic and recycled ocean-bound plastic.[14]

### Dell 14 Plus

Designed with materials like recycled and low emissions aluminum, recycled steel. recycled ocean-bound plastic and post-consumer recycled plastic.[15]

### Dell Pro Plus

Designed with materials like low emissions and recycled aluminum, post-consumer recycled plastic and bio-based plastic.[16] Also, features the world's first Modular USB-C Port that is more durable and easier to repair.[17]

### Alienware AW7825P Backpack

Designed with 100% recycled plastic in the exterior fabric.[18] Ships in 100% recycled or renewable packaging.[19]

### Dell Pro 27 Plus Monitor

Designed with materials like recycled plastic,[20] recycled steel,[21] recycled aluminum[22] and recycled glass.[23] Ships in a box made with 100% renewable or recyclable box.[24]

### Dell Pro Dock - WD25

Designed with the industry's highest post-consumer recycled plastic,[25] 65%. Ships in 100% recycled or renewable packaging.[26]

### Dell Pro 13-14 Plus EcoLoop Backpack

Crafted with organization and comfort in mind, we incorporate 100% ocean-bound plastic into its exterior main fabric.[27]

Ships in plastic-free and 100% recycled or renewable packaging.[28]

### Dell 280W EPR 48V USB-C GaN Adapter

Designed with post-consumer recycled plastic, recycled aluminum[29] and an industry leading 80% recycled copper in the cable.[30]

### Commercial PC Batteries

Dell has the widest portfolio of commercial PCs with recycled cobalt batteries.[31]
The 45whr battery is designed with around 80% lesser cobalt.[32]

## Legal disclaimers

1. Applies to Dell Pro, Dell Pro Plus, and Dell Pro Premium laptops launching in 2025. Based on internal analysis, November 2024. Read warranty information for port replacement instructions.
2. Applies to Dell Pro Max and Dell Pro Max Plus workstations launching in 2025. Based on internal analysis, November 2024. Read warranty information for port replacement instructions.
3. Based on internal analysis. Entry battery(45 whr) uses NCM technology and has 80% lesser cobalt compared to LCO technology. Upsell battery (55 whr) is made with 50% recycled cobalt.
4. Based on internal analysis of publicly available data, April 2023. New packaging is made with up to 94.8% recycled content and up to 64.4% renewable content in the form of renewable paper fibers.
5. Material makeup varies by product and size. Applies to new models shipping after 2022
6. Based on internal analysis, July 2024
7. Based on EPEAT Climate+ Designations achieved in all applicable countries. EPEAT registered where applicable. EPEAT registration varies by country. See www.epeat.net for registration status and tier levels
8. Based on internal analysis, December 2024. Internal testing comparison between the Dell Pro Dock - WD25 130W and the Dell Dock WD19S 130W on standby mode
9. This is based on a Dell internal study, testing power and performance within our Dell Optimizer power module. White paper published November 2022 https://www.delltechnologies.com/asset/en-us/solutions/business-solutions/industry-market/maximizing-power-efficiency-with-dell-optimizer-a-case-study.pdf
10. Applies to Dell Pro, Dell Pro Plus, and Dell Pro Premium laptops launching in 2025. Based on internal analysis, November 2024. Read warranty information for port replacement instructions.
11. Based on internal analysis, November 2024. post-consumer recycled plastic: 98% in the battery frame, 50% in the bezel frame and 30% in the speaker housing; recycled cobalt:50% in the PC battery (40Whr and 60Whr); recycled magnesium:90% in the lid, palm rest and bottom cover, bio-based plastic:46% in the bumpers.
12. Based on internal analysis, December 2024. 50% post-consumer recycled plastic in the bezel, palmrest innerframe, 30% in the top cover, bottom cover and speaker housing 50% recycled cobalt in the 64whr, 72whr and 96whr batteries, 42% bio-based plastic bottom bumpers and 21% bio-based plastic in the top and bottom covers, 28% recycled ocean-bound plastic in the fan housing and 20% reclaimed carbon fiber in the top and bottom covers.
13. Percentage applies to total steel weight in the chassis. Includes OptiPlex Micro, OptiPlex Micro Plus, OptiPlex Tower, OptiPlex SFF , OptiPlex SFF Plus, Dell Pro Micro, Dell Pro Micro Plus, Dell Pro Tower, Dell Pro Slim and Dell Pro Slim Plus. Based on internal analysis, January 2025
14. Based on internal analysis, March 2025. Percentage is based on plastic weight. Post-consumer recycled plastic: 47.7%, closed-loop ITE-derived plastic:16.1%. 50% recycled steel in the chassis. 13% recycled ocean-bound plastic in the fan and fan-housing.
15. Based on internal analysis, January 2025. Recycled(50%) and low emissions(50%) aluminum in the top cover. 25% recycled ocean bound plastic in the fan-housing 15% recycled steel in the touchpad bracket and up to 21% post-consumer recycled plastic throughout.
16. Based on internal analysis, November 2024. Post consumer recycled plastic: 50% low emissions aluminum and 50% recycled aluminum in the top cover and palmrest. 98% in the battery frame, 50% in bezel frame, 30% in inner frame of the top cover and bottom cover and speaker housing, 46% bio-based rubber bumpers, 28% recycled ocean-bound plastic in the fan housing, 10% recycled glass in the panel and 80% less cobalt in the 45whr battery. Cobalt reduction in the battery is 80% reduced cobalt use in NCM battery technology compared with LCO battery technology.
17. Applies to Dell Pro, Dell Pro Plus, and Dell Pro Premium laptops launching in 2025. Based on internal analysis, November 2024. Read warranty information for port replacement instructions.
18. Based on internal analysis, November 2024
19. Contains 79.2% recycled content and 20.8% renewable materials. Renewable materials in the form of sustainably forested materials. Excludes optional items added to order and included in the box.
20. Percentage is based on plastic weight. Based on internal analysis, March 2025. Up to 67% post-consumer recycled plastic and up to 21% closed- loop ITE-derived plastic.
21. Recycled steel is in the monitor head and stand. Based on internal analysis, January 2025.
22. Recycled aluminum is in the monitor stand. Based on internal analysis, January 2025.
23. Applicable to all new monitors launching in CY 2025. Recycled glass is present in monitor panel. Based on internal analysis, January 2025.
24. Applies to all Dell monitors launched since 2023. Made from FSC mix sources which is a mix of material from FSC certified forests, recycled content and/or FSC controlled wood. Based on internal analysis, August 2023.
25. Based on internal analysis, December 2024. 65% post-consumer recycled plastic in the chassis. Applies to docks comparable with the Dell Pro Dock - WD25, Dell Pro Smart Dock - SD25, Dell Pro Thunderbolt 4 Smart Dock - SD25TB4 and Dell Pro Thunderbolt 5 Smart Dock -SD25TB5.
26. Contains 92.9% recycled content and 7.1% renewable materials. Renewable materials in the form of sustainably forested materials. Excludes optional items added to order and included in the box.
27. Ocean-bound plastic is waste collected within 50 kilometers (30 miles) of an ocean coastline or major waterway.
28. Renewable materials in the form of sustainably forested materials. Excludes optional items added to order and included in box.
29. Based on internal analysis, March 2025. 95% post-consumer recycled plastic in the adapter case and socket, 98% recycled aluminum in the thermal shield and 80% recycled copper in the cable.
30. Based on internal analysis January 2025. Applies to the 280W GaN USB-C adapter.
31. Based on internal analysis, of publicly available data, February 2025. 50% recycled cobalt in PC batteries.
32. Based on internal analysis, January 2025. Entry battery(45 whr) uses NCM technology and has 80% lesser cobalt compared to LCO technology.



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