

MESSAGE FROM MICHAEL DELL

I believe the future is what we make it

At Dell Technologies, we see a future that propels human progress, one that delivers business and societal impact for everyone. We are driving innovation, partnerships and technology to connect people with opportunities, reduce environmental impact and build trust.

18th consecutive year

The Human Rights Campaign Foundation has given us a perfect score on the Corporate Equality Index

Thanks to our customers and partners, this past year was one of the best ever in Dell's history. And our emphasis on environmental, social and governance (ESG) measures ensures that while we accomplished our business goals, we also delivered positive results for all of our stakeholders.

This report details our progress toward achieving our ambitious 2030 goals. There's much work to be done, and as we apply our spirit of innovation

and purpose-driven culture to the challenge, I'm particularly proud that:

- We have joined other members of Business Roundtable and Information Technology Industry Council in support of rejoining the Paris Climate Agreement.
- We will deliver on our commitment to achieve net zero greenhouse gas (GHG) emissions across our entire value chain by 2050.
- For the 10th time Ethisphere® has listed Dell Technologies as one of the World's Most Ethical Companies®.
- And for the 18th consecutive year the Human Rights Campaign Foundation has given us a perfect score on their Corporate Equality Index, which recognizes the Best Places to Work for LGBTQ+ equality.

But we certainly won't stop there. We are focused on driving positive impact for the planet and for all of its people through the twin engines of human inspiration and technology innovation.

I'm excited to share our progress, our purpose in action, with you now in this report.



Michael Dell
Chairman and CEO
Dell Technologies



“Our emphasis on environmental, social and governance (ESG) measures ensures that while we accomplished our business goals, we also delivered positive results for all of our stakeholders.”



ADVANCING SUSTAINABILITY

We have a responsibility to protect our planet

We work with our customers, partners, suppliers and communities to make an impact on the most pressing environmental issues. Core to our business, the power and scale of our global supply chain allow us to drive the highest standards of sustainability and ethical practices, holding ourselves accountable for our actions while driving improvements wherever possible.

At the core of everything we do

Our Advancing Sustainability goals align to these focus areas:



We take action on climate change for our company, our customers and society

Climate change is an economic, social and environmental challenge with increasingly evident consequences. Our focus on climate change spans decades and is a priority for our company and those we serve. Dell Technologies works throughout our entire value chain to reduce emissions across all scopes while validating and incorporating additional carbon removal strategies that are effective, quantifiable and verifiable. Recognizing the critical role that technology can play in addressing climate change, we are driving innovation to help our customers make progress on their emissions goals and support research and conservation efforts around the world.

We accelerate the circular economy

The global population is growing, and with this growth people are consuming more materials, which in turn could lead to negative environmental impacts related to the extraction of raw material processing and increased carbon emissions. This reality is raising concerns about climate change, waste and resource constraints. But there is a choice. We can choose to change the system. By leaving behind the linear economy and embracing a circular one, we can design to reduce and reuse waste, and extend the useful life of products and materials to reduce environmental impact. At Dell, we believe technology will play a key role in this shift, and we see the circular economy as a critical business model for our collective future.

We champion the many people who build our products

With the power of our global supply chain, Dell has the scale and ability to drive responsible manufacturing. We insist upon ethical practices, respect and dignity for everyone creating our products; this is a condition for doing business with us. We partner with many of our suppliers to help them develop the necessary insights and capabilities, reinforced by a comprehensive assurance program — including audits — that accelerates and maintains improvements. We are also a founding member of the Responsible Business Alliance, supporting the rights and well-being of workers and communities contributing to the global technology supply chain.

Focus on climate change is growing, along with a sense of urgency to act

The attention generated by the 26th U.N. Climate Change Conference of the Parties (COP26), combined with the release of the first Intergovernmental Panel on Climate Change (IPCC) report, dramatically increased awareness of what is at stake if we don't act now to offset the worst impacts of global warming.

There is no question that zeroing out emissions is the strongest commitment countries and businesses can make to slow down global warming. We are committed to delivering on our net zero goal with the right actions, technology, measurement, partnerships and people to get us there.

With the term “net zero” growing in use comes the challenge that not everyone is defining or measuring it in the same way. At Dell, we are currently working to align our net zero goal with the [latest guidelines](#) from the Science Based Targets initiative (SBTi) — a globally recognized partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the Worldwide Fund for Nature (WWF). Our net zero goal:

- Contains near-term goals based on SBTi guidance in line with the latest climate science necessary to meet the goals of the Paris climate agreement, providing a clearly defined pathway for companies to reduce emissions, helping prevent the worst impacts of climate change. In 2015, we were one of the first 12 companies to have our emissions reduction targets validated by the SBTi.

- Supports the climate mitigation hierarchy, committing to address our own value chain emissions and working to achieve these targets as our first priority while evaluating projects and timeline to mitigate emissions outside of our value chain.
- Extends across our entire value chain, counting not only the scope 1 (direct emissions, for example, facilities) and scope 2 (indirect purchased emissions, for example, electricity) but also scope 3 emissions created on a company's behalf, such as those coming from its supply chain (upstream) and the use of its products by consumers (downstream). These scope 3 emissions often make up the majority of a company's carbon footprint.

We will continue to engage and evaluate as measurement guidelines and standards evolve. This may mean adjusting how we measure and report in the future to ensure our net zero goal is as comprehensive as possible to deliver on our commitment to achieve a true net zero greenhouse gas emissions target by 2050.

Greenhouse gas emissions by scope

SCOPE 1

Direct emissions from Dell Technologies-owned and -controlled resources



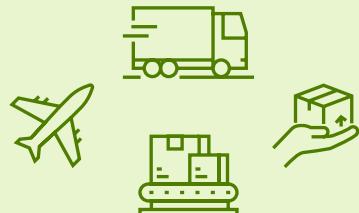
SCOPE 2

Indirect emissions related to the consumption of purchased electricity, steam, heating and cooling



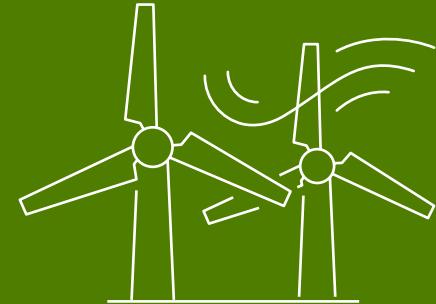
SCOPE 3

Indirect emissions associated with our supply chain, the use of our products by customers, and things like business travel and transportation of goods and services



On the road to net zero

SCOPES 1, 2 AND 3



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

SCOPES 1 AND 2



We will reduce scopes 1 and 2 GHG emissions by 50% by 2030

SCOPE 2



We will source 75% of electricity from renewable sources across all Dell facilities by 2030 — and 100% by 2040

SCOPE 3



We will partner with our direct material suppliers to reduce GHG emissions by 60% per unit revenue by 2030

SCOPE 3



In FY23 we will release a new 2030 goal to reduce the carbon emissions associated with the use of sold product

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

Our net zero goal is an extension of our existing climate-related goals and reflects our strong commitment to taking action on climate change. Achieving this goal will require global cooperation across many aspects of our business and our broader value chain, a science-based approach and consistently meeting our time-bound interim goals. Most importantly, our 2030 emissions targets are key to achieving the goal. To reach net zero emissions, we must significantly reduce or eliminate our scopes 1 and 2 and material scope 3 emissions, and then focus our efforts, where possible, on balancing the remaining GHG emissions via carbon removal activities. We know that this is an ambitious plan. Technology innovation, increased adoption of renewable electricity and climate science all impact the rate at which the world makes the net zero transition. We'll continue to evaluate and be agile to make the most of these to accelerate our progress while supporting our customers and partners with their own climate goals.

In FY22, we maintained focus on reducing emissions, increasing the use of renewable electricity and partnering across our value chain. We continue to see a significant opportunity to increase efforts in scope 3 emissions related to the use of our products. In FY21, we retired [our goal](#) to reduce the energy intensity of our products by 80% (FY12–FY21), achieving a 76.7% reduction across our entire portfolio. To continue to drive progress in this area, we are establishing a new 2030 goal to reduce the carbon emissions associated with the use of sold product, which we will share in FY23.

*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.





National Geographic Explorer, Mike Libecki uses Dell Rugged Extreme laptops to support climate and microplastics research on an expedition to Antarctica.

RECENT HIGHLIGHTS

World Economic Forum's Alliance of CEO Climate Leaders

In advance of COP26, Michael Dell joined more than 90 CEOs of large multinational organizations as members of the World Economic Forum's Alliance of CEO Climate Leaders in [signing a public letter](#) sharing their readiness to work side by side with governments in a joint public-private effort to accelerate the race to net zero.

CDP Supplier Engagement Leaderboard

Dell was included on the CDP Supplier Engagement Leaderboard, which provides a rating for how effectively companies are engaging their suppliers on climate change. CDP assessed performance on supplier engagement using a company's response to selected questions on governance, targets, scope 3 emissions and value chain engagement in the CDP 2021 climate change questionnaire. We also scored an A- in the climate category for the quality and comprehensiveness of information we provided.

"The world is waking up to the reality that achieving net zero greenhouse gas emissions is not optional. We will decarbonize our business by 2050 through strong short- and long-term goals driven by technological innovation, increased adoption of renewable electricity and climate science. But no company is an island. Avoiding the worst impacts of global warming takes everyone. It's why we are also putting our technology to work to help our customers, value chain and society transition to net zero."

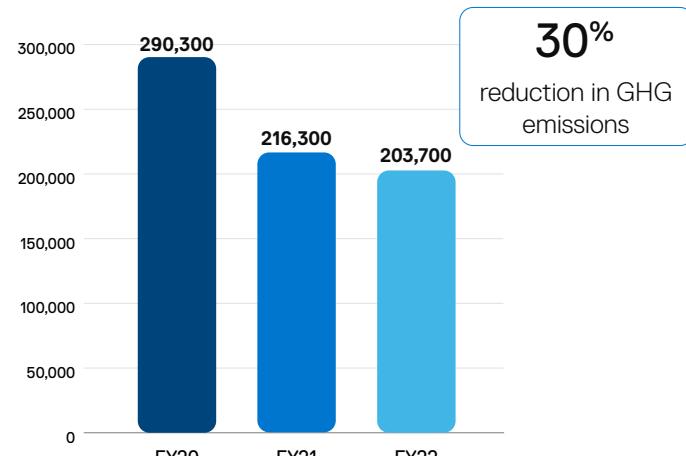
JJ DAVIS
CHIEF CORPORATE AFFAIRS OFFICER,
DELL TECHNOLOGIES

We will reduce scopes 1 and 2 (market-based) greenhouse gas (GHG) emissions by 50% by 2030

Taking responsibility for the GHG emissions generated by our company facilities; vehicles; purchased electricity, heating, and cooling is the first step on the journey to net zero. Electricity use in our buildings is the largest source of GHG emissions from our own operations, with smaller quantities coming from fuels and refrigerants used in buildings and in company vehicles. To achieve a 50% reduction by 2030, we are focusing on efficiency in our electricity use and increasing our use of renewable energy. Our 2030 scope 1 and scope 2 GHG reduction targets have been accepted by the Science Based Targets initiative (SBTi) as consistent with reductions required to keep global warming to 1.5 degrees Celsius, the most ambitious goal of the Paris climate agreement.

PERFORMANCE TO DATE*

Reduction measured from FY20 baseline.²¹



MTCO₂e of scopes 1 and 2 (market-based) GHG emissions

*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.

RECENT HIGHLIGHTS

Reduced our scopes 1 and 2 GHG emissions by 86,600 metric tons since FY20

In FY22, we achieved the ISO 50001 energy management systems standard certification for two additional Dell facilities. As a result of these certifications, all 10 of our Dell-owned manufacturing facilities are now certified. Through this and other programs, we continue to implement projects to improve energy efficiency and reduce greenhouse gasses in the buildings we operate.



CLIMATE ACTION GOALS

We will source 75% of electricity from renewable sources across all Dell Technologies facilities by 2030 — and 100% by 2040

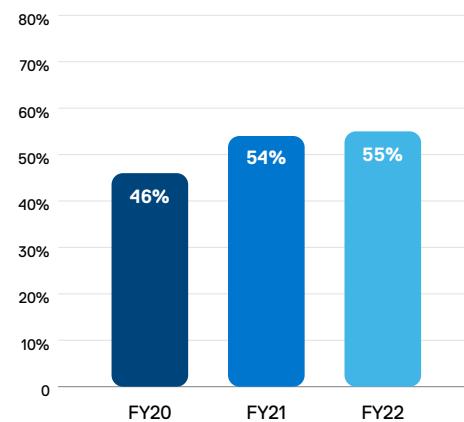
The transition to renewables is essential to decarbonize our economy and mitigate the effects of climate change. We are making progress and will continue our work to source renewable electricity alternatives to reach 100% by 2040. This goal contributes to scope 2 emissions reductions and supports our scopes 1 and 2 GHG emissions reduction goal.

RECENT HIGHLIGHTS

Maintained focus on energy improvements in our owned buildings and leased spaces

To support our long-term global renewable electricity strategy, in FY22 we added additional renewable electricity to our facilities in India, France and the U.S. We also conducted several detailed opportunity assessments of near-term and alternative solutions for buildings and leased spaces, which we will use to help plan our long-term global renewable electricity strategy.

PERFORMANCE TO DATE*



Total electricity used generated from renewable sources

*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.





CLIMATE ACTION GOALS

We will partner with our direct material suppliers to reduce GHG emissions by 60% per unit revenue by 2030

We understand that part of our overall carbon impact on the environment includes carbon emissions that occur when our suppliers manufacture key components and provide vital services to us. Our current near-term supplier emissions reduction target demonstrates our commitment to addressing climate change throughout the value chain and has been approved by the Science Based Targets initiative (SBTi). We continue to evolve how we hold ourselves and our suppliers accountable to maximize our impact.

We demonstrate this by engaging with suppliers to help them reduce their GHG emissions and track progress. We constantly work to refine how we measure to drive results and increase accuracy in reporting. Over the last year, our suppliers improved their GHG emissions reporting practices, and we have further enhanced the data collection methodologies used in calculating results for our direct material suppliers goal.

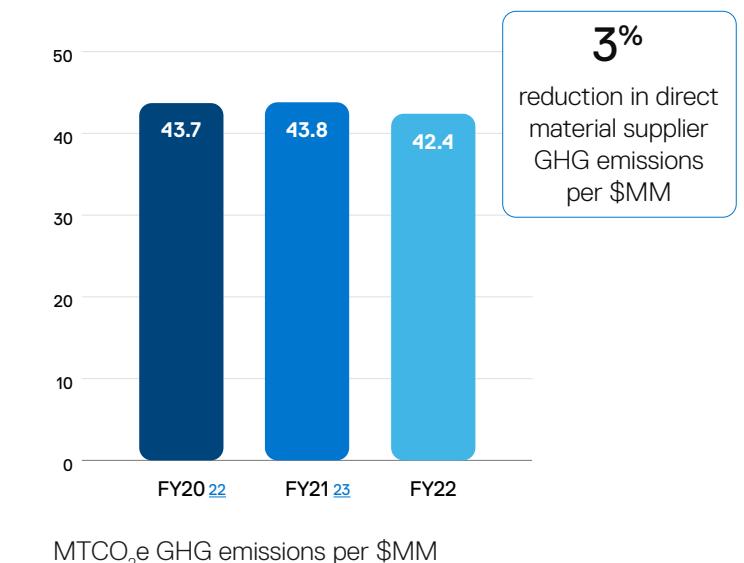
These changes are reflected in our FY22 results. In addition, we are restating our goal baseline and initial reporting results. Our updated FY21

numbers show we were level with our baseline where we previously reported a decrease in direct supplier emissions per million dollars (\$MM) of revenue.

Over the last year, we deepened engagement with our direct material suppliers and supported them in their efforts to set aggressive and ambitious GHG emissions reduction targets. Through direct engagement with supplier sustainability teams, we worked to understand the barriers suppliers face in setting reduction targets and shared best practices to help overcome them. We also provided them with global standards and methodologies for setting GHG goals and referred suppliers to the public tools we used to develop our own targets. All of these activities are critical to driving long-term GHG emissions reductions with our direct material suppliers and successful achievement of our goal.

PERFORMANCE TO DATE*

Reduction measured from FY20 baseline.



*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.



RECENT HIGHLIGHTS

Supported suppliers with climate reporting

Encouraged suppliers to complete the CDP climate questionnaire and then provided detailed feedback to each supplier, including how to expand and provide more in-depth responses for the climate questionnaire in the future. We include this practice as part of our ongoing approach for GHG emissions reduction discussions with suppliers. This resulted in an increased level of specificity from suppliers in describing their programs qualitatively, not just with numerical data. This [case study](#) shares more about how we engage with suppliers to help drive GHG emissions reductions.

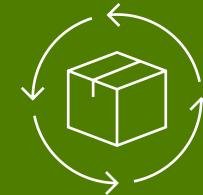
Continuing our focus on scope 3 emissions associated with the use of sold product

When we look at our GHG emissions, we take responsibility all the way through to the use of our products by our customers and partners. Our now retired goal to reduce the energy intensity of our entire product portfolio by 80% (FY12–FY21) was an ambitious one focused on driving down the energy intensity of our entire product range, from laptops all the way through to servers and storage. We are proud that we achieved a 76.7% reduction and are now turning our attention to our next aggressive target. To continue to drive progress in this area, we are establishing a new 2030 goal to reduce the carbon emissions associated with the use of sold product, which we will share in FY23.

Accelerating the circular economy



By 2030, for every product a customer buys, we will reuse or recycle an equivalent product



By 2030, 100% of our packaging will be made from recycled or renewable material



By 2030, more than half of our product content will be made from recycled or renewable material

CIRCULAR ECONOMY MOONSHOT GOAL

By 2030, for every product a customer buys, we will reuse or recycle an equivalent product. 100% of our packaging will be made from recycled or renewable material. More than half of our product content will be made from recycled or renewable material.

As we work to tackle global challenges like climate change, waste and pollution, the circular economy — reducing waste and emissions and reusing products and materials at their highest value — is critical to help solve these issues. Our circular economy goal calls for taking back as much as we produce and significantly scaling our adoption of recycled and renewable materials. These two actions, along with Dell's design methodology to optimize product reusability and recyclability, support the future of the circular economy.

In FY22, we used over 179.8M kilograms (396.5M pounds) of sustainable materials in our products and packaging. But our approach goes beyond materials. By considering sustainability at every stage of a product's life cycle, we are further reducing its carbon footprint. Designing products to last longer and be easier to repair, refurbish or recycle takes pressure off sourcing new materials and emissions related to manufacturing.

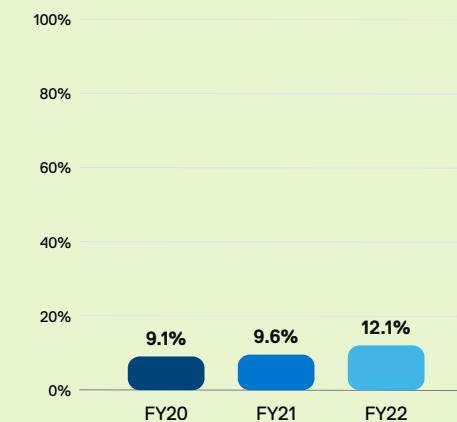
Understanding the challenges to sustainable materials use, recycling and reuse are key to this goal. In FY22, we focused efforts on partnering with others to uncover new materials and drive innovative design ideas like [Concept Luna](#). We also built upon our 25 years of recycling leadership to [scale existing services](#) and pilot new ways to incentivize return streams. This will be an area where we will continue to drive investment to evolve current and introduce new programs that respond to changing consumer and business behaviors. We will partner with others to achieve our goal and reduce environmental impact.

[Explore more on Dell's perspective on circularity →](#)

*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.

†We commissioned an external third party to perform limited assurance procedures with respect to this metric. [View full details and data methodology.](#)

PERFORMANCE TO DATE*



Percentage of product collected (total units captured for recycling and reuse over the amount of products sold)



Percentage of recycled/renewable content in products



Percentage of recycled/renewable material content in packaging



“Early on, Dell recognized the need for cross-industry collaboration to address the scale of the ocean-bound plastic problem, and fueled the development and launch of NextWave Plastics, the only consortium of global companies working together to build a network of ocean-bound plastic suppliers and bring value to the communities from which this material is sourced. Extending the use of this material across new products demonstrates Dell’s long-term commitment to addressing the 14 million metric tons of new plastic entering the ocean every year.”

DUNE IVES
CEO OF LONELY WHALE

RECENT HIGHLIGHTS

Repair leadership

Repair is essential to keep products in use longer and out of landfills. At Dell Technologies, we have long supported customers’ choice to repair their own device or seek out another convenient repair option. Continuing to engage in the growing conversation around repair is important. We see opportunities to evolve Dell’s leadership, providing additional routes to make repair more accessible and affordable.

You can read more about our work to support repair [here →](#)

Rethinking recycling

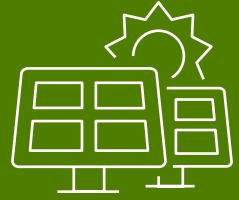
Achieving our goal to reuse or recycle as much as we produce means trying new ways to engage individuals, partners and businesses to turn in their out-of-use technology. We recently expanded our Dell Trade-In Program, which allows consumers to trade in eligible technology they are no longer using (of any brand) and receive instant credit toward new Dell products. We also collaborated with Google, Apple, Amazon and Microsoft to launch a year-long citywide doorstop electronics recycling pilot for consumers from Denver, Colo. Developed in partnership with recycling start-up [Retrievr](#), this pilot is helping collect insights to better understand the most

critical factors affecting consumer behavior and apply them to improve processes for recycling electronic waste. We have also expanded our commercial Asset Recovery Services (ARS) to 36 countries, helping customers receive value from existing IT assets and implement sustainable recycling and recovery services at scale.

Expanding the use of ocean-bound plastics

In FY22, we exceeded our commitment [in support of U.N. Sustainable Development Goal 14](#) to increase our annual use of ocean-bound plastic tenfold by 2025, based on our 2017 baseline (10 x 16,000 pounds). Using over 227,000 pounds of ocean-bound plastic in our packaging in a single year enabled us to achieve this goal four years ahead of schedule. We also recently announced an important milestone that expands use of ocean-bound plastic beyond packaging into products. The Latitude 5000 series and Precision 3570/3751 Mobile Workstations now feature ocean-bound plastics in the fan housing (28%) and in the fan and fan housing (13%) in our OptiPlex Micro desktops and Precision Workstations. Dell’s EcoLoop Pro series of backpacks, sleeves and briefcases also now features 100% ocean-bound plastic in the exterior main fabric.

Championing the people who build our products



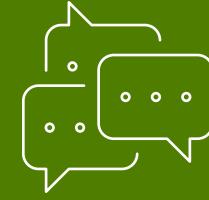
We will drive sustainability improvements in our global workplaces through 2030



Each year through 2030, we will show continued commitments to provide healthy work environments where people can thrive



Each year through 2030, we will deliver future-ready skills development for workers in our supply chain



Each year through 2030, we will continue engagement with the people who make our products

We will drive sustainability improvements in our global workplaces through 2030

Championing sustainability starts at home. We work on a local level to reduce environmental impact in our workplaces around the world, but the actions that are prioritized for one country may differ from another. Our factories in Xiamen, China, for example, face very different water-related issues than our offices in Montpellier, France, or our U.S. data centers in Durham, N.C. While we track our efforts against two global efforts — reducing freshwater use and reducing workplace plastic waste — we also look at broader sustainability efforts. In an environment where hybrid work has continued to scale and new ways of working continue to evolve, we will evaluate how the focus areas for this goal will shift in the future.

We will reduce freshwater use in our Dell Technologies-owned facilities by 25% in locales with high water stress, and by 10% elsewhere

Dell uses fresh water for domestic purposes, such as drinking, cooking, cleaning and flushing toilets, as well as for cooling and landscape needs. Water stress — any situation in which water is insufficient for a region's needs — is chronic in some parts of the world. Although water resources are precious everywhere, living and operating in those areas require special consideration. We view our goal to reduce freshwater use as part of being a good citizen of those communities. Our FY22 results show a decrease across both of these targets, largely as a result of the dramatic reduction of our workforce going into Dell-owned facilities. As new ways of working continue to evolve, we will evaluate the impact on this goal.

We will reduce workplace plastic waste by 90%

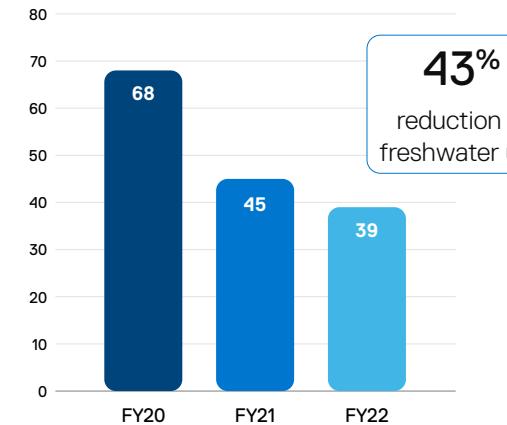
Single-use plastics — those used once and then discarded — are examples of the linear economy in action. We want to break free from this use. Our goal focuses on reducing plastic and plastic foam waste from food service and other general workplace activities. With team member presence at our workplaces impacted by the pandemic, any reduction reported would not reflect business-as-usual plastic consumption levels. As changes to where and how our team members work evolve, we will evaluate reporting on this or an alternative metric in the future.



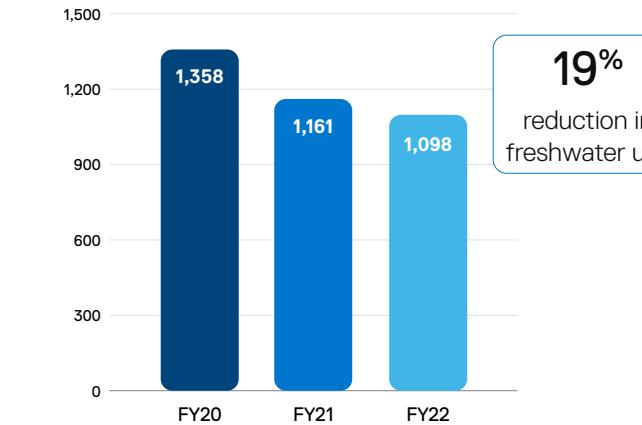


PERFORMANCE TO DATE*

Reduction measured from FY20 baseline.



Megaliters of fresh water used in high water stress locales



Megaliters of fresh water used in other locales

RECENT HIGHLIGHTS

Sustainable workplaces by design

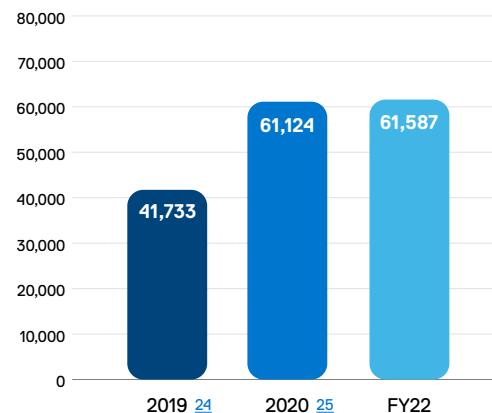
Secured a LEED Interior Design and Construction (LEED ID+C) Silver award for our new Japan headquarters. Our facilities design team incorporated water conservation, energy efficiency, indoor air quality features and other measures in these leased spaces, supporting our sustainability objectives to protect people and the planet.

*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.

Each year through 2030, we will show continued commitments to provide healthy work environments where people can thrive

Dell expects a safe, healthy workplace where people can thrive. Delivering such a workplace involves a commitment to health and safety, training, and management. We expect the same within our supply chain, and we reinforce the responsible operation of our factories and those of our suppliers. We evolve our approach to ensure we continue to deliver meaningful impact.

PERFORMANCE TO DATE*



Total hours of social and environmental responsibility training provided to the people in Dell's global supply chain

*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.

RECENT HIGHLIGHTS

Workplace engagement pilot

Worked with Social Accountability International (SAI) to pilot its TenSquared program in our supply chain. A structured, 100-day workplace engagement program, TenSquared united teams of supplier employees and their managers to address root causes of workplace challenges, overcome institutional hurdles to change and create a culture of continuous improvement. Frontline supplier employees participated in the process of root cause analysis, solution discussion, execution progress evaluation and impact measurement. Participants learned a robust methodology for problem-solving, organizational communication and leadership that they can apply to future challenges. [Learn more about the TenSquared program in this case study.](#)

Implementing new processes

Continued our commitment to the health and safety of everyone in our supply chain by prioritizing high-risk manufacturing processes. We implemented a hierarchy of control for processes, such as aluminum-magnesium smelting, electroplating, painting and solvent cleaning. Processes include elimination and substitution, as well as engineering and administrative controls. We also assessed supplier management systems, machine safeguarding, process operation and material management for high-risk processes.

New ways to engage suppliers

Partnered with suppliers to increase their own health and safety practices, facilitating workshops and developing a short video series focused on chemical safety and wearing proper personal protective equipment (PPE). This series is available on Dell's mobile training platform, making it easy for workers to access. [Learn more about how we enable digital learning through mobile phones.](#)





CHAMPIONING PEOPLE GOALS

Each year through 2030, we will deliver future-ready skills development for workers in our supply chain

Through our global supply chain, thousands of people work to bring Dell's products and services to life. Delivering meaningful work, developing new skills and progressing in their careers are critical to their success. We are working to identify critical skills for the future, provide team members with the skills and training they need to unlock opportunities and advance their careers, and support our suppliers' efforts to do the same. To offer skills development at scale, in FY22 we implemented additional innovative solutions for both online learning and in-person training opportunities.

RECENT HIGHLIGHTS

Developing communication and digital skills

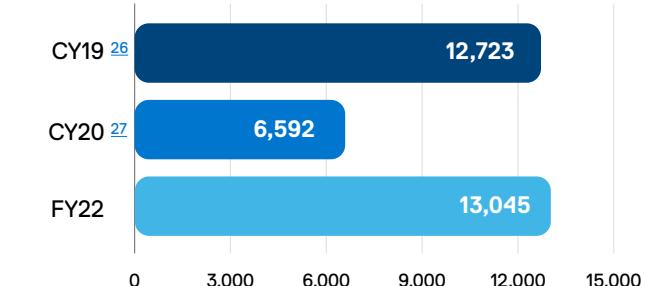
Supported the growth of our in-house manufacturing teams by implementing future-ready training focused on addressing personal and interpersonal effectiveness, such as communication and having a growth mindset, as well as cognitive skill topics, such as decision-making, critical thinking, creativity and innovation. With digital skills foundational to business, we also focused on training and developing confidence in this key area.

Future-ready skills pilot program

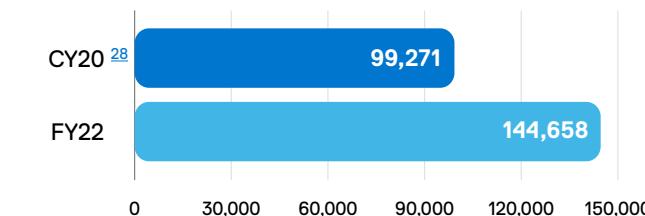
Developed and successfully implemented a future-ready skills pilot with two key suppliers. Dell collaborated with these suppliers to benchmark their existing training and development programs against Dell and industry standards, created a frontline worker talent development road map strategy, built customized training tool kits, shared best practices and monitored progress. Going forward, we aim to promote supplier-led future-ready skills development programs across our supply chain.

*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.

PERFORMANCE TO DATE*



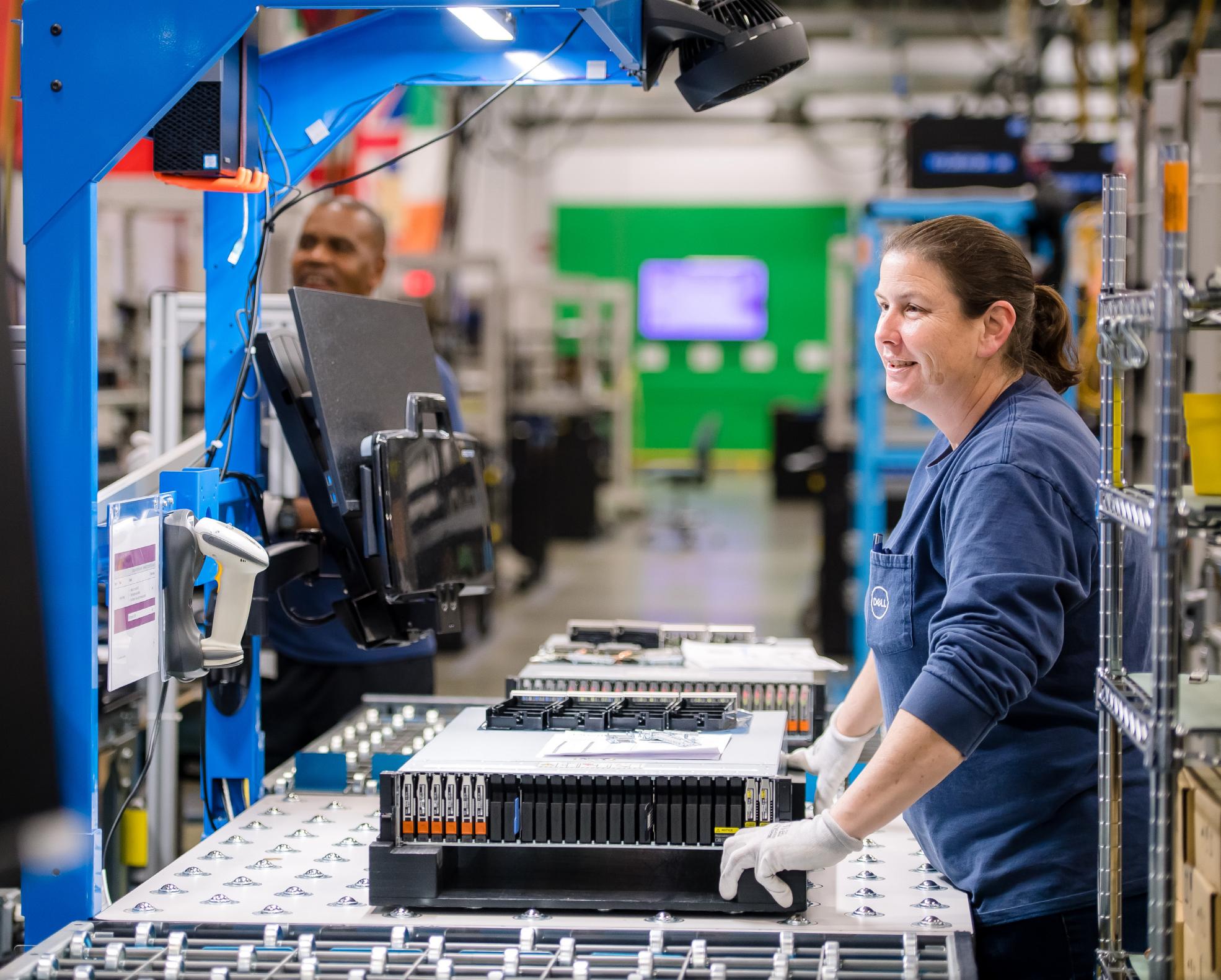
Total number of future-ready skills training hours at in-house manufacturing locations



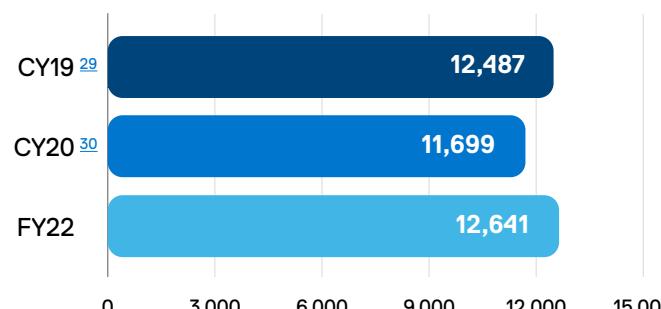
Total number of future-ready skills training hours in supply chain

Each year through 2030, we will continue engagement with the people who make our products

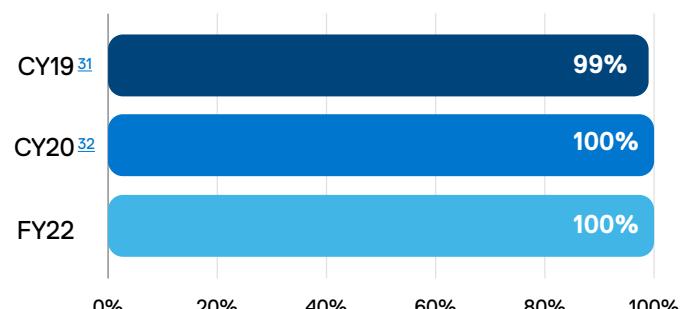
The people who make our products are critical to our success. Listening to feedback and enlisting their unique insights creates a better workplace and drives our business forward. Our in-house experience — through our manufacturing team's Culture of Innovation Program — demonstrates how a positive and inclusive environment enables innovation to thrive through individual engagement, skills development, dedicated events and recognition. This experience forms the basis of Dell's engagement with suppliers to support their own similar programs.



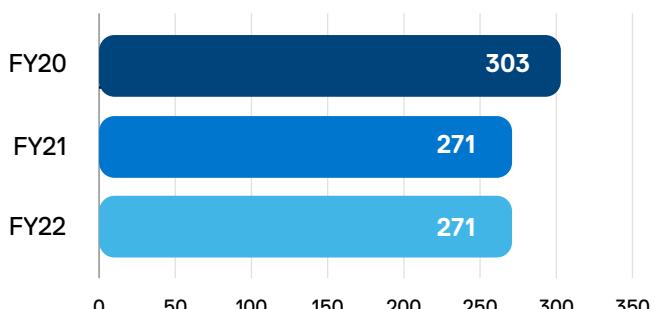
PERFORMANCE TO DATE*



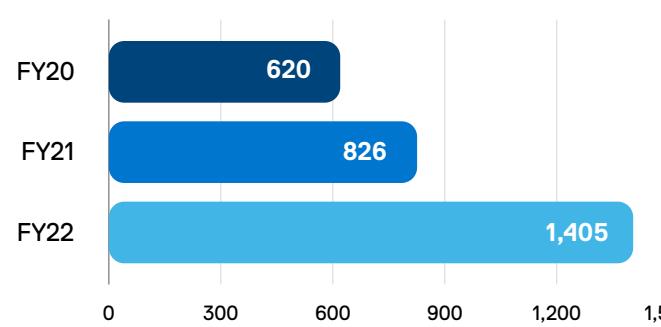
Number of feedback interviews conducted with supply chain workers



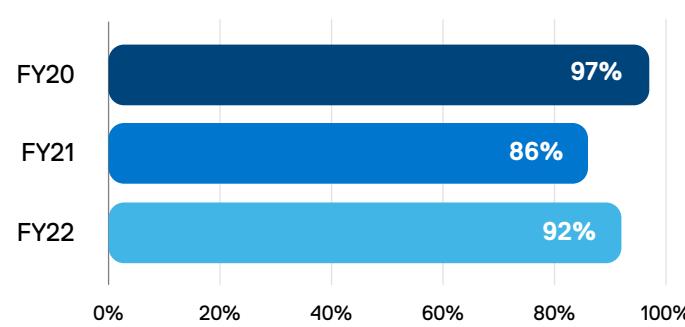
Percentage of manufacturing facilities with feedback channels in place



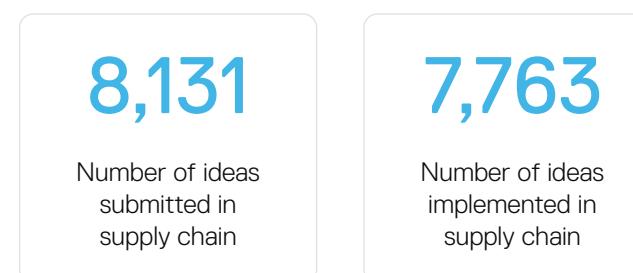
Number of ideation sessions in-house



In-house innovation ideas implemented as projects



Level of participation in in-house ideation sessions



*Please see our [2030 Goals Dashboard](#) for more on the progress, scope and measurement of this goal.

RECENT HIGHLIGHTS

Ideation and innovation seminars

Launched capability-building seminars in partnership with our Culture of Innovation Teams. Seminars support ideation and innovation in our 10 manufacturing sites. Sessions focus on best-in-class practice sharing that helps scale and mature supply chain innovation among site leads. Instruction includes guidance on the ideal framework structure: ideation methodologies, prioritization and implementation of the best ideas.

Virtual brainstorming sessions

Facilitated online brainstorming sessions to enable idea sharing across global facilities. Our Culture of Innovation Teams enhanced our engagement strategy by launching more virtual events, using collaboration platforms that allowed frontline worker participation in real-time ideation, problem-solving and recognition. We plan to continue expanding virtual events across our Global Manufacturing Teams in FY23.



Product Sustainability



Reducing the environmental impact of our products for a healthier planet

People and organizations around the globe use our technology to drive innovation and progress. With the growing use of technology comes a constant need to reduce the environmental impact of creating our products, as well as the energy use footprint when our customers use our products. At Dell Technologies, sustainability is part of every product decision we make in service of achieving our circular economy and net zero greenhouse gas emissions goals. We consider the environment across the entire life cycle of a product from design, sourcing materials, manufacturing, shipping and the eventual end of life of those products.

Sustainable design not only extends the life of products and materials, reducing emissions and waste for the planet, but also meets our customers' increasing demands for sustainable products. A recent global research study conducted by the Economist Intelligence Unit (EIU)³³ and commissioned by Worldwide Fund for Nature (WWF) shows a staggering 71.0% rise in popularity of searches for sustainable goods over the past five years.

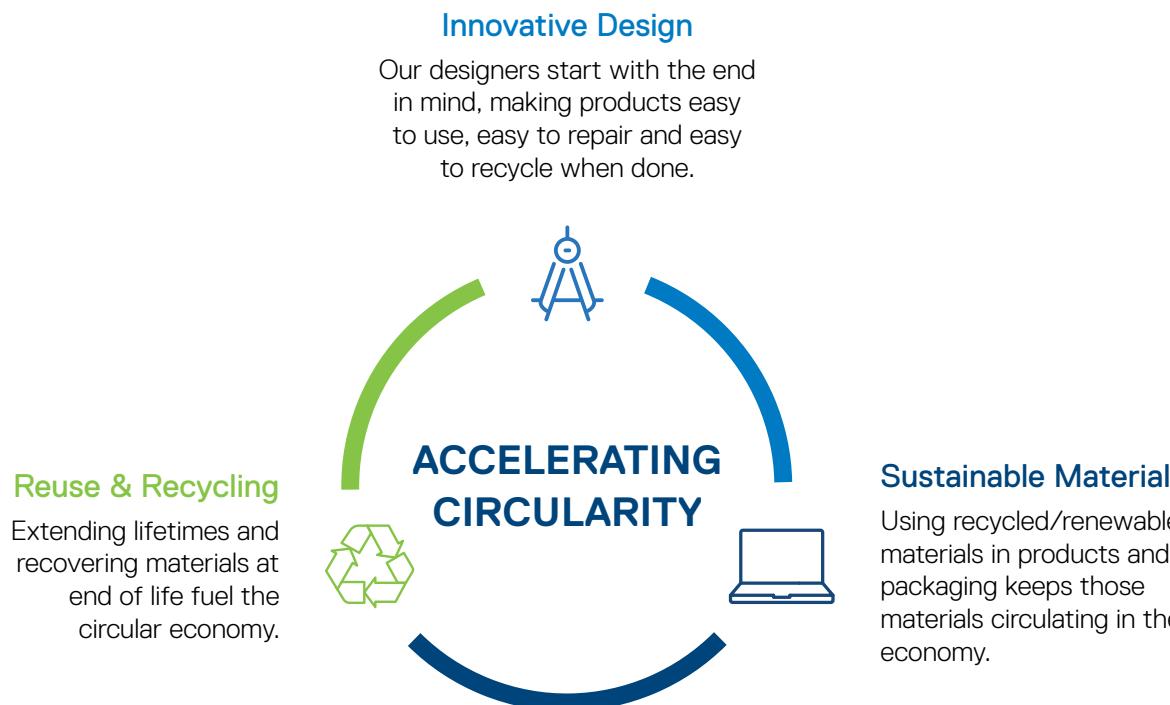
Beyond our products, we are evolving our services and programs to increase our take back of out-of-use or legacy IT equipment. We are helping customers take advantage of the business and sustainability outcomes of as a service. Through these efforts, we are delivering powerful technology and services our customers are looking for, while constantly driving innovation to reduce our environmental impact.



Sustainable materials exploration

Circular design

Dell Technologies' [circular design principles](#) encourage a reduction in the size and number of needed components, the amount of material needed for each component, and the complexity of system assembly, making them easier to repair, reuse and recycle. Examples of this in action include using standard tools and fasteners as well as snap-fits or uniform screws instead of adhesives.



Concept Luna

In FY22, we introduced [Concept Luna](#), a prototype that [pushes the boundaries of future laptop design](#). Concept Luna drives innovation by exploring how to make components more accessible, replaceable and reusable to reduce resource use and keep circular materials in the economy. This ambitious work stream is experimenting, proving and assessing sustainable design ideas to help identify those with the greatest potential to scale across our portfolio. When compared with a similar laptop in Dell's current portfolio³⁴, Concept Luna demonstrates:

- 50.0% overall reduction in carbon footprint.
- 10x fewer screws for easy access to internal components.
- Keystone innovation locks components without adhesives.
- 75.0% reduction in the size of the motherboard.³⁵
- Aluminum chassis processed using hydropower.

Sustainable materials

Dell prioritizes the use of recycled and renewable materials in both products and packaging. Recycled and renewable materials can dramatically reduce the environmental impact of manufacturing when compared to the emissions generated to create new materials.

Our extensive work to scale our use of sustainable materials means we are not reliant on one material or supplier to reach our goal to have 50% of our products and 100% of packaging made with recycled or renewable materials by the year 2030.

Recycled material we are using today:

- **Closed-loop:** Taking back out-of-use technology and recycling materials to make parts for new devices. For example, in 2021 OptiPlex became the first PCs to use hard drives made with closed-loop recycled aluminum sourced from old disk drives.³⁶
- **Carbon fiber:** Recycling carbon fiber materials sourced from the aerospace and other industries for use in our products. This thermoplastic carbon fiber-based material can be ground up, remelted back into thermoplastic resin and molded into new parts, while maintaining its recyclability.
- **Ocean-bound plastic:** Since 2017, we have used over 443,000 pounds of ocean-bound plastics in our packaging. We recently extended use of this material in select Latitude, Precision and OptiPlex products, as well as our EcoLoop™ line of carrying cases.
- **Post-consumer Recycled (PCR) Plastic:** We use PCR plastic made from a variety of sources, such as 5-gallon water cooler jugs and single use plastics across our product and packaging portfolio.

We also look for materials that have as little carbon footprint as possible in production, assembly or transportation. Our work with aluminum is a great example. Traditionally, aluminum has a high carbon footprint due in large part to the smelting process, which typically occurs in coal-powered facilities. To help reduce carbon footprint, our XPS 13 Plus chassis is made with aluminum produced with hydropower. This chassis offers a 70% reduction in carbon emissions versus a coal-powered chassis. We will extend this material to additional product lines in 2022.

Renewable materials we are using today:

- **Bioplastics made with tall oil:** A by-product of the paper-making process, tall oil³⁷ is mixed with other new and recycled materials for use in the lids of Latitude 5000 and Precision 3000 notebooks.
- **Bio-based rubber using castor oil:** A nonfood crop, castor oil³⁸ is used to create a rubber material for the bottom bumpers on new Latitude 5000/7000/9000 series laptops and in Precision 3000 series mobile workstations laptops.
- **Renewable packaging materials:** Recycled corrugate and paper, bamboo, and most recently, bagasse, a sugar cane byproduct, are materials we use in select packaging.



Dell Latitude 5000 series

The new Dell Latitude 5000 series products are made with the industry's most innovative use of sustainable materials in mainstream business laptops with recycled, reclaimed and renewable materials throughout the chassis.

List of sustainable materials:

- **Laptop lid** – 71% PCR plastic, reclaimed carbon fiber and bio-based plastic³⁹
- **Palm rest** – 35% PCR plastic
- **Inner frame** – 35% PCR plastic
- **Battery frame** – 50% PCR plastic
- **LCD cover frame** – 30% PCR plastic
- **AC adapter exterior** – 30% PCR plastic
- **Fan-housing** – 28% ocean-bound plastic
- **Laptop base** – 20% reclaimed carbon fiber
- **Rubber feet** – up to 39% bio-based rubber

Energy intensity

Reducing the energy intensity of our products while continuing to maximize performance is critical to support our customers with their business and climate goals.

For example, managing massive quantities of data requires significant compute power. We aim to provide maximum performance per watt, which allows us to consolidate infrastructure and reduce energy and cooling needs. This also makes it possible to shrink the physical and carbon footprint in the data center. Since 2013, we have reduced the energy intensity of our PowerEdge servers by 83%. Through continued innovation, what required six servers in 2013 can now be accomplished with one server today.

Thermals play a big role in energy because of the cooling needs required to manage the heat generated by the equipment. Our engineers redesigned the chassis of our latest PowerEdge servers for optimal thermal performance. This new layout places power supply units (PSUs) on opposite sides of the chassis to create efficient airflow channels to allow hot air to exit quickly. OpenManage Enterprise with Power Manager can also help customers gain insights into the power and thermal performance of equipment in their data center to maximize efficiency and reduce energy waste.

Eco labels

Eco-labeling standards drive sustainability by helping customers understand electronic products and the companies that make them. A few examples of the programs Dell participates in include:

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

Packaging innovation

How we package and ship products to our customers plays an important role in reducing our impact. Dell is a leader in responsible packaging, reducing waste and driving innovation to find recycled and renewable alternatives to protect our products while in transit. Once the packaging has fulfilled its purpose, it also needs to be simple to recycle. Our design and packaging engineers are constantly exploring and testing new materials and designs to deliver packaging made with 100% recycled or renewable material across our entire product portfolio by 2030.

Today 90.2%* of our packaging across our entire product portfolio is made from recycled or renewable materials. Closing the final 10.0% will

be our biggest challenge, but through continued innovation, testing and scaling, we will achieve our goal. Our packaging goal includes our PC business, displays, peripherals and enterprise products, including servers, storage and networking — each with unique packaging needs.

Our latest packaging innovations include:

- **100% recycled or renewable packaging:** This new packaging will be rolled out on the majority of laptops launching in the next year. Made with up to 95% recycled content and up to 22% renewable content in the form of recycled paper, bamboo and sugarcane (bagasse) fibers, in 2022 we introduced this packaging on new Latitude, Precision and XPS devices. We will continue to roll out this new packaging on the majority of laptops over the next year and beyond.⁴⁰ Accessing the device is also easier and faster with the introduction of a paper tape tab that replaces traditional plastic tape.
- **Multipack shipping:** In FY22, we announced our multipack offerings across select client and server products. This allows us to ship larger quantities of products in a single box. Without individual packaging, it is easier for commercial customers to deploy new devices with less waste. Multipack shipping saves space, materials and time, reducing our transportation footprint by maximizing devices per pallet.



*We commissioned an external third party to perform limited assurance procedures with respect to this metric. [View full details and data methodology.](#)



PRODUCT SUSTAINABILITY

Recycling and take back services

E-waste is one of the fastest-growing waste streams today. According to The Global E-waste Monitor 2020, only 17.4% of e-waste is formally documented as being collected and recycled. The report estimates that globally, e-waste will reach 74Mt by 2030, nearly double the amount since 2014. The environmental impacts alone are multifaceted and of great concern, but there are also financial implications. The same report shows that the amount of iron, copper, gold and other minerals discarded in e-waste is valued at over \$57 billion. Recovering those materials through proper recycling benefits the planet and our business. Our goal to reuse or recycle an equivalent product for every product we sell by 2030 can only be achieved if we make it easy for our customers to return their devices to us after use.

Some of our recently revamped commercial and consumer recycling services are key to making that possible.

- **Dell Trade In:** In FY22, we launched Dell Trade In in the U.S., enabling consumers to register eligible personal electronics — of any brand, in any condition — for instant credit. A completely free service, consumers simply enter the details of their eligible device online, receive a quote for the credit they will receive and drop it off at a FedEx location or drop box. As soon as the box is scanned, the value is instantly emailed to the customer in a virtual prepaid debit card that can be used to purchase Dell products and services. Dell Trade In is set to expand globally in FY23.

- **Asset Recovery Services (ARS):** Commercial customers represent the most significant opportunity to scale the take back of out-of-use and legacy equipment. We recently revitalized this offering, which now supports 36 countries across the globe. Through Asset Recovery Services, Dell manages the entire asset disposition process, regardless of the brand. We sanitize devices in strict alignment with the (National Institute of Standards and Technology) NIST SP-800-88-r1 standards and prioritize reuse to minimize waste and maximize value back to the customer. 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.

Evolving business models

In order to scale sustainability outcomes for our customers, we need to continue to evolve and drive innovative new business models.

A recent Forrester Consulting study, commissioned by Dell, evaluated how companies view and leverage as a service models to achieve their environmental, social and governance goals. Nearly half of respondents believe as a service models will provide clear sustainability benefits, such as:

- Reducing sustainability-related management costs (40.0%).
- Reducing overall e-waste generation (45.0%).
- Lowering the cost of managing end-of-life equipment (39.0%).
- Anticipated cost savings of more than 10.0% (65.0%).

APEX and as a service offerings(aaS):

Dell's as a service (aaS) offerings, including APEX, optimize customers' IT operations, which can also help them achieve their sustainable IT goals. Research shows that on average customers overprovision their data centers by 37.0%, which can lead to energy wasted to power and cool that equipment. APEX allows customers to maximize performance, while rightsizing their current IT environments, with the flexibility to grow and shrink as needed. As part of the as a service model, customers can also return their devices at the optimum time to be reused or recycled, extending life cycles for our products and helping ensure proper recovery and disposal of materials.

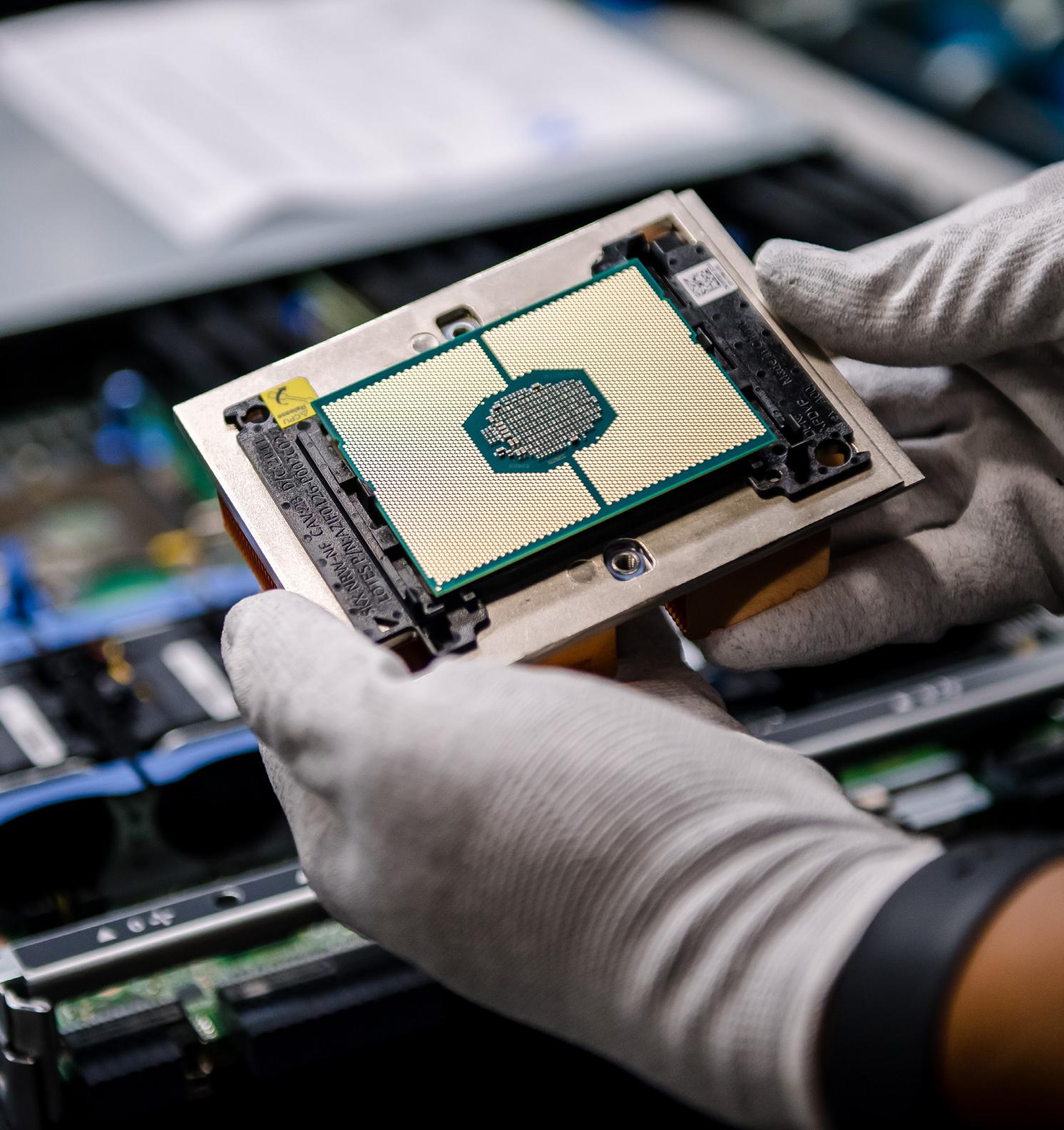


Environmental Protection Agency (EPA) recognition

In FY22 the EPA Sustainable Materials Management Awards recognized Dell with three awards:

- Cutting Edge Champion Award for our use of bio-based plastics.
- Sustained Excellence Award for our closed loop aluminum pilot.
- Gold Tier Recycling Award for our recycling services.

These awards mark eight consecutive years that Dell has been recognized by the EPA for its commitment to sustainable materials management and recycling electronics responsibly.



BETTERING THE LIVES OF PEOPLE IN OUR SUPPLY CHAIN

Responsible sourcing of minerals in our supply chain

Minerals are used in many Dell products. For example, gold is used in circuit boards, and tantalum is used in capacitors. Some of these minerals are mined in conflict-affected and high-risk areas. While we do not purchase minerals directly from mines, smelters or refiners, our expectations for responsible sourcing extend throughout our supply chain.

It is our goal to avoid purchasing materials containing minerals whose mining and sale are not aligned with our responsible sourcing commitments. These commitments are underscored in the [Dell Responsible Sourcing Policy](#). We also work in coordination with industry-wide groups such as the [Responsible Minerals Initiative](#) (RMI) to promote a common approach, tools and processes that support sourcing decisions that drive improved regulatory compliance.

Our responsible sourcing efforts focus on key “conflict minerals” (tin, tungsten, tantalum and gold — known as 3TG) and follow the recommendations established by the [Organisation for Economic Co-operation and Development Due Diligence Guidance](#) (OECD). These include risk assessment, assurance and transparent reporting. We also track other minerals of concern, including cobalt, which is used in lithium-ion batteries.

Emphasis is placed on the identification and assurance of smelters or refiners (SORs) used to process material supplied by mines or mineral agents. This includes an independent, third-party assessment of management systems and sourcing practices to validate conformance with the [Responsible Minerals Assurance Process](#) (RMAP). The sector-wide RMAP standards meet the requirements of the OECD Due Diligence Guidance, the [Regulation \(EU\) 2017/821 of the European Parliament and the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act](#). Dell annually files a [Conflict Minerals Disclosure report with the U.S. Securities and Exchange Commission](#).

To track conformance rates, we require suppliers who use 3TG and/or cobalt within their supply chain to complete the Conflict Minerals Reporting Template or the Cobalt Reporting Template to report on SORs within their own supply chains.

Given the many supply chain tiers involved and the size of smelting and refining operations, multiple suppliers will likely include some of the same SORs in their reporting. We collaborate with suppliers to develop their own capabilities and help them to remediate issues with SORs that are not participating in any third-party assurance program to achieve conformance or remove them from their supply chains. More information is available in our [Conflict Minerals Disclosure report](#).

Reducing our supply chain's impact on the planet

Dell is committed to protecting our planet and collaborating with stakeholders to address the impacts of climate change. We drive sustainability efforts through every aspect of our business and hold our suppliers to the same level of accountability.

Despite the ongoing challenges of the pandemic, we maintained our supply chain environmental programs and continued to see progress in the areas of greenhouse gas (GHG) emissions reduction, water stewardship and waste management through partnership with our suppliers.

To underscore the positive impact of our supply chain environmental practices, the [Institute of Public & Environmental Affairs](#) (IPE) in China ranked Dell as a [Green Supply Chain Corporate Information Transparency Index](#) (CITI) Master for 2020 and 2021. We are one of only two companies to earn this recognition.

To qualify as a CITI Master, a company must:

- Rank as a top performance brand in the annual CITI ranking.
- Maintain high performance standards in their supply chain environmental management.⁵⁴
- Show that all key suppliers track their environmental performance through data systems.



REDUCING OUR SUPPLY CHAIN'S IMPACT ON THE PLANET

Reducing greenhouse gas (GHG) emissions in our supply chain

Our carbon footprint includes emissions that our suppliers generate as they provide products or services to us. As part of our goal to achieve net zero emissions by 2050, we are partnering with our direct suppliers to reduce GHG emissions by 60% per unit revenue by 2030.⁵⁵ This target meets the Science Based Targets initiative (SBTi) criteria for ambitious value chain goals, meaning our near-term emissions reductions target is in line with current best practices. This goal is part of Dell's recently released strategy to achieve net zero GHG emissions by 2050. Our progress is detailed on [page 49](#) of this report.

To achieve this goal, we are building on work we started in 2017 to help suppliers reduce energy consumption, improve energy efficiency and source cleaner energy. Our supplier engagement strategy includes working with suppliers to set ambitious science-based targets. We collaborate with energy experts to evaluate our suppliers' data disclosed through the CDP and analyze direct feedback from internal surveys and on-site visits to develop training, consult on opportunities for improvement and share best practices. In FY22, we partnered with four key suppliers to help them identify factory energy usage, learn about renewable energy options and leverage industry tools for the development of science-based targets.

We continue to work with Dell teams around the globe to identify renewable energy options in areas where such sources are limited. As expected, this is proving to be a key challenge for our suppliers.

Although there is still much to be done, we are proud of the recognition we have received over the past year for progress we are making through collaboration with our suppliers:

- [CDP](#) Supplier Engagement Leader: Our efforts to cascade climate action across our supply chain helped Dell earn this ranking.
- [Climate Action Transparency Index](#) (CATI): Ranked No. 1 out of 662 companies across all industries and 48 information technology companies. Developed by IPE in 2021, this assessment focuses on brands' performance on corporate and value chain-level climate action performance.

Greenhouse gas emissions reductions, FY22

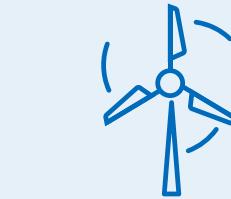


305,898 metric tons

of carbon dioxide equivalent of greenhouse gas emissions were avoided through energy consumption reduction projects at supplier factories



Amount of renewable energy used in Dell Technologies' supply chain



2,383,210,656 kilowatt-hours

"Dell Technologies is working with suppliers to reduce GHG emissions in a way that aims to drive positive climate action throughout its supply chain. We are pleased to recognize Dell at the top of our inaugural CATI ranking."

MA JUN
FOUNDER AND DIRECTOR, INSTITUTE OF PUBLIC & ENVIRONMENTAL AFFAIRS

Collaboration drives energy efficiency one supplier at a time

Not every supplier has experience in sustainability. That's why Dell's social and environmental responsibility (SER) specialists collaborate with our suppliers and industry organizations to drive environmental improvements. These are long-term engagements focused on achieving sustainable results.

In 2018, one of our printed circuit board (PCB) suppliers joined Dell's supply chain energy efficiency program. Energy management was new to this supplier. They did not have experience in developing an energy management system that would serve as the foundation for key activities, such as setting GHG emissions reduction targets and gaining alignment with internal stakeholders to meet those targets.

Our SER specialists consulted directly with the supplier to understand the current energy usage at factory sites and made recommendations for improvement. Dell's energy-saving suggestions included:

- Installing a heat recovery system for air compressors.
- Increasing cooling tower efficiency by replacing heat exchange filters.
- Updating workshop exposure machine lighting to LED and LED illuminant replacements.

These energy-saving efforts have paid off for the supplier and for the environment. In FY22, the supplier reported a 15.0% overall reduction in energy usage since we began our engagement with them. In addition, the supplier's factories received their [ISO 50001 certification](#), which is specifically targeted to support the development of energy management systems.



REDUCING OUR SUPPLY CHAIN'S IMPACT ON THE PLANET

Working with stakeholders to support water stewardship

Water stewardship — the responsible planning and management of resources⁵⁶ — is vital to a sustainable future. In addition to water use considerations around the manufacturing of our products, a number of our suppliers operate in areas of water stress.

Dell partners with suppliers in China who have water-intensive processes or operate factories located in water-stressed areas where at least 20% of renewable surface and groundwater is withdrawn annually and is insufficient to meet a region's needs.⁵⁷ For the past seven years, we have worked closely with these suppliers to analyze their water use, offer training, and develop and implement water management plans to achieve reductions in water use and wastewater discharge.

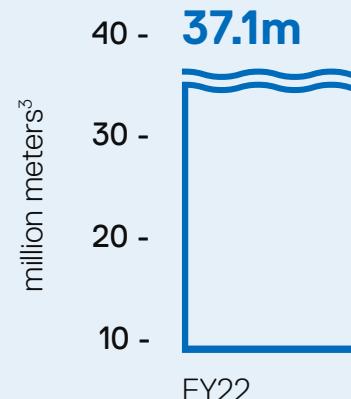
In FY22, 207 of our supplier factories implemented water management plans. Through this work, these suppliers saved 40.9 million cubic meters of fresh water and reduced the amount of wastewater they discharged by 37.1 million cubic meters.

In addition to considering our own supply chain's water use, we recognize the importance of understanding shared risk and engaging with stakeholders across the full catchment area. Reflective of this, factory water risk mitigation plans include engagement with stakeholders, such as municipal water providers, local community members and wastewater treatment plants.

Freshwater saved in FY22

 **40.9**
million meters³³

Water discharge reduced



REDUCING OUR SUPPLY CHAIN'S IMPACT ON THE PLANET

Addressing waste

Sustainable management of resources is critical to the long-term resiliency of our business and the overall health of the environment. As part of our efforts in this area, we collaborate with suppliers to identify alternatives to reduce or reuse waste that would otherwise be sent to landfills. In FY22, Dell helped 21 suppliers in China reduce the amount of waste disposed of in landfills through our Zero Waste Program. These supplier sites were chosen to support this program as key strategic partners to Dell.

As part of the Zero Waste Program, our social and environmental responsibility specialists provide expertise to help suppliers ensure safe disposal practices and reduce waste. Beyond following disposal standards for solid and hazardous waste, we help suppliers implement solutions that include reuse, recycling, composting, anaerobic digestion and incineration. Suppliers participating in these efforts diverted 93.1% of their solid waste from landfills, either through recycling or reuse, in FY22.

In addition to our Zero Waste Program, we expect our suppliers to align with our expectations for transparency about their environmental impacts by publishing sustainability reports in accordance with the [Global Reporting Initiative](#) (GRI). Last year, 95.9% of our direct material suppliers (by spend) reported sustainability initiatives in accordance with GRI standards. Based on this information, 67.6% of Dell's direct material suppliers (by spend) reported progress in reducing waste from their operations.

