

Products, solutions and services sustainability

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



TABLE OF CONTENTS

• Advancing our sustainability goals	2
• Achieve your goals sustainably	3
• An end-to-end solutions partner	4
• Circular design principles	5
• Accelerating design for circularity	6
• Sustainable materials	7
• Responsible packaging	9
• Energy efficiency	10
• Sustainable data center	11
• AI and sustainability	12
• Sustainability services	13
• Responsible asset retirement	14
• Lifecycle management payment solutions	15
• Featured products	16

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 sustainably. 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.

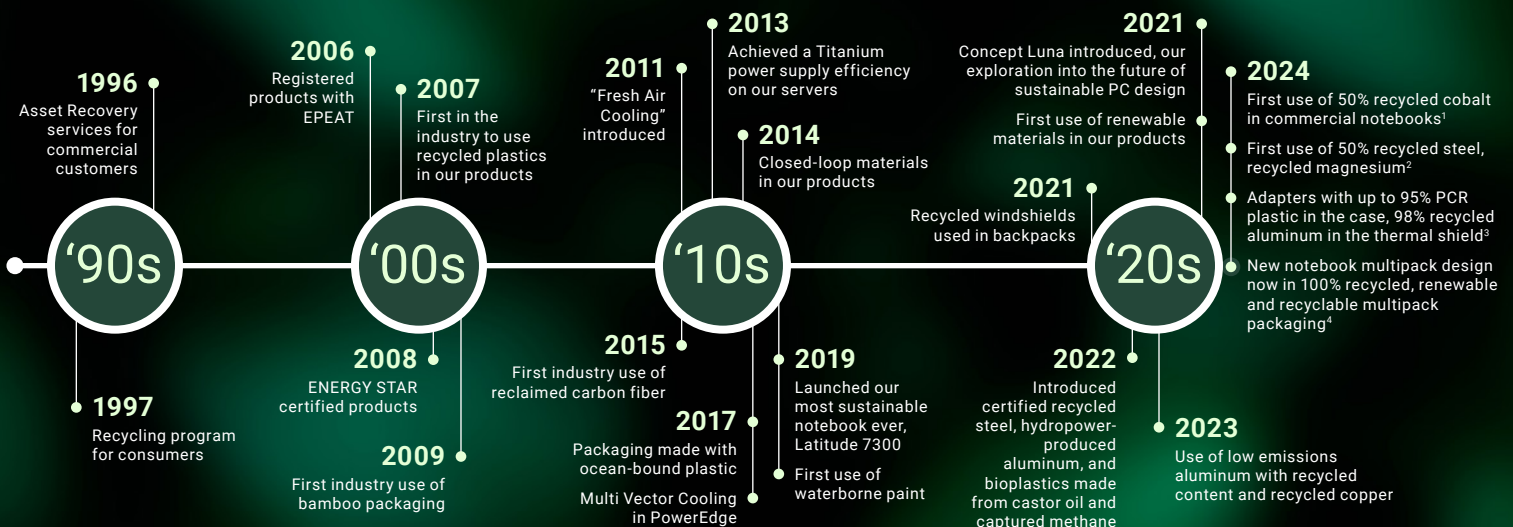
Take climate action

Cut IT emissions with hardware, data insights, and tailored services.



Implement circular IT

Responsibly manage your IT environment to minimize waste.



An end-to-end solutions partner in circular innovation

We look for every opportunity to make, deliver, use and recover our products responsibly and sustainably.



Recycle

We have strict standards and guidelines for responsible end-of-life disposition and work with a global network of partners to ensure e-waste is securely and responsibly managed



Design

By simplifying our product design and using fewer materials from the start, we help reduce emissions and negative environmental impact while incorporating more sustainably sourced materials



Recover and reuse

We recover your retired technology and refurbish to reuse or resell – giving you value back through our easy-to-use services for consumers and businesses, including as-a-Service (aaS) models



Build

We use more recycled, renewable, bio-based steel, carbon fiber, copper and aluminum in our components and products than ever



LIFECYCLE
MANAGEMENT TO
ACCELERATE THE
CIRCULAR ECONOMY



Manage

Our services help you increase efficiency and reduce waste through innovative management processes



Use

We are lowering the energy intensity of our technology and offer services to reduce energy waste, emissions and operational costs

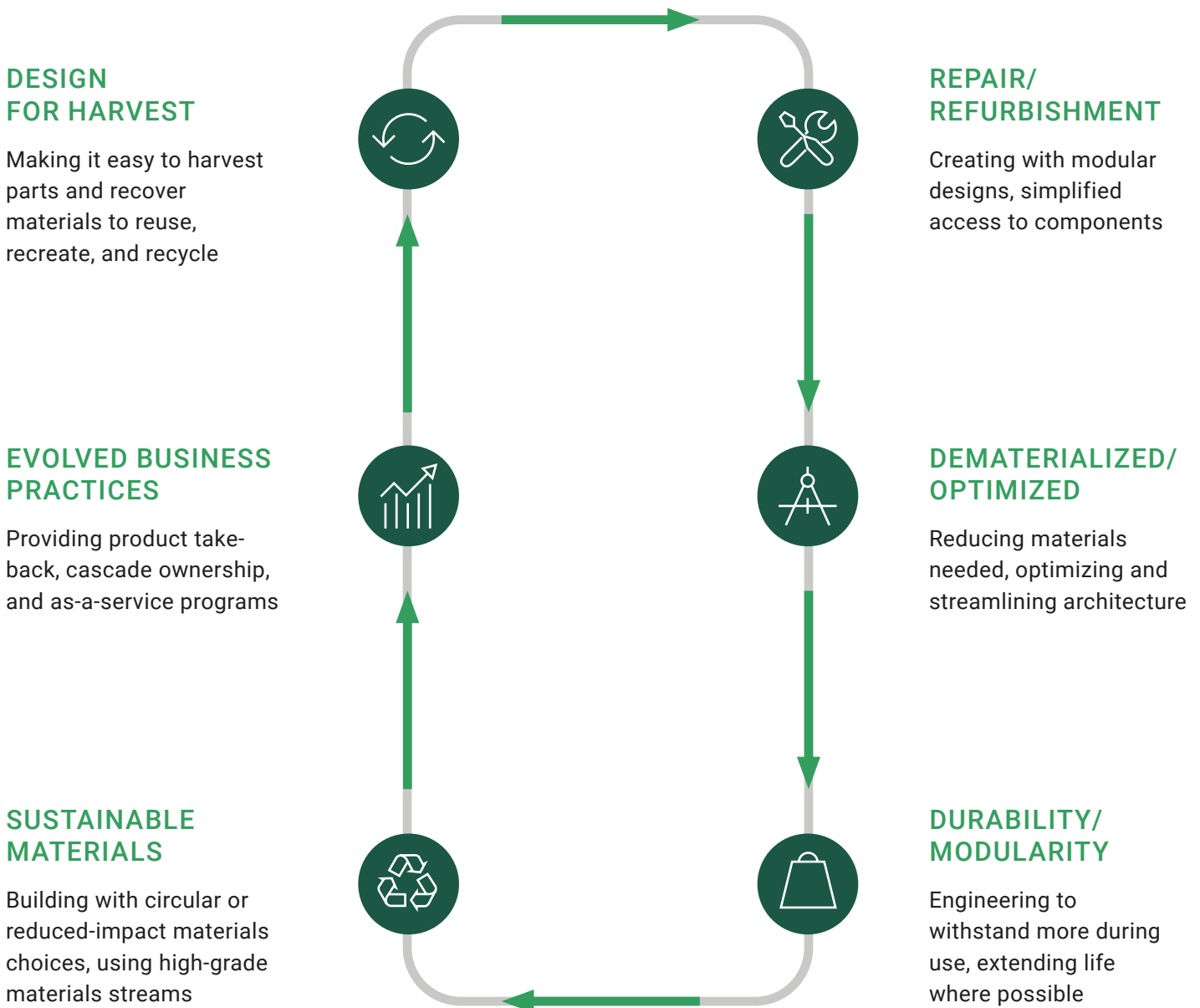


Ship

94.5% of our packaging is made from recycled or renewable material⁵

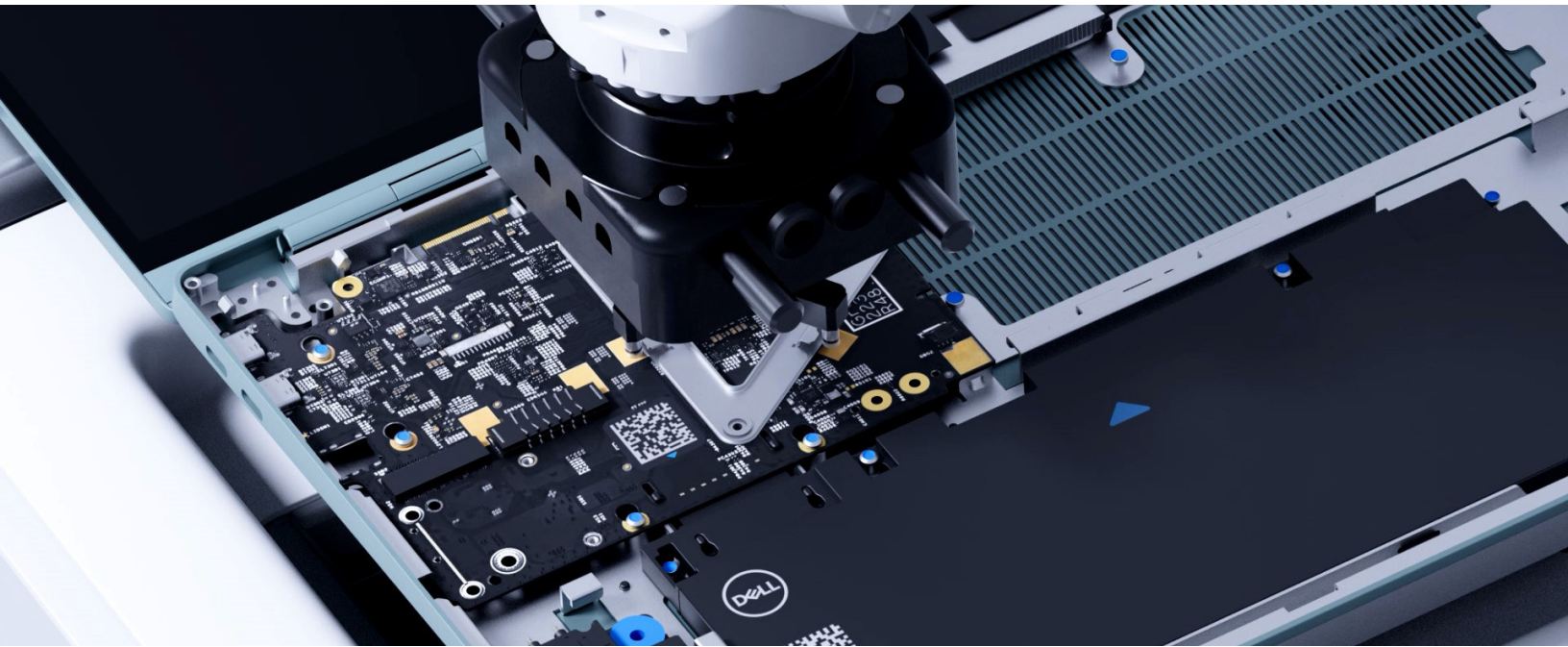
Circular design principles

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.



Accelerating design for circularity

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

Concept Luna is Dell's approach to circular design and manufacturing. It explores sustainable product designs that accelerate the circular economy through emissions reductions, modular designs, intelligent telemetry, and enhanced repairability.

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.

For example, low emissions aluminum was originally part of Concept Luna, and transitioned from a concept to applied use on XPS, Latitude laptops and Precision mobile workstations. This mix of hydropower-produced and recycled aluminum reduces the emissions of the material by 90% over coal power production.

The 100% hydropower achieved a 70% carbon footprint reduction compared to coal.

Sustainable materials

We are investing in sustainable 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.



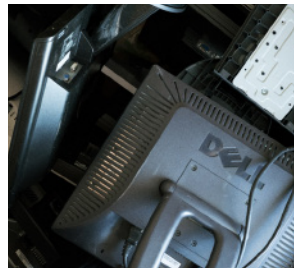
Paper Fibers

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.



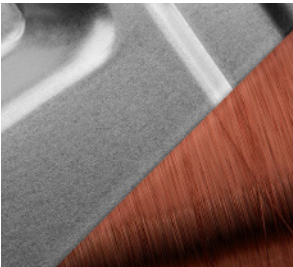
Reclaimed Carbon Fiber

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



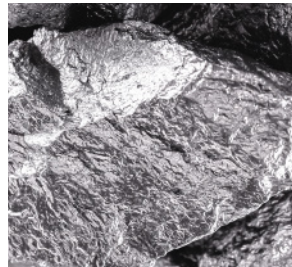
Recycled Ocean-Bound Plastic

We've saved over 443,000 pounds of plastics from the ocean, recycling them for use in our products and packaging.⁶



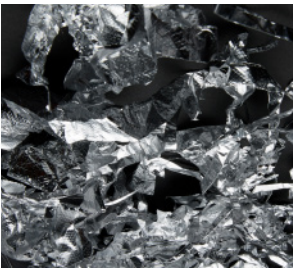
Recycled Metal

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



Recycled Cobalt

We are estimated to ship 21 million laptops accounting to nearly 500MT of recycled cobalt in PC batteries. All without compromising the performance of our PCs.



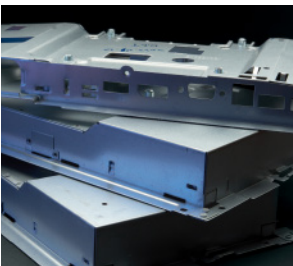
Sustainable Aluminum

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.⁷



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 material on all new Dell notebooks our commercial notebooks.⁸

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

We have already reduced the energy intensity across our entire product portfolio by 76% since 2010.⁹ 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)



300+

EPEAT Climate+
registered products¹⁰

An EPEAT Climate+ champion

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



100%
Notebooks



91%
Displays



100%
Desktops



80%
Servers

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.

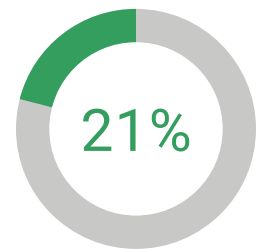
Intelligent Devices: Our AI-based optimization software, Dell Optimizer – learns and responds to how users work, so you never have to compromise on performance or efficiency.

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.



1 new
PowerEdge

One new PowerEdge server can do the work of up to five previous generation servers.¹¹



21% improvement in performance per watt with Dell Optimizer when Thermal Management feature is set to Quiet mode.¹²

Sustainable data center

Our technology and services allow us to partner on your journey to achieve a modern and sustainable data center. We can help you utilize equipment designed for efficient energy and reduced heat while optimizing and consolidating your infrastructure and hardware.



Efficient Infrastructure

Energy Efficiency: Energy costs make up 40-60% of a data center's operating costs, that is why we are making our technology more efficient and less intensive to reduce energy waste.¹³

Thermals & Cooling: We engineer new ways to address the heat generated by our powerful machines. By reducing the heat, we can avoid energy wasted cooling the data center.

Infrastructure Consolidation: We make our technology denser while simplifying data storage to reduce physical and carbon footprints in the data centers.

32x CPU performance

Since 2011, PowerEdge servers achieved up to 32x the CPU performance with less than 3x increase in CPU TDP. That's up to 1,000% improvement in CPU performance per watt.¹⁴

AI and sustainability

Implement AI solutions to achieve your organizational and environmental initiatives, with tailored solutions that maximize efficiency and deliver insights to reduce your emissions.

Energy Efficient Planning

Optimize IT infrastructure for energy efficiency, cost savings, and on-demand capabilities.

- **Dell “Power” Series:** Leader in energy-efficient IT solutions
- **On-Demand Delivery:** Avoids over-provisioning by supplying only needed resources
- **Dell Optimizer Thermal Mode:** Enhances device energy efficiency by up to 18% in “Quiet” mode

Intelligent Sustainability Insights

Gain actionable insights for reducing energy use and emissions, while improving cost efficiency.

- **APEX AIOps:** Monitors and predicts server fleet energy use and emissions
- **OME:** Manages servers with power-saving features like throttling and capping
- **iDRAC:** Provides efficient remote control for PowerEdge servers

Efficient System Design

Right-sized AI solutions offerings with circularity and recovery in mind.

- **More Sustainable Technologies:** Designing products for efficiency and circularity
- **Recycled Materials:** Uses recycled and renewable materials in new AI PCs.

Asset Recovery Service

Facilitates responsible IT equipment retirement during tech refreshes.



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 retirement, 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 logistics 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.¹⁵



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.¹⁶

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.



Technology Rotation Program

For infrastructure customers, this solution can help customers implement regular refresh cycles while mitigating risks of ownership. Overall, this helps reduce organizations' total cost of ownership and drive towards their sustainability goals.

Featured products

DEVICES



Latitude 5550 Laptop

Designed with recycled materials like PCR plastic, ocean-bound plastic, bio-based plastic, reclaimed carbon fiber and 50% recycled cobalt in the battery.¹⁷



Precision 3590 Mobile Workstation

Designed with recycled materials like PCR plastic, ocean-bound plastic, bio-based plastic and reclaimed carbon fiber and 50% recycled cobalt in the battery.¹⁸



OptiPlex Micro

World's first desktop PC designed with 50% recycled steel in the chassis.¹⁹ Designed with 56.7% recycled plastic²⁰ and 13% recycled ocean-bound plastic in the fan and fan housing.²¹



XPS 14 Laptop

Ships in 100% recycled or renewable packaging.²² Designed with at least 25% recycled materials like recycled plastics, glass and recycled aluminum²³ and a chassis made with recycled and low emissions aluminum.²⁴



Inspiron 16 Laptop

Ships in 100% recycled or renewable packaging.²⁵ Made with recycled copper, recycled steel, post-industrial recycled aluminum and 26% recycled plastic.²⁶



Latitude 7350 Detachable

World's most serviceable and durable²⁷ and the first commercial PC to ship with recycled cobalt in the battery.²⁸ Featuring 90% recycled magnesium in the chassis plus recycled & low emissions aluminum in the kickstand.²⁹

PERIPHERALS



Dell 24 Monitor P2423

Designed with sustainable materials including 50% recycled steel, 85% post-consumer recycled plastic, including closed-loop plastics and 100% recycled aluminum.³⁰ Ships in a 100% renewable and recyclable box.³¹



Dell Silent mouse and Keyboard KM555

Designed with up to 64% post-consumer recycled plastic.³²



EcoLoop Pro Backpack

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

Ships in packaging made with 100% recycled content in the hang tag, hang loop, plastic bag.³³

SERVERS & STORAGE



PowerEdge R660 Rack Server

New "Smart Flow" configurations delivers up to 14.6% more airflow than the traditional 10 x 2.5" chassis.³⁴

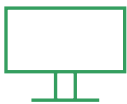


PowerStore 3200Q

Responsibly meet business needs with minimal energy use. Our new hardware, powered by cutting-edge QLC Storage technology, delivers enterprise-level capabilities and high performance. Adapt easily to evolving business demands on a cost-effective platform.

Endnotes

- 1 7350 Detachable and the Latitude 7350 uses the 57Whr battery. Based on internal analysis, February 2024.
- 2 Steel-Includes OptiPlex Micro, OptiPlex Micro Plus, OptiPlex Tower, OptiPlex SFF and OptiPlex SFF Plus and applies to select configurations launching in March 2024. Based on internal analysis of publicly available information, February 2024. Applies to Product launched March 2024. Based on Dell internal analysis, November 2023. Latitude 7350 Detachable contains 90% recycled magnesium in body.
- 3 Based on internal analysis, February 2024. 98% recycled aluminum in the thermal shielding. Based on internal analysis, March 2024.
- 4 Contains at least 89.4% recycled content and 9.6% renewable materials. Renewable materials in the form of sustainably forested fibers. Excludes optional items added to order and included in box.
- 5 By weight, percentage breakdown of recycled and renewable materials varies by product: based on internal analysis, June 2023.
- 6 Per FY22 ESG Report.
- 7 Based on internal analysis, March 2023.
- 8 Premium Packaging: Approximately 78% recycled content and 22% renewable content in the form of FSC paper fibers. Excludes optional items added to order and included in box. Enhanced Packaging: Approximately 95% recycled content and 5% renewable content in the form of FSC paper fibers. Excludes optional items added to order and included in box.
- 9 Based on internal analysis, April 2021.
- 10 Based on EPEAT Registry data as of October 2022, varies by country.
- 11 Based on internal analysis, March 2023. Applies to: PowerEdge C6620, PowerEdge R660, PowerEdge R6615, PowerEdge 6625, PowerEdge R760, PowerEdge 7615, PowerEdge 7625, PowerEdge XR4000r, PowerEdge XR4000z.
- 12 Based on internal study, testing power and performance within our Dell Optimizer power module. These workers primarily focus on general compute activities such as video conference calls, web browsing and general response time of opening and closing applications. Whitepaper published, November 2022.
- 13 Based on calculations using Schneider Electric's Data Center PUE Calculator assuming a range of 1.4-1.6 PUE.
- 14 Internal analysis, March 2024. CPU performance results are publicly available on spec.org . Based on comparing the floating point rate performance and CPU TDP of the PowerEdge R710 with 2x Intel Xeon X5690 processors and PowerEdge R760 with 2x Intel Xeon Platinum 8592+ processors. Internally verified ratio used to convert CPU2006 results to CPU2017 results. Actual results may vary.
- 15 Asset Recovery Services available in 36 locations.
- 16 Dell Trade In services only offered in the U.S.
- 17 Based on internal analysis, March 2024. Post-consumer recycled plastic: 30% in LCD cover lid, 30% in LCD antenna window, 50% in LCD bezel, 50% in palm-rest, 50% in inner frame, 30% in bottom door, 35% in battery filler, 50% in battery housing, 30% in speaker enclosure; Reclaimed carbon fiber: 20% in LCD cover lid; 20% in bottom door; Bio-based plastic: 21% in LCD cover lid, 21% in bottom door, 42% in the feet at the bottom of the device; Ocean-bound plastic: 28% in fan housing; Recycled cobalt: 50% in entry (42Whr) battery; Recycled aluminum: 98% in 65W adapter thermal shielding.
- 18 Based on internal analysis, January 2024. 50% recycled cobalt: Shipping timelines may vary based on region and laptop configuration; Recycled plastic: 30% in LCD cover lid, 30% in LCD antenna window, 50% in LCD bezel, 50% in palm-rest, 50% in inner frame, 30% in bottom door, 35% in battery filler, 50% in battery housing, 30% in speaker enclosure, 28% ocean bound plastic in fan housing, 21% bio-based plastic in LCD cover lid, 21% bio-based plastic in bottom door, 42% bio-based plastic in the feet at the bottom of the device; Reclaimed carbon fiber including 20% in the lid and 20% in the bottom door.
- 19 Includes OptiPlex Micro, OptiPlex Micro Plus, OptiPlex Tower, OptiPlex SFF and OptiPlex SFF Plus and applies to select configurations launching in March 2024. Based on internal analysis of publicly available information, February 2024.
- 20 Percentage is based on system plastic weight and may vary by model. Based on internal analysis, January 2024.
- 21 Based on internal analysis, January 2024.
- 22 Made with 92.4% recycled content and 7.6% renewable content in the form of sustainably forested materials. Excludes optional items added to order and included in box.
- 23 Based on internal analysis, November 2023. Percentages are based on total system weight.
- 24 Based on internal analysis, November 2023. Designed with 75% recycled aluminum and 25% low emissions aluminum in the lid, palmrest and bottom cover.
- 25 Made with 94% recycled content and 6% renewable content in the form of sustainably forested materials. Excludes optional items added to order and included in box.
- 26 Inspiron 16 Plus (7640) with discrete graphics: Recycled Aluminum: 50% in laptop lid, recycled steel: 15% in hinge bracket, touchpad bracket, recycled copper: 50% in thermal plate. Recycled Plastic: Percentage is based on plastic weight.
- 27 Based on internal analysis, October 2023.
- 28 Applies to the Latitude 7350 Detachable and the Latitude 7350 that uses the 57Whr battery. Based on internal analysis, February 2024.
- 29 Applies to Product launched March 2024. Based on Dell internal analysis, November 2023. Latitude 7350 Detachable contains 90% recycled magnesium in body, low emissions 75% recycled aluminum in kickstand.
- 30 Based on internal analysis, November 2023. Plastic percentage is based on total plastic weight. Recycled steel: 50% recycled steel in monitor bracket Recycled aluminum: 100% recycled aluminum in monitor stand.
- 31 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, February 2024.
- 32 Based on internal analysis, May 2024.
- 33 Applicable to Dell Thunderbolt Dock WD22TB4 & Dell Dual Charge Dock HD22Q. Based on Internal Analysis, October 2022.
- 34 Based on internal analysis, October 2022.



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