An annual update on our
2020 Legacy of Good Plan

FY16 Corporate Social Responsibility Report

DELL

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Letter from Michael Dell

Last year, we paved the way for the future—ours, our customers' and our planet's.

We expanded our solutions portfolio to address the needs of a connected world that's fast becoming alive with intelligence and information. Through the power of digital transformation, we're helping our customers become more efficient, more effective and more sustainable.

Now, with our pending acquisition of EMC, we are poised to become the most relevant technology company in the digital revolution we are all experiencing—and yet that has only just begun.

At the center of these moves and many more are the core beliefs that the world is changing faster than we know, opportunity abounds for those who are ready and business as usual won't cut it in the months and years ahead.

The same beliefs also shape how we manage our operations, innovate responsible business practices and deliver on the 21 ambitious goals that comprise our Dell 2020 Legacy of Good Plan. It's a plan to put Dell technology and expertise to work where they can do the most good for people and the planet we share.

I am proud to say we've made terrific progress since our last report. We are setting the standard for our industry as the first and only IT company employing a UL-certified closed-loop recycled plastics supply chain. Today we use recycled plastics—5.6 million pounds of it since the program began—in 48 of our products globally. We also use reclaimed carbon fiber, another industry first, which prevented 170,000 pounds of materials from reaching the world's landfills last year alone.

We are equally committed to helping people thrive in the years ahead. Last year, our Youth Learning initiatives brought technology access and education to more than 415,000 underserved children around the world. A recent survey of our Youth Learning partners showed that roughly half of the children had never touched a computer before participating in one of our programs.

We entered our fifth year of partnership with the Translational Genomics Research Institute (TGen) in an effort to cure pediatric cancer and enable precision medicine. Enhancements to TGen's Dell-designed high-performance computing solution yielded 50 percent faster genome processing speeds. That meant TGen could nearly double the number of pediatric cancer patients they serve.

But perhaps my proudest FY16 highlight is the passion and power of our global team. Together, Dell employees volunteered a record 811,000 hours to the charities and causes they care about. Now that's impact!

We were honored to receive a number of prestigious awards including the 2015 Catalyst Award from the Green Electronics Council for our closed-loop manufacturing practices, and the EPA's SMM Electronics Challenge Gold Tier Award for our vision and leadership in e-waste management. Computer Business Review named Dell the Greenest Tech Company in the World, and the Ethisphere Institute listed us once again among the World's Most Ethical Companies.

We know the choices we make today determine tomorrow, and we are rethinking, reshaping and reimagining Dell to create the future we want for our customers, team members, communities and our world.

Michael Dell

Michael Dell
Chairman and CEO
Dell Inc.

Disclosure Regarding Forward Looking
Statements available on page 137

Letter from Trisa Thompson, VP Corporate Responsibility

2015 was a year for us to step back and take stock of where we were as a company on our Dell 2020 Legacy of Good Plan. Are the goals achievable? Are our goals still relevant? Are we driving innovation? Where are we in our progress toward our goals? How has the world changed since we set our goals?

Let's begin with the last question. Critically, the world came together for the first time to make a significant commitment to reducing the negative impact of climate change. COP21 in Paris was the first time, in this century, 196 countries committed to set a specific goal of keeping global temperature rise to well below 2 degrees Celsius. Meanwhile, the number of people living in extreme poverty around the world is likely to fall to less than 10 percent of the global population in 2015, according to World Bank, providing new evidence that the 25 year-sustained effort to reduce poverty is moving the world closer to ending poverty by 2030.

We also saw adoption of the UN Sustainable Development Goals (SDGs). There are 17 goals including, among other issues, ending poverty and hunger, promoting inclusive and sustainable employment for all, making cities more sustainable, and protecting oceans and forests.

The progress made on the world stage confirms for us that the goals we set forth in our 2020 Legacy of Good Plan are still relevant. What's more, they are driving innovation.

Consider our over-arching 2020 goal: for the good that will come from Dell technology to be 10 times what it takes to create and use it. The creation and use of technology accounts for approximately 2 percent of global emissions. To address this 2 percent, one of our goals is to reduce the energy intensity of our Dell product portfolio by 80 percent. So far, we've reduced the energy intensity across our portfolio by 42.8 percent.

But the real question is how can technology positively impact the other 98 percent?

Working with Sustainability and Health Initiative for NetPositive Enterprise (SHINE), BSR (Business for Social Responsibility), Forum for the Future, and other companies, we helped form The Net Positive Project. Together, we are working to measure how our companies' technologies can reduce global emissions while improving social issues.

We also committed to helping educate 3 million underserved youth directly and 10 million people indirectly to grow and thrive. Today, we are more than half way to our direct impact goal and 78 percent of the way to our indirect impact goal. This work ties directly to the SDG on education: *Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.*

Finally, we have a goal to use 50 million pounds of recycled content plastic in our products. Our team saw an opportunity with our e-waste recycling stream. We now reprocess plastic from recycled computers for use in a closed-loop system.

We are pleased with our progress, but we have more work to do. We hope our commitment to our communities, our people and the planet is evident to you in the pages that follow. And, we welcome your comments and thoughts.

Trisa Thompson
VP, Corporate Responsibility
Dell Inc.

Our commitment

At Dell, we are committed to putting our technology and expertise to work where it can do the most good for people and the planet.

Looking ahead

Living up to our commitment means taking real, measurable actions. Our 2020 Legacy of Good Plan outlines our strategies and sets forth a number of goals that help us track progress. We are proud of all that we've accomplished so far in working toward these goals.

This FY16 Corporate Social Responsibility Report summarizes our annual performance against our 2020 Plan. Combined with our annual Global Reporting Initiative (GRI) G4-based online index, it provides customers and other stakeholders with a picture of how Dell is delivering on our commitment and measuring up to the goals we've set. It also presents an opportunity to celebrate our successes and address our challenges as we make our journey to 2020.

2015
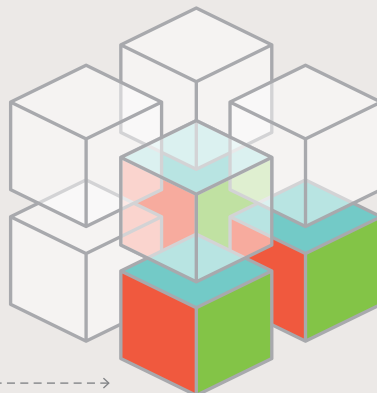
2020

2020 Framework

Action areas and our 2020 aspirations

We take action to benefit the environment, strengthen our communities, and engage our people in a diverse and inclusive workforce. Our nine aspirations qualitatively describe what we hope to achieve as part of our overall commitment.

Environment — **Communities** — **People**

Reduce the environmental impact of our operations

Enable customers to reduce the environmental impact of their IT infrastructure

Promote technology's role in addressing environmental challenges

Engage team members around the globe to use their passions in support of their communities

Use technology to improve the lives of young people

Develop leaders who are committed to helping our team members be their best and do their best work in service of our customers

Promote a culture where team members are encouraged to take risks and feel supported, valued and proud to be a part of Dell

Be a compelling destination for our team members to thrive, achieve career aspirations and have fun

Give team members a voice that influences leadership and shapes the direction of our company
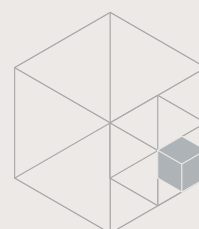
Our multifaceted approach

Within each of our corporate responsibility action areas—environment, communities and people—our broad aspirations are supported by one or more time-bound goals.
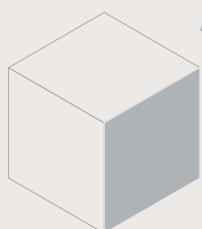
Action area → Aspiration → Goal

Goals index

How we measure our success

Our 21 ambitious goals identify how we will reach our aspirations.
All of these goals are bound by an end date of 2020.

10x20 Goal — A Legacy of Good

By 2020, the good that will come from our technology
will be 10x what it takes to create and use it

Environment

Reduce greenhouse
gas emissions from our
facilities and logistics
operations by 50%

Develop and maintain
sustainability initiatives in
100% of Dell-operated
buildings

Reduce our water
use in water-stressed
regions by 20%

Reduce the energy
intensity of our product
portfolio by 80%

Ensure 90% of waste
generated in Dell-operated
buildings is diverted
from landfills

Use 50 million pounds of
recycled-content plastic
and other sustainable
materials in our products

Goal language updated to reflect a broader scope

Communities

Engage 75% of team
members in community
service by 2020 and
provide 5 million
cumulative hours of service
to the communities in
which we live and work

Apply our expertise and
technology in underserved
communities to help
3 million youth directly
and support 10 million
people indirectly to
grow and thrive

People

Increase engagement
and drive inspirational
leadership on Dell's
strategies, priorities and
goals through Dell's
end-to-end Leadership
Development Programs

Engage 40% of our global
Dell team in employee
resource groups by 2020

Encourage eligible team
members to enroll in Dell
flexible work programs,
increasing global
participation to 50%

Increase university hiring
to a rate of 25% of all
external hiring

Be recognized as a best-in-
class Employer of Choice

Achieve 75% favorable
responses (or higher)
in team member
satisfaction globally as
measured through the
annual employee
satisfaction survey

Supply chain

Demonstrate 100% transparency of key issues within our supply
chain, working with suppliers to mitigate risks in those areas

Ensure 100% of product
packaging is sourced from
sustainable materials

Recover
2 billion pounds
of used electronics

Ensure 100% of
Dell packaging is either
recyclable or compostable

Identify and quantify
the environmental
benefits of IT-based
solutions*

Phase out environmentally
sensitive materials as viable
alternatives exist
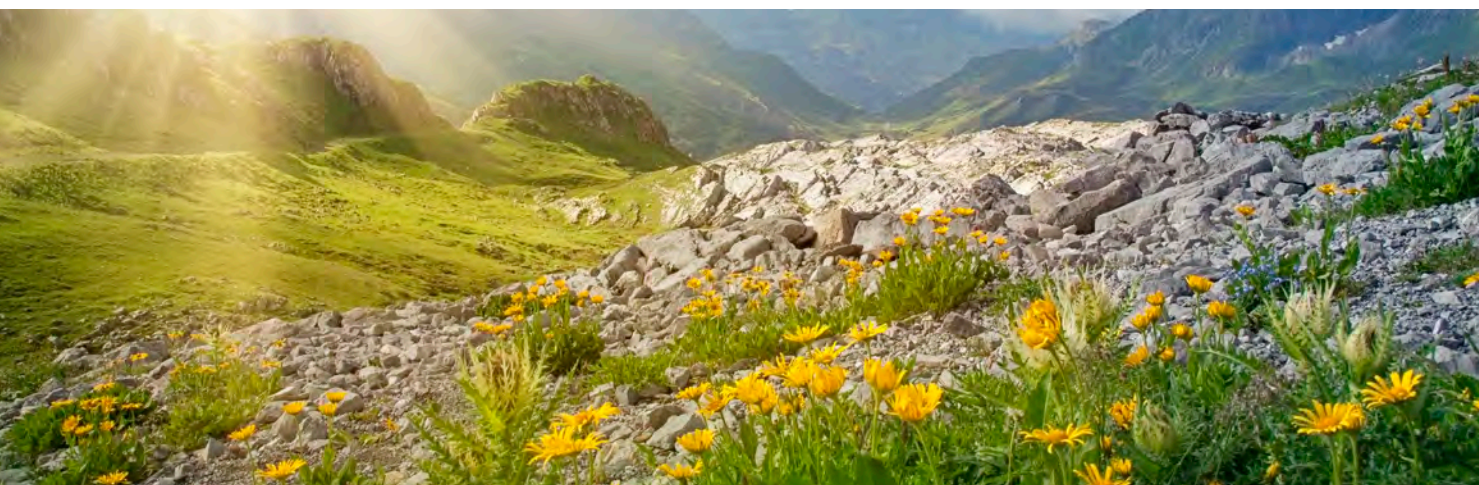
By 2020, the good that will come from our technology will be 10x what it takes to create and use it

Status: In FY16, the results of our first solutions measurement pilots enabled us to make steady progress toward developing models to measure this goal while we seek appropriate methodologies to measure and model social outcomes. This was also the second year we produced an estimated carbon footprint calculation that is inclusive of Dell's most material emissions impacts. Through the Net Positive Project, we intensified our collaboration with like-minded organizations around the world.

Background, challenges and opportunities

Many of the 2020 goals outlined in this report aim to reduce the environmental impact of Dell technology. We have set ambitious targets for reducing the amount of natural resources it takes to create and ship our products, the amount of materials used in our products and their packaging, the amount of energy it takes for customers to use our products, and the effects our products have on people and the planet at the end of their useful life.

While doing "less bad" is critical, Dell technology is also a force for doing more good, both socially and environmentally. Our 2020 goals devoted to efforts such as bringing technology to underserved youth only begin to touch upon this good. Every day, Dell customers use our technology solutions to do incredible things like powering smart cities, designing waste out of operations, educating students across the globe, and increasing the efficacy of medical devices.

Our 10x20 goal is designed to capture all the ways we and our customers use Dell technology—whether part of a goal or not—to reduce our collective footprint and increase our collective good. This concept of an organization putting more back into society and the environment than it takes is called Net Positive.

It's an extremely challenging concept to quantify, because giving back ("good") and taking ("footprint") are subjectively defined and involve so many different units of measurement. How do you develop a formula with inputs both for saving water and for saving lives?

Background, challenges and opportunities (continued)

How do you categorize a solution that drills for oil, but with less environmental impact than other methods? Answering these questions and developing concrete measurements is critical to building the credibility of Net Positive, so it becomes not just another marketing buzzword but rather a new and lasting way of doing business that helps pave the way toward a more restorative economy.

There are an increasing number of companies who are committed to becoming Net Positive and are wrestling with the same measurement challenges we face. In FY16, we deepened our collaboration with such companies through channels like the newly formed Net Positive Project. Because this is an unprecedented effort for us, teamwork throughout our value chain will be crucial to developing globally recognized methods and best practices. We believe this movement will expand and there is room for everyone—non-governmental organizations, suppliers, academic institutions, customers, other stakeholders and even competitors. The problems we will tackle cross industries, societies and regions, and none of us are large enough to solve them by ourselves.

A continuing challenge we face is the scalability of our findings. While we can extrapolate some results from the pilot studies we've already conducted to other solutions, we've realized these pilot studies alone will not enable us to understand the full impact of Dell's business. Our solutions are intricate and custom built to each customer's unique needs. The breadth of our customer base, along with the sheer number of ways in which our technology is used, will make it difficult for us to capture all the positive and negative impacts.

Additionally, as long as we are calculating impact based solely on carbon emissions, it is easy to aggregate our findings and arrive at a common and acceptable net impact. As we look at other environmental measures, such as our water footprint, the path to a common denominator becomes less clear. Adding in social dimensions will further complicate the equation.

As we solve the measurement challenges associated with this goal, we gain opportunities to act upon our newfound knowledge. We'll be able to understand where our technology provides the most benefit to people and the planet, and help customers choose and deploy their solutions accordingly.

Beyond the good we expect to see, we recognize Net Positive is a long-term business opportunity. Our customers, our employees and society generally want to see progress toward a better world and increasingly expect to see part of that progress delivered by the businesses they patronize. As an early adopter of this approach, we are better positioned to respond to their evolving value-driven choices. And as the world continues to invest in social and environmental solutions, we will be there.

Progress to goal

In FY16, we made steady progress toward our goal by continuing to form partnerships with like-minded organizations and bring disparate organizations together as a community. We also continued taking inventory of our entire value chain of solutions—Dell-developed solutions, solutions we've developed in tandem with our partners, and solutions customers have developed independently—while looking for opportunities to engage with customers on measurement.

We stayed on course working against our multi-year plan for reaching our 10x20 goal. This year we performed initial pilots, identified follow-ons, conducted our first interim water footprint analysis, initiated value-chain customer stakeholder engagements, and laid the foundation for developing measurement techniques for customers not tied to specific Dell solutions.

Mapping the 10x20 goal

Phase/Task	2014	2015	2016	2017	2018	2019	2020	2021
Initial pilots	●	●	●	●				
Identify and initiate follow-ons		●	●	●	●	●		
Value-chain customer stakeholder engagement		●	●					
Development of measurement techniques for customers not tied to specific solution			●	●	●	●		
Scale up non-solution-specific measurement					●	●	●	
Intermediate 10x20 report			●		●			
Preliminary final 10x20 report							●	
Final 10x20 report								●

Progress to goal (continued)

Measuring our footprint

There are two major components of what we need to measure for this goal: our footprint (the impact associated with everything that goes into creating and using our products) and the social and environmental benefit (the good) that is generated by using our technology. Thinking of our goal as a fraction, the good would be on the top (the numerator) and our footprint would be on the bottom (the denominator).

FY16 was the second year we reported a carbon footprint number. This year, we've expanded the scope to include more of the material categories of our Scope 3 emissions— the emissions resulting from the use of our products and the emissions generated by our suppliers to produce components and products for us.

The graphic on demonstrates the approximate size of our carbon footprint, which also includes Dell's Scope 1 and Scope 2.

As part of a revised look at our footprint, we started working with a third-party organization to examine our methodology for calculating the energy footprint of our products and the resultant expected emissions. This has led to more focused and accurate lifecycle assessments around carbon.

Similarly, we began evaluating how we can incorporate more supply chain emissions data in our footprint. We will need to overcome obstacles related to supplier data quality and availability.

We also began exploring how we can include water impacts in our footprint. While we do not yet have a full estimate of our water impact across our value chain (Dell operations, supply chain and customers), we have been engaging with an increasing number of suppliers through the CDP's Water Disclosure program (see) and in FY16 completed our first water-focused product analysis. Water is, and continues to be, a material area of impact for Dell. As such, we must get to a point where we can provide a full accounting of our water-related footprint.

Tracking our supply chain carbon and water footprint is challenging. While we provide aggregate numbers, we caution against reading too much into the actual figures. This year's calculations suggest a number of data accuracy and consistency issues. In addition, our model for estimating our share of our suppliers' emissions may not be the best approach for certain reports. While our current numbers should not be seen as actionable, we believe tracking these numbers is important and remain committed to improving our process.

Dell's estimated carbon footprint

Scope 1 emissions

Dell buildings and vehicles
38,694 MTCO2e

Scope 2 emissions

Purchased electricity
211,823 MTCO2e
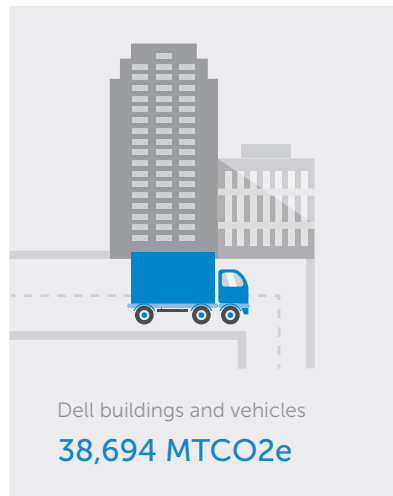
Dell's FY16 estimated carbon footprint

14,743,512 MTCO2e
(metric tons of CO2 equivalent)

Scope 3 emissions

Supply chain — purchased goods*
2,371,503 MTCO2e

Transportation and distribution
TBD

Business air travel
81,496 MTCO2e

Employee commuting
TBD

Use of sold goods**
12,040,000 MTCO2e

This illustration is not to scale nor does it represent the full picture—yet. For example, our accounting of Scope 3 (transportation and distribution as well as employee commuting) emissions is not complete. Additionally, this year's calculations of Scope 3 supply chain-purchased goods suggest data and consistency issues that mean our current numbers should not be seen as actionable. Tracking these numbers is important and we remain committed to improving our processes.

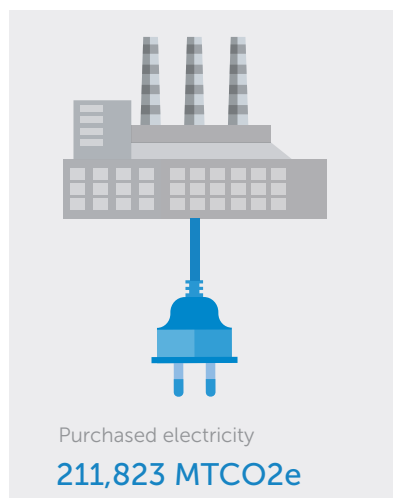*Calculated based on revenue-apportioned emissions from suppliers representing c. 90% of total procurement spend reported to Dell via CDP Supply Chain

**Based on U.S. average emissions factor identified by the U.S. EPA

Progress to goal (continued)

Completing initial pilots and identifying follow-ons

We will continue to refine how to define social and environmental good, but we must move forward. As outlined in our goal to measure the environmental benefits of IT solutions (see page 73), we worked on two pilot studies in FY16. One pilot, which was nearing completion at the end of FY16, focused on the benefits of Dell team members working remotely through our Connected Workplace programs.

The other pilot, which we completed in FY16 working with our partners at BSR's Center for Technology and Sustainability (CTS), focused on the potential environmental and economic impact of our customer Arizona State University's (ASU's) move toward more online instruction.

By studying the sustainability-related benefits of remote work, we are gaining insights that will be of benefit not only to Dell, but also to our customers and their employees as we help them design technology solutions that facilitate telecommuting. The Connected Workplace study results, along with statistics from the August 2015 Gallup poll data on remote working habits across U.S. companies, showed us that based on Dell's share of the U.S. server market, we helped our customers and their employees in the U.S. avoid approximately 617 million round-trip commutes and 6.1 million metric tons of carbon dioxide equivalent (CO_2e) in 2015. It would take more than 150 million tree saplings grown for 10 years to sequester that much carbon.[*]

While we will continue to search for other pilot opportunities in FY17, the next step in our roadmap is to identify and initiate follow-on studies that can help us test our models and extrapolate findings across multiple solutions. As a follow-on to the ASU pilot, we plan to work with ASU and the Harvard School of Public Health's Sustainability and Health Initiative for NetPositive Enterprise (SHINE) initiative to study Harvard Extension School's Distance Learning initiatives.

Engaging with others

In FY16, Dell became a founding member of the Net Positive Project (NPP), a new coalition that brings together three of the world's major Net Positive initiatives—Forum for the Future's Net Positive Group (NPG), BSR's CTS, and SHINE—to create an ambitious, global Net Positive vision with a rigorous, detailed roadmap for action. The NPP's members also include organizations committed to becoming Net Positive—such as AMD, AT&T, Dow-Dupont, Eaton, HP Enterprise and Pfetzer Vineyards—as well as nongovernmental organizations and academics eager to advance the movement worldwide. Forum for the Future, CTS, and SHINE have been doing groundbreaking work, and joining forces through the NPP will help us align our approaches, share our results and ensure Net Positive becomes a movement marked by credible methodologies, guidelines and principles.

The NPP's initial focus is developing a vision for what a successful Net Positive movement looks like. Its goals are to expand the number of companies that aspire to be Net Positive and to provide tools and guidance for those that have already set out on that path. Bringing together nongovernmental organizations, academic institutions, customers, suppliers, and even competitors through the NPP will enable us all to more quickly realize a truly restorative economy.

Based on an estimate of 128 million U.S. workers (per the 2014 Global Workplace Analytics study) averaging 2.3 work-from-home days per month (Gallup, August 2015) and 76.4 percent of workers using a personal vehicle alone (i.e., not using public transportation or carpooling). Emissions data based on average round-trip commute distance of 24.1 miles (U.S. DoT – 2009 National Household Travel Survey), with an average vehicle fuel efficiency of 21.7 miles per gallon (U.S. DoT) and a gasoline emissions factor of 8.89 kg of CO_2e per gallon of gas (per U.S. EPA). Tree equivalency from U.S. EPA's greenhouse gas equivalencies calculator.

Progress to goal (continued)

Developing measurement techniques outside of solutions

Our pilot studies have shown that extrapolating results across multiple Dell solutions is difficult because Dell's customer base is so large and diverse in its applications of our technology. Studying individual solutions will not give us enough timely data to calculate our 10x20 goal results by 2020. We will have to supplement this work with additional measurement approaches.

At the end of FY16, we began working with third-party consultants on a study of Dell customers' publicly reported emissions data and goals. The study's purpose is to determine if we can look at the historical data and future trends of downstream emissions to understand our current and potential impact. We have also initiated other research efforts to examine the positive outcomes from our business and technology. We look forward to reporting on these in our FY17 corporate social responsibility report.

Next steps

- Through the Net Positive Project, we will collaborate in FY17 with like-minded organizations to raise the worldwide profile of the Net Positive movement, share best practices and develop the tools and methodologies to measure Dell's progress. We will also engage with customers and stakeholders throughout our value chain to develop rigorous analytic and semantic approaches that clarify how we are doing good and what that good is.

- We will continue to identify opportunities for engaging with Dell customers on measurement, both through initial pilots and follow-on studies.

- Additionally, we will continue our development of measurement techniques for customers not tied to specific solutions. We expect to conduct a number of different studies studying multiple approaches. Some of the areas of greatest interest are in looking at valuation models for sustainability initiatives and a deeper understanding of the connection between the United Nations' Sustainable Development Goals and IT.

- We will expand our footprint measurement to include more supply chain-related emissions data as well as water impact throughout our value chain (Dell operations, supply chain and customers).

- We expect to begin work on measuring social outcomes (and understanding our social footprint) in FY17.

- We will publish our first intermediate report of progress toward our 10x20 goal in FY17.

University of Florida

By helping the University of Florida to grow the speed and capacity of their HiPerGator supercomputer cluster, high-performance computing and leading-edge research at the university is faster and better. The upgrade more than doubles the number of cores, enabling researchers to perform faster simulations on everything from sequencing beetle DNA to modeling pediatric cancer treatments—all work For the Gator Good.

Learn more ›

Powering smart transportation in China's Fujian Province

Vehicle ownership is rising rapidly in China, with more than 150 million of the nation's residents owning a car in 2014. This brings new challenges, like traffic congestion, accidents and pollution that significantly affect the environment and quality of life in Chinese cities.

Some cities have tried to ease congestion by restricting the purchase and use of motor vehicles. In Fujian Province, the government is trying a different approach by implementing a technology-driven, Smart City Transportation strategy. Understanding the problems is the first step. For that, officials have turned to Fujian University of Technology and the Fujian Traffic Information and Communication Center.

Fujian University of Technology expanded a Dell-developed solution to mine and analyze real-time data on local road usage, and deliver it to residents and government offices. Engineers have equipped more than 120,000 public vehicles, such as buses and taxis, with GPS devices. Each vehicle uploads its position and speed every 30 seconds. This data, along with video-monitoring data from major traffic lights, is fed to an end-to-end Dell cloud platform that processes the massive amounts of data into useful information such as a congestion index analysis and travel route planning.

Residents can check current travel conditions and plan their commutes by visiting a website or accessing an application on their smart phones. One of the benefits is reduced congestion, which reduces air pollution. Additionally, government officials are using the data to understand how roads are being used in order to shape transportation policy and infrastructure design for the better, leading to fewer traffic problems and a more efficient transportation system.

Dell worked with Fujian University of Technology to ensure the technology platform will deliver easily measurable and replicable results so multiple cities can make informed decisions as they address their most pressing traffic-related issues.

"The cloud platform is easy to manage and we feel confident about the technical assistance from Dell ProSupport Plus. We look to scale the platform and connect it to other systems to support similar Smart City schemes in the future," said Professor Zou Fumin, vice dean of Fujian University of Technology's College of Information Science and Engineering.

Demonstrate 100% transparency on key issues within our supply chain, working with suppliers to mitigate risks in those areas

Status: In FY16, we continued to foster social and environmental responsibility (SER) in our supply chain. Dell requires production suppliers (representing 95 percent of total production spend) and select services suppliers to undergo Electronic Industry Citizenship Coalition (EICC)-certified third-party audits. Suppliers must undergo a full audit once every two years and then conduct as many follow-up audits as necessary to close all major and priority findings. In FY16, 247 of our supplier facilities in high-risk areas underwent their first audit in that two-year cycle, 105 had follow-up audits, and four of our six Dell manufacturing facilities underwent audits. The 352 audits conducted set a new record for Dell's supply chain, and represents a significant increase in resources dedicated to SER.

Background, challenges and opportunities

Customers are seeking more details about the supply chain systems behind the products they purchase, from clothing to computers. They want to know how products are made, who's making them, how those workers are treated, and how the product's manufacturing affects the environment. Complete transparency is becoming the standard for responsible global companies. At Dell, we welcome the increased engagement that results from customer inquiries. We are working diligently to expand the level of insight into our manufacturing processes that we can provide Dell customers through our website, sales channels, and customer engagement initiatives. These discussions are leading us to examine ways to set meaningful social and environmental goals for our supply chain.

Dell's global supply chain is a highly complex, diverse network of interconnected companies. Obtaining and sharing information about Tier 1 suppliers (those with whom we contract directly) is relatively straightforward. Expanding transparency of the sub-tiers of our supply chain is something we aspire to, but we face some challenges. Since we lack contractual leverage with sub-tier suppliers, we are limited in the kinds of social and environmental performance data we can obtain or share publicly. In some cases, we face competing demands from sub-tier suppliers' other customers or we lack visibility into their supply chains.

Background, challenges and opportunities (continued)

Most significantly, we have found that our sub-tier suppliers' data collection and social and environmental management systems vary greatly in their levels of maturity. This presents an opportunity for us to build supplier capabilities through training on best practices and sharing technology solutions.

Maintaining open, honest and clear communication with our stakeholders is one part of our goal; working with suppliers to increase accountability and drive continuous improvement is the other. Our increased auditing, along with the Electronic Industry Citizenship Coalition's (EICC) launch of a revised Code of Conduct that focuses more closely on areas of concern, caused a significant increase in audit findings. This is both a challenge and an opportunity, as more and stricter audits will invariably uncover more issues. We worked closely with suppliers to address findings through corrective action plans, which opened positive, one-on-one dialogue and helped us tailor capability-building programs to meet their needs.

While we are pleased with the progress our new supplier improvement programs have already achieved, our internal efforts are affected by outside forces. The labor market in China has been affected by new limitations on the use of contingent labor, which many companies use to manage sales volume fluctuations.

We have found some suppliers respond to labor market challenges by extending workers' hours or hiring incompletely vetted contingency workers. Additionally, many workers want the opportunity to earn higher wage rates through overtime work. We make clear to our suppliers that all overtime work must be 100 percent voluntary and the maximum allowable work week of 60 hours must be observed. However, our audits continue to show that allowing working hours in excess of the 60-hour limit is the most frequent finding among our suppliers' employment practices.

We are addressing this issue with a three-pronged approach: through direct engagement with our suppliers to address work volume challenges, through industry collaboration with our peers and the EICC, and through multiple initiatives designed to dialogue directly with workers about their rights and quality of life. We have also expanded our weekly working hours monitoring to include 119 facilities covering more than 170,000 workers. We can't solve this issue on a factory-by-factory basis, and we can't do it alone. Our supply chain overlaps significantly with that of our industry peers, so open communication is key to addressing shared challenges. Our suppliers work within many cultural and regulatory environments, but industry can help set international standards and shared expectations.

Progress to goal

In FY16, we continued to focus on three targets we consider critical to demonstrating transparency of key issues within Dell's supply chain:

• Auditing 100 percent of high-risk production suppliers and select services suppliers

• Ensuring that Dell's Tier 1 production and select service suppliers publish a GRI-based sustainability report

• Requiring a five-year responsible water risk mitigation plan from production and select services suppliers

Our measurement in these three areas helped us understand Dell suppliers' key issues and their year-over-year performance trends.

To raise awareness of these requirements and Dell's social and environmental responsibility (SER) standards, we publish Dell policies, such as our Supplier Principles, Code of Conduct, and Vulnerable Worker Policy, on our website and include them in our supplier contracts.

We also hold supplier orientations for new suppliers to familiarize them with the EICC Code and Dell SER policies. Additionally, we require new suppliers to complete a Social and Environmental Responsibility Risk Assessment before they can be qualified as a Dell supplier. This tool enables us to identify, prioritize and mitigate risks along our supply chain. In FY16, we asked more than 500 suppliers to return signed acknowledgement of our SER policies.

Enhancing our audit program

Audits are an important tool in examining suppliers' adherence to expectations. Our SER program, which covers all Tier 1 and sub-tier production and services suppliers critical to our supply chain, requires 100 percent of high-risk suppliers in the top 95 percent of our production spend to undergo EICC-certified third-party audits. This exceeds EICC membership requirements. The suppliers must undergo a full audit once every two years and conduct as many follow-ups as necessary to close all major and priority findings.

Aggregate findings from supplier audits (FY16)

Audit section	EICC audit findings	Number of facilities with a finding of non-compliance	Facilities in compliance*
Labor & Human rights	Young worker protections	25	91%
	Freedom of association	40	86%
	Freely chosen employment protections	38	87%
	Humane treatment	4	99%
	Non-discrimination	61	79%
	Proper wages and benefits	108	63%
	Working hours and rest days	173	40%
Health & Safety	Emergency preparedness	115	60%
	Food, sanitation and housing	57	80%
	Health and safety communication	9	97%
	Industrial hygiene	76	74%
	Machine safeguarding	25	91%
	Occupational injury and illness prevention	82	72%
	Occupational safety	105	64%
	Physically demanding work	30	90%
Environment	Air emissions	23	92%
	Energy consumption and GHG emissions	27	91%
	Environmental permits and reporting	46	84%
	Hazardous substances	75	74%
	Materials restrictions	1	100%
	Pollution prevention and resource reduction	26	91%
	Storm water management	28	90%
	Wastewater and solid waste	21	93%
Ethics	Business integrity	16	94%
	Disclosure of information	4	99%
	Fair business, advertising and competition	23	92%
	Intellectual property	7	98%
	No improper advantage	14	95%
	Privacy	9	97%
	Protection of identity and non-retaliation	15	95%
	Responsible sourcing of minerals	5	98%
Management systems	Audits and assessments	25	91%
	Communication	23	92%
	Company commitment	7	98%
	Corrective action process	14	95%
	Documentation and records	10	97%
	Improvement objectives	25	91%
	Legal and customer requirements	33	89%
	Management accountability and responsibility	29	90%
	Risk assessment and risk management	34	88%
	Supplier responsibility	66	77%
	Training	18	94%
	Worker feedback and participation	4	99%

* Facilities with a major or priority finding in an initial or followup audit are deemed to be non-compliant. All suppliers must implement corrective action plans to come into compliance with the EICC Code of Conduct.

Progress to goal (continued)

Actions like this have helped Dell improve its ranking on Institute of Public and Environmental Affairs (IPE) Green Choice Alliance's Corporate Information Transparency Index significantly, going from #22 among technology companies in FY15 to #8 in FY16 and #2 as of publication (June 2016).

Third-party auditors conducted 352 EICC-certified audits covering all high-risk Tier 1 production suppliers and additional sub-tier and small-spend suppliers we perceived to be at high risk around key issues. There were 247 suppliers that underwent initial audits in a two-year cycle, 105 suppliers had follow-up audits, and four Dell-owned manufacturing facilities were audited. The 247 initial audits represent a 72 percent increase over our FY15 total of 144 facilities audited. Roughly half of all suppliers audited were Tier 1 suppliers and half were sub-tier suppliers.

EICC-certified third-party audits

Audit type	FY15	FY16	Change
Initial audits	144	247	+ 72%
Follow-up audits	43	105	+ 144%
Total audits	**187**	**352**	**+ 88%**

For context, there are approximately 50 suppliers that make up the vast majority (approximately 95 percent) of our total production spend. Those suppliers have more than 200 facilities. Our focus with audits is on high-risk areas, so we do audits beyond this 95 percent threshold and we include sub-tier manufacturers, covering nearly every site located in a high-risk area. However, we may not audit every facility a supplier has, given that some of our production suppliers have manufacturing in geographic areas with significantly lower risks.

All audits were conducted by EICC-certified third parties to ensure the independence of results and suppliers' adherence to the EICC's new 5.0 Code of Conduct. The new Code of Conduct supports stricter social and environmental standards than ever before. More stringent standards, combined with the 72 percent increase in initial audits, led to a significant increase in audit findings.

While these changes make it difficult to make a parallel comparison of our FY16 findings and FY15 findings, we welcome them because they identify areas for improvement and allow us to have consistent conversations about our expectations and where we are hoping to take the industry.

Addressing labor issues in the supply chain

According to International Labour Organization statistics, approximately 21 million people worldwide are victims of forced labor, which can include deceptive or coercive recruitment, bonded labor, and exploitative work. Unfortunately, the electronics industry is not immune to the issue of forced labor. In FY16, all Dell production suppliers and select service suppliers agreed in writing to abide by our new Vulnerable Worker Policy, which outlines our expectations for labor conditions and explicitly bans the kinds of behaviors that may indicate a risk of forced labor or child labor, such as charging recruitment fees, holding identification documents, or failing to provide return transportation for foreign migrant workers. This new policy goes beyond the Federal Acquisition Regulation (FAR) requirements on human trafficking.

While the policy applies to all workers in Dell's supply chain, regardless of tier, it specifically focuses on protecting foreign migrant workers, dispatch workers and young workers. This policy complements our existing Human Rights and Labor Policy. Dell also published an updated statement documenting our commitment to combat human trafficking and modern slavery.

To hold suppliers accountable to our Vulnerable Workers Policy, our SER Executive Review Board conducts extensive due diligence on all audit findings that could possibly indicate a risk of child labor or forced labor, such as charging recruitment fees or holding identity documents. The executive review process has served to increase the knowledge and understanding of SER issues throughout Dell's global operations organization.

Working hours are another concern related to our supply chain's labor force. Dell's FY16 aggregate audit findings (see table on page 17) show that excessive working hours (greater than 5 percent of the workforce working over the 60 hours per week maximum stipulated by the EICC Code) continues to be our most frequent finding. This is a complex issue that requires sensitivity to workers' health and safety, quality of life, wage earnings, and the use of recruiting mechanisms and labor agents.

We have an internal monitoring program that tracks working hours and rest days for workers (as well as their use of student workers, dispatch workers, young workers— defined as under 18—and migrant workers) at our largest and most strategic production suppliers that began in FY15 with 20 facilities.

Progress to goal (continued)

In FY16, we added more than 100 additional suppliers and as a result we have found that approximately 90 percent of the more than 170,000 workers we monitor are in compliance with the maximum 60-hour week (a facility gets an EICC finding during their audit if they are below 95 percent compliance—which is why we show only 40 percent compliance on the aggregate audit findings page). We now share this data from our monitoring on our public website and Dell leaders review this information on a weekly basis, incorporating it into quarterly business reviews with suppliers.

Addressing customer concerns, providing more information

In addition to increasing our audit coverage, in FY16 we also worked collaboratively with customers and nongovernmental organizations to discuss areas of concern in electronics manufacturing. We invited our most engaged customers to tour Dell and supplier manufacturing facilities, opening a dialogue on industry challenges such as excessive working hours, health and safety standards, and worker living conditions.

To further increase transparency on key issues within Dell's supply chain, we enhanced the area of our public website devoted to our supply chain's social and environmental performance data. This enables stakeholders to easily find:

• A map of our supply chain's main locations and listing of key suppliers

• Aggregate findings from supplier audits

• Updates on suppliers' compliance with industry working hour standards

• An overview of our corrective action plan (CAP) management process

• Information about suppliers' carbon emissions data and water risk mitigation plans

• Relevant commitments, policies and actions

Providing greater transparency is an important issue that we have communicated repeatedly through executive communications with our supply chain. In addition to setting that expectation, we have amended some of our master relationship agreements with suppliers to formalize the expectation that transparency in our supply chain is a top priority and that we will share audit results with customers as appropriate. Our contracts with suppliers contain confidentiality agreements that shield workers' personal information, intellectual property, and trade secrets—and these agreements also have limited the level of detail we can share publicly about our suppliers' performance in the past. We pledge to continue expanding the SER performance data we make available to the public.

We also take additional action and disclose additional information directly when requested. For example, in May 2015 a Swedish media company aired a story alleging poor working conditions at a company in Dell's supply chain. We immediately responded to the allegations with an out-of-cycle, third-party audit of the facility, and worked closely with the supplier to address the findings. Our customers, partners and the media requested we clearly share our SER commitment and our governance structure for ensuring compliance with guiding principles and regulations. We provided our major customers and partners with extensive materials documenting our supply chain audit and due diligence procedures, as well as our tactics for addressing the story's specific allegations.

Siemens PLM Software

Siemens PLM Software's custom-designed cluster of Dell PowerEdge™ C8220 servers, running a Hadoop-based solution (from Cloudera, a Dell partner), helps its customers search and analyze billions of product data records in seconds, quickly identifying potential risks and delivering a core set of shared data. This greater visibility into supply chain data also helps Siemens PLM Software and its customers spend more time resolving issues and less time identifying them.

Learn more ›

Progress to goal (continued)

To further demonstrate our commitment to transparency, we invited Dell customers to attend two supply chain tours in China. Attendees found the visits so valuable that we have scheduled additional supply chain tours in FY17. Overall, this open communication significantly strengthened our relationship with customers and partners.

Driving continuous improvement

In FY16, we made significant investments in driving social and environmental accountability throughout our supply chain, nearly doubling the size of Dell's SER team and launching an SER Champions team. The SER Champions team is composed of procurement category managers from across Dell who undergo extensive training on SER best practices and supplier engagement. This has effectively quadrupled the number of people we have working on building supplier capabilities and closing open audit findings.

As a result, we accelerated our time to closure for audit findings, even as findings increased significantly due to our 72 percent increase in auditing and adherence to the EICC's new Code of Conduct 5.0 requirements. When suppliers do not make adequate progress in closing EICC audit findings and don't demonstrate a willingness to partner with us in building SER capabilities, we will terminate the relationship. In recent years we have terminated four supplier relationships due to poor SER performance.

In FY16, we established the foundation of an industry-leading supplier capability-building program, and as a result we will be able to increase our supplier trainings by 200 percent in FY17. That work began this year. We began building a supplier network that enables suppliers to share best practices, and we trained more than 180 suppliers by the end of FY16. We are also encouraging more than 100 suppliers to take trainings through the EICC e-Learning Academy. And we launched new programs to improve suppliers' adherence to our standards for working hours, vulnerable workers and environmental health and safety.

We implemented a program to help selected suppliers develop expertise in environmental, health and safety issues. To proactively manage environmental risks, in FY16 we enhanced audit protocols around environmental issues and developed a new, streamlined rating system. We used the new criteria to conduct on-site assessments of 21 suppliers with high environmental impact processes. We will also require these suppliers to provide risk mitigation plans.

Working with suppliers and industry peers to foster supplier self-accountability

Building Dell suppliers' abilities to manage their own workplace issues and comply with our SER standards is key to building a more responsible supply chain. Programs like our weekly working hours monitoring help in this regard, as the suppliers know they are reporting to us and want to demonstrate how their labor management practices have changed.

We also conduct quarterly business reviews and hold our critical Tier 1 suppliers accountable for the SER performance of some of our sub-tier suppliers that they manage. How they manage those suppliers is reflected in their quarterly scorecards.

Working together is also critically important. We offer training to help suppliers develop expertise in issues related to labor and the environment so they can implement best practices in their facilities.

For example, we engaged with the Institute of Public and Environmental Affairs (IPE) to help our suppliers improve environmental capabilities and meet important global standards for reducing pollution. IPE maintains a database of companies that have violated air and water pollution standards in China. We cross-referenced our first tier and sub-tier production supplier lists with IPE's database to identify 28 supplier facilities that have environmental violations. We then partnered with IPE and those suppliers to remediate their violations.

Sometimes, the best way to improve practices is to work with others across our industry, using shared tools and common language.

For example, we are part of the EICC's Vulnerable Worker working group. Our Vulnerable Worker Policy requires that all Dell suppliers (Tier 1 and sub-tier) that host student interns must conduct rigorous due diligence of their educational partners. We used the EICC's student worker toolkit to educate our suppliers on industry-accepted practices for hiring student workers. We greatly increased our oversight of suppliers' student worker employment in FY16. We checked that the percentage of students in any facility does not exceed our limit of 20 percent. We also closely monitored student working hours weekly and made sure internships were safe, relevant to the student's educational objectives, and completely voluntary.

Timeline of Dell's actions around conflict minerals

2015
- Launched a revised Conflict Minerals Reporting Template (v4.01b) and now updating reporting monthly.
- Strengthened our due diligence process to align with OECD guidelines.
- Published conflict minerals policy.
- Achieved 99 percent completion of reporting within Dell's supply chain.

2014
- The European Union (EU) released a proposed regulation on conflict minerals.
- Dell continues to support legislative environments that require companies to source responsibly.

2013
- Dell became a private company, no longer subject to the Dodd-Frank requirement.
- Although, Dell continues to trace and report on its supply chain and support the industry in the collective effort to responsibly source minerals.

2012
- The US government released the final rule on Dodd-Frank Consumer Protection Act, including a section on conflict minerals.

2011
- The EICC launched the world's first conflict-free smelter (CFS) program and list of compliant tantalum smelters.
- Joined the Public-Private Alliance on Conflict Minerals.
- Commodity managers were given conflict minerals training.
- Suppliers were given conflict minerals webinars.
- Tier 1 and 2 suppliers were given in-person training on conflict minerals.

2010
- Dell participated in a committee to inform recommendations of the Frank-Dodd bill.
- Dell joined a multi-stakeholder group to drive new legislation and more.
- Dell hosted an international multi-stakeholder event to discuss conflict minerals, tied to the Corporate Responsibility Officers (CRO) Summit.

2009
- We invited our competitors to a multi-industry forum to discuss next actions.
- Dell helped to advance a conflict-free smelter program through a working session with the EICC and the Global e-Sustainability Initiative (GeSI).

Progress to goal (continued)

In FY16, Dell and Apple continued to partner with the EICC and Stanford University's Rural Education Action Program (REAP), which assesses the quality of vocational schools in China—the country's main source of student workers. Through this program, we evaluated the educational performance and internship quality of over 12,000 students at more than 130 vocational schools in China.

Publishing GRI reports

Dell's standard for sustainability reporting is the Global Reporting Initiative (GRI) G4, an internationally recognized framework for identifying what is included in a robust sustainability report. In FY16, 94 of our Tier 1 production suppliers published a GRI-based report.

We share links to each supplier's report and sustainability website (if available) on Dell's website. This helps our customers and stakeholders achieve more insight into our supply chain's impacts, strengths and improvement areas. It also provides our suppliers an opportunity to communicate their full SER efforts to a broader audience.

Encouraging responsible use of natural resources

The SER standards to which we hold our suppliers include criteria for carbon, water and waste. We educate suppliers on these standards through orientations and trainings. Using information disclosed via CDP, we have identified which Dell suppliers have the highest levels of energy and water intensity, and we have begun the process of defining how to work with these suppliers to lower greenhouse gas emissions and water consumption in our supply chain.

While we focus on suppliers' resource consumption primarily to reduce our supply chain's environmental footprint, we also do it to mitigate risks—particularly those associated with water usage. Risks such as drought, flooding, disasters and lack of clean water can disrupt suppliers' abilities to deliver goods and services and to care for their employees. In FY16, we continued working with Dell suppliers to mitigate these risks, with the ultimate goal of requiring all production and select service suppliers to have a water risk mitigation plan in place by 2020.

In FY15 and FY16, we invited 83 suppliers to report their water usage to CDP's water disclosure program as a first step toward characterizing our supply chain water footprint. We used the CDP data and our own hot-spot mapping to identify our 50 suppliers with the highest water usage and/or risk of natural disaster. By the end of FY16, all 50 published a five-year water risk mitigation plan.

We trained the suppliers on how to create a plan, which we require to include a water policy, water management targets, data collection plans, monitoring and evaluation plans, and information disclosure. We also reviewed and provided feedback to all suppliers on their water risk mitigation plans, rejecting two plans that did not meet our requirements.

In FY17, we plan to help an additional 50 suppliers create a plan and will monitor the suppliers who submitted plans this year, measuring their progress toward goals.

Progress to goal (continued)

Reducing Volatile Organic Compounds

Volatile organic compounds (VOCs) are organic compounds (meaning they contain carbon) that easily become vapors or gases. VOCs include a variety of chemicals, some of which may have short-and long-term adverse health effects.

While there are many environmental exposures to VOCs in the outside world, workers in Dell's supply chain encounter VOCs when using paints and solvents, and we have many measures in place—such as administrative controls, personal protective equipment (PPE), and engineering solutions—to manage their exposure and protect their health. Our work begins with designing low-VOC finishes for Dell products. We are able to further reduce VOCs by improving paint utilization and by switching from paints and thick coatings to monocoatings, films and even textures that need no painting.

According to our analysis of Dell products over several platform generations, we reduced our VOC use by 25 percent between FY14 and FY16. We are also working with third-party laboratories such as UL Environment to benchmark Dell's current VOC emissions tracking methodology and develop recommendations to ensure our approach continues to align with best practices in the industry.

Cultivating a conflict-free supply chain

To ensure the materials used in our products are sourced responsibly, we track the use of minerals known as 3TG (tin, tungsten, tantalum and gold), also referred to as conflict minerals. In FY16, Dell was not required to publicly report on conflict minerals under the Dodd-Frank Act, but we did report on conflict minerals to our customers. Dell's policy on Conflict Minerals can be found here. (Also see Conflict Minerals Timeline on page 21).

We continued working with our suppliers toward full and complete disclosure of their smelter lists. We publish these lists on our website so customers can compare them to the list of smelters verified by the EICC's Conflict-Free Smelter Program. In FY16, approximately 95 percent of Dell production suppliers submitted supply chain usage reports, though not all reports were complete. The main obstacles to achieving a greater level of completion are getting suppliers to provide disclosures at the product level (versus simple facility-level assurances) and smelter verification. These are both cross-industry challenges for all governments and businesses trying to report minerals traceability.

To overcome these challenges, in FY16 we brought in a third-party reporting tool, which leverages both the EICC Conflict-Free Smelter Program and other international initiatives to identify certified smelters. By the end of FY16, our data was 99 percent complete.

Additionally, we continued to actively monitor the evolving regulatory landscape around the world—especially emerging requirements in the European Union—on topics related to conflict minerals. While not considered a conflict area, we also worked with other technology companies, in partnership with IDH's Tin Working Group (TWG), to improve the economic, social and environmental sustainability of the Indonesian tin industry.

Progress to goal (continued)

Supporting diverse suppliers

Dell strives to cultivate a supply chain that is as diverse as the customers and the communities we serve. Working with companies of all different sizes and backgrounds brings the innovation and range of perspective we need to compete in a dynamic global economy.

Since 2008, Dell has belonged to the Billion Dollar Roundtable, which encourages corporate entities to continue growing their supplier diversity programs by increasing commitment and spending levels each year. In FY16, we spent more than $4.9 billion with diverse suppliers, compared to our FY15 spend of $4.1 billion.

In FY16, we continued to expand our supplier diversity program, adding 49 certified diverse suppliers outside the U.S. We also paired Dell leaders with 25 diverse suppliers for mentoring relationships to help them grow and expand their businesses.

Supplier Diversity results are reviewed biannually at the Global Diversity Council (chaired by Michael Dell). All procurement leaders have diverse spend goals, which are then cascaded throughout the entire procurement organization. Supplier Diversity Champions meet monthly with the diversity team to discuss procurement sourcing strategies, review potential new suppliers' capabilities, and discuss best practices around supplier development.

Dell's supplier diversity program was ranked #2 in the U.S. by Diversity Inc in FY16. We were named a top corporation for women-owned businesses by the Women's Business Enterprise National Council for the seventh year in a row. We were also honored with a 2015 Top Performer Award by the National Minority Supplier Development Council.

Next steps

- In FY17, we will incorporate the lessons we learned from the SER Executive Review Board into Dell's supplier training and capability building programs. We also plan to increase supplier training opportunities, training 540 supplier representatives—up from 373 participants in FY16. Programs will include the EICC e-learnings, six rounds of supplier networking, quarterly supplier orientations, and capability building. FY17 trainings also will be specifically designed to address audit findings, targeting relevant suppliers as participants.

- We will pursue five-year water risk mitigation plans from 50 additional Dell suppliers. We will monitor the 50 suppliers who submitted plans in FY16, tracking their progress against their stated goals.

- To further improve Dell's ranking in the IPE Green Choice Alliance's Corporate Information Transparency Index, we will assist our suppliers in resolving environmental violations and update our internal scorecards to reflect IPE engagement.

- We plan to conduct a detailed analysis of our performance against the UN Guiding Principles on Business and Human Rights (UNGP) and begin the process of reporting our progress against the UNGP reporting framework.

- We will continue to facilitate further improvements to protect workers from VOCs, investigating enhanced exhaust treatment control systems and further implementing activated carbon solutions.

- If Dell's merger with EMC is successfully completed as expected, we will align and integrate our companies' SER programs and management practices.

Elizabeth Heron is the founder of OrangeDoor, a London-based marketing agency and one of Dell's diverse suppliers.

Dell's support helps diverse suppliers scale

The International Finance Corporation estimates women-owned entities represent more than 30 percent of registered businesses worldwide. Yet according to WEConnect International, those women-owned businesses are earning less than 1 percent of the money large corporations and governments spend on vendors. It's just one example of how diverse businesses are missing out on opportunities.

Dell is working to change this. In FY16, we spent $4.9 billion with small, women-owned, and minority-owned businesses. Plus, over the last decade, our mentoring, training and networking programs have helped thousands of diverse suppliers scale their businesses.

In 2000, Dell hired OrangeDoor, a woman-owned small business, to support the Dell Europe Middle East and Africa (EMEA) region's communications team during a major event in New York. At that time, the newly formed London-based integrated marketing agency only had three full-time employees. This successful project led to another, and today OrangeDoor has more than 35 employees and says Dell has been instrumental in its growth.

"As an independent small business, we often rely on our own initiative and support system. But working with Dell, I have a supplier diversity mentor with whom I meet with monthly. Her expertise has boosted my knowledge of procurement best practices," said OrangeDoor Founder Elizabeth Heron. "We've also been able to network with company directors and discover so many new opportunities within Dell and with other clients. I'm thrilled at how Dell has helped a company of our size open up amazing opportunities!"

For longtime Dell supplier SIC, such programs have helped the woman-owned business grow throughout Latin America. Dell hired SIC in 2005 to provide warranty services in Mexico. SIC has grown with Dell, expanding its services to Dell Carry-in Service Centers in 14 countries and opening offices in Colombia, Argentina and Chile. Through Dell, SIC has also become involved in international networking groups like WEConnect.

"Working in a male-oriented business society has historically presented some challenges for companies like ours," said SIC Chief Executive Officer Leticia Martinez. "But Dell has been very supportive and over 11 years we've quickly evolved from service provider to true business partner."

Customer Spotlight

Environment

Environmental responsibility is about more than creating an eco-friendly product or initiative. It's about incorporating sustainability into every aspect of what we do, using our technology and expertise to innovate on behalf of our customers, our communities and the planet.

This commitment starts with our own operations, becoming even more efficient in how we create and deliver technology solutions worldwide. It extends through our supply chain, where we work to ensure consistent, transparent environmental and social stewardship among thousands of companies across the globe. Our commitment continues throughout the lifecycle of our products and ultimately provides our customers with solutions that give them the power to do more while consuming less.

Our aspirations and goals for 2020 reflect our approach of considering the environment at every stage of technology's lifecycle—from design through end of life—and then measuring the impact to inform future efforts. Together they form the interconnected, inseparable components of our work to make a positive impact on the world we share.
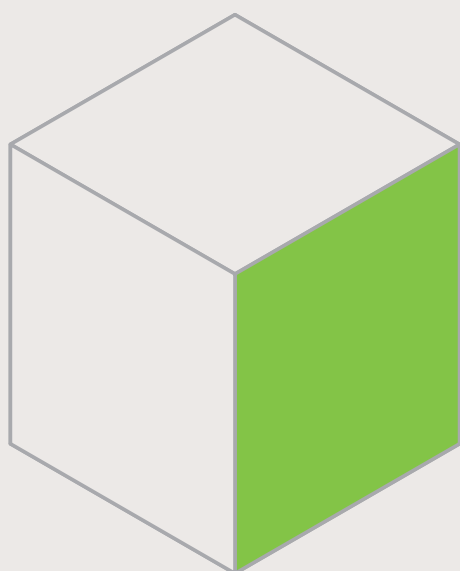
Aspirations

Reduce the environmental impact of our operations

Enable customers to reduce the environmental impact of their IT infrastructure

Promote technology's role in addressing environmental challenges

Aspiration

Reduce the environmental impact of our operations

Goals

Reduce greenhouse gas emissions from our facilities and logistics operations by 50%

Reduce our water use in water-stressed regions by 20%

Ensure 90% of waste in Dell-operated buildings is diverted from landfills

Develop and maintain sustainability initiatives in 100% of Dell-operated buildings

Reduce greenhouse gas emissions from our facilities and logistics operations by 50%

Status: In FY16, we decreased greenhouse gas emissions from our combined facilities and logistics operations by 15.9 percent compared to FY15. We have reduced combined emissions by 21.8 percent since our baseline year of FY13. Overall, we are on track to meet our 2020 goal.

Our FY16 results represent a 9.5 percent decrease in our facility-based Scope 1 and Scope 2 emissions, and an 18.6 percent decrease in our Scope 3 upstream transportation and distribution emissions since FY15. This year, we used 22 million less kilowatt-hours of electricity (kWh) than last year.

Background, challenges and opportunities

Dell's emissions reduction goal reflects our desire to reduce the greenhouse gas (GHG) emissions in two areas: emissions related to operating our facilities (Scope 1 and Scope 2) and emissions associated with product transportation within our supply chain (classified as Scope 3, Category 4 emissions). For the purposes of this goal, we are measuring the emissions specifically associated with the movement of select system types from our suppliers in China to distribution points around the world. While this does not represent a full accounting of Scope 3, Category 4 emissions, it does represent our highest volume products and most material shipping routes.

When it comes to reducing greenhouse gas emissions at our facilities, our first priority is to improve the energy efficiency of our operations. Reducing energy consumption reduces both emissions and operating costs, so it makes good sense from a sustainable business perspective.

Our second priority is to buy and use renewably sourced energy where feasible, which we do through a combination of purchase contracts with our utility providers and on-site generation.

We, and other companies like us, face three key challenges regarding renewable energy: ease of purchase, global availability, and the suitability of our own facilities to host on-site generation. As a nimble company with a highly dynamic real estate portfolio, we want to be able to buy renewable energy locally without long-term power purchase agreements. Dell has actively encouraged developers and brokers to make such short-term investments available.

Background, challenges and opportunities (continued)

Shorter-term commitments, such as through utility contracts that deliver certified renewable energy, are ideal for us yet are not yet widely available in many of the countries we operate in. While renewable energy products such as renewable energy certificates (RECs) and guarantees of origin can be purchased in the U.S., much of Europe, and Australia, other markets are just beginning to set up the appropriate infrastructure needed. We are looking forward to seeing how these markets develop.

Our efforts to reduce emissions from our logistics operations are predicated on our working relationships with Dell suppliers, our shared ability to identify the most efficient routes and timing, changes in product form factors, and overall increases in sales volume.

This past year, we continued our multiyear implementation of a new, global transportation management system, which has already delivered opportunities to reduce emissions by consolidating shipments and transitioning major routes to new, more efficient modes of transportation.

Progress to goal

In FY16, we continued to pursue opportunities to reduce Dell's overall energy use, change our mix of purchased power and drive efficiencies in the transport of materials within our supply chain.

As in previous years, Dell's operational carbon footprint for this goal is composed of Scope 1 emissions from the fuels we burn and refrigerants we use, Scope 2 emissions from the energy we purchase, and Scope 3, Category 4 emissions from the transport and distribution of materials and select products within our supply chain and up to the point of sale. Outside the definitions of this goal, we also report on other Scope 3 emissions, such as those from business air travel and the use of our products (see By the numbers,).

Overall, our total facility-based emissions in FY16 decreased by 25.6 percent from the adjusted FY13 base year, and our total transportation and distribution-related emissions decreased by 8.4 percent from the adjusted FY13 base year. We reduced total electricity use by 28 million kilowatt-hours (kWh) in this period.

Facility-related emissions (Scope 1 and 2)

Beginning this year, companies that report to CDP must provide two sets of Scope 2 emissions: "location-based" and "market-based." In general terms, the location-based method accounts for the average emissions intensity for a country or regional grid, while the market-based method accounts for the emissions intensity of the electricity purchased using contracts with providers.

For companies that prefer to purchase renewable electricity, their market-based emissions will likely be lower than their location-based emissions. The trends below are based on Dell's market-based Scope 2 emissions for FY15-FY16, and our "net" emissions (considering renewable energy) for FY13.

Due to the change in methodology, we cannot perform an exact like-to-like comparison with our FY13 baseline. Since our previous calculations match best with the new market-based methodology, we will use this standard moving forward and note the change in approach.

As in previous years, we can attribute most of this decrease in facility-based emissions to energy efficiency improvements, business efficiency improvements such as our flexible work solutions and Connected Workplace program, and an increase in the percentage of renewable energy purchased over this three-year period.

The largest contributors to Dell's facility-related GHG emissions are the emissions associated with purchased electricity and municipal heat. These are classified as Scope 2 (indirect) emissions. In FY16, these indirect emissions accounted for about 88.0 percent of our total facility-based emissions (e.g., not including vehicles, which are not a part of this goal but are a part of our overall Scope 1 emissions). Our FY16 Scope 2 emissions decreased by 10.7 percent compared to FY15.

Progress to goal (continued)

Our direct (Scope 1) facility emissions are much smaller and include those from the use of natural gas and other fuels for heating and cooking, diesel fuel used to run backup generators, and small discharges of hydrofluorocarbon (HFC) refrigerants from air conditioning equipment. Other Scope 1 emissions, which are not part of this goal, come from the use of Dell-owned or leased personal and service vehicles. Most of these vehicles are used for sales activities.

Because most of our facility-based emissions come from energy use, our GHG reduction strategy has two key components: using energy more efficiently and increasing our purchase and use of renewably sourced energy.

Optimizing our energy use

Energy efficiency improvements remain the most cost-effective means of reducing our overall electricity use—and along with that, our GHG emissions. We reduced our total consumption of electricity from 674.8 million kWh in FY15 to 652.7 million kWh in FY16. In FY16, we continued to make energy efficiency upgrades to Dell's buildings and operations with projects such as the following:

Global

• We continued to make lighting upgrades across our global operations, replacing older fluorescent tubes and high-wattage exterior lighting with LEDs.

• We also continued to replace heating, ventilation and cooling systems and components with more efficient models, and considered energy-efficiency gains when making other upgrades and repairs to our buildings, roofs and interiors.

Asia Pacific-Japan (APJ)

• Dell facilities in India and Malaysia installed new or upgraded energy monitoring and management systems, which allow us to track the energy use of specific pieces of equipment, identify maintenance problems in advance, and discover opportunities for tuning equipment to reduce energy consumption.

• In Australia and Singapore, we decommissioned and replaced several older computer room air conditioning (CRAC) units with new, more efficient systems. With further reconfigurations, the Singapore site was also able to reduce the number of new units required.

Europe, Middle East and Africa (EMEA)

• At Dell's Poland manufacturing facility, we updated and repaired the compressed air distribution system and added a heat recovery unit to "recycle" the hot air indoors during the cold months. The site also added optimization controls to its hot water boilers.

• Throughout the region, several Dell-owned facilities commissioned detailed energy audits, which identified many improvements to add to our project roadmap.

Americas

• Our Brazil manufacturing operations made changes to the production lines to reduce energy consumption during the "burn" (software add and test) process. The team also reconfigured storage spaces and other areas to reduce lighting and cooling needs.

• Our corporate data centers in Austin, Texas, continued to make many upgrades to obtain more IT output using less energy, such as additional hot/cold aisles, heating, ventilation and air conditioning (HVAC) improvements and IT reconfigurations.

• We piloted a cloud-connected LED lighting and control system in the U.S. to learn more about our equipment, our operations, and their effects on our employees.

• With input from employees at our Oklahoma City and Central Texas locations in the U.S., we replaced window blinds with window tinting to cut down on heat gain during the summer. This also had the added benefit of increasing natural light and reducing dust in the area.

Additionally, we nearly finished construction and prepared for the FY17 opening of a new, LEED Platinum-certified office building in Bengaluru, India.

Progress to goal (continued)

Increasing renewable energy usage

In FY16, we sourced 41.1 percent of our purchased electricity needs from renewably generated sources—an increase of 2.7 percent from FY15. This keeps us on track to meet our target of sourcing at least half of our energy from renewables by 2020.

During FY16, 20 Dell facilities purchased 100 percent of their electricity needs from renewable sources such as wind, water and solar and another three purchased lesser amounts. Our Sydney, Australia, location began purchasing nearly 100 percent of its electricity from renewable sources, which expanded our green power purchasing to three continents.
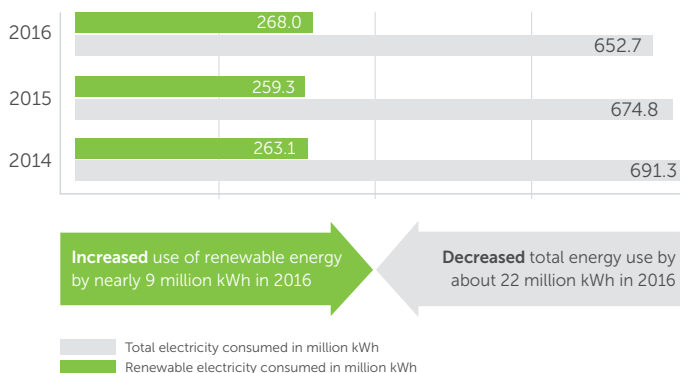
We continued to explore opportunities for on-site sources of alternative energy. We finished construction on a solar photovoltaic system at Dell's Panama location, which includes a roof-top installation as well as solar lighting in the facility's parking lot. We also began construction on a solar photovoltaic system in Gurgaon, India, which is scheduled for completion in FY17. We continued to operate solar photovoltaic systems in Round Rock, Bengaluru, and Coimbatore, which had a combined output of 172,000 kWh in FY16. Additionally, we operated solar water heating systems at six of our locations in Brazil, Ireland and India.

Emissions associated with upstream transportation and logistics (Scope 3, Category 4)

From FY15 to FY16, we had a 18.6 percent decrease in Scope 3 emissions from the transport and distribution of select Dell products from our manufacturing facilities to distribution points around the globe. This decrease in emissions resulted in part from fewer units being shipped globally. We also continued to make progress transitioning to more efficient transportation options. Bulk planning of shipments, along with further increases in our products' packaging and palletization to save space, enabled us to better consolidate shipments for fewer trips.

The net result leaves us with a 19.8 percent reduction in the emissions associated with the transportation of laptop and desktop products since the FY13 baseline year. We are investigating how we might change this goal to better encompass a full accounting of our supply chain emissions and means of affecting change across our logistics.

Renewables up, total electricity use down

2016	268.0
	652.7
2015	259.3
	674.8
2014	263.1
	691.3

Increased use of renewable energy by nearly 9 million kWh in 2016

Decreased total energy use by about 22 million kWh in 2016

Total electricity consumed in million kWh
Renewable electricity consumed in million kWh

Progress to goal (continued)

Optimizing the efficiency of our transportation network

Dell's business model continued its ongoing shift toward more pre-configured shipments with longer lead times sent out from regional centers. This has enabled us to choose more energy-efficient modes and routes. For example, in FY16 we sent 30 percent of Dell shipments via ocean transport rather than air transport, which generates more carbon emissions per mile.

We also continued our multiyear, worldwide implementation of a new integrated transportation management system, which is further increasing our efficiency. Moving from our regional systems to one global tool helps us improve our mode selection and timing, consolidate orders to increase shipment density, and select the best carriers for delivery.

In FY16, the new system enabled us to begin bulk planning of shipments, grouping smaller, individual orders going to the same distribution hub into fewer, larger shipments.

For example, by consolidating shipments along one route from Mexico to Nashville we will be able to save 260,000 miles annually (approximately 210 trips) without affecting service levels or lead times. Within our U.S. retail operations, we found a way to significantly cut carbon emissions by optimizing our truckload utilization. The system also enabled us to switch many shipments from air to ground transport throughout the U.S., and will eventually allow us to do so globally.
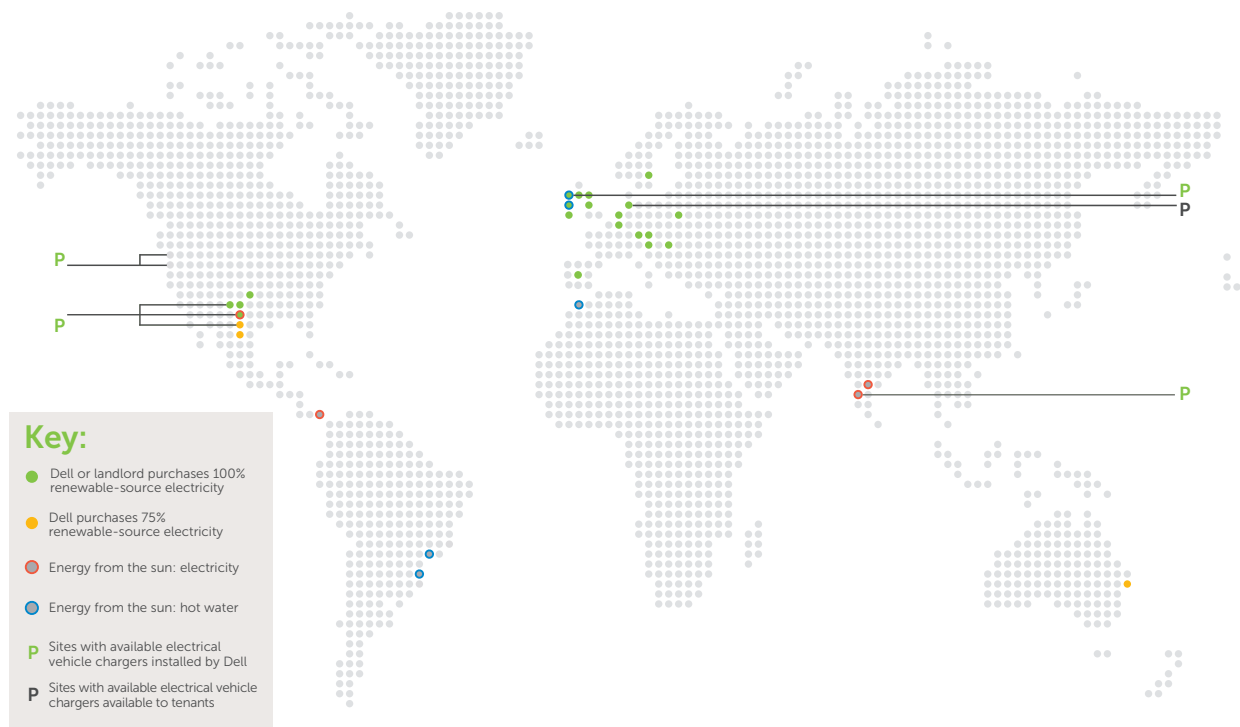
In the U.S., Dell was once again certified as a SmartWay Shipper by the Environmental Protection Agency, and we continued to work with our carrier partners to sustain their status as SmartWay Carriers. By leveraging our SmartWay partnerships, Dell can select carriers who are committed to tracking and reducing their fuel consumption and carbon footprint. Using these partners enables Dell to optimize overall logistics while reducing environmental impact.

Next steps

- In FY17, we will continue our ongoing efforts to improve energy efficiency at Dell facilities. We will also increase electricity purchases from renewable sources as contracts and situations allow.

- We will continue the phased implementation of our integrated transportation management system, looking for ways to optimize routes, transition to new modes and consolidate shipments.

Renewable energy at Dell (FY16)

Key:

- Dell or landlord purchases 100% renewable-source electricity
- Dell purchases 75% renewable-source electricity
- Energy from the sun: electricity
- Energy from the sun: hot water
- **P** Sites with available electrical vehicle chargers installed by Dell
- **P** Sites with available electrical vehicle chargers available to tenants

Purchased green energy

● Dell or landlord purchased 100% renewable-source electricty

Amsterdam, Netherlands	Copenhagen, Denmark	Limerick, Ireland	Oklahoma City, USA
Asse-Zellik, Belgium	Cork, Ireland	Lodz, Poland	Plano, USA
Bracknell, England	Frankfurt, Germany	Madrid, Spain	Round Rock, USA
Bratislava, Slovakia	Glasgow, Scotland	Munich, Germany	Solna, Sweden
Cherrywood, Ireland	Halle, Germany	Nottingham, England	Tulsa, USA

● Dell purchased 75% renewable-source electricty

Austin, USA *(2 locations)*   Sydney, Australia

Energy from the sun

● Electricity

Bengaluru, India   Panama City, Panama
Coimbatore, India   Round Rock, USA

● Hot water

Casablanca, Morocco   Hortolândia, Brazil
Cork, Ireland   Limerick, Ireland
Eldorado do Sul, Brazil

Sites with available vehicle chargers

P Installed by Dell

Austin, USA   Plano, USA
Coimbatore, India   Round Rock, USA
Limerick, Ireland   Santa Clara, USA *(2 locations)*

P Available to tenants

Amsterdam, Netherlands

Reduce our water use in water-stressed regions by 20% at Dell owned and operated facilities

Status: In FY16, fresh water consumption increased by 1 percent at Dell-operated facilities located in water-stressed regions compared to last year. Based on intensity metrics to allow for acquisitions and divestitures, we have achieved a 9 percent reduction since our baseline year of FY13. We remain on track for this goal.

Background, challenges and opportunities

Water stress and scarcity is one of the greatest threats to humans, plants and animals. In light of climate change and population growth, the situation is only expected to intensify. According to the World Resources Institute (WRI), more than 1 billion people currently live in water-scarce regions, and as many as 3.5 billion could experience water scarcity by 2025.

Dell is committed to reducing our use of water, especially in water-stressed regions. In our owned and operated buildings—which include our manufacturing locations and some of our larger office facilities—we only use water for landscape irrigation, food preparation, in toilets and sinks, and in equipment like air conditioning systems and cooling towers. We neither create nor discharge industrial wastewater, and all the water we use is returned to the environment through evaporation, soil absorption or municipal sewer systems. Most of our water use happens within Dell's supply chain and, as detailed on page 22 of this report, we are working with our suppliers on reduction plans and risk mitigation strategies.

Because Dell facilities do not use significant quantities of water, we have limited opportunities to reduce our water use. Our progress is slow, steady and incremental. In addition, while this goal specifically measures our efforts in regions that have been defined as having high or extreme water stress according to the WRI Water Risk Atlas, we are also responding to water issues, such as short-term droughts, in other locations.

We plan to continue our broader approach to water reduction, finding solutions for Dell facilities in areas where climate change, population growth, poor infrastructure, agricultural practices, and other factors are contributing to chronic water stress, as well as for facilities in areas where weather patterns may cause temporary drought.

Progress to goal

In FY16, we used approximately 1.4 million cubic meters of water worldwide in our Dell-operated facilities. This is about the same amount of water that flows over Niagara Falls in less than 10 minutes. This is down from the 1.5 million cubic meters of water we used in FY15. Of this amount, about 75 percent was used in Dell-operated facilities.

Only 15 percent of our total FY16 water use occurred in Dell-operated buildings located in regions designated as water stressed (defined as being located in river basins where overall water stress is currently high or extreme according to WRI). Water intensity in these buildings (measured as cubic meters of water use per square meter of building space) was up 1 percent from FY15, but down 9 percent since FY13.

Implementing local projects

We have determined that water issues are best addressed locally, since each Dell-operated facility experiences its own weather conditions, water quality and availability issues, government codes and regulations, and service providers to consider. In FY16, each facility continued to evaluate its unique needs and innovate solutions. Cross-functional teams within Dell's global facilities and environmental, health and safety organizations share best practices among our locations, and use local successes to inform global resource conservation strategies.

Progress to goal (continued)

Following are a few key water reduction projects Dell facilities implemented in FY16:

- Our manufacturing facility in Brazil started operating the rainwater collection system, which collected and reused 320 cubic meters of water for irrigation in FY16. In addition, the team was able to modify the method used to perform hydrostatic testing of the fire water (extinguishing) system so no water would be wasted.

- We installed more than 100 additional water-conserving nozzles in washroom sinks at our India locations, continuing a project we began in FY15.

- In our manufacturing facility in Chengdu, China, we added water flow controllers to toilet taps.

- Several U.S. facilities that were undergoing renovation replaced older plumbing fixtures (faucets, toilets and urinals) with low-flow units.

- At our Austin, Texas, campus in the U.S., we replaced the decorative vegetation in our parking lot islands with plants requiring significantly less water.

- Our development center in Herzliya, Israel, installed water leak- and auto-shutoff sensors.

- At our U.K. facility in Bracknell, we installed sensor taps with automatic shutoffs in washrooms throughout the building.

Next steps

- In FY17, we will continue to work with service providers and team members to implement additional water conservation and reuse efforts in targeted facilities. We will also increase team member awareness of processes for reducing water consumption.

- Our cross-functional teams will continue working together across regions and facilities, sharing best practices and results to determine which tactics will best help us achieve this goal.

Institute of Industrial Science, University of Tokyo

Researchers from the University of Tokyo helped Thai authorities to manage water resources more effectively by modeling water-related data 10 times faster and sharing the results quickly with an integrated IT solution.

Learn more ›

Ensure 90% of waste generated in Dell-operated buildings is diverted from landfills

Status: In FY16, our manufacturing facilities diverted 97 percent of their total wastes from landfills. Because this is the largest source of our operational wastes, we remain on track for achieving this goal. We estimate that the global diversion rate in our other Dell-operated buildings remains in the 55-60 percent range, on average.

Background, challenges and opportunities

Dell owns or operates approximately 30 buildings and campuses around the world (we also lease or occupy many more buildings where we do not directly influence waste operations). We are committed to responsibly diverting the waste generated at our owned-or-operated facilities from landfills through reuse and recycling. Because our buildings vary greatly in their size, function and waste streams, we take a local approach to waste diversion, employing strategies as diverse as our real estate portfolio itself.

Seven of our buildings house manufacturing facilities. These operations produce relatively large quantities of recyclables such as cardboard, paper, metals and plastics. Our total manufacturing waste diversion rate had remained steady at about 95 percent for many years. In FY16, our Brazil manufacturing facility, which was lagging the others with an 80-85 percent diversion rate, worked with a local service provider to implement a waste-to-energy process for Dell's materials. After the process was tested, Brazil was able to join our other manufacturing facilities in achieving a 96 percent or higher diversion rate.

With our manufacturing operations now above a 95 percent diversion rate and some facilities at nearly zero waste to landfill, our remaining challenge is to make more improvements in our office locations. Waste produced in these facilities typically comes in low volumes from a variety of sources. These range from everyday, widely recyclable wastes like printer paper and aluminum cans to more variable, difficult-to-recycle wastes such as worn furnishings as well as construction and renovation debris. Finding service providers who can consistently collect and accurately measure the types of waste we recycle and reuse at every location is an ongoing challenge.

And making it easy for Dell team members to properly recycle waste is another challenge, because even a small amount of "contamination" can make a whole container of recyclable materials only suitable for landfill. While we share best practices globally, these challenges are best tackled at the local facility level in conjunction with the local recycling partners.

Progress to goal

In FY16, we estimate that our overall diversion rate is about 85 percent, considering manufacturing and office operations, similar to what we reported in FY15.

The total waste diversion rate at Dell's manufacturing facilities, which are located in Brazil, China, India, Malaysia, and Poland, was 97 percent in FY16, up from 95 percent in FY15. In Q4, after the Brazil manufacturing waste diversion project launch, it was over 99 percent.

At office facilities operated by Dell, diversion rates, where data is available, ranges from 5 percent to nearly 100 percent. While facilities management and employee teams have made great strides in increasing awareness and identifying more ways to recycle in our office operations, obtaining accurate and timely waste data from our vendors remains our biggest challenge.

Progress to goal (continued)

Implementing local projects

Dell's Hortolândia, Brazil, manufacturing facility's landfill diversion rate increased from about 82 percent to over 99 percent at the end of FY16, becoming a virtually zero-waste-to-landfill facility (in alignment with U.L. guidance on what constitutes a zero-waste facility). The facility achieved this by partnering with a local vendor that is able to collect our more difficult-to-recycle materials, such as small scraps of paper, wood and plastics. The vendor processes these non-hazardous materials to make a solid product, which can be sold as a commercial fuel source for purposes such as electricity generation.

In our office operations, we continued to look for ways to improve recycling, working with our on-site janitorial and food service providers and with recyclers in the community. In FY16, we further experimented with different types of recycling stations in several facilities. In addition, we have a number of projects lined up to launch in FY17 and FY18.

Our team members continued to drive recycling innovation locally, both through our Planet employee resource group and independently organized initiatives. Cross-functional teams within Dell's global facilities and environmental, health and safety organizations shared best practices among our locations, and used local successes to inform global resource conservation strategies.

Some examples of our FY16 waste reduction and diversion efforts include:

• A "bring your own mug" program, launched in FY15 by team members in India, expanded to Dell locations in France, Singapore, and the U.K. To eliminate the use of paper drinking cups, team members are encouraged to bring reusable cups from home to use during the day. Not only does this reduce waste, but it also visibly promotes the importance of conserving resources.

• Several locations in China implemented a "green office" initiative to show employees how to improve office recycling. These facilities, along with many others across Dell's Asia Pacific-Japan region, also improved their central waste collection areas to encourage more recycling.

• Local teams throughout sites around the world found innovative ways to collect and recycle specialized waste streams such as coffee grounds, small batteries, and even cigarette butts.

• We also explored strategies for avoiding waste during construction, and we began using more recycled materials in office furnishings and carpeting.

Next steps

• In FY17, we will continue to work with vendors and team members to implement additional waste diversion efforts in targeted facilities. We also plan to identify ways to increase team member awareness of existing diversion options.

• Our cross-functional teams will continue working together across regions and facilities, sharing best practices and results to determine which tactics will make the biggest difference in our work toward this goal.

Develop and maintain sustainability initiatives in 100% of Dell-operated buildings

Status: At the end of FY16, 87 percent of our Dell-operated facilities had at least one active sustainability initiative in one or more of our eligible categories: equipment or building upgrades, renewable energy use, on-site services and employee engagement. This puts us on track to meet our goal.

Background, challenges and opportunities

Some of Dell's 2020 goals, such as those involving product design and logistics, are driven primarily by specific teams. Other targets, such as our goal to develop and maintain sustainability initiatives at all Dell-operated buildings, can involve or inspire any Dell team member. While our Facilities Operations team manages the physical improvements to our buildings, we encourage any team member who is passionate about sustainability to propose an improvement or organize an activity.

Our team members have improved our operations' sustainability through creative initiatives like rooftop beehives, monarch butterfly gardens and recycling awareness campaigns. These employee-driven initiatives are often more visible than changes to air conditioning systems or data center upgrades. Supplementing our vital behind-the-scenes improvements with more interactive initiatives increases team members' awareness of sustainability's importance and encourages them to help make a difference.

Measuring the number of sustainability initiatives continued to be a challenge in FY16 due to the diversity of Dell facilities and the sheer size and breadth of our engagement activities. We continued to improve sharing and communication between sites, which has helped us learn more about Dell's sustainability-related priorities and values.

For example, we realized that many team members take a more holistic view of sustainability. Recognizing the relationship between human health and the environment, they make conscious choices about food, transportation methods and other products, preferring those that are better for themselves and the planet. We began developing health and wellness criteria for our sustainability initiatives and plan to start counting these type of programs toward our totals in FY17.

Progress to goal

In FY16, we determined that 87 percent of Dell-operated buildings implemented or maintained at least one sustainability initiative during FY16. Of the locations with initiatives, about 78 percent had two or more types of initiatives.

Dell-operated buildings represent about 60 percent of our total space footprint (the rest of our spaces are leased). For FY16, we counted a Dell-operated location as having a sustainability initiative in place if it met one or more of the following criteria:

• The site completed one or more new sustainability-related projects or upgrades during FY16, FY15 or FY14. We count each project for up to three years after its completion if the expected benefit (energy conservation, water efficiency, etc.) continues during the entire period.

• The site purchased or used renewable energy during FY16. We will give credit if a site purchases renewably sourced energy for the entire year, or if it initiates the purchase during the year and continues it after the end of the year. We will also credit a site each year they operate or start up an on-site system for generating renewable energy, such as a solar photovoltaic or solar water heating system.

• The site provided sustainable services, such as a new or expanded recycling program, during FY16. As with the projects and upgrades criteria, we will count new services for up to three years, provided the expected benefits continue.

Progress to goal (continued)

• At least one sustainability-themed employee engagement activity, held on-site or in the community, took place during FY16.

Tracking sustainability initiatives requires coordination among many different teams. In FY16, building-based sustainability initiatives continued to be identified locally and tracked centrally by the global facilities management team. To track employee engagement activities, we worked with Planet employee resource group (ERG) chapters as well as regional ambassadors of Dell's global giving team. We also continued to share best practices among Dell locations worldwide.

Upgrading certifications, buildings and equipment

As of the end of FY16, all of Dell's manufacturing facilities are certified to OHSAS 18001, an internationally recognized occupational health and safety management system specification. The latest additions were our Brazil and India facilities in FY15 and FY16, respectively. Meeting the OHSAS 18001 standard requires extensive participation by Dell team members, such as in helping to identify risks and implement programs and processes to maintain a safe and healthy workplace. Dell has reached a major milestone: all of our global manufacturing facilities are now certified to the three management system standards most required by our customers: ISO 9001 (Quality), ISO 14001 (Environmental), and OHSAS 18001 (Occupational Health and Safety).

In FY16, our facilities made many resource-saving upgrades. They are outlined in detail under our goals to reduce Dell's greenhouse gas emissions, reduce water consumption, and divert waste from landfills. Some of these examples include:

• We continued to upgrade lighting across the globe, replacing older fluorescent tubes with high-efficiency LED fixtures.

• Facilities in India and Malaysia installed new or improved building energy monitoring and management systems, which help identify equipment inefficiencies and needed upgrades.

• Our manufacturing facility in Brazil began operating the rainwater collection system it installed in late FY15.

Using renewable energy

As of the end of FY16, 29 Dell facilities purchased some or all of their electricity, or generated a portion of their electricity or water heating energy, from renewable sources. This figure includes 16 Dell-operated buildings or campuses, as well as a number of leased locations where Dell or the landlord directly contracts with local utilities for green electricity. We also finished construction on a solar photovoltaic (PV) system at Dell's Panama location and nearly completed a PV unit at our Gurgaon, India facility.

In FY16, we added electrical vehicle charging in Plano, Texas, and Limerick, Ireland. That makes eight locations across the globe that now offer EV charging capabilities provided by Dell.

Implementing or improving on-site services

As described earlier, our Brazil manufacturing facility increased its landfill diversion rate from approximately 82 percent to more than 99 percent by partnering with a local vendor that accepts its most difficult-to-recycle materials.

Additionally, several Dell-owned facilities in our Europe, Middle East and Africa (EMEA) region commissioned detailed energy audits. The audits were used to identify further actions to add to our project roadmap in the coming years.

Organizing employee engagement activities

Dell's Planet ERG continued to drive the bulk of our employee engagement activities around the world, through chapters at 48 Dell locations with more than 7,000 total members. For example, in FY16, the Round Rock, Texas, chapter took measures to protect the monarch butterfly, a threatened species that passes through Texas on its annual migration from Canada to Mexico. The chapter planted gardens of milkweed, the monarch's preferred food source, at the Dell campus and distributed seeds for employees to plant at home. In EMEA, the Limerick, Ireland, chapter of Planet helped beekeeping employees set up a "smart beehive" on the Dell campus roof to protect and study bee populations. See page 41 for the full story.

Progress to goal (continued)

On March 28, 2015, we joined others around the globe to celebrate Earth Hour and raise awareness of the need for action on climate change. At 88 Dell locations, our facilities team, Planet chapters and individual team members turned off the lights for one hour. This was the first globally coordinated event of its kind for Dell, and we plan to expand it in FY17.

Dell's Taipei and Oklahoma City locations won our fifth annual Healthy Site Award competition, which recognizes the Dell locations with the most outstanding health and wellness initiatives. Employee awareness and engagement activities are a part of the criteria.

Individual Planet chapters also organized a number of activities specific to their site, often with their Facilities Operations partners. Examples include:

- Organizing "bring your own mug" campaigns to reduce paper cup usage in France, India, Singapore and the U.K.

- Encouraging two U.S. facilities to replace window blinds with window tinting to cut down on heat gain during the summer.

- Planting native milkweed on campus and distributing milkweed seed packets to employees during an Earth Day event at the Round Rock, Texas headquarters. Monarch numbers have plummeted in the past few years as their food sources have disappeared. Central Texas is along their migration route.

- Our Montpellier, France, site organized Kids Day with Planet in June 2015, bringing 253 children of employees to participate in seed planting, art projects with recycled items, farm activities and more.

- In China, Planet experienced a tremendous 260 percent growth rate in FY16, expanding to 3,600 members. The country's chapters held 96 activities across 11 Dell sites, including Car-Free Day initiatives, tree plantings, a campaign to reduce the use of plastic bags, and an extension of Earth Hour activities to conserve energy and reduce resulting emissions.

Next steps

- In FY17, our Facilities Operations and Planet teams will continue to pursue innovative methods for encouraging sustainability actions and improving awareness at their local Dell sites.

- We plan to start counting health- and wellness-related initiatives toward this goal. We will also continue to hone our processes for measuring progress and sharing best practices among Dell locations.

Israel Electric Corporation

When electricity is your core product, all operations are scrutinized for efficiency and environmental impact. Through virtualization projects and the changing out of 10,000 desktops for super-efficient and highly secure Dell Wyse™ zero clients, the Israel Electric Corporation delivers on its commitments to shareholders to reduce emissions and cut costs by 80 percent.

Learn more ›

Creating the Internet of Bees

Dell's Limerick campus is buzzing with extra collaborative energy since the August 2015 arrival of some new rooftop residents—a "smart" hive of more than 20,000 bees.

What makes the hive smart? It's equipped with sensors that monitor the bees' activity levels and the hive's carbon dioxide, oxygen, temperature and humidity levels. The data not only helps keepers better tend the Dell hive, but it can also be shared globally with other beekeepers and researchers studying hive and colony health.

This "Internet of Bees" sustainability initiative took a colony of Dell team members to implement. Irene Power, Dell EMEA retail services director and master beekeeper, with support from another resident beekeeper, Mike King, saw the Limerick campus roof as an ideal place for urban beekeeping, especially since the local chapter of Dell's Planet employee resource group had already planted a garden nearby. As Irene, the facilities team and the Planet chapter worked together to plan the hive's logistics, they also engaged engineers from the Dell Limerick's Internet of Things (IoT) Lab to develop an end-to-end hive monitoring solution.

"This is an ideal sustainability initiative for Dell because it was initiated by a team member, creatively uses our facility and technology to tackle an environmental issue, and raises our employees' awareness in the process," said Tom Moriarty, Dell regulatory compliance manager and member of the Limerick Planet chapter. "And as we help the bees thrive, they're helping us gain insights we and our customers can use to solve other big problems using IoT solutions."

Many Dell customers and school groups have already expressed an interest in the hive.

Read the Internet of Bees case study.

Aspiration

Enable customers to reduce the environmental impact of their IT infrastructure

Goals

Reduce the energy intensity of our product portfolio by 80%

Use 50 million pounds of recycled-content plastic and other sustainable materials in our products

Ensure 100% of product packaging is sourced from sustainable materials

Ensure 100% of Dell packaging is either recyclable or compostable

Phase out environmentally sensitive materials as viable alternatives exist

Recover 2 billion pounds of used electronics

Reduce the energy intensity of our product portfolio by 80%

Status: From FY15 to FY16, we reduced the average energy intensity of Dell's product portfolio by 16 percent based on delivered capabilities. This means since our FY12 baseline, we've reduced the average energy intensity of our product portfolio by 42.8 percent. This measurement is based on the expected lifetime energy consumption of the Dell products we sold during this reporting period and the expected capability we are delivering in those products.

While we continue to make steady progress toward our goal, our current trajectory suggests we are slightly off track in the client-computing category (we are on track or ahead of schedule in other product categories). The many variables that affect this goal make it difficult to predict our final outcome at this time.

Background, challenges and opportunities

Technology is accelerating the spread of ideas, connecting people across developed and developing nations, and helping people tackle some of the biggest problems of our time. It's also using an increasing amount of our planet's resources. Estimates from the SMARTer2030 report presented at the U.N. Climate Change Conference in 2015 suggests that by 2020, the ICT sector will account for 2.3 percent of global emissions.

Dell is committed to reducing the energy intensity of our products, on behalf of our customers and the planet. Energy intensity measures how much energy is required to produce a set amount of work. For example, if serving up a web page took 100 Watt-seconds (Joules) to perform in FY12, then an 80.0 percent reduction in energy intensity would mean the same operation will only require 20 Watt-seconds of energy by the end of 2020.

Energy efficiency is a closely related term, indicating how much work can be produced with a given amount of energy. Energy efficiency and energy intensity are often used interchangeably, though mathematically one is the inverse of the other.

Customers continue to point to energy efficiency as a top purchasing criteria, for reasons including government regulation, environmental concerns, and the cost and space required to power their ever increasing IT needs. We certify hundreds of Dell products to leading eco-labels such as ENERGY STAR® to help our customers make smart selections, and continually work with stakeholders and governments to advance efficiency standards worldwide.

Background, challenges and opportunities (continued)

While regulations and eco-labels are important, our energy intensity goal goes well beyond their requirements. Our 80 percent reduction target reflects our belief that we must aggressively pursue energy efficiency as a social imperative. We are proud that the CDP, as part of its We Mean Business campaign to secure global companies' commitments to advance the Paris Agreement's climate goals, has accepted Dell's 2020 energy intensity target as a science-based emissions reduction target, consistent with the level of decarbonization required to keep global temperature increase below 2°C compared to pre-industrial temperatures. This shows we are on the right track in pursuing energy efficiency as a means to combating climate change.

As we work toward this goal, we face several challenges that also present opportunities for ongoing innovation. The first is that Dell products are already quite efficient, so much our progress comes through steady, incremental improvements rather than leaps and bounds.

The big performance gains we do see come infrequently since most of our products do not follow an annual redesign cycle. And some products hit natural efficiency plateaus, so we must continue tackling design challenges from new angles. Our products are made from hundreds of components, so our progress is affected both by the efficiency of our suppliers' components and our execution in integrating them into a complete system. We work closely with our partners and suppliers to ensure our goals are aligned.

Finally, as Dell's product portfolio changes, we must continue to revise our models and methodologies accordingly to ensure we're delivering an accurate measurement of our portfolio's energy intensity.

Progress to goal

In FY16, we saw significant reductions in energy intensity as a result of new generation server and client products introduced in FY15. We continued to make improvements across our portfolio by optimizing power supplies and other components with each new product update. We also began to see efficiency gains from incorporating 6th Gen Intel® Core™ Processors (built on the new Skylake microarchitecture) into Dell server and client products in late FY16, and will continue to do so as we transition to this chipset in smaller products across our portfolio.

By the end of FY16, we had 416 products qualified to the various ENERGY STAR standards, representing approximately 90 percent of our eligible products. These standards help customers quickly and easily identify energy-efficient products compared to the "norm" within the product category.

We continued to refine our methods of calculating energy intensity across our portfolio. We added workstations to our FY16 portfolio calculation after discovering these products had a large enough energy footprint to necessitate their inclusion. This was also the first year in which we included tablets in our calculation, using the models we developed in FY15.

Achieving energy efficiency gains in data center products

FY16 was our first full year of sales for the 13th generation of Dell PowerEdge™ servers, so we began realizing the impact of their increased efficiency on our portfolio measurements. The new models offer increased computing power within the same energy footprint as our 12th generation models. As we design our 14th generation products, we continue to explore every opportunity to make incremental improvements in cooling efficiencies and voltage regulators, as we have with previous product updates.

As of the end of FY16, 34 Dell servers were qualified to the ENERGY STAR 2.0 Computer Servers specification and 15 Dell storage products to the ENERGY STAR 1.0 Data Center Storage specification. In the U.S., the Environmental Protection Agency's (EPA) ENERGY STAR is the widely recognized indicator of energy-efficient performance for a variety of product categories.

Dell was instrumental in the EPA's development of its new ENERGY STAR 1.0 specification for Large Network Equipment, to which we will start qualifying our products in FY17.

Progress to goal (continued)

Energy efficiency among end-user devices

In FY16, we realized the energy efficiency gains associated with our FY15 incorporation of 5th Gen Intel® Core™ Processors (built on the Broadwell microarchitecture) into Dell end-user devices such as laptops and tablets. We expect to see further improvements as we transition many devices to Intel's new 6th generation (Skylake) chipset in FY17.

We have steadily improved the energy efficiency of Dell laptops over the last five years by working with our suppliers to reduce energy use of components and continually designing improved energy conservation into every level of the systems.

A Dell laptop purchased in FY16 only costs approximately $3.10 per year to power, compared to $7.03 per year for a model purchased during FY11 (based on average power consumption, average U.S. electricity prices and typical annual usage).

As of the end of FY16, 228 Dell end-user products were qualified to the latest ENERGY STAR 6.0 and 6.1 Computers specifications.

**Informing energy efficiency standards worldwide**

We continued to see interest in energy consumption issues accelerate around the globe.

In FY16, Japan began the process of updating the Japan Energy Law requirements for energy efficiency of server products. Dell, The Green Grid (TGG) and the Information Technology Industry Council (ITI) are working with the Japan Electronics and Information Technology Industries Association to leverage the Server Efficiency Rating Tool (SERT) as part of the law's updates.

We continued to track the EU's growing interest in data center energy efficiency and actively participated in the EU Commission preparatory study on Enterprise servers and storage equipment (DG ENTR Lot 9) to consider which eco-design requirements should be set for these products.

Additionally, Dell continued to actively participate in China's development of server energy efficiency standards, working with TGG and ITI to provide analysis and recommendations to the China National Institute of Standardization.

Annual energy costs for 12- and 13-inch laptops
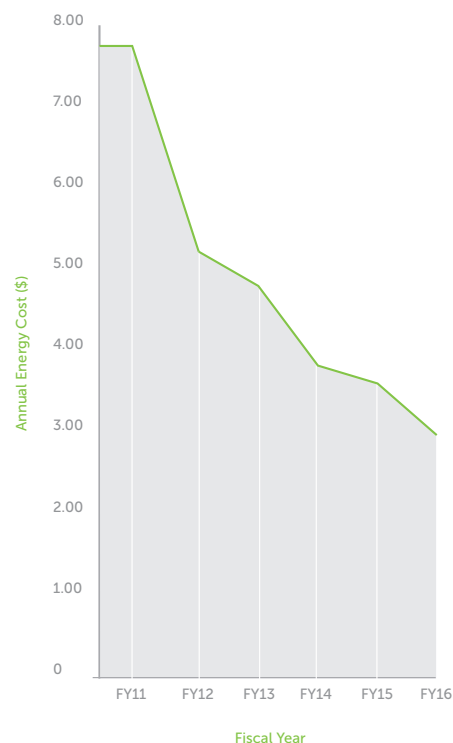
Progress to goal (continued)

Dell has been leading much of the work to create one global industry standard for server and storage specifications worldwide. This will ensure all organizations provide uniform, accurate measurements that help inform customer behavior. ENERGY STAR's latest specification for servers and storage systems introduces active efficiency metrics, which measure both performance and energy consumption while running typical active workloads. This differs from Dell's current methodology in that we are using a different active workload (SPECpower_ssj2008).

In FY16, we worked closely with TGG and ITI to analyze the new benchmarks on a cross-section of industry products so we can help direct regulatory bodies regarding the inclusion of active workloads in energy efficiency regulations.

Government agencies and voluntary programs are rapidly adopting this metric as the efficiency workload worldwide, and in FY17 Dell will evaluate whether we will convert our energy intensity metric for servers to this workload.

We also have long been involved with the EPEAT® green procurement tool. Dell product registrations vary across the 16 countries we have on the EPEAT registry due to customer needs and product end of life, but as of FY16, we have almost 300 products listed. In addition to working with stakeholders in the IEEE/NSF Joint Task Group to develop the new environmental server standard for EPEAT, we are also helping to revise the existing IEEE 1680.1 standard for computers and displays.

Dell's ENERGY STAR-qualified products

By the end of FY16, approximately

90%

of Dell's eligible systems qualified to the various ENERGY STAR® standards

ENERGY STAR® Program	Number of Dell systems qualified to standard
ENERGY STAR® for Computers Version 6.1	228
ENERGY STAR® for Displays Version 6.0	110
ENERGY STAR® for Enterprise Servers Version 2.0	34
ENERGY STAR® for Data Center Storage Version 1.0	15
ENERGY STAR® for Imaging Equipment Version 2.0	29
Total Dell systems qualified to standard	416

Next steps

• In FY17, we will continue to make energy efficiency improvements to all product categories within Dell's portfolio. We will work with partners and suppliers to combine and incorporate more efficient components into our products.

• We will investigate the possibility of changing our current performance metrics for both servers and storage products to new, industry-standard energy efficiency workloads.

• We will continue working with policymakers and regulators to help them understand the industry's perspective on global efficiency standards for all product categories.

Use 50 million pounds of recycled-content plastic and other sustainable materials in our products

Status: In FY16, we used more than 14.1 million pounds of recycled plastics in our products; 3.4 million pounds came from our closed-loop efforts. We also began using recycled carbon fiber in our products—170,000 pounds total. We have used a cumulative total of 36.2 million pounds of sustainable materials in Dell products since the start of FY14. We have achieved 72 percent progress toward our 2020 goal, putting us on track.

Background, challenges and opportunities

Dell has long taken a lifecycle approach with all of our products, considering the environment at every step: product design, manufacturing, packaging and shipping, customer use and recycling. This systems-level approach has been identified as the key to shifting to a more circular economy—one where all materials are used and reused efficiently and effectively. As economic, environmental and social pressures continue to push for this transition, we have stepped up our efforts to source sustainable materials for our products.

In 2008, we began incorporating recycled-content plastics into Dell monitors and desktops. We acquired the resins on the commodities market, generally coming from water bottles and CD cases. These sources were clean and provided a high-quality material that would meet our mechanical and aesthetic needs. To take most advantage of the material, we used it with our OptiPlex™ line of desktops—products that consistently used a large amount of plastic.

Using recycled-content plastic helped Dell reduce the environmental impact of our products. While mechanically the plastic would not work for all products, we began to see opportunities to expand the use of recycled plastics.

For years, our highly successful electronics takeback programs have recycled obsolete equipment (usable technology gets reused or resold as appropriate). In many cases, this meant the plastics removed from various types of hardware would get sold on the commodities market. Taking advantage of this obvious connection became our next step toward a more circular economy—we created the industry's first third-party certified, closed-loop plastics supply chain.

Our closed-loop supply chain incorporates plastics from electronics recovered through our takeback services into the plastics used to make new Dell products. The number of suppliers who can adequately process these plastics is limited, so we pull material from our Dell Reconnect partners in the central United States. The plastics are collected, sorted and processed for transport back to Asia where they get blended with virgin resins and formed into new parts.

Geography is the biggest challenge to increasing our supply of closed-loop plastics. First, regardless of where the technology gets recycled, we have to move it through appropriate processors and to our manufacturing in Asia. This adds to the cost and the environmental footprint of this process. While we work with suppliers who are expanding their operations to other locations, we still have to contend with limits to the supply created on the recycling side. Plastics collected in Europe are often diverted for other uses, while material collection in many developing areas lags far behind the critical mass we would want to see before operations expand. This is due, in part, to greater reuse—a good thing, but it does not expand available source material.

Another limiting factor is the sheer volume that gets collected. Estimates suggest the industry only collects 13 percent of electronics for recycling. To expand our efforts, we must continue to work with partners and stakeholders worldwide to determine how to increase overall collection.

Background, challenges and opportunities (continued)

Overcoming these obstacles is becoming increasingly important. More customers' procurement requirements now call for recycled-content products, and we expect eco-labels to eventually add this to their criteria. Meanwhile, the prices of recycled-content plastics and the processing of our closed-loop plastics have proven to be more stable than those of virgin resins, which are dependent on the cost of oil.

To truly effect a change to a more circular economy, we must continue to find ways to reuse all kinds of materials, beyond plastics. Since 2009, our packaging engineers have shown success in exploring innovative source materials from other industries. Accordingly, we also continue to look for new sources of materials for our products. This year, we were the first to solve the challenges around using recycled carbon fiber and we continue to explore the use of other materials from our own recycling processes and from others' waste streams.

Taken together, our efforts are demonstrating the economic and environmental benefits of shifting to a circular approach. We are keen to share our experiences with like-minded industries and organizations and to support their circular economy initiatives. Engaging in this global community of thought leaders helps advance the transition to a circular economy, which we believe will help us achieve our goals.

Progress to goal

In FY16, we saw explosive growth in the amount of sustainable materials incorporated into Dell products. We increased our use of recycled plastic (both open-and closed-loop) by 20.5 percent compared to FY15, and were the first in the industry to introduce recycled carbon fiber into our products. Overall, we used:

- 14.1 million pounds total of recycled-content plastics in our products, up from 11.7 million pounds in FY15.

- Out of that 14.1 million pounds, 10.7 million pounds came from traditional recycled-content plastics (up from 9.5 million pounds in FY15) and 3.4 million pounds came from our closed-loop recycled plastics supply (up from 2.2 million pounds in FY15).

- The closed-loop plastics were used in 48 Dell products, up from 19 products in FY15.

- In addition to plastics, we used 170,000 pounds of recycled carbon fiber in Alienware and Latitude™ laptops.

By using a combination of traditional post-consumer recycled plastics and closed-loop post-consumer recycled plastics in various Dell products instead of virgin plastic resin, in FY16 we reduced greenhouse gas emissions by 9,790 metric tons of carbon dioxide equivalent (CO_2e)— the equivalent of taking more than 2,000 passenger cars off the road.

Progress to goal (continue)

We continued to look for new supplies of both closed-loop recycled plastics and traditional post-consumer recycled plastics globally, as well as new opportunities to increase the use of these materials in our products.

Additionally, we looked for ways to proactively drive the industry toward a more circular approach, working within our industry to encourage revisions to procurement standards and joining forces with cross-industry organizations at the forefront of the circular revolution. We were honored that, throughout the year, we were recognized for our efforts while making new allies along the way.

Expanding our closed-loop supply chain

We significantly scaled our use of closed-loop plastics. In FY15, we used closed-loop plastics in parts for 19 different products. At the end of FY16, we were globally shipping 44 Dell flat panel-monitors and four desktop/all-in-ones containing closed-loop plastics. We also started engineering trials to add closed-loop recycled resin in the front bezel of a server.

The closed-loop process begins when U.S. customers recycle their old systems through our Dell Reconnect consumer recycling partners (Goodwill® locations). The plastics are separated and sorted into different types at our environmental partner's facility in McKinney, Texas, then inspected, baled and shipped to China, where our partner Wistron Advanced Material blends the plastics with virgin plastics to achieve structural integrity (the current mix has 35 percent recycled-content) and then molds the plastic into new parts.

In FY16, we significantly increased the volume of plastics collected by Goodwill® partners that were delivered to Wistron for the closed-loop process. We also pursued opportunities to further strengthen our relationship with Wistron and to process more material in more locations.

Dell engaged a third-party research firm to evaluate the net benefit of closed-loop ABS plastic compared to virgin ABS (ABS is acrylonitrile butadiene styrene—a common thermoplastic polymer used in many of our products).

Sustainable materials used in FY16

Recycled carbon fiber:
(source: manufacturing waste)

170 thousand pounds

for laptops

Closed-loop recycled plastics:
(source: old electronics)

3.4 million pounds

for desktops, displays

Recycled plastic:
(source: water bottles, CD cases)

10.7 million pounds

for desktops, displays

Progress to goal (continue)

The study found that Dell's closed-loop recycled plastic has a 44 percent lower environmental footprint compared to virgin ABS plastic, based on the natural capital values of environmental impacts including eco-toxicity, fossil fuel depletion, air pollution and human health impacts.

The study also calculated that Dell's closed-loop initiative provides a societal benefit of $1 million per year (based on 5.6 million pounds of closed-loop plastics being incorporated into our products). In addition to providing direct environmental benefits by increasing the recycling rate of plastics and avoiding the landfill and incineration of materials, Wistron's state-of-the-art optical sorting technology and hydro-purification process for separating plastics consumes minimal energy and utilizes fewer resources than their previous recycling process. Additionally, Dell's partnership with Goodwill® provides local jobs and training for individuals with disabilities or disadvantages.

Introducing recycled carbon fiber

In an industry first, in FY16 Dell introduced recycled carbon fiber into select Alienware and Latitude™ laptops. This post-industrial recycled content comes from excess, scrap, or off-spec material from other industries' carbon fiber manufacturing processes. Until now, most scrap carbon fiber was not recyclable and was sent to landfills.

We partnered with our supplier SABIC to develop a recycling method that allows us to use the material in carbon fiber-reinforced plastic instead. This lightweight and thin material is used for enclosure parts.

Our development of this process was driven by the need for a design solution to a specific technical challenge—maintaining strength and reliability as mobility products become thinner and lighter. We tested multiple materials, and from an engineering perspective, recycled carbon fiber's environmental and mechanical properties proved more desirable than those of alternative laptop enclosure materials (e.g., magnesium alloys).

Increasing the use of post-consumer recycled-content plastics

While we have seen great success with our closed-loop plastics supply chain and the new process to use recycled carbon fiber, the continued use of post-consumer recycled-content plastics is an integral part of our shift to a more circular economy. In FY16, we continued to use post-consumer recycled-content plastics in desktops and displays. These are top-selling products that use more plastic than some other product categories, so they present an opportunity for us to have the greatest impact.

The CES Innovation Awards are based upon descriptive materials submitted to the judges. CEA did not verify the accuracy of any submission or of any claims made and did not test the item to which the award was given.

Dell's UltraSharp InfinityEdge monitors are CES 2016 Innovation Awards Honorees in Eco-Design.

Progress to goal (continue)

In addition, Dell product designers continued to actively assess the feasibility of using more post-consumer recycled-content plastics in other mainstream Dell products such as laptops, servers and thin clients. These products contain smaller parts and use plastics with different mechanical qualities. Our engineering teams worked with suppliers to develop specialized resins that will enable us to incorporate post-consumer recycled-content plastics into Dell's mobility products for the first time in FY17.

Advancing the circular economy

Within the electronics industry, we were advocates in FY16 for adding criteria to procurement standards to encourage a more circular approach. For example, Dell engaged within the IEEE 1680.1 (Revision) standard material group—an industry group working to update environmental standards for electronics products—to promote the inclusion of optional closed-loop plastic criteria and post-consumer recycled content criteria.

We also strengthened our relationship with the Ellen MacArthur Foundation, becoming a member of the CE100—a pre-competitive innovation program established to enable organizations to develop new opportunities and realize their circular economy ambitions. See our story about Dell's CE100 membership on page 53. We have used this platform and others to openly share our insights and advance our belief that there is great opportunity—both in terms of better economics and in reduced externalities—in moving to a circular economy.
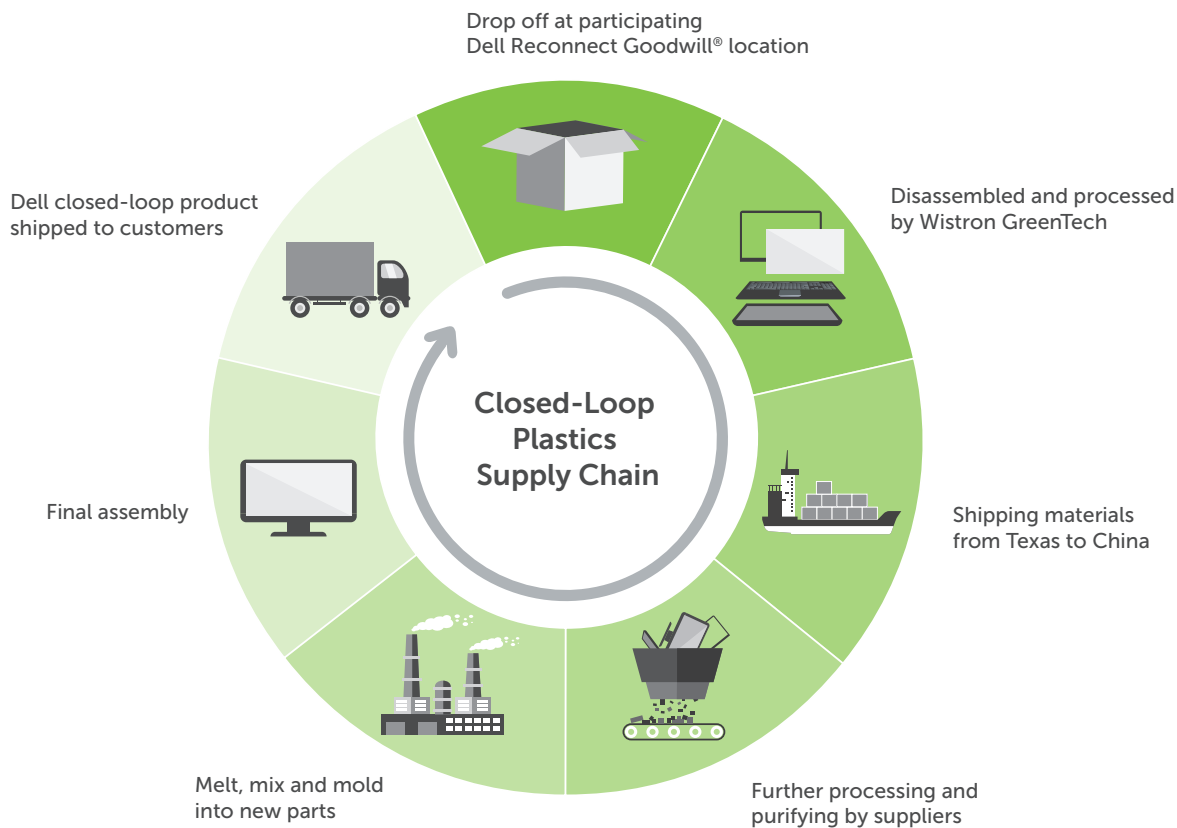
Gaining industry recognition

Dell was honored with the Green Electronics Council's 2015 Catalyst Award, which celebrates innovative solutions and tangible environmental accomplishments throughout the lifecycle of electronic technologies. Dell was recognized for our work to develop a closed-loop program and further the circular economy. We accepted the award at the International Emerging Green Conference.

Additionally, Dell received the Sustainable Purchasing Leadership Council's 2015 Outstanding Case Study Award for our closed-loop recycled plastics initiative. We were also honored to again win the Champion Award (non-product) for the second year in a row from the U.S. EPA's Sustainable Materials Management Electronics Challenge, recognizing our commitment to driving the circular economy. At the 2016 CES Innovation Awards, the Dell UltraSharp InfinityEdge Monitor was this time recognized as an award honoree for Eco-Design and Sustainable Technologies for its use of closed-loop plastics.

How Dell does closed-loop recycling

Drop off at participating
Dell Reconnect Goodwill® location

Dell closed-loop product
shipped to customers

Disassembled and processed
by Wistron GreenTech

**Closed-Loop
Plastics
Supply Chain**

Final assembly

Shipping materials
from Texas to China

Melt, mix and mold
into new parts

Further processing and
purifying by suppliers

It takes approximately six months for the plastics to be recycled back into new parts.

Next steps

• In FY17, we will continue to increase the amount of
closed-loop recycled-content plastics we use in our
products. We will also look for opportunities to expand
use of this material to more product types while
increasing the number of displays, desktops and
all-in-ones using closed-loop plastics.

• We will significantly expand our use of post-industrial
recycled carbon fiber.

• We will begin incorporating post-consumer recycled-
content plastic from traditional sources (such as water
bottles) into Dell's mobile platforms. We will also
continue to increase the amount of post-consumer
recycled-content plastic we use in desktop and monitors.

• We will continue our commitment to promoting a shift
to the circular economy, sharing our knowledge and
looking for opportunities to advance the understanding
of how technology can make this shift even easier, more
profitable and better for the environment.

To propel the circular economy, Dell collaborates with like-minded leaders

Today's linear economic model of "take, make and dispose" relies on large quantities of cheap, easily accessible materials and energy—a model that's been in place for nearly 300 years. Transitioning to a circular economic model, in which all resources have value and waste is eliminated, is an imperative but enormous undertaking that no one company can handle alone.

That's why Dell joined the Ellen MacArthur Foundation's Circular Economy 100 (CE100) program in September 2015 to collaborate with other business leaders who share our interest in accelerating the move toward a circular economy. We will work with CE100 members such as H&M, Philips and Unilever to develop new manufacturing approaches, identify new partnerships and share best practices for applying circular principles.

"Technology will play a critical role in the global transition to a circular economy," said Casper Jorna, CE100 program lead for the Ellen MacArthur Foundation. CE100 member organizations can both learn from and strengthen Dell's leadership and experience of circular approaches to manufacturing."

We continue to look for opportunities to scale Dell's existing closed-loop recycling efforts while exploring new ways technology can drive a more circular approach. Since joining the CE100, we've engaged in the CE100 Collaborative Projects, sharing knowledge we've gained as the first PC manufacturer to develop a closed-loop supply chain for plastics.

"A circular economy relies on relationships across the entire value chain, including between suppliers and manufacturers," said Jonathan Perry, Dell's liaison to the CE100. "Collaborating through the CE100 will enable Dell and our fellow members to develop and scale circular global supply chains much faster than we could on our own."

Learn more about Dell and the Circular Economy

CE100

Ensure 100% of product packaging is sourced from sustainable materials

Status: We define sustainable materials specifically as those that come from recycled or renewable (preferably rapidly renewable) sources. As of the end of FY16, approximately 72 percent of Dell shipments were packaged entirely in sustainable materials—an increase from 66 percent in FY15. This means that in seven of every 10 Dell shipments, 100 percent of the packaging is sourced from sustainable materials.

We have also started measuring this goal by weight. In FY16, 93 percent of Dell's product packaging material by weight was sourced from sustainable materials. We are on track for this goal.

Background, challenges and opportunities

Dell ships millions of packages around the world each year, sending our products across oceans, mountain ranges and metropolitan areas. The packaging materials we use must be strong enough to protect Dell products from damage and the elements during these journeys. The materials must also be readily available in the large quantities we need, in markets near our manufacturing facilities, and at a cost that works for our business. Because packaging's role is short-lived, to be good stewards of our planet we choose sustainable packaging materials and strive to minimize the amount of materials we use.

Finding materials that meet all of our criteria is an ongoing challenge; one we meet through collaborative innovation and strategic sourcing. We must continually monitor market forces and adjust our packaging mix as the cost and availability of sustainable material fluctuates. For example, in FY16, we transitioned some packaging configurations to molded paper pulp as this material's price decreased.

Having a diverse packaging materials portfolio, along with proven processes for testing packaging configurations, allows us to quickly and nimbly react to changing global markets.

Lastly, our transition to a circular economy challenges us to derive maximum value from the materials we use. As we continue to increase the sustainability of our materials portfolio, we will also consider other factors that minimize our packaging's impact, such as its continuing performance capability, recyclability and stackability.

Progress to goal

As we introduced new Dell products in FY16, we continued to standardize our packaging configurations across multiple models and replace petroleum-based foams and plastic trays with more sustainable materials whenever possible. We shifted the balance of our sustainable materials portfolio as product cost and availability changed. Following our commitment to explore promising new packaging technologies, we continued to find ways to incorporate alternative materials, including AirCarbon® plastics and mushroom cushioning.

In FY16, we significantly increased the percentage of sustainable materials used in shipping two key medium-sized Dell products. By the end of the year, 72 percent of our flat-panel monitor shipments and 65 percent of desktop/all-in-one shipments were packaged entirely in sustainably sourced materials (up from 69 percent and 57 percent, respectively, in FY15).

The composition of our packaging for Dell tablet shipments and laptop shipments held steady, with 100 percent of tablet shipments and 93 percent of laptop shipments packaged completely in sustainably sourced materials. All Dell Wyse™ thin client product shipments were packaged completely in sustainable materials.

While less than 10 percent of our server shipments are packaged entirely in sustainably sourced materials, by weight 81 percent of all server shipment packaging is sourced from sustainable materials. The main challenge to making a server shipment's packaging completely sustainable lies in finding a reliable replacement for its petroleum-based foam cushions. In FY16, we continued to investigate sustainably sourced materials that can cushion large, heavy, sensitive server products without negatively impacting our manufacturing operations efficiency, box size or material cost structure.

Collaborating with industry

We continued our collaborative approach to packaging development, following a structured innovation model to explore new solutions with suppliers, partners, nongovernmental organizations and stakeholders. In FY16, we held our eighth annual Packaging Innovation Summit with suppliers to identify potential new sustainable material solutions from providers of all sizes, from Fortune 500 corporations to start-ups.

At this year's event we focused heavily on exploring solutions to reduce the size and complexity of service parts packaging and use more sustainable materials for these shipments.

The Australian Packaging Covenant recognized Dell's innovation and leadership by awarding us its 2015 APC Award in the Large Communications and Electronic category.

Transitioning from foam to molded paper pulp cushions

Prior to FY16, flat-panel monitors and desktop all-in-ones were the predominant Dell product categories in which we used expanded polyethylene foam cushions (for desktops) and expanded polystyrene foam cushions (for monitors) to protect shipments. This year we expanded the range of these products shipping to all regions in molded paper cushioning.

Molded paper pulp, which is typically made from 100 percent old corrugated containers, continues to be a cost competitor to foam and is widely available worldwide. It can be easily formed to the profile of a part for cushioning. There are some limitations on the size and weight of the products molded paper can protect, so while it has not found applications for servers, Dell flat panels and all-in-ones are ideal "heavier" products to ship using this material. We were able to develop packaging configurations that protect these items while fitting into boxes that are the same size or smaller than those we previously used with foam cushioning. The products' parts can also be nested within the configurations, which enables us to stack more packaging materials on each shipping pallet and reduce the number of inbound deliveries to manufacturing sites.

Progress to goal (continued)

Evaluating our packaging materials mix

In FY16, market forces drove the cost of paper pulp to decrease more than the cost of the wheat straw we use for our manufacturing boxes and cushions for Dell laptops produced in China (for global distribution). We thus used more paper pulp in our configurations. We used 1.96 million pounds of wheat straw in FY16—23 percent less than the 2.53 million pounds we used in FY15.

The overall composition of our wheat straw-based laptop packaging remained the same. The box's liners (exterior surfaces) were made from 80 percent recycled paper content and its medium (wavy, fluted paper between the liners) was made from approximately 30 percent wheat-based fiber and 70 percent recycled-content corrugated cardboard. The molded pulp cushions inside the box were made from approximately 70 percent wheat straw and 30 percent recycled-content paper.

Dell was one of the first companies to use wheat straw-based packaging, and we remain committed to working with our partners to identify more opportunities to use this material.

Bamboo was the first fiber technology we pioneered for Dell packaging, and it still holds a minor role in our materials portfolio. In FY16, we used 163,000 pounds of bamboo fiber material for molded pulp trays on a range of XPS™ laptop platforms.

Launching new AirCarbon plastics

In FY16, we started using AirCarbon bags to protect a range of Dell Latitude™ laptops manufactured in Mexico for the North American market. This made us the first in the IT industry to use this new, carbon-negative material.

Our supplier Newlight Technologies makes AirCarbon plastic not from oil but from a captured methane emissions from places like farms, landfills, and energy facilities. Performance remains largely the same as traditional plastics.

Newlight Technologies is planning to dramatically expand their production capabilities and we will assess how we might expand the use of this material—especially as protective cushioning.

Examples of Dell's sustainably sourced, easily recyclable or compostable packaging materials. Clockwise from left: bamboo-based trays for an XPS™ laptop, a Dell box made of corrugated cardboard, molded-pulp cushions that use wheat straw and recycled paper, and a divider cushion made from mushroom for server shipments.

Progress to goal (continued)

Re-introducing mushroom-based server cushioning

After extensively designing and testing the use of mushrooms as a cushioning material, in FY16 we began incorporating mushroom components into our packaging design for a Dell PowerEdge 13G R430 platform shipping in North America (expansion to other regions is limited by supplier manufacturing locations). The R430 cushion base was previously manufactured from 100 percent expanded polyethylene (EPE).We replaced this with a lower-cost design that replaces 65 percent of the cushioning with mushroom and corrugate components.

We previously piloted mushroom cushioning in server shipments in FY13, and developments in manufacturing combined with our follow-up testing enabled our FY16 re-introduction of this material.

We expect the mushroom cushioning material to remain a part of our packaging materials portfolio.

Reducing packaging form factors

Following our 3Cs strategy (cube, content and curbside recyclability), we focused on reducing the size and volume of our packaging. We continued our industry-pioneering use of Finite Element Analysis and Shock Response Spectrum to identify new opportunities for optimizing our packaging configurations and using fewer materials.

In FY16, we reduced the size of our 14-inch Dell Inspiron™ 5459 laptop packaging enough to achieve a 13 percent increase in the number of units we can fit on a pallet. That means we can also fit 13 percent more units on each sea container for shipment. The reduction of our Inspiron™ 5459 packaging alone saved more than 43,000 pounds of packaging material in FY16. Overall, in FY16 our packaging reduction efforts saved us $13 million.

Next steps

- In FY17, we will continue our collaborative approach to packaging innovation, working with our partners to identify and test other sustainable alternatives to petroleum-based materials. We will hold our ninth annual Packaging Innovation Summit, from partnerships with companies at the forefront of packaging technology, and pursue viable ideas from our FY16 event.

- We will monitor and adjust the balance of our sustainable material portfolio as market conditions change, and will continue expanding our use of the most cost-effective sustainable materials.

- To increase the sustainability of our server packaging, we will investigate alternatives to petroleum-based foam cushions.

- As we launch new Dell product platforms, we will test corresponding packaging configurations and work toward minimizing our box sizes and materials usage as much as possible.

- We will continue educating Dell customers and stakeholders about the sustainable materials used in our packaging.

Ensure 100% of Dell packaging is either recyclable or compostable

Status: At the end of FY16, 72 percent of all Dell packaging shipments could be considered entirely recyclable or compostable, up from 66 percent in FY15. This means in seven out of every 10 Dell shipments, 100 percent of the packaging is recyclable or compostable. We have also started measuring this goal by weight. In FY16, 93 percent of Dell packaging by weight was recyclable or compostable.

We continue to categorize a material as being recyclable if it is accepted by a majority of municipalities, and as being compostable if it can be certified to meet ASTM D6400 standard. We remain on track for this goal.

Background, challenges and opportunities

The average Dell package is only in circulation for approximately eight weeks between the time the box is created and the time it reaches the customer. We want that period to represent just a small portion of the packaging materials' overall useful lifecycle. That's why we're working toward a circular economic model for packaging, looking for ways to design out waste and maximize the value we obtain from the resources we use. We strive to minimize the amount of packaging materials we use, source as much recycled-content material as possible and select materials customers can easily recycle or compost to give them new life.

In FY16, we continued to tackle the challenge of finding recyclable and compostable materials that are affordable, widely available and strong enough to protect our heavier products.

Market forces cause materials' pricing to fluctuate often, adding another challenge as we design new configurations. We continually assess our packaging materials' cost and availability, using data to adjust our materials portfolio and configurations accordingly. This also sharpens our creativity and inspires us to look at packaging from new perspectives.

Historically, we have not included services packaging in the measurement of this goal due to both data availability and the complexity and volume of the packaging used (we provide hundreds of thousands of parts in a nearly infinitely variable configuration of quantities and types). We plan to factor this type of packaging into our overall goal calculations in the future.

Progress to goal

As we designed packaging for FY16, we focused on exploring new methods while expanding the use of tried and true materials, since customers count on us for consistent recyclability.

Overall, 93 percent of Dell packaging by weight is recyclable or compostable. Many of our products must meet EPEAT® criteria requiring at least 90 percent of the product's total packaging weight to be recyclable.

The composition of our packaging for Dell tablet shipments and laptop shipments held steady from FY15 to FY16, with 100 percent of tablet packaging shipments and 93 percent of laptop packaging shipments classified as recyclable or compostable. One hundred percent of the packaging for Dell Wyse™ thin client shipments is also classified as recyclable or compostable.

Progress to goal (continued)

By the end of FY16, 72 percent of flat-panel monitor shipments and 65 percent of desktop/all-in-one shipments were packaged entirely in recyclable or compostable materials (up from 69 percent and 57 percent, respectively, in FY15).

While less than 10 percent of our server shipments are packaged entirely in recyclable or compostable materials, by weight 81 percent of all server shipment packaging is recyclable or compostable.

Collaborating with industry

Strategic supplier involvement remains critical to our packaging innovation. In October 2015, we hosted our eighth annual Packaging Innovation Summit, where packaging suppliers and teams from throughout Dell presented ideas for tackling challenges, and worked with Dell engineers to brainstorm ideas for delivering the next level of recyclable and compostable materials. We then evaluated the ideas against our criteria for cost, sustainability, and customer experience and will implement the most feasible options.

This Summit focused specifically on services packaging ideas and transitioning away from expanded polyethylene (EPE) cushioning for a variety of products.

Packaging cushions made from a blend that includes wheat straw. The process is more efficient than producing regular molded pulp and the end material is equally recyclable.

Evolving our portfolio of packaging materials

Using a structured innovation process, we continued to test new configurations of existing materials along with continuing to review the feasibility of new materials.

Molded paper pulp is not as exotic as some of the materials we've pioneered, but in FY16 we applied it in new ways to achieve breakthrough results. We successfully transitioned many of our Dell flat-panel monitor and desktop all-in-one shipments from foam cushioning to molded paper cushioning. These were key product categories for us to tackle as we work toward this goal because they require more packaging materials than our smaller product categories like tablets and laptops. Molded paper pulp is an ideal material to protect monitors because, like foam, it can easily be formed to the profile of a part for cushioning. And the pulp, which is typically made from 100 percent old corrugated containers and can be recycled like cardboard, is now cost competitive with foam and is widely available worldwide.

In FY14, we were the first company to introduce wheat straw-based packaging, using it for our manufacturing boxes and cushions for Dell laptops produced in China (for global distribution).

While in FY16 we shifted some of our laptop configurations to molded paper when the price of that material decreased, we remain committed to using wheat straw. It is a sustainable, agricultural byproduct from farms in China. It can be grown anywhere in the world and is 100 percent recyclable.

In FY16, we re-introduced compostable mushroom-based packaging as a cushioning material to reduce the amount of EPE used for heavier shipments. We began incorporating mushroom components, in conjunction with corrugate material and EPE, into our cushioning design for a Dell PowerEdge™ 13G R430 platform shipping in North America. Only 35 percent of the cushioning base for this product is now composed of EPE, down from 100 percent used in our original design.

We piloted mushroom cushioning for servers in FY13 and spent FY14 and FY15 on further design and testing as well as overcoming hurdles related to the development of a production-oriented supply chain. We expect the mushroom cushioning material to remain a part of our packaging materials portfolio.

Progress to goal (continued)

Optimizing services packaging through our box reuse program

Though not counted currently in the metrics for this goal, services packaging is an important part of how we support our customers. With the millions of support requests we receive each year and the unique requirements for each, services packaging presents some daunting sustainability challenges. Improving our information systems, aligning with industry best practices, and enabling new packaging technologies will help reduce this complexity in the future.

Another opportunity for the services team is to take advantage of the boxes used for returns and other shipments. We have implemented a box reuse program and initial indications are that boxes were getting reused as many as seven times. Additionally, after one quarter's measurement, the reuse program helped us avoid 55.4 metric tons of carbon dioxide equivalent (CO_2e) and the use of 1.9 million liters of water.

Continued customer education, including outside-the-box messages explaining the program and that the reused appearance of the box does not reflect the condition of the parts inside, will be important as the program grows.

Optimizing packaging design to use fewer materials

We continued using Finite Element Analysis and Shock Response Spectrum to identify new opportunities for optimizing our packaging configurations so customers have less waste to dispose. In FY15, we were the first in the IT industry to use these tools, which we also use to design our products, for packaging applications.

Our packaging engineers audited each packaging configuration, identifying key areas where cushioning material is required to protect the system, and areas where less material is required. We used testing results to reduce the size of our 14-inch Inspiron™ 5459 laptop packaging enough to achieve a 13 percent increase in the number of units we can fit on a pallet. That means we can also fit 13 percent more units on each sea container for shipment. The reductions associated with our Inspiron™ 5459 packaging alone saved 43,000 pounds of packaging material in FY16. Overall, in FY16 our packaging reduction efforts saved us $13 million.

Using these tools also improves the speed at which we develop our packaging so we can get new configurations to market more quickly.

Next steps

- In FY17, we will continue to transition away from non-recyclable packaging as older products cycle out and new materials become available. We will collaborate with partners and suppliers to innovate and test new materials, configurations and methods.

- We will monitor and adjust the balance of our materials portfolio as market conditions change, and will continue expanding our use of the most cost-effective recyclable and compostable materials.

- To increase the amount of recyclable and compostable materials used in our server packaging, we will investigate alternatives to petroleum-based foam cushions.

- We will continue employing audits and engineering tools to reduce the amount of materials used in the packages we ship.

- In FY17, we will begin to incorporate metrics from services packaging.

Phase out environmentally sensitive materials as viable alternatives exist

Status: In FY16, we continued to phase out materials on Dell's Materials Restricted for Use list. Additionally, we upgraded our supplier tracking processes and tools, which will enable us to better monitor and manage materials for greater transparency.

Background, challenges and opportunities

Electronics products and their components are comprised of thousands of materials. Some of the materials that perform helpful functions, such as stabilizing plastics or preventing fires, may also have harmful effects on humans and the planet, especially if not managed appropriately at the end of a product's life.

Dell is committed to proactively identifying and eliminating substances of concern from our products. As outlined in our Chemical Use Policy, we employ the precautionary principle, voluntarily avoiding substances if reasonable scientific grounds indicate they could be harmful to humans or the environment.

Eliminating environmentally sensitive materials from Dell products is a complex endeavor. First, we must find alternative materials and production methods that deliver the same level of product performance without posing harm. This is a long-term, collaborative engineering process, which is often affected by changing regulatory environments.

We follow the latest chemical regulations worldwide to ensure that our watch list mirrors the latest policies, and that we stay in full compliance. And we also audit our suppliers to ensure their compliance to local laws and our Chemical Use Policy.

Dell customers are increasingly interested in this process. They want to know how our products' components are sourced and which materials they contain. Providing this level of detail can be a challenge due to the sheer number of products we create and the number of suppliers involved. To increase transparency and better respond to customer inquiries, in FY16 Dell deployed a new supplier declaration process and reporting tool called Agile Product Governance and Compliance (PG&C) that will enable better traceability of materials throughout Dell's supply chain. We look forward to using the insights we gain to enhance our work toward our Legacy of Good goal.

Progress to goal

During FY16, we continued to explore opportunities to phase out materials on our watch list (see page 62). We have not added any new materials to our Materials Restricted for Use list since FY15, but we continue to proactively monitor the latest findings for potential areas of concern.

We phased out the RoHS exemptions 7(b) (lead in solders for servers, storage and network equipment) and 8(b) (cadmium in electrical contacts) and the exemption for mercury in button cell batteries. We also lowered the threshold for HBCDD to 100ppm (from 1000ppm) to match the amended persistent organic pollutants (POP) regulations in the EU.

We expect all other RoHS exemptions we currently use will be renewed for continued use. However, we will explore phasing out additional exemptions as we identify acceptable alternatives.

We have phased out all substances in the "Materials we are phasing out" category of the watch list, to some degree. Some have been phased out completely (select phthalates, PAHs), some rely on certain exemptions or reduced scope (e.g. mercury in projector lamps, antimony in plastic housings) and some have been phased out in certain applications and products (e.g. BFR/PVC).

Materials on our watch list

Materials we are phasing out
Mercury
Brominated Flame Retardants (BFRs)
Polyvinyl Chloride (PVC)
Di(2-ethylhexyl) phthalate (DEHP)
Butyl benzyl phthalate (BBP)
Dibutyl phthalate (DBP)
Diisobutyl phthalate (DIBP)
Antimony
Hexabromocyclododecane (HBCDD)
Polycyclic Aromatic Hydrocarbons (PAHs) • Benzo[a]pyrene • Benzo[e]pyrene • Benzo[a]anthracene • Chrysene • Benzo[b]fluoranthene • Benzo[j]fluoranthene • Benzo[k]fluoranthene • Dibenzo[a,h]anthracene
Benzenamine, N-phenyl-, Reaction Products with Styrene and 2,4,4-Trimethylpentene (BNST)
Dibutyltin compounds (DBT)
Dioctyltin compounds (DOT)
Di-n-octyl phthalate (DNOP)
Diethyl phthalate (DEP)
Tris(2-chloroethyl) phosphate (TCEP)
Arsenic compounds (Diarsenic pentoxide, Diarsenic trioxide)

Materials we are assessing for future phase out
Beryllium
Bis(2-methoxyethyl) phthalate (DMEP)
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters C7-rich (DIHP)
Diisononyl phthalate (DINP)
Diisodecyl phthalate (DIDP)
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)
Diisobutyl phthalate (DIPP)
n-pentyl-isopentyl phthalate (nPiPP)
Dipentyl phthalate (DPP)
Di-n-hexyl phthalate (DnHP)
Other Polycyclic Aromatic Hydrocarbons (PAHs)

"Oracle is committed to providing capabilities in all our products that help our customers drive their environmental and sustainability initiatives. By using the PG&C capabilities in Oracle Agile A9 PLM, Dell has been able to design-in environmental compliance to the benefit of all."

— *Jon Chorley*
Chief Sustainability Officer & Group Vice President, Supply Chain Management Product Strategy, Oracle

Progress to goal (continued)

Dell also rejoined the Green Chemistry and Commerce Council to work collaboratively with the industry in advancing green chemistry across sectors and supply chains.

Monitoring and assessing regulations

We worked with industry associations, suppliers and competitors to identify potential changes to materials regulations worldwide. When new regulations are proposed, we assess the potential impact on Dell's products and operations, Next, we determine if and how we use the substances, formulating substance phase-outs, if applicable. We also assess our customers' materials requirements and factor them into our plans.

For Dell and the industry, RoHS (the European Union's Restriction on Hazardous Substances in electrical equipment) and REACH (the European Union's framework for the Registration, Evaluation, Authorization and Restriction of Chemicals) continued to be the strictest and most wide-reaching regulations.

We also tracked other countries' progress toward adopting their own versions of RoHS. Taiwan passed its RoHS requirements in FY16, while Singapore and the United Arab Emirates worked toward similar regulations.

In the U.S., we monitored potential updates to the Toxic Substances Control Act at the federal level. We also kept abreast of state-level regulations such as potential changes to California Prop 65, which would expand the requirements for on-product messaging disclosing both substances present and substances eliminated.

Focusing on eco-labels and industry standards

We also monitor the industry's eco-labeling requirements, which are often more aggressive than legal requirements.

In FY16, we paid particularly close attention to the EPEAT® standards for PCs, displays and server products. While the existing version already covers a broad set of criteria related to materials, we anticipate a revision will add more required and optional criteria.

TCO Certified criteria (an eco-label we pursue for our range of displays, some desktops and laptops) requires in its newest version that non-halogenated flame retardants in plastic parts be assessed with GreenScreen® for Safer Chemicals. This assessment tool (developed by the U.S. Environmental Protection Agency and Clean Production Action) ensures that the identified alternatives are safer and environmentally preferable.

Tracking materials throughout our supply chain

To ensure our suppliers apply our principles, we regularly train them on Dell's Chemical Use Policy, Materials Restricted for Use list, and our processes to report on substances of concern. We also audit our suppliers to ensure their compliance to local laws and our Chemical Use Policy.

While we have a strong relationship with our suppliers, the size and complexity of our supply chain often challenges our ability to obtain detailed information about material usage and sourcing. In late FY16, Dell deployed a new supplier declaration process and reporting tool called Agile Product Governance and Compliance (PG&C). This product lifecycle management system gives suppliers an easier way to report information about materials of concern. This is not trivial given the breadth and depth of our product portfolio.

The new system is important for regulatory compliance, but will also enable Dell to:

• Make better-informed decisions on future phase-out of specific materials

• Provide our customers better and more accurate material information

• Engage more deeply with our supply chain on issues of materials of concern

Progress to goal (continued)

We continue to collect data from our supply chain, which we look forward to using in-depth discussions with customers.

Progress on BFR/PVC-free products

Our list of BFR/PVC-free products did not change from FY15 to FY16. These Dell product families are BFR/PVC-free (excluding peripheral accessories):

• Dell Venue™ tablet products

• XPS™ laptops and tablets

• Dell Precision™ mobile workstations

• Latitude™ laptops (except Latitude 3-series)

• OptiPlex™ 9020 USFF desktops and micro-desktops

• P-Series flat-panel displays

Next steps

• In FY17, we will assess restriction of additional substances.

• We will continue to advocate for changes to procurement standards—with a renewed focus on EPEAT®—to award additional points for products with BFR/PVC-free laminate.

• To stay ahead of any restrictions, we will continue to monitor legislation around the world along with new industry developments around substances of concern. We will also engage with stakeholders to ensure our priorities remain aligned.

We continue to advocate for increased restriction of BFR/PVC content across the industry. We firmly support incentives for companies to procure BFR/PVC-free products. Many public procurement organizations and eco-labels, with the exception of EPEAT®, have also not made this a priority. We continue to advocate for criteria in EPEAT® (and other eco-labels and green public procurement standards) that would award additional points to suppliers offering BFR/PVC-reduced products (e.g. BFR/PVC-free laminate).

• We will use the supply chain data from our new product lifecycle management system to hold more in-depth discussions about materials of concern across Dell's broader value chain, from suppliers to customers. We will also use the data to enhance our established communication tools including environmental data sheets (available for every Dell product) and material-specific web pages.

Recover 2 billion pounds of used electronics

Status: Dell recovered 168 million pounds (76.2 million kilograms) of used electronics in FY16. Since our baseline year of FY08, we have recovered a cumulative total of 1.6 billion pounds (722 million kilograms) of electronics. We have achieved 80 percent of our 2020 goal, and our future estimates show we are on track to meet our target (units collected continues to increase, shrinking form factor places downward pressure on total volumes).

Background, challenges and opportunities

According to the United Nations University, 41.8 million tons of Waste Electrical and Electronic Equipment (WEEE) were discarded globally in 2014.

This e-waste represents $52 billion of potentially reusable resources, yet less than one-sixth is properly recycled or made available for reuse. Not only is this wasteful, but it is also potentially harmful, as electronics contain certain substances that may impact human and environmental health if improperly incinerated or landfilled.

As a global electronics producer, Dell is committed to the recovery and proper recycling of used electronics. We consider this our responsibility as a citizen of the communities we serve and a steward of the planet we share. Dell offers safe, convenient takeback programs for both consumers and businesses in 83 countries and territories, accepting WEEE of all electronics brands. Both the scope and innovation of our programs have established us as an industry leader in electronics recycling. We are also a leader in designing our products for reparability and longevity, along with ease of recycling at end of life.

We face several challenges in our quest to recover 2 billion pounds of used electronics by 2020. One is that products continue to get smaller and weigh less over time, so we must collect more units to reach our takeback volume goal. But developing new programs and entering new markets is an intensive process. It requires extensive collaboration with our environmental partners, local governments, industry, nonprofits and nongovernmental organizations. Electronics recycling regulations vary widely across states, countries and provinces and often stipulate that manufacturers implement collection and recycling systems and educate customers on proper disposal of used electronics.

In FY16, we continued to proactively engage with the governments of countries that are developing or revising takeback regulation, lending our operational expertise to help ensure any legislation works well within its local economic environment and infrastructure. In our existing takeback markets, we pursued expansion through avenues such as new storage buy-back programs and partnerships with Dell Carry-in Service Centers.

And we looked toward the future, embracing the principles of a circular economy and expanding our closed-loop recycling leadership. We incorporated the plastics from electronics recovered through our takeback services into the plastics used to make 48 new Dell products. This comes just one year after we became the first in the industry to offer a desktop with certified closed-loop plastics, and we are exploring other ways in which we can expand upon our innovations.

Dell's FY16 global takeback collection by region

Global takeback volume:
168M lbs. (76.2M kg)

Americas takeback volume:
115.3M lbs. (52.3M kg)

Europe, Middle East and Africa (EMEA) takeback volume:
37.3M lbs. (16.9M kg)

Asia Pacific-Japan (APJ) takeback volume:
15.4M lbs. (7M kg)

Our global takeback services

Free Consumer Recycling (78 countries and territories)

Dell has partnered with shipping companies across the globe to provide free mail-back recycling of Dell-branded IT equipment. In many countries, we will pick up the used equipment from a customer's home.

Asset Resale and Recycling (49 countries and territories)

For our business customers, we provide a full spectrum of logistic and disposal capabilities to recover and dispose of owned and/or leased IT equipment in a secure, environmentally safe way.

Printer Supplies Recycling (51 countries and territories)

We make it easy for consumers and businesses to recycle toner and ink cartridges by offering them free options for single, bulk box or pallet returns.

Dell Reconnect (United States)

This Dell and Goodwill® partnership enables consumers to drop off any brand of used electronics, in any condition, at more than 2,000 participating Goodwill® locations for free and responsible recycling.

Dell Carry-In Service Centers (China & India)

Customers can drop their used IT equipment at these Dell-designated repair centers for free recycling. As of FY16, we offer 55 participating locations in China and 33 participating locations in India.

Trade-In Services (United States)

Consumers can trade in any brand of used electronics to be responsibly recycled and receive a Dell gift card to trade-up to the latest technology through this online service.

Progress to goal

In working toward our goal in FY16, we concentrated our efforts on:

• Expanding our collection networks and services in the countries and territories we currently serve

• Growing our closed-loop recycling initiative

• Advocating for effective recycling legislation in the most receptive markets throughout the globe

Dell Asset Resale and Recycling Services continued to provide business customers in 49 countries and territories with convenient, guaranteed secure asset disposal. In FY16, we achieved our reach to 49 countries and territories when we added Asset Resale and Recycling Services in Indonesia and Philippines. We handle the full spectrum of requirements including asset removal/logistics, data security, on-site shredding, recycling and reporting.

Expanding our closed-loop recycling supply chain

FY15 marked our entry into the world of closed-loop recycling, as we became the first company to offer a desktop (the OptiPlex™ 3030 All-in-One that contained closed-loop plastics certified by UL Environment. We used 2.2 million pounds (1 million kilograms) of recycled plastics in FY15. In FY16, we significantly expanded our closed-loop recycled plastic supply chain, recycling 3.4 million pounds (1.5 million kilograms) of closed-loop plastics into enclosures for new Dell products. These plastics were used in 48 flat-panel monitor models and three Dell OptiPlex™ desktops available globally.

The plastics we collected came through Dell's recycling programs including our Dell Reconnect partnership with Goodwill® in the U.S. These return-stream plastics then become part of our closed-loop supply chain. This collected material is shipped to our partners at Wistron, who shred the plastic and convert it into raw material pellets. The pellets are then mixed with virgin plastics, and the resulting material (composed of 35 percent closed-loop plastics) is used to make new components. In FY16, we significantly increased the volume of plastics collected by Goodwill® partners delivered to Wistron for the closed loop process.

Closed-loop recycling has multiple benefits, including its potential to reduce the amount of virgin plastics needed for electronics production. This will be especially crucial as the world's middle class, and its demand for electronics, continues to grow. And by increasing the demand for recycled plastics, closed-loop recycling opens up greater opportunities to increase collection volumes.

Increasing recovery from existing programs

In FY16, we continued to look for opportunities to expand Dell's consumer and business takeback programs to collect more used electronics.

Americas

In Dell's Americas region, our total takeback volume increased from 104.8 million pounds (47.6 million kilograms) in FY15 to 115.3 million pounds (52.3 million kilograms) in FY16.

In the U.S., we celebrated the 11th year of our Dell Reconnect partnership with Goodwill®, which offers more than 2,000 convenient drop-off locations for free computer recycling and added a new member, Land of Lincoln Goodwill Industries in Springfield, Illinois, who joined the program in FY16. Revenue from the recycled computer equipment collected supports Goodwill®'s mission in creating job training and employment services for individuals with disabilities or disadvantages. Since launching the program in 2004, the Dell Reconnect program has collected and responsibly recycled more than 464 million pounds of used electronics.

Europe, Middle East and Africa (EMEA)

In our EMEA region, total takeback weight decreased from 53 million pounds (24 million kilograms) in FY15 to 37.3 million pounds (16.9 million kilograms) in FY16.

In FY16, we started a storage buy-back program for commercial customers in France, Germany and the U.K. The program enables Dell Asset Resale and Recycling customers to return their used storage equipment in exchange for new, improved models. Due to the success of the initial launch, we expanded the program to another 15 countries in EMEA by the end of FY16.

Progress to goal (continued)

Asia Pacific-Japan (APJ)

In our Asia Pacific-Japan region, total takeback volume increased from 14.7 million pounds (6.7 million kilograms) in FY15 to 15.4 million pounds (7 million kilograms) in FY16.

In FY16, we introduced Asset Resale and Recycling Services for businesses in Indonesia and the Philippines.

We expanded our consumer recycling collection program's footprint in China and India. Customers can now drop off their used electronics for free recycling at 55 Dell Carry-In Service Centers in China and 33 in India (up from 42 and 18, respectively, in FY15). The arrangement leverages existing Dell infrastructure and customers' awareness of the service center locations.

Creating new models in developing countries

Dell continued to collaborate with United Nations Industrial Development Organization (UNIDO) partners to identify and implement sustainable e-waste management models for developing countries. This partnership, which began in FY15, has brought added credibility and perspective to Dell's engagements with local regulators around the world.

In FY16, we supported the preparation of UNIDO projects in Latin America and Nigeria that will include better management of Persistent Organic Pollutants (POPs) found in collected e-waste. We will continue to work with UNIDO on these projects in FY17 as part of our long-term commitment to reduce the impact of e-waste and related issues in emerging economies.

We also worked closely with the Nigerian government in FY16 on the implementation of new legislation that will govern all manufacturers and importers of WEEE, enable the establishment of a formal recycling infrastructure, and close the loopholes previously exploited by informal recyclers.

This creates a model for other developing countries to follow as they move from an informal recycling culture to a safe, formal takeback program supported by legislation. This approach has garnered much support across the region and we continued to work with governments in Kenya and Ethiopia in crafting similar legislation and rolling out supporting e-waste collection and treatment infrastructure.

In FY16, we continued to work with India's Ministry of Environment and Forest on WEEE regulation with provisions including a deposit refund scheme and mandatory collection targets. We met with key officials to present Dell's position and emphasize our commitment to comply with all regulatory requirements.

Progress to goal (continued)

Continuing our industry leadership and legislation advocacy

Dell continued to monitor takeback regulations worldwide. We worked with governments and through industry groups to support the development of regulations that will enable recyclers to create effective e-waste collection networks and treatment infrastructures. This past year we helped Step Initiative develop "Guiding Principles to Develop E-waste Management Systems and Legislation," a white paper for countries and provinces developing guidelines and legislation for the first time. We also continued the development of a third-party accredited global recycling standard.

We reviewed our WEEE program for businesses in Italy, France and Spain and decided to move from an individual compliance solution to a collective compliance scheme. This means a third party will handle many of the tasks required for Dell's compliance with producer responsibility legislation. It will also give customers a more efficient network of drop-off points for their used electronics.

We deepened Dell's role as a global electronics recycling advocate and industry leader by regularly participating in related panels and industry discussions around the world. Notable examples from FY16 include:

• We engaged with the Basel Convention Regional and Coordinating Centres in the development of Basel's technical guidelines for global e-waste shipping. The guidelines, which were approved at the Twelfth Meeting of the Conference of the Parties to the Basel Convention in May 2015, ban illegal shipments of e-waste to developing countries. They also include a provisional agreement, for which Dell advocated, that allows legitimate equipment shipments to centralized repair facilities in developing countries. Such facilities are often located in emerging economies and this provision reduces waste and keeps equipment prices from increasing.

• Dell attended the (Biennial) Conference of Canadian Stewardship, which gathered industry and government to discuss issues affecting product stewardship in Canada. We met with various stakeholders and participated in a Canadian Council of Ministers of Environment working group session on harmonizing electronic producer responsibility programs. We also presented on Dell's circular economy, closed loop, packaging, and Internet of Things efforts.

• At the World Recycling Forum's Electronics Recycling Asia Conference in Singapore, Dell chaired the session devoted to the circular economy and also gave a presentation on our experience in developing a closed-loop recycling supply chain.

Raising awareness of recycling options

Dell regularly holds events around the world to educate customers about our takeback programs and the importance of recycling used electronics responsibly. Key events in FY16 included:

• Dell and its Social Good Advocate, Adrian Grenier, joined with Uber and Goodwill Industries of NYNJ to hold a NYC Tech Takeback event on the eve of America Recycles Day (see story on). New York City residents could use the Uber smartphone app to request that one of Uber's driver-partners come pick up their used electronics, of any brand and in any condition, for free. The electronics were then taken to a nearby Goodwill® to be responsibly recycled through Dell Reconnect. Grenier served as a volunteer and event spokesperson, and in addition to collecting over 3 tons of used electronics in one day, the event generated extensive media coverage of our recycling services.

• We collaborated with Dell's Planet employee resource group to launch a Community Electronics Collection Drive in Bangalore, India. This initiative provided free recycling collection throughout the community. Additionally, Planet held internal recycling drives at Dell offices in Japan, China and Singapore in honor of World Environment Day.

• In Sydney, Australia, Dell partnered with nonprofit organization TechCollect to host our second annual Electronics Recycling Day. We invited residents and small businesses to bring their used electronics to Dell Australia's headquarters and more than 8 tons of electronics were collected.

Achieving industry recognition

We received several prominent awards and recognitions for our global recycling programs and leadership in advancing the circular economy in FY16.

U.S. Environmental Protection Agency (EPA) recognitions including:

- Gold Tier Award in Sustainable Materials Management (SMM) Electronics Challenge

- Champion Award, Non-product category in Sustainable Materials Management (SMM)

Additional recognitions:

- #1 on list of Top 10 Greenest Tech Companies—awarded by Computer Business Review

- Named an Initiative Leader in the eCycling Leadership Initiative by the Consumer Technology Association

- 2015 Catalyst Award for our closed-loop recycling innovation—awarded by the Green Electronics Council

- 2015 APC Award, Large Communications and Electronic Category—awarded by the Australian Packaging Covenant

- IPO Award for Green System Partner—awarded by the Ministry of Economic Affairs (Taiwan)

- Outstanding Case Study Award for Closed Loop Recycling Plastics Initiative—awarded by the Sustainable Purchasing Leadership Council

Next steps

- In FY17, we will continue to explore opportunities to expand our closed-loop plastics collection into additional geographic areas (including outside the U.S.), for ultimate use in the manufacture of new Dell products.

- We will follow and advocate for effective takeback legislation around the globe and will continue to proactively expand our programs where enabled to do so.

- We will continue to leverage our community programs while looking for new ways to maximize the lifecycle of our products.

NYC Tech Takeback makes recycling electronics easier than ever

What if you could responsibly recycle your used electronics with just a tap of your finger?

In honor of America Recycles Day, the Dell Reconnect program and Uber teamed up to make it easy for New York City residents to responsibly recycle their used electronics. On Nov. 14, 2015, people in Manhattan, Brooklyn and Queens could use the Uber app on their smartphones to request free, on-demand pickup of unwanted electronics from their home or office. Uber driver-partners then took the donated equipment to area Goodwill® locations to be properly recycled.

Through the Dell Reconnect program, consumers can drop off their used electronics of any brand, in any condition, at more than 2,000 participating Goodwill locations nationwide. This not only helps protect the environment through safe recycling and diverting e-waste from landfills, but all donations also help Goodwill provide job training and employment opportunities for people with disabilities and disadvantages. The NYC Tech Takeback event was an awareness-building effort provided by Dell in partnership with Uber and Goodwill Industries of Greater New York and Northern New Jersey. It also provided added convenience to urban residents, who normally have to rely on public transportation to haul their recyclables. In just one day, Tech Takeback recovered more than three tons of used electronics from New Yorkers.

In addition, many lucky consumers got a perk beyond a clean closet and peace of mind: a surprise visit from Dell's Social Good Advocate, Adrian Grenier. Adrian rode along with an Uber driver-partner to pick up electronics, thank consumers for their participation and raise awareness.

"What's really great about this program is it's using technology to solve a problem—technology to recycle technology—and it's a collaboration among three big organizations," said Adrian. "I think that's important. When there's corporate responsibility and companies that can make a difference putting their muscle behind a cause, a lot of good things will happen."

Watch a video of the NYC Tech Takeback event.

Environment Spotlight

Aspiration

Promote technology's role in addressing environmental challenges

Goals

Identify and quantify the environmental benefits of IT-based solutions

*Goal language updated to reflect a broader scope

Identify and quantify the environmental benefits of IT-based solutions*

Status: FY16 was another year of measured progress, with work on measurement models steadily moving forward, two pilot projects completed and one follow-on study planned. While our momentum is tempered by data collection challenges, we continue to learn much from the process.

Background, challenges and opportunities

Dell technology solutions are often intricate and custom-built to meet each customer's unique needs through the right mix of products and services. Similarly sized companies in the same industry may use Dell technology in very different ways to solve very different sets of problems. They may combine our technology with other hardware and software products. And through their implementation, they can sometimes have a positive environmental effect far beyond the footprint of the IT. This makes measuring the environmental impact of Dell solutions a much more complex task than simply adding up the carbon footprint of individual products. While customers and other stakeholders are keenly interested in how technology can deliver net positive results, this is new territory for us and for our industry.

To measure the environmental benefits of a Dell solution, we must work with our customer to obtain data that helps us quantify the outcomes of their technology usage. Depending upon the solution, we may need to know things like how much water our customer uses

or how many miles their employees commute to work. This requires a high-touch, collaborative partnership between Dell, our customer and any third-party research organizations. We recognize some stakeholders are very interested in our work but do not have the time to devote to a study, and may not have or be allowed to share the information we need. Finding collaborators for our pilot studies has thus proven more challenging than we anticipated.

Our studies have also taken longer than expected to complete. Since this is uncharted territory, we have no formal training and few examples to work from when looking at methods, procedures and protocols. For much of this work, we must define processes as we go along and document them both for future Dell studies and for any other parties interested in doing similar research. The data collection can be problematic because many sources are hard to find and the type of data which we are interested in cannot always be collected directly.

Given that customers implement solutions of their own and the intent of our goal is to understand how technology solutions produce positive environmental outcomes, we have adjusted the wording of our goal to reflect a broader cohort of possible solutions to measure.

Background, challenges and opportunities (continued)

We expect that as we define processes and learn how to conduct this work, we will be able to perform future studies with greater speed and accuracy.

Additionally, when we first set this goal our focus was on measuring Dell-developed solutions, but we have since realized that an expanded approach that takes into account all IT-based solutions will provide a clearer picture of the positive potential for technology to do "good." This means measuring both the environmental impact of our solutions as well as measuring all the creative ways in which our customers integrate Dell technology into the solutions they develop. This brings additional complexity.

Scaling the results of our studies to form larger conclusions is also a challenge. Our goal to quantify the impact of Dell solutions directly supports Dell's top-level 10x20 goal (see page 8), which states that by 2020, the good that will come from our technology will be 10x what it takes to create and use it. To understand the ratio of our outcomes to our impact, we have to learn how to measure across multiple solutions.

However, the current pilots have shown that extrapolating the impact of an individual solution more broadly—applying the results of one hospital's study to all hospitals, for example—is difficult because Dell's customer base is so large and diverse in its applications of our technology.

Studying individual solutions will not give us enough timely data to calculate our 10x20 goal results by 2020. We will have to supplement this work with additional measurement approaches.

We've learned that the best way to overcome these challenges and learn how to do these studies is to just start working and be prepared for unexpected factors. Our FY16 efforts have prepared us well for the work going forward. We have a much better handle on how to identify and understand both negative impacts and positive outcomes. And luckily, we are far from alone on this journey—like-minded entities such as the Net Positive Project, AT&T and Eaton continue to be invaluable research and collaboration partners.

Progress to goal

In FY16, we completed two pilot projects, and queued up two others, to better understand how to measure our solutions, test our approaches, and formalize our most successful methods into models.

We identified new solutions measurement approaches and worked with industry partners to begin harmonizing them with other industry approaches. We also engaged third-party consultants to identify research that can supplement our pilot study results.

Conducting pilot studies: online education

Arizona State University (ASU) published the full results of a pilot measurement study Dell and BSR's Center for Technology and Sustainability (CTS) conducted over FY15-FY16 to measure the environmental impact of the school's move toward more online education programs. ASU, a Dell customer, has one of the largest university campuses and largest student populations in the U.S., and is turning to virtual instruction to serve more students. We created a scalable scorecard to compare the cost of a virtual learning IT infrastructure with the potential energy savings.

The pilot results revealed some positive surprises, most notably that the economic value of awarding more student degrees through online instruction was much greater than reducing the students' carbon footprint through decreased commuting (though both were positive).

The study found that, compared to traditional, "immersive," on-campus programs, ASU's online programs delivered socio-economic benefits of $545,000 per undergraduate degree based on students' lifetime economic earnings as a result of attaining a bachelor's degree. The programs also delivered a carbon savings between 30 and 70 metric tons of carbon dioxide equivalent (CO_2e) per undergraduate degree. The savings came from reduced student commuting and ASU's reduced need to construct and use campus facilities.

Beyond the smaller carbon footprint associated with using technology for education, pursuing growth via online instruction enables ASU to educate more students with fewer resources, which has far-reaching and enormously positive consequences in the community.

Progress to goal (continued)

The success of the study has led Dell to partner with ASU and the Harvard School of Public Health's Sustainability and Health Initiative for NetPositive Enterprise (SHINE) initiative to plan a follow-on validation study focusing on online instruction through Harvard Extension School's Distance Learning program. We defined the study and scope in FY16 and look forward to launching it in early FY17.

Conducting pilot studies: flexible work solutions

Independent of our work with CTS, in FY16 we conducted a pilot study measuring the environmental benefits of Dell's Connected Workplace program, which enables our team members to work remotely, at variable hours, or in other flexible arrangements. One of our Legacy of Good goals is for half of all eligible Dell team members to enroll in Connected Workplace by 2020. In FY16, 25 percent of team members were enrolled worldwide, but we focused on U.S. employees for our pilot sample.

Our study measured the program's direct and indirect effects, not just on Dell's power and resource use (which we already measure), but also on our team members' own environmental impacts. To understand how working from home affects employees' energy use, we engaged with Pecan Street Inc., which manages the largest residential energy research network in the U.S.

We found the average Dell employee in the U.S. works from a remote location 9.7 times per month. According to an August 2015 Gallup poll, this is four times more than the average U.S. worker (in all jobs). Working remotely decreases the collective carbon footprint of Dell's U.S. employees by approximately 35,000 metric tons of carbon dioxide equivalent (CO2e) annually, equivalent to taking nearly 7,500 cars off the road entirely for a year. This saves each employee approximately $350 per year in fuel costs. These results reflect our comparison of employees' carbon footprint reductions due to decreased commuting-related fuel usage and vehicle wear with their carbon footprint increases due to increased home electricity use and increased vehicle use for personal trips during business hours.

Our pilot results, which we will publish in FY17, are similar to findings from other studies. The results are also scalable across our customer base, as our customers' experiences using Dell-developed flexible work solutions will likely be similar to Dell's experiences. Remote work is a continuing trend, so we have every reason to believe future numbers will be even more significant than today's—significant enough to affect our 10x20 goal.

Developing additional studies and methodologies

In FY16, we worked with our partners at Forum for the Future to lay the foundation for a future measurement pilot focused on smart vehicles and transportation. We were able to identify an appropriate target for measurement, but need to assemble a full set of collaborators before initiating a study.

Our work with CTS and the pilot programs helped us continue refining our measurement models. In FY16, Dell also became a founding member of the Net Positive Project, a new organization that brings Forum for the Future, the CTS and SHINE together for more effective collaboration. While many of the group's objectives are tied to our 10x20 goal, the process of sharing best practices in Net Positive measurement will help us harmonize methodologies across the industry.
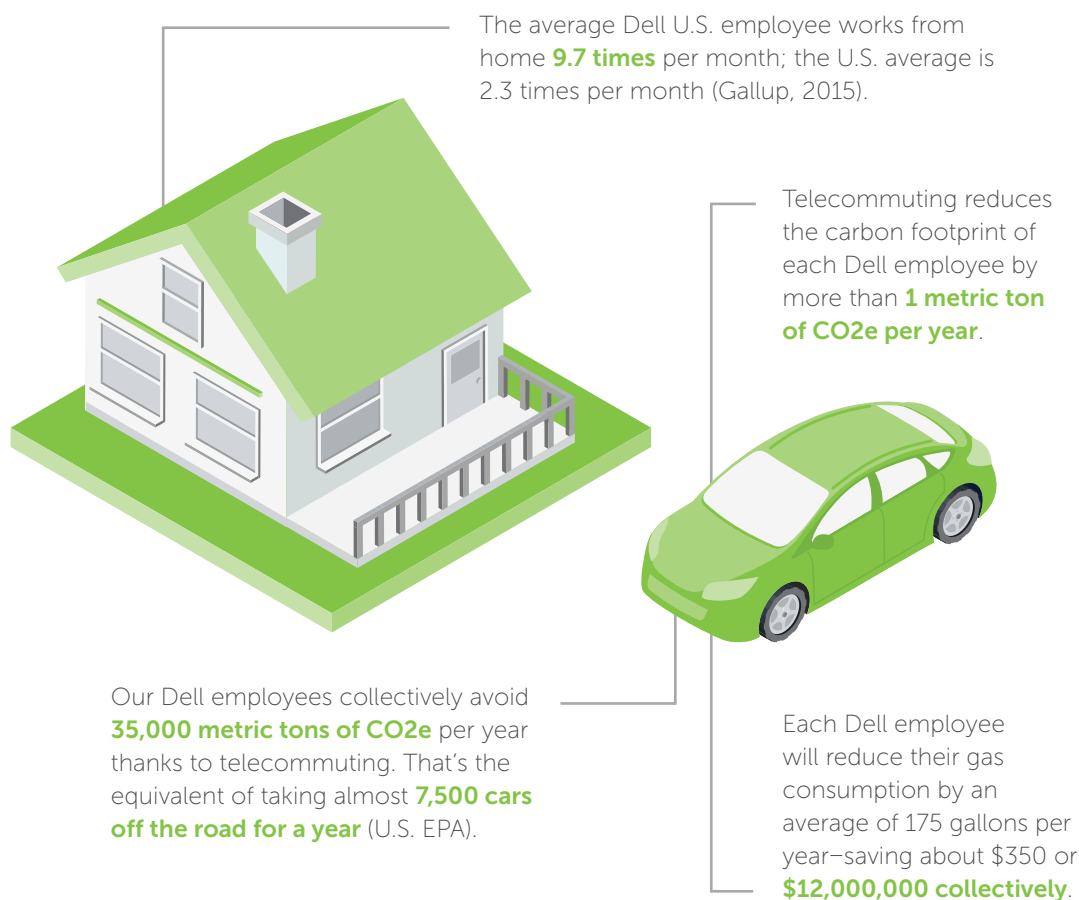
Additionally, as an outcome of the Connected Workplace Study, we hope to develop a general protocol for conducting IT solution net benefit studies, as well as a proposal for a specific process for investigating and estimating the data center impacts of an IT solution. We expect to share these with our collaboration partners in FY17 and expect them to evolve and mature as both we and our peers conduct additional work in this area.

Connected workplace study

The U.S. workforce avoids 2.7 billion round-trips per year by telecommuting. Based on an estimate of Dell's server market share, our technology plays a direct role in more than 20% of these—helping avoid 617 million round trips and reducing the commuting footprint by 6.1 million metric tons of CO2e.

How Dell does telecommuting

The average Dell U.S. employee works from home **9.7 times** per month; the U.S. average is 2.3 times per month (Gallup, 2015).

Telecommuting reduces the carbon footprint of each Dell employee by more than **1 metric ton of CO2e per year**.

Our Dell employees collectively avoid **35,000 metric tons of CO2e** per year thanks to telecommuting. That's the equivalent of taking almost **7,500 cars off the road for a year** (U.S. EPA).

Each Dell employee will reduce their gas consumption by an average of 175 gallons per year—saving about $350 or **$12,000,000 collectively**.

Next steps

- In FY17, we will continue our work on measuring the benefits of IT-based solutions with positive social and environmental outcomes. Additionally, we will explore a number of other approaches to measuring our impact. These may include investigations into specific industry sectors or general economic approaches to understanding impact. We also expect that, in FY17, we will start looking at how Net Positive corporations should view and measure social impact.

- We will publish white papers outlining the findings of our pilot and follow-on studies. As our engagement with the Net Positive Project matures, we hope to work with our new commercial and nonprofit partners to examine new methodologies. We will also identify opportunities to duplicate studies and test methodologies with additional end users and organizations to identify differences and trends. We will ultimately scale these results to apply to entire solutions—both those developed by Dell and those developed by our customers using Dell technology.

Brewing great beer in a sustainable way is central to New Belgium's core identity.

Dell powers New Belgium Brewing Company's sustainable solutions

When New Belgium Brewing Company's co-founders decided to move from home beer brewing to commercial production in 1991, they took a long hike in Colorado's Rocky Mountain National Park to discuss their strategy. The scenic surroundings confirmed their desire to set environmental stewardship as a company core value from day one.

Today, New Belgium is the fourth-largest craft brewer in the U.S., producing popular varieties like Fat Tire and Ranger IPA. Each bottle is brewed at its Fort Collins, Colorado, facility using as few natural resources as possible. The company, which is a Certified B Corporation, has automated every step of the brewing process to conserve water and energy. Dell's end-to-end solutions have powered New Belgium's operations for the last decade, utilizing virtualization to minimize its IT footprint and energy usage.

When New Belgium decided to build a second brewery in Asheville, North Carolina, in 2015, Dell helped them save another valuable resource—time. While the LEED-certified brewery was under construction, we built a "brewery in a box" solution that enabled New Belgium to virtually design its entire manufacturing automation system from Ireland (where much of its custom equipment was being built). The solution used Dell PowerEdge™ VRTX to simulate, test and refine every valve and process of New Belgium's complex operations, shaving nearly eight months off the overall project timeline. And when the Asheville server room was completed, we shipped the fully configured IT solution back for installation.

"Our business is about relationships, and we look for partners like Dell who share our belief that business can do well while doing good," said Jake Jakel, New Belgium's IT operations manager. "Dell designs solutions with our environmental goals in mind, and we often find side benefits we'd never even imagined."

New Belgium's Asheville brewery is scheduled to open in Spring 2016. Watch how Dell's solutions are helping New Belgium expand in Asheville.

Communities

As a global technology provider and corporate citizen, we see firsthand how a lack of access to quality education and technology can prevent people from reaching their full potential.

To help our communities overcome these challenges and thrive, we believe we need to do much more than just write checks. To drive real change, we go beyond funding to apply technology, expertise and volunteerism toward solving pressing social issues.

Our aspirations and goals for 2020 focus on two interrelated aspects of our giving approach. One is to inspire more of our team members to use their passions and unique professional skills to serve their communities. The other is to connect the youth of today with a more promising tomorrow through the power of technology. Together these aspirations deliver on our commitment to put our technology and expertise to work where they can do the most good for people and the planet.

Aspirations

Engage team members around the globe to use their passions in support of their communities

Use technology to improve the lives of young people

Aspiration

Engage team members around the globe to use their passions in support of their communities

Goal

Engage 75% of team members in community service by 2020 and provide 5 million cumulative hours of service to the communities in which we live and work

Engage 75% of team members in community service by 2020 and provide 5 million cumulative hours of service to the communities in which we live and work

Status: In FY16, 63 percent of our team members registered at least one volunteer activity through our online tracking system, compared to our FY15 team member engagement level of 66 percent.

Team members have provided 2,263,000 cumulative service hours since we began tracking in FY14, which keeps us on pace toward our 2020 goal. Annual service hours increased from 713,000 hours in FY15 to 811,000 hours in FY16.

Background, challenges and opportunities

Dell supports nonprofits worldwide through strategic grants, our technology, and our expertise. When our team members volunteer their time and talents to these organizations, it amplifies the impact of Dell's support. We also encourage community service because it boosts team members' happiness. Our annual, internal Tell Dell survey shows team members who volunteer score higher in all measures of job satisfaction than those who do not volunteer. Volunteering also helps team members gain new skills and insights they can use in service to our customers.

As we work on increasing volunteerism across Dell's global team, our approach is to continue encouraging, rather than mandating, participation. Community service has always been a voluntary endeavor at Dell, and we're proud of how many team members make time during their busy lives to give back. Dell was one of the first companies to develop a formal, measurable and international community service program.

We were also one of the first to provide team members with an online community, Powering the Possible, as a single hub for discovering and sharing volunteer activity. Additionally, our network of more than 5,000 Dell ambassadors and community service leaders sets us apart. This internal team enables us to roll out initiatives to every corner of the globe in a strategic, structured manner. Continuing to nurture Dell's strong culture of giving and service, and tracking the success of each effort, will be key to meeting our 2020 goal.

Background, challenges and opportunities (continued)

Engaging team members in community service will be more challenging as Dell's global workforce becomes increasingly dispersed, with fewer people working at Dell sites all day, every day. In FY16, approximately 25 percent of Dell team members formally worked in some sort of flexible arrangement, such as working from home or during variable hours. Our goal is to have 50 percent of eligible team members enrolled in flexible work programs by 2020. In FY16, we continued to shift our volunteering strategy accordingly, holding fewer on-site events, such as hunger drives, and instead promoting skills-based volunteerism like our new Dell Volunteers: Project Management Program. We also began tracking volunteerism among the 24 percent of Dell team members who are involved in employee resource groups, and plan to promote targeted opportunities to this globally dispersed, yet highly engaged, team member population.

"Volunteering, personally, gives me the ability to impact people and communities that I may not have ever met or helped before. It opens your heart and mind to others and the selfless act of giving back. It's therapeutic—everyone should try volunteering. It's good for the soul!"

— Jenn Friday Jones,
  Global Employee Engagement Manager

Progress to goal

In FY16, Dell set three major community service records. We logged 811,000 hours of volunteer time, team members from 66 countries volunteered, and our service positively impacted 26,000 charities worldwide— our highest annual totals since we started tracking volunteerism in 2006.

Team members may volunteer for any charity of their choice, during or after work hours, and record their community service hours through our Powering the Possible online community. At the end of FY16, 71 percent of team members belonged to this community, which enables them to find volunteer opportunities, give through our matching program, create groups for a cause, record their hours, and share inspiring stories of service.

We continued to reward team members for their community service, giving anyone who logs 10 or more hours of volunteer time per quarter a US$150 voucher to donate to the vetted charity of their choice. In FY16, we distributed 18,700 rewards totaling more than $2.8 million.

Through our Global Matching Gifts Program, Dell matches team members' charitable donations up to $10,000 per team member per calendar year. In FY16, Dell matched $7.2 million in team member donations.

Taking a global-but-local approach to community service

In addition to encouraging team members to support their personal causes, we continued to promote opportunities for them to support Dell's two global focus areas for charitable giving: youth learning and children's cancer care. Dell furthers these causes by developing programs with more than 70 strategic nonprofit partners around the world, whom we call our strategic giving partners. We encourage our team members to volunteer for these organizations, and 42 percent of team members provided 110,000 hours of service to Dell's strategic partners in FY16 (compared to 45 percent, providing 109,000 hours of service in FY15). However, we recognize many people want to impact their local communities but do not have a strategic partner in their area. That is why our FY17 community service strategy will focus on providing team members with virtual, skills-based opportunities to help our partners.

Progress to goal (continued)

In FY16, we began developing "global but local" volunteering campaigns to give team members the camaraderie of uniting around one cause along with the flexibility to support related charities in their communities. For example, we launched a campaign with Brooke's Blossoming Hope for Childhood Cancer Foundation, which provides handcrafted headwear to children experiencing hair loss during cancer treatment. Dell gave Brooke's Blossoming Hope a grant to fund 40,000 headband kits, which our team members from 44 Dell sites then crafted and distributed to their local children's cancer charities.

To further engage team members in our children's cancer care programs, we hosted our third annual Children's Cancer Care Walk in FY16. More than 18,000 Dell team members participated, up from 17,000 in FY15. To rally team members to walk, we held several participation challenges. Dell rewarded the three most active groups of participants by donating to the strategic partner of their choice, and we ended up giving $18,000 (total) to Gustave Roussy in France, Sri Shankara in India and the Translational Genomics Research Institute (TGen) in the U.S. We will look for ways to increase participation in FY17 by enabling team members to support their local children's cancer care nonprofits.

Promoting skills-based volunteering

Many nonprofits have few full-time employees and are in desperate need of volunteers with the professional skills our team members possess, such as translation, marketing or IT training. In FY16, we continued to promote skills-based volunteering to Dell team members, using the Powering the Possible community to connect them with organizations in need of their unique skills. Fifty-one percent of Dell team members engaged in skills-based volunteering in FY16, providing 245,000 hours of service. In FY17, we hope to pilot a technology solution that will make it easier for team members to virtually engage in skills-based volunteering.

The Dell Volunteers: Project Management Program (Dell VPMP), which provides local charities with project management training from Dell team members who are certified project managers, is an example of an innovative skills-based volunteering program. In FY16, approximately 32 project managers from four countries volunteered 584 hours. The Dell VPMP program was still in its infancy in FY15, with just 28 project managers volunteering 94 hours in Ireland.

Dell team members' support of Learning Links Foundation (one of our Youth Learning partners) and one of its schools in Chennai, India, is another example of skills-based volunteerism at work. The Foundation's Government Girls Higher Secondary School Sriperumbadur, which is located near Dell's manufacturing site in Chennai, needed instructors to teach its students advanced information communications technology (ICT) skills. Since FY15, members of the Dell engineering and IT teams have completed teacher training and taught courses to more than 150 students. The team won the "best volunteer story" award during Dell's FY16 Ignite Youth Learning Month, a campaign we run each year to increase team members' awareness of our work with Youth Learning partners.

Engaging a global workforce in virtual volunteering

Many Dell teams are made up of people working in different cities and countries. In FY16, we continued to promote virtual volunteering, or using technology to connect with and help people remotely, as a way for dispersed teams to overcome barriers that prevent them from volunteering together in person.

Virtual volunteering can also enable teams to help nonprofits in any geographic area. In FY16, Dell team members in Manila used Microsoft Lync video conferencing to entertain residents of Children's Joy Foundation Inc.'s Child Care Residential Home, a shelter for abandoned and orphaned children located in Cebu City, more than 500 miles from Manila. The team members and children spent several hours sharing stories, singing songs and playing interactive games like charades. Team members also taught the children to use Microsoft applications.

For an example of how individual Dell team members are engaging in virtual volunteering, raising money and making a significant, positive impact on the charities they support, read Anna-Maree Manciet's story on page 85.

Progress to goal (continued)

Making giving simple

In addition to encouraging team members to engage in ongoing community service, we provided them with easy, quick ways to give back to their communities. In December 2015, we organized our second annual 31 Days of Giving campaign, partnering this year with Dell's Conexus, Planet and Wise employee resource groups (ERGs) to leverage their membership and boost participation. The month-long campaign invited all Dell team members worldwide to donate money to their favorite nonprofit, to donate toys or food to local charities, or donate old Dell T-shirts to make quilts for the homeless. Team members in 44 countries spent more than 11,000 hours donating items.

Providing disaster relief

In FY16, Dell responded to several disasters that significantly affected areas where our team members, customers and suppliers live and work: floods in South India, an earthquake in Nepal, flooding and tornadoes in Texas and Oklahoma, and severe winter weather throughout the U.S. Dell's cash and product donations, team members' donations, and Dell's matching contributions provided a total of 917,000 in aid to relief efforts. In addition, team members organized local volunteer efforts and collected and donated items to nonprofits.

Dell also expanded its longtime partnership with the American Red Cross (ARC). In FY16, members of the Dell Digital Business Services team donated their time to develop and execute a 5-week social media campaign that identified and mobilized the ARC's blood donor base online. By encouraging blood donors and recipients to share their testimonials on channels like Facebook and Twitter, we were able to help drive a 76 percent increase in donation appointments—booking 18,000 appointments during the campaign alone. By helping the ARC implement a digital appointment reminder system, we also decreased the patient no-show rate by 8 percent.

This project builds upon the technology and team expertise we've donated to the ARC over the last four years. In FY15, we launched a DigiVol program that provides the organization with a team of volunteers who can respond to the public via social media when disaster strikes. Dell-powered Digital Operations Centers (DigiDOCS) in Washington, D.C., San Jose, and Dallas give the ARC a social media command center where they can monitor online conversations before and during disasters to help anticipate people's needs, send them messages of comfort and support, and connect them with resources.

Leveraging our global leadership network

Dell has a formal leadership structure to support community service at all levels of our organization. We continued to leverage this framework to quickly deploy worldwide initiatives while also meeting the specific needs of each community we serve.

Our Executive Leadership Team sets the tone for a culture of volunteerism, our Global Giving Council and four Regional Giving Councils set annual plans, and our regional ambassadors execute the plan at their local level. A network of more than 5,000 community service leaders (team members who've volunteered to spearhead local activities) then promote individual initiatives and opportunities.

In FY16, Asia Pacific-Japan achieved the highest participation rate of all Dell regions, with 67 percent of team members volunteering. Latin America followed closely behind with 63 percent participation.

This year we also began using Powering the Possible to track the volunteerism levels of Dell ERG members so we can target future community service opportunities to specific ERGs; for example, promoting virtual volunteering among members of our Conexus ERG for remote workers. More than 24 percent of Dell team members belong to an ERG, and in FY16 these individuals volunteered over 65,000 hours.

Next steps

- In FY17, we will pursue more global-but-local opportunities that allow team members to support Dell's global children's cancer care, youth learning and environmental efforts while helping related nonprofits in their communities.

- We will engage more Dell ERG members in volunteerism, using the Powering the Possible community and targeted campaigns to promote opportunities of interest. This will also help ERGs increase their recruitment and engagement of members.

- To increase skills-based volunteering, we will deploy a targeted global strategy that raises team members' awareness of opportunities and gives them the tools needed to participate.

- We will also offer more virtual volunteer opportunities such as a global social media volunteer program, where team members will provide social media training to nonprofits and use their social media skills to raise awareness of Dell's strategic partners.

- To further engage Dell team members, we will create a mobile solution for our online volunteer community and continue incorporating technology components into all community service programs.

- In addition to tracking team members' volunteer hours and engagement levels, we will explore methods for measuring the business impact of their community service efforts.

Dell team member volunteering metrics
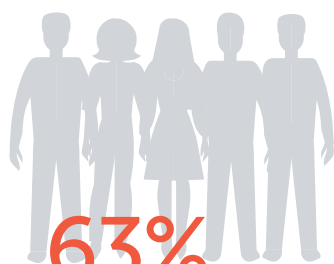
63%
employee volunteers

811,000
hours
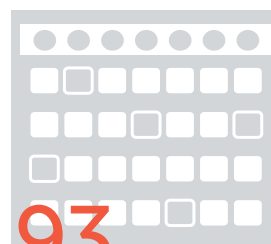
93
calendar years of volunteer hours

So far we have achieved 45% of our goal of 5 million volunteer hours by 2020.

| 0 | 1 million | 2 million | 3 million | 4 million | 5 million |
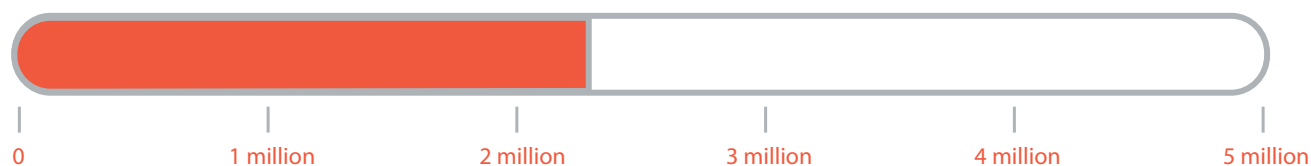
Dell team member and gamer Anna-Maree Manciet fundraised nearly $35,000 in 2015.

Giving back through gaming

Like many superheroes, Anna-Maree Manciet has a dual identity. By day, she hosts and produces video content for AlienwareTV. By night, she's a professional videogamer who uses her sharp mind and quick reflexes to raise money for charity.

Anna has developed a loyal personal following on YouTube and the Twitch online gaming community. Since 2011, she's leveraged that community to host marathon fundraising gaming sessions. During these events, Anna plays games for more than 24 hours and challenges her online audience to donate money to St. Jude Children's Research Hospital, Children's Miracle Network and Operation Supply Drop. In 2015 alone, she raised nearly $35,000 for these charities.

The nonprofits have definitely taken notice of Anna's skills and passion. Children's Miracle Network invited Anna to meet the team behind Extra Life, the annual marathon gaming event in which she participates. And St. Jude named Anna a PLAY Live Ambassador, which enables her to visit St. Jude Children's Research Hospital in Memphis each year.

"I spent a lot of time in the hospital as a child, and gaming was an escape. I got really good at Halo!" said Anna. "Now I want to give back as much as I can. Visiting St. Jude was a life-changing experience for me because I got to see what my hard work went toward."

Juggling her Dell career and volunteer work has helped Anna sharpen her project management and video production skills. She's also used the event management skills she's gained through volunteering to take on new challenges at Dell. She is now a full-time host on Alienware's Twitch channel, and she involved the company in a November 2015 Extra Life event streamed live from Dell Children's Medical Center of Central Texas.

"I love these programs because they show how people with quieter voices can make a big difference, working in their own way behind the scenes," said Anna.

Aspiration

Use technology to improve the lives of young people

Goal

Apply our expertise and technology in underserved communities to help 3 million youth directly and support 10 million people indirectly to grow and thrive

Apply our expertise and technology in underserved communities to help 3 million youth directly and support 10 million people indirectly to grow and thrive

Status: In FY16, our strategic giving initiatives directly impacted more than 444,000 youth and indirectly impacted 1 million people. Direct impact is a measurement of the youth enrolled in Dell-funded programs and indirect impact is a measurement of the individuals who are not enrolled in our programs but use the technology we donated to those programs.

Since we began working toward this goal in FY14, we have helped 1,605,487 youth directly* and 7.9 million people indirectly. We are more than 50 percent of the way to our direct impact goal and 78 percent of the way to our indirect impact goal.

Background, challenges and opportunities

Technology is a powerful tool for breaking down barriers and opening up new possibilities for children around the world. It can give a child living in the streets access to the same information as the most affluent child. It can bring more educational opportunities to remote villages. And it can accelerate the development of critical medical treatments. The key is connecting technology to those who need it most, and that's where Dell comes in.

Our giving initiatives apply Dell's technology and expertise in communities that are considered underserved and underrepresented for reasons such as poverty, insufficient infrastructure, geographic isolation, disability or illness.

We design programs that directly benefit children because they represent our collective future and because helping them can cause a ripple effect. Our studies show that one-third of the children enrolled in our education programs go on to teach their friends or family members to use technology. We focus our programs specifically on improving youth learning and children's cancer care, two major areas where children's needs and Dell's capabilities intersect.

*This number reflects a correction from our FY15 Report, wherein we mistakenly included data from FY13 and reported a cumulative figure of 1,461,000 people directly impacted in FY15. Instead, the correct cumulative number as of FY15 is 1,161,000 people. As of FY16, the cumulative number is 1,605,487.

Background, challenges and opportunities (continued)

More than 4.3 billion people around the world lack internet access, according to the World Bank Group's 2016 World Development Report. Even in many well-connected areas of developed nations, low-income children have fewer opportunities to build their technology skills. These challenges inspire us to develop innovative technology solutions and programs.

In the U.S., cancer is the second leading cause of death in children, after accidents. Worldwide, nearly 100,000 children under age 15 die from cancer each year according to a series of studies in Lancet Oncology. Precision medicine—the use of a patient's genomic data to develop an individualized treatment—represents the next revolution in children's cancer care. Dell is working with research partners to address the key challenges of bringing personalized medicine treatments to a wider market.

In FY16, we continued to apply our technology to accelerate the time it takes to analyze patients' genetic data, cutting processing time in half so researchers can help twice as many patients.

Measuring the true impact of our programs is an ongoing challenge because our initiatives vary so widely in their format and type of interaction. It is also difficult to quantify how discovering a passion for technology or receiving cancer treatments changes the trajectory of a child's life. We continue to work with our partners to evaluate and refine each program's measurement of participation levels. To begin measuring outcomes, we conducted a benchmark survey of Dell youth learning program participants' attitudes and behaviors so we can track progress over time.

Progress to goal

In FY16, youth learning and children's cancer care continued to be our key focus areas as we put Dell's technology and expertise to work where it can do the most good. We deepened our ongoing, strategic partnerships with nonprofit organizations worldwide, many of whom we've supported more than five years. This has enabled us to mature and scale proven programs and launch innovative new initiatives, learning from our shared experiences. This report highlights just a few of our partners' many efforts to help people grow and thrive in FY16.

Youth Learning

Dell's Youth Learning initiatives directly impacted more than 415,000 underserved and underrepresented young people in FY16 by providing them access to technology and education. We delivered our programs by working with our 62 Youth Learning partners in 15 countries: Brazil, Canada, China, Colombia, France, India, Mexico, Morocco, Nigeria, Panama, Philippines, Singapore, South Africa, the U.K. and the U.S.

Dell provides our Youth Learning partners with grant funding, our latest technology and our team members' expertise.

A local Dell ambassador (team member) manages our engagement with the partner, including deployment of technology and Dell team member volunteers. Sometimes we also address basic needs, such as food or security,

which might hamper a child's ability to learn. This shared responsibility between Dell and the community fosters meaningful learning opportunities and change.
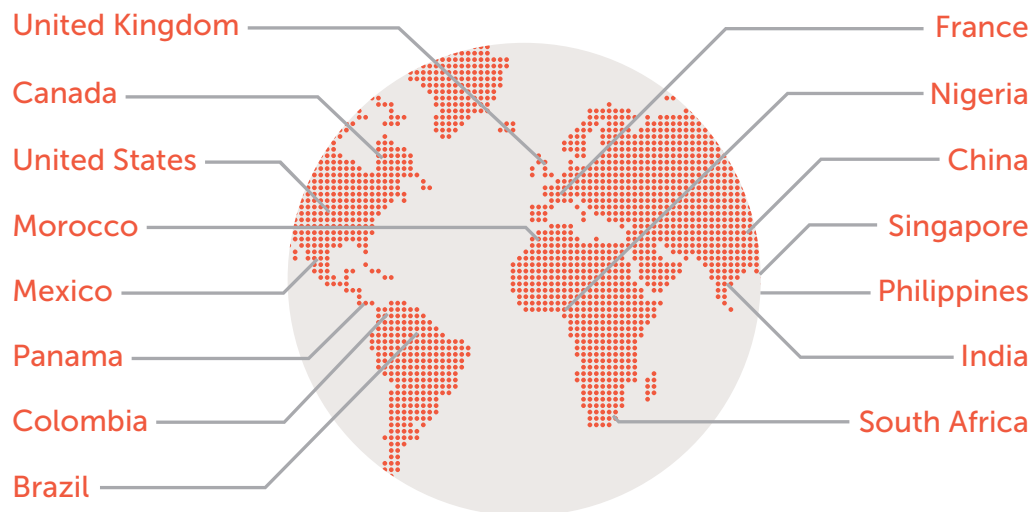
Measuring our outcomes

To measure how Dell's Youth Learning programs positively affect the lives of young people, in FY16 we conducted our first extensive benchmark survey of program participants. More than 320,000 responded. Results showed that of those surveyed, 50 percent of participants are using technology for the first time as a result of the program, which confirms we are reaching youth who may not otherwise get these experiences and skills. Additionally, 51 percent of the youth are more comfortable working with others, 47 percent feel more confident sharing their ideas, and 48 percent expressed interest in a job in a technology field.

Over time, we will continue to evolve our benchmarking of all our strategic programs and to consider how the impact of our Youth Learning programs factors into our progress toward our 10x20 goal (see page 8). This goal states our aim to capture all the ways we and our customers use Dell technology to reduce our collective footprint and increase our collective good. Giving back ("good") is a challenging concept to quantify, because it is subjectively defined and involves so many different units of measurement. So, it will take us time to determine how we measure this impact in this way.

62 Youth Learning partners in **15 countries**:

United Kingdom — France
Canada — Nigeria
United States — China
Morocco — Singapore
Mexico — Philippines
Panama — India
Colombia — South Africa
Brazil

Progress to goal (continued)

Reimagining the classroom to reach new communities

As Dell and our partners assess each community's unique barriers to accessing technology, many of our creative solutions involve reimagining traditional learning models.

The pioneering solar-powered Dell Learning Labs program, launched in FY14, uses solar-powered storage containers, converted into well-lit and ventilated classrooms, to bring technology-based learning to communities without reliable electricity. In FY16, we expanded the program by installing six new Dell Learning Labs in South Africa (four with our partner Sci-Bono and two with our partner SHAWCO). Note that we also opened two more labs in early FY17—one in South Africa, with Sci-Bono, and one in Cazuca, Colombia (just outside Bogota) with Tiempo de Juego. As of early FY17, this brings our total to 11 labs—nine in South Africa, one in Nigeria, and one in Colombia.

To create the solar-powered Dell Learning Labs, we outfit a shipping container with solar panels that power 100 percent of the energy-efficient Dell technology inside. The solution is composed of an air-cooled server, Dell Wyse™ thin clients and vWorkspace™.

This solution uses less than 4 percent of the energy of a typical PC. In addition to providing all equipment, Dell also funds ongoing internet access for the labs.

We also work with and provide funding to local charity partners to create an information and communications technology curriculum (ICT) specifically for students using the labs. For example, in South Africa our partner Sci-Bono is using the labs to bring their Computer Clubhouse after-school program to girls and rural youth; two groups that are still under-represented within the IT sector. The Computer Clubhouse curriculum allows these learners to use multimedia technologies and collaborate with youth from around the world as they explore music, art, computer-aided design and programming.

FY16 survey of youth learning partners

Dell's Youth Learning initiatives connect underserved youth with more access to technology and brighter futures. Results show how our programs positively affect the lives of young people:

66% Participated in a Youth Learning program for the first time
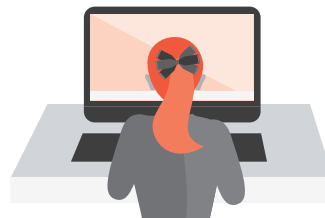
50% Used a computer for a first time

36% Showed a friend or family member how to use a computer

38% Used a Youth Learning computer to complete a school assignment

51% Are more comfortable working with others

48% Are interested in a job using technology

Progress to goal (continued)

In the U.S., we partnered with the Perot Museum of Nature and Science in Dallas, Texas, to launch the TECH Truck, a mobile innovation center that will bring free, interactive educational programs to schools, libraries and community centers in underserved neighborhoods throughout the Dallas-Fort Worth area. In late FY16, we outfitted the TECH Truck with 3D printers, laser cutters, Dell laptops and other technologies to encourage experimental learning of science, technology, education and math (STEM) concepts. Specially trained Perot Museum educators work full-time to help children solve design challenges through hands-on making, tinkering and creative problem solving. We plan to bring the program to more than 13,200 children per year over the next three years and will add a second truck in FY17.

In Morocco, our partner Bayti has worked for more than five years to bring ICT, language and other career-building skills to street children and other underserved youth through 17 Dell technology labs in community centers. To reach young people in more distant communities, Bayti also hosts a mobile IT Caravan, which was initially created through the partnership between Dell, UNICEF and the Moroccan Ministry of Youth and Sports. This bus is outfitted with a Dell technology lab and travels nearly 2,500 miles each year. Dell team members serve as Caravan facilitators to help youth in these communities learn how to use technology. In FY16, our team helped certify more than 6,000 young people as Dell Certified System Experts. Many of the students go on to paid positions after receiving the training and certification.

Fostering the Girl Scouts' entrepreneurial spirit

Dell has worked with the Girl Scout's regional councils for more than a decade and in FY16 we started a three-year grant agreement with the Girl Scouts of the USA. In FY16, Dell supported the Girl Scouts' launch of Digital Cookie 2.0, an online web platform to foster young girls' entrepreneurship and STEM skills. Digital Cookie 2.0 builds upon the Girl Scouts' longtime cookie sales program, using online tools to teach girls vital business skills like goal setting, decision making, money management, people skills, and business ethics.

In addition to helping fund the development of the Digital Cookie 2.0 website and its mobile app, Dell is also donating tablets to help Girl Scout troops in underserved communities access the platform. By the end of 2018, we plan to reach more than 500,000 girls directly through our tablet donations and more than 1.3 million girls through the program as a whole.

In addition to Digital Cookie 2.0, Dell also supports the Girl Scouts' Be the Video Game Developer online game, which teaches girls the basics of coding.

Grants from Dell have funded development of the game and its new phase, which teaches girls how to debug their code. Available to even more girls in FY17, the games help girls gain 21st-century technological skills.

Supporting STEM education in China

One of Dell's most extensive and longest-running youth learning partnerships is with the China Youth Development Foundation (CYDF). Since 2009, our jointly developed after-school programs have brought digital literacy to migrant schools across China. In FY16, the program focused on building students' STEM skills through coding lessons and a virtual robotics program. We also hosted our sixth annual Dell-CYDF 21st-century Skills National Competition and Summer Camp, a three-day event at which students and teachers from more than 30 provinces and cities participated. Dell team members volunteered at the event, coaching students in coding, documentary-making and presentation skills. Team members also regularly volunteer at Dell-CYDF school programs throughout the year.

Progress to goal (continued)

Children's Cancer Care

In FY16, we continued our multiyear, $23,570,000 commitment to TGEN to fight children's cancer by providing funding, Dell technology and expertise to help pediatric cancer researchers and doctors accelerate and improve treatments.

We also worked with 10 nongovernmental organizations in eight countries—Brazil, France, India, Malaysia, Mexico, Panama, the U.K. and the U.S.—to support the needs of affected families and children. We funded technology solutions for pediatric care facilities and supported volunteer work.

To date, over 100 children have participated in the groundbreaking clinical trials supported by Dell technology. Patients currently participate in the clinical trials supported by Dell technology. Additionally, in FY16 we directly helped more than 28,000 youth enrolled in Dell-funded programs and indirectly helped another 36,000. An example of our direct help includes the children able to use our technology while staying in a Ronald McDonald House or another charitable location as they receive medical care nearby. Our indirect help includes the use of our technology by a child's parents—to work remotely or stay in touch with family—or the use of our technology by doctors for records keeping, data input of patient care information, and more.

In the long term, our work has millions of potential beneficiaries. Dell technology has enabled new research capabilities our partners can leverage to treat not only pediatric cancer but also other childhood diseases, adult cancers, Alzheimer's disease, and neurological disorders.

Powering precision medicine

Dell entered the fifth year of our partnership with the Translational Genomics Research Institute (TGen). Our Dell Genomic Data Analysis Platform combines high-performance computing and a cloud-based portal to help childhood cancer researchers rapidly analyze and understand patients' genomic data, develop individualized treatments, and share their results with colleagues around the globe. This is known as precision medicine, and it holds the promise of providing better insights for diagnosis and treatment, which can improve chances of survival and reduce medical costs by eliminating unnecessary or ineffective medical treatments.

"When you have cancer at 9 years old, a month is a lifetime. So being able to do 1200% more analysis to find a treatment sooner can bring a lifetime of hope."

— Dr. Jeffery M. Trent
President and Research Director, Translational Genomics Research Institute (TGen)

Progress to goal (continued)

In FY16, Dell's renewed commitment included a $3 million grant that enabled TGen and the Neuroblastoma and Medulloblastoma Translational Research Consortium (NMTRC) to launch the world's first Food and Drug Administration (FDA)-approved precision medicine trial that applies upfront molecular guided therapy in combination with standard chemotherapy at the point of pediatric cancer's diagnosis. This represents a new approach, as molecular guided therapy has typically been applied only after patients' tumors have proven resistant to more traditional therapies.

Dell has supported four clinical trials to date, and our technology has enabled many of the breakthroughs researchers are testing. Our FY16 grant also enabled TGen and the NMTRC to expand their pediatric clinical trials beyond the U.S., where 25 hospitals now participate. The team added a site in Lebanon in FY16 and a site in France in the first half of FY17.

Accelerating genomic research

Turning a patient's vast DNA and RNA sequencing data into the insights doctors need to recommend precision medicine treatments requires incredible processing power. This year we significantly enhanced the capability of the Dell-designed high-performance computing solution TGen uses to perform this task. In FY16 alone, by increasing capacity and decreasing processing time, the number of patients TGen can support has nearly doubled.

Over the lifespan of our partnership, Dell's solution has reduced the total time needed for whole genome sequencing analysis from multiple weeks to eight hours.

Additionally, we have continued to develop and modify the KIDS Cloud, a distributed, cloud-based solution that enables medical professionals from all NMTRC clinical trial sites to collaboratively review information and create treatment plans. It also contains a patient portal that allows patients to view select information. The KIDS Cloud and high-performance computing hardware and software solution combine to create the comprehensive Dell Genomic Data Analysis Platform.

Leveraging technology to fight other diseases

Dell's support has also enabled TGen to extend its capabilities past pediatric cancer. The TGen Center for Rare Childhood Disorders (C4RCD) is harnessing the latest technologic leaps in genome sequencing to pinpoint the causes of such disorders. By leveraging the capacity of Dell's high-performance computing infrastructure and cloud solutions, the C4RCD is able to help families get answers more quickly.

TGen is leveraging this technology across all of its precision medicine clinical studies, which include research in melanoma, multiple myeloma, breast cancer, small cell lung cancer, and Alzheimer's disease.

Next steps

- In FY17, we will continue to work with our Youth Learning partners to provide technology and education to underserved and underrepresented youth worldwide, both in and out of school. We will focus on programs that find creative new ways to reach young people and spark their imaginations, whether through nontraditional classrooms or through innovative methods like inquiry-based learning.

- We plan to continue to evolve our benchmarking of Youth Learning programs, focusing on outcomes and impact measurement.

- We will investigate the potential for additional solar-powered Dell Learning Labs in Africa.

- We have committed to an additional $3 million contribution to help TGen and NMTRC continue their valuable work. In FY17, this will help them:

  » Standardize and scale the Dell Genomic Data Analysis Platform to facilitate broader deployment and adoption, making this type of medicine more accessible to medical professionals without genomic expertise.

  » Expand the number of children enrolled in the clinical trial utilizing molecular guided therapy and tumor genomics in treatment of pediatric cancers.

The Perot Museum of Nature and Science TECH truck is one example of how Dell brings learning to underserved youth.

Customizing classrooms to overcome communities' barriers to technology access

Using technology introduces young people to new ideas and skills they'll need to compete in the global workforce. But for far too many youth, poverty and infrastructure challenges keep this world of possibilities out of reach.

That's why Dell is reimagining the traditional learning models to bring technology-driven education to underserved areas around the globe. Working with our local youth learning partners, we examine each community's unique barriers to accessing technology and then develop creative, customized solutions to overcome them.

In areas where cost or distance prevents youth from going to a school or learning center, Dell brings the technology to them in the form of a mobile classroom. In Morocco, Dell's Youth Learning partner Bayti complements its technology centers with an IT Caravan that travels to remote villages to teach children from a bus-based classroom. And in the Philippines, our partner Child Hope's Mobile Education Van brings not only technology education but also meals and life skills training to children living on the streets of Manila.

In areas of Nigeria and South Africa where a lack of affordable, reliable electricity prevents traditional schools from powering computers, we've pioneered solar-powered Dell Learning Labs. These classrooms combine steady internet access and energy-efficient Dell Wyse™ thin clients within a ventilated shipping container. In FY17, Dell opened the first Learning Lab in Colombia, with Computer Aid International and Tiempo de Juego.

"My training [at the Dell Learning Lab] was very mind-opening. I learned the computer can give you any access to another world. I learned how to make a CV (curriculum vitae or résumé) and use the Internet," said Desiree April, a student taught at one of the South Africa Learning Labs.

Communities Spotlight

People

Dell's People Strategy is designed to help us attract the world's greatest talent and to deliver breakthrough performance for our customers, our business and our team members.

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Our People Strategy is an enabler of Dell's business and focuses on three key pillars: inspiring leaders, winning together and entrepreneurial spirit. We have established that valuing diversity is a part of every team member's personal effectiveness. The four aspirations and six goals we've outlined over the following pages work together to advance this strategy.

We developed our People Strategy to build diverse, inclusive global teams and keep our team members feeling valued, engaged and inspired to do their best work in service of our customers and communities. We also strive to be considered an employer of choice and a leader in the marketplace through many initiatives, including our support of the Employment Non-Discrimination Act and immigration reform. Our goal is to ensure Dell is a compelling destination for team members in the decade to come.

Aspirations
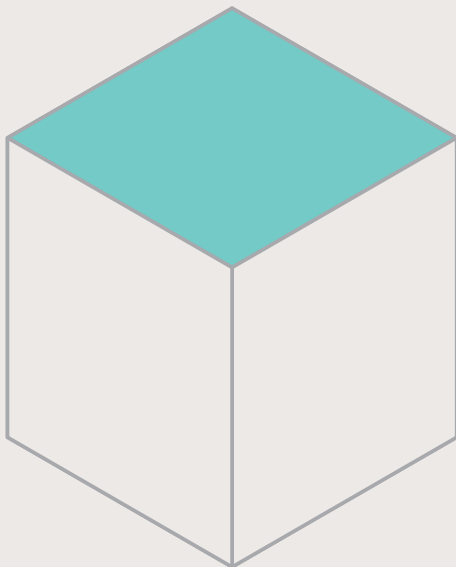
Develop leaders who are committed to helping our team members be their best and do their best work in service of our customers

Promote a culture where our team members are encouraged to take risks and feel supported, valued and proud to be a part of Dell

Be a compelling destination for our team members to thrive, achieve their career aspirations and have fun

Give team members a voice that influences leadership and shapes the direction of our company

Aspiration

Develop leaders who are committed to helping our team members be their best and do their best work in service of our customers

Goal

Increase engagement and drive inspirational leadership on Dell's strategies, priorities and goals through Dell's end-to-end Leadership Development Programs

Increase engagement and drive inspirational leadership on Dell's strategies, priorities and goals through Dell's end-to-end Leadership Development Programs

Status: In FY16, 40 percent of all Dell leaders completed at least one leadership training during the year, exceeding our 2020 goal of 20 percent.

Background, challenges and opportunities

Becoming an inspirational leader requires a broad range of skills including strategic thinking, listening, problem solving, decision-making, and motivating others to do their best work. Leading within Dell's fast-paced, global work environment requires additional skills such as leading geographically dispersed teams, managing remote workers, and understanding diverse cultural backgrounds.

To cultivate these skills at all organizational levels, from first-time managers to executives, Dell has developed end-to-end leadership programs. In FY16, we continued to grow these programs globally and adapt to our leaders' changing needs. For example, we fully operationalized our *Director Leadership, Inspiring Leadership,* and *Women in Leadership* programs by offering them in all regions.

We also launched a program for new graduate hires to provide them with professional development and guide their transition into Dell as they network and build professional relationships.

We continued to adapt our training models to meet the needs of Dell's increasingly mobile workforce. For each new training program we introduced in FY16, we offered a virtual version of the content offered in the classroom to reach leaders who work remotely.

Progress to goal

In FY16, 40 percent of all Dell leaders participated in one or more of our leadership trainings—a slight increase from our FY15 participation rate of 38 percent.

We believe ongoing leadership development supports managers and executives as they create an environment where people can perform at their best. All of the programs within our end-to-end leadership development curriculum support the "*Inspiring Leaders*" pillar of our People Strategy.

Additionally, we continue to offer training related to other important subjects for Dell leaders, such as diversity and inclusion. Examples of this include our *Women in Leadership program* for women directors and *Men Advocating Real Change (MARC)* program, which guides managers in their efforts to promote gender equality and an inclusive culture at Dell.

Expanding our leadership and development programs

Our Leadership Development programs expanded in FY16 to include new offerings at all career levels in all regions, including "potential leaders"—those who currently lead project teams or would like to move into management. We also continue to offer online resources for people interested in leadership development.

Executive Rapid Start gives new Dell executives the resources they need to be successful in their role, and in FY16 we successfully used this program with 100 percent of our new external executive hires.

We also created and launched ExecConnect, Dell's internal social media site (similar to LinkedIn), in December 2015. This site provides our executives with an easy way to network, collaborate and learn more about peers.

In FY16, we expanded our delivery of the *Women in Leadership* program to all regions. This program helps Dell women senior managers and executives understand their unique strengths in inspiring their teams, create action plans for growing their leadership skills, and build a network with other women leaders at Dell.

We also expanded our director-level programs by delivering the *Director Leadership* program globally in FY16. This program enhances directors' leadership acumen and provides them with opportunities to learn from senior Dell leaders. The program is tailored to address the specific development needs of a role, region or business unit.

Partnering with diversity and inclusion

We continued to make diversity and inclusion a focus area of leadership development.

In FY16, we created four new training modules that can be used by Dell's employee resource groups (ERGs) to include professional development as part of their work. Our ERGs are designed to build upon Dell's culture of inclusion by bringing team members with common interests together to positively impact Dell's business, give back through volunteering, network, and develop inspiring leaders. The ERG training modules' topics are networking, mentoring, career transitions and influencing. A Dell executive often speaks as part of the training to offer his or her insight on the topics.

"The Director Leadership Program was an excellent experience for me. The combination of self-evaluation and collaboration with similarly situated leaders provided both a personal and team perspective to the tools and processes of leadership at Dell."

— *Joe Burke*
Chief Compliance Counsel,
Global Ethics and Compliance

Progress to goal (continued)

As another way to support diversity and inclusion at Dell, *Women in Leadership* program graduates in our Europe, Middle East and Africa (EMEA) region helped us roll out a one-day *Advancing Your Career* class. In this class, the graduates taught their *Women in Leadership* learnings to other women. In FY17, we will expand *Advancing Your Career* classes to more regions.

In FY16, we launched our *Leading Virtual Teams* training to equip Dell leaders with the skills needed to engage geographically dispersed teams and team members working remotely. The training will help leaders develop skills in virtual communication and collaboration, and practice these skills in a simulated virtual team setting.

FY16 was Dell's second year promoting *Men Advocating Real Change (MARC)*, an initiative for men and women leaders committed to creating a more inclusive workplace.

The Executive Leadership Team participated in MARC sessions in FY16, bringing our total executive participants to 242 (which is 36 percent of Dell executives). In EMEA, more than 100 senior leaders participated in one-day MARC sessions and became ambassadors for the program. These MARC ambassadors then rolled out awareness sessions, reaching more than 800 team members.

Measuring program effectiveness and impact on leadership

We continued to hone our methods for evaluating the effectiveness of Dell's leadership training, focusing measurement on our *Foundations of Leadership* program. In FY16, 78 percent of our newly promoted leaders enrolled in this program (our target for 2020 is 100 percent), which provides first-time managers with the skills and tools they need to be inspiring leaders at Dell.

We surveyed *Foundations of Leadership* program participants and their managers, with these key results:

• 95 percent of participants were satisfied with the program as a whole and would recommend the training to their peers. Participants valued the inclusion of job-relevant content and the use of real-life examples and case studies.

• 97 percent felt confident that they will be able to apply what they have learned on the job.

We also surveyed *Women in Leadership* program participants, with these key results:

• 100 percent also stated the program met their learning expectations and provided knowledge they will apply to their jobs.

We surveyed *Director Leadership* program participants, with these key results:

• 93 percent said the program met their learning expectations.

• 93 percent felt confident they will be able to apply what they learned to their jobs.

Next steps

• We plan to expand the MARC program to more global leaders and hold more MARC awareness sessions in FY17. MARC Ambassadors in the U.S., Asia Pacific-Japan, India, and Latin America will deploy MARC awareness sessions beginning in FY17.

• We will embed more on-demand learning solutions into our programs and training modules, and increase our usage of these assets.

• We will expand our *Advancing Your Career* classes to more regions in FY17, including the U.S. and APJ.

At a MARC awareness session, Dell leaders examine how to create a more inclusive workplace.

Creating Dell's inclusive culture starts at the top

Increasing workforce diversity is a hot topic among technology companies. But diversity is only one part of the equation—inclusion is the other. For a globally representative workforce to truly thrive, all people must feel equally understood and appreciated for their unique perspectives.

Dell is a leader in this area, as the first IT company to participate in *Men Advocating Real Change (MARC)*, an immersive program for emerging and senior leaders focused on engaging men as change agents who lead efforts to bring greater diversity to the workplace. More than 400 Dell executives and senior leaders, including Michael Dell, have completed intensive MARC workshops where they openly discussed workplace dynamics—especially related to gender—and examined the effects of their own unconscious biases. More than one quarter of Dell's MARC participants were women, which enriched the discussion as leaders compared their personal perspectives.

"MARC made me realize I unconsciously favored team members without family commitments. I now limit early morning calls, which benefits all working parents," revealed Doug Hillary, Dell's vice president of sales operations in North America. "I have also joined Wise (Dell's employee resource group for women), taken an active role in mentoring women, and encouraged my male colleagues to do the same."

After the workshops, participants furthered the "MARC Movement" by sharing their personal insights with their teams, mentoring employees, and helping facilitate the program's global expansion. More than 100 senior leaders in Dell's Europe Middle East and Africa (EMEA) region became certified MARC ambassadors in FY16 and they've held learning sessions with more than 800 team members. In FY17, the ambassador program will become global, as will a training offered to employees on unconscious bias.

"MARC is the most exciting initiative I've ever worked on at Dell. It shows leaders that subtle changes in thinking can make a huge difference. And leaders' actions show everyone that inclusion matters here, at all levels." said Ingrid Devin, Dell's EMEA diversity and inclusion lead.

Watch Dell leaders discuss their MARC experience.

Aspiration

Promote a culture where our team members are encouraged to take risks and feel supported, valued and proud to be a part of Dell

Goals

Engage 40% of our global Dell team in employee resource groups by 2020

Encourage eligible team members to enroll in Dell flexible work programs, increasing global participation to 50%

Engage 40% of our global Dell team members in employee resource groups by 2020

Status: At the end of FY16, 24 percent of Dell team members were engaged in employee resource groups—a significant increase from 18 percent in FY15. Overall, 25,039 team members are involved in an employee resource group, putting us on track for our 2020 target.

Background, challenges and opportunities

Employee resource groups (ERGs) are designed to build upon Dell's culture of inclusion. Inclusion means not only having team members with a diverse set of backgrounds and perspectives, but also fostering an environment where all team members can grow and thrive and feel free to bring their whole selves to work. ERGs support this by enabling team members with common interests to come together to impact Dell's business, give back through volunteering, network across the company, and develop inspiring leaders. Any team member can join any ERG. Although each group has a particular focus area, allies are encouraged to join and play a vital role in each ERG's success.

The misperception that someone has to belong to an ERG's reference group in order to join an ERG is a challenge we face. For example, our Wise ERG began with a focus on women's professional development but has many male members who are committed to gender equality and have joined the diversity discussion. And, many straight allies belong to our Pride ERG, which is focused on issues related to the lesbian, gay, bisexual and transgender community.

In FY16, we made progress toward combating this misperception. We hosted a new event called Global ERG Days to increase awareness of ERGs and the benefits of joining them. Another new strategy was to emphasize cross-ERG partnerships to maximize the impact of ERG events.

The dispersed nature of our global workforce—with 25 percent of eligible team members enrolled in flexible work programs—is also a continued challenge to growing ERG membership. In FY16, we worked to make ERG involvement easier for those who work remotely or in some other flex work capacity.

The results of our Tell Dell employee survey show the more active Dell team members are in ERGs, the more engaged they are in their careers. ERG members also have a better understanding of Dell's strategies. We will continue to look for opportunities to make ERGs a valuable resource for our workforce and our business in FY17 and beyond.

Progress to goal

At the end of FY16, we reported 25,039 ERG members across nearly 60 countries, with 256 chapters overall. That's a 38 percent increase in the number of chapters and a 44 percent increase in membership year-over-year. We saw significant growth in Asia Pacific-Japan (APJ), where the number of ERG chapters doubled, from 27 to 54.

Each ERG chapter is governed by its own leadership team and is responsible for coordinating activities at its Dell site. Many sites have more than one ERG chapter, and cross-ERG collaboration at the site level is increasingly common. Since chapters are only created when team members step forward and express interest in forming a chapter at their site, the significant FY16 growth in the number of ERG chapters illustrates both increased geographic reach and team member interest in ERGs.

In FY16, we drove accountability for increasing ERG membership at every level of Dell, starting at the top. Each of our 11 ERGs has a Dell executive sponsor who acts as a global ambassador for their group. In addition to promoting the benefits of ERG membership as they visited Dell sites around the globe, this year the executive sponsors also met with ERG chapters worldwide to help them develop strategies for building awareness. We also increased visibility into the progress each Dell Executive Leadership Team member's organization has made toward our 40 percent ERG membership goal. Leaders from Dell businesses with lower ERG membership representation launched a number of initiatives to drive ERG awareness among their teams.

Our work with ERGs is gaining recognition outside of Dell. Dell was ranked number four on the 2015 DiversityInc Top 10 Companies for Employee Resource Groups. Adelante (our Hispanic/Latino ERG) was honored as the runner-up in the U.S. Hispanic Chamber of Commerce's Corporate ERG Challenge, a competition that recognizes ERGs' value in impacting business results, building community, and developing employees. Also, Springboard Consulting recognized Dell as a 2015 Disability BRG Award of Excellence Recipient (for the True Ability ERG) in both Europe, Middle East and Africa (EMEA) and North America.

Using team member feedback to improve our ERGs

In the FY16 Tell Dell employee survey, 38 percent of team members said they were unaware of ERGs' existence (down from 42.5 percent in FY15). As one of many things we did to address this feedback, we hosted Global ERG Days, a worldwide initiative aimed at giving our globally dispersed team members an opportunity to experience first-hand the benefits of ERG membership.

This initiative attracted more than 900 new ERG members through over 80 events around the world—including professional development trainings, volunteering community impact activities, networking, and presentations and panels with senior leaders.

Our Tell Dell survey, as well as a global ERG member survey, also revealed the need for clarification in some areas. For example, 13 percent of FY16 Tell Dell respondents said they weren't ERG members because they didn't understand the benefits of membership. Others expressed the belief that there was no ERG they could join. Since ERGs have benefits to offer for everyone and anyone can join any ERG, we sought to clarify and strengthen the messaging around ERGs.

Additionally, an ERG member survey we completed in FY15 revealed that in a few ERGs, a large percentage of current members felt they were unable to clearly explain their ERG's core pillars, strategy and vision. This is what drove our Black ERG (formerly BRIDGE) to rebrand at the end of FY15 and start FY16 with a refreshed vision, core team, and strategic priorities. Other ERGs undertook similar actions on a smaller scale for the same reasons.

Increasing awareness of and support for ERGs

In FY16, we provided our ERG community with additional training materials covering subjects including how to utilize our Powering the Possible online tool to manage memberships and how to run effective team meetings. We also continued to hone our ERG reporting capabilities, which will help us obtain the detailed insights into global membership distribution we need to better and facilitate ERG-based volunteerism.

In late FY16, we launched a "Why Join an ERG?" video featuring ERG members around the globe sharing why they got involved and what being in an ERG means to them. Top Dell leadership distributed the video across the business to promote a broader understanding of ERGs' membership benefits.

We continued to promote ERGs through employee events. Additionally, we encouraged ERG leaders and members worldwide to use our Diversity Impact Tool to record event details—such as location, attendance, outcomes, speakers and photos—so we can better track ERG activities' effectiveness.

Progress to goal (continued)

Evolving and growing our ERGs

Most Dell ERGs are based around site-specific chapters. We made progress in FY16 toward engaging team members who aren't based at a physical Dell site. Nearly all of our ERGs now have a chapter for remote members and we've made more ERG events accessible virtually.

In North America in FY15, we launched Conexus, our ERG focused on supporting a flexible work culture among team members who work remotely (either full-time or occasionally) or work at variable hours. Conexus also enables team members who work remotely, but in the same geographic area, to volunteer together.

Conexus membership has increased from 862 members in two chapters at the end of FY15 to 2853 members in 17 chapters at the end of FY16. It is now Dell's fourth largest ERG. This progress is especially meaningful because, given our goal to have 50 percent of eligible Dell team members enrolled in flexible work programs by 2020, the need to support virtual teams will only increase.

Since launching Mosaic—an ERG that celebrates the world's many cultures—we have realized rapid, exponential growth, from 44 members in four chapters at the end of FY15 to 191 members in seven chapters at the end of FY16. That's an increase of 334 percent in membership and 75 percent in chapters.

Connecting for stronger teamwork and innovation

In FY16, Dell ERGs continued to unite their members to better serve our customers, enhance their own professional development, give back to the community, celebrate their cultures and interests, and educate other team members about their unique perspectives. Examples of their work start on .

Kendra Hunt
Global Talent Management

▶ youtube.com/DellCareers

Dell team members share what it means to be involved with a Dell employee resource group (ERG) and connect with employees with shared backgrounds and interests.

Next steps

- In FY17, we will continue to drive more active and engaged membership across all ERGs.

- We will encourage our Dell ERGs to develop activity offerings that align and support business goals.

- We will continue to encourage Dell executives to support ERGs and share their personal stories about why they're involved.

- We will support and promote more cross-ERG collaboration, which is especially important at our smaller Dell sites.

ERGs at Dell

GenNext

Provides a network for new hires and young professionals which fosters Dell's growth and success through community involvement, personal empowerment and professional development.

- Hosted second annual GameChangers Innovation Competition, at which 600 team members worldwide collaborated to address current issues facing Dell and present ideas to executives

Black
Employee Resource Group

Creates an engaging environment for black team members that accelerates professional growth, drives business excellence, and fosters community involvement, while serving as a critical engine for attracting top black talent into Dell's leadership pipeline.

- Hosted a kickoff event to celebrate its rebranding and new name, which were designed to increase the ERG's resonance among team members

Asians in Motion

Dedicated to global growth of Asian leadership and cultural awareness at Dell, Asians in Motion seeks to build future leadership by recruiting, retaining and developing Asian talent.

- Offered a series of professional development programs on a variety of topics and hosted an annual Taste of Asia event at U.S. headquarters

Wise

Enables women at Dell to grow and thrive by creating connections and providing leadership and expertise to deliver on the promises of Dell's people and business strategies.

- Held over 100 *IT is Not for Geeks* sessions for 4,298 students globally to encourage more young people to enter tech careers; 1,892 ERG members participated in training on career topics including networking, influencing and mentoring

Adelante

Enhances the personal and professional development of team members who have interests aligned with the Hispanic community.

- Held second annual Family Picnic at U.S. Dell headquarters; launched Adelante Badge Program to encourage members to continue learning and incentivize higher participation

Veterans

A community for veteran and military supporters at Dell, striving to be leaders in providing support for all active duty, reserve, former military and services members, as well as their families.

- Held its first Veterans Benefits Day, where a variety of institutions that offer support to veterans came to the Dell Round Rock campus. The ERG also rebranded from "Virtus" to "Veterans" to clarify its focus.

ERGs at Dell (continued)

True Ability

Educates, drives awareness and serves as a resource for our team members impacted by disabilities or special needs.

- Hosted a Dine in the Dark lunch event to raise awareness for visual impairment in Dell's APJ, North America, and EMEA regions; inaugurated an employee transportation bus for Panama employees with disabilities

Pride

Enriches the Dell experience for those whose interests are aligned with the lesbian, gay, bisexual and transgender (LGBT) community.

- Launched the Pride Ally campaign and 16 Dell sites participated; the #BeYourself campaign encouraged team members to "be who you are at Dell"

Planet

Encourages an environmentally responsible culture by increasing team member awareness, partnering with Dell business groups to implement relevant environmental solutions and leading our communities as sustainable stewards.

- Drove Earth Day activities, including tree planting, at multiple sites; membership grew 260 percent in 2015; with over 3,600 members in APJ, Planet is the largest ERG in this region

Conexus

Champions a flexible work community by creating a collaborative environment that enables team members to grow and thrive.

- Began work on a Conexus locator tool to help remote team members find one another and Dell events; hosted a 5K race benefiting March of Dimes at U.S. headquarters

Mosaic

Focused on connecting and recruiting employees from different cultures at Dell while enhancing their career and strengthening the Dell brand through engagement with local communities.

- Highlighted different religious cultures and celebrations each week during November—including Diwali, Eid, Hanukkah and Chistmas—to celebrate Shine a Light month for Mosaic London

Encourage eligible team members to enroll in Dell flexible work programs, increasing global participation to 50%

Status: At the end of FY16, approximately 1 in 4 eligible Dell team members worldwide were enrolled in flexible work programs, the same ratio as reported last year. This puts us 50 percent of the way toward reaching our 2020 goal.

Background, challenges and opportunities

When it comes to the workplace, things are changing—and fast.

Technology has made it so we can work from almost anywhere. Creating a sustainable and innovative business is becoming more important. And, today's employee wants to work differently. So we've been asking, in this mobile and global world, how can we best align Dell's technology and workplace values to operate in ways that deliver better results for our customers—and make us happier?

Dell's Connected Workplace program enables eligible team members to work remotely, at variable hours or in other flexible capacities that fulfill their job and lifestyle needs. Since we launched this program in 2009, we've been examining our approach and constantly improving on our flexible workplace strategy.

We've learned a lot by being introspective and with that, we can serve our customers better. We can show how enabling a flexible workforce can result in real business benefits—from the hiring and retention of team members to reducing our environmental impact and facilities costs.

For example, measuring the impact of the changes we're making provides us with insights we can use and dispels some common misconceptions about flexible work. Our Evolving Workplace survey—administered in FY16 to 50 percent of Dell's population—received more than 16,000 responses and revealed Dell team members—across all age groups, gender, ethnicities, experience levels, and locations—highly ranked work flexibility as very valuable. This shows that work flexibility is a uniting concept for all generations, not just for Millennials.

We've also determined that our culture of flexibility allows us to attract a wider and potentially more qualified pool of candidates to Dell—which means we can better support our customers while supporting the life choices and well-being of our team members.

And last, we've learned that engineering a new kind of work culture isn't possible with a one-size-fits-all program. We're looking at different ways to incorporate technology, flexibility and new ideals for our diverse employees. They can choose—with their managers—the working arrangement that best fits their needs.

Progress to goal

In FY16, we offered Connected Workplace at 23 new sites. This extended the program's global reach to 73 sites in 29 countries, up from 50 sites in 28 countries in FY15. Eligible team members can choose from a variety of flexible work solutions including work-from-home and part-time work arrangements, variable work times, and job sharing. They can elect how much they want to leverage work flexibility and how often.

While the Connected Workplace program provides a formal structure for team members to enroll in flexible work arrangements we also realize the popularity of more informal flexible work arrangements. Based on Dell's 2015 Tell Dell survey, 53 percent of Dell employees are not

officially enrolled in the Connected Workplace program but often work remotely or in a flex work capacity, with the approval of their managers. This gives employees the chance to try work flexibility without committing—and we embrace that approach.

Progress to goal (continued)

Dell's ongoing commitment to work-life balance for all team members earned us a spot for three consecutive years on FlexJobs' 100 Top Companies for Remote Jobs, coming in at #6 in 2016.

Identifying ways to improve and measure success

As we evolve our flexible work culture and initiatives, we continue to identify ways to measure and improve our success. For example:

• We are exploring methods to more accurately measure the number of team members leveraging flexibility informally (outside of Connected Workplace). This will help us understand how we can best support our team members in choosing the arrangements that work best for them.

• Our FY16 Dell Culture survey—an online survey to assess team members' perceptions of Dell's culture— showed that Dell is supportive of work-life flexibility, but we have an opportunity to reduce the complexity of our processes.

Enabling team members to connect

In addition to being users and champions of work flexibility themselves, Dell's senior leaders are also actively engaged in the success of the Connected Workplace program. Roughly 59 percent of our executives say they use some form of work flexibility in their roles at Dell. Their support helps elevate flexible work from a program to a culture. In FY16, Dell executives continued to share their success stories and best practices around our flexible work program through the Conexus ERG Development panels, which are open to all team members to hear about how executives can combine success and work flexibility.

Team members also explore and share best practices through Conexus—our employee resource group for remote team members. This group enables members to connect, network and come together with other remote employees living near them to volunteer in their local communities together.

Shifting our workplace to the future

Work flexibility doesn't just come from what we do to enable people to work remotely, but also from how we support a flexible work environment within the Dell offices.

For example, many Dell team members now spend all or part of their time working remotely, but come into the office to work in teams and groups. They may also need quiet space, but that no longer needs to be an assigned cubicle, which would sit empty much of the time.

In FY15, we piloted our Workplace Innovation program at select Dell facilities, testing various combinations of new technologies and workspaces designed for our flexible workforce. Today, Workplace Innovation has been introduced in eight locations across the globe, with several more in the works for FY17, including the Evolving Workplace Lab. This lab will be a customer and employee-facing environment that will constantly evolve to include the latest Dell technologies and space concepts. Employees will have the opportunity to immerse in this environment for a three month time period to provide usability feedback and influence future Dell technologies and space concepts. Customers will have the opportunity for insight into Dell's vision of the future of workplace, a request we receive often.

Our new configurations offer a mix of open collaborative areas, rooms for phone/audio conferencing, and areas for quiet, focused work. We have received positive feedback from team members and will continue to transform our sites to reflect the culture we're trying to create.

# Our flexible work culture works for everyone

At Dell, our team members work hard for our customers while creating happy, successful lives for themselves. From working remotely to job-sharing to compressed work weeks, our team members get great results no matter how, when or where they do their jobs.

Dell was recognized as #6 on **FlexJobs' 100 Top Companies for Remote Jobs in 2016**
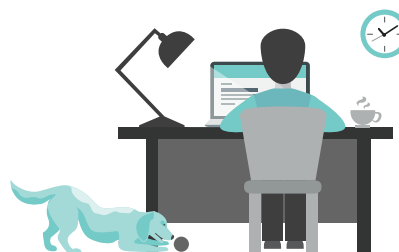
2,853

Conexus membership has increased to **2,853 members** in 17 chapters
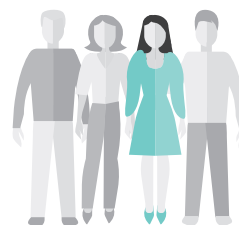
1 in 4 team members are participating in a flexible work program

In FY16, Dell offered Connected Workplace at 23 new sites, extending the program's global reach to **73 sites in 29 countries**

When employees have a high degree of work-life balance, they are **4x** as likely to be engaged at work and are **twice as likely** to want to stay in their current jobs

Progress to goal (continued)

Reducing our environmental impact

Participation in Connected Workplace also helps Dell reduce its environmental impact.

In our operations, flexible work's biggest environmental benefits are the reductions in energy use and greenhouse gas emissions that come from maintaining a smaller real estate footprint and fewer team members commuting daily. Since 2013, Dell has reduced our real estate costs by $39.5 million as a result of implementing Connected Workplace. In FY16 alone, we implemented Connected Workplace initiatives in 23 Dell locations, contributing to our real estate consolidation.

We estimate that between FY14 and FY16—our three years of measurement toward our 2020 goal thus far—Dell avoided an estimated 25 million kilowatt-hours of energy and 13,000 metric tons of carbon dioxide equivalent (CO2e).*

The sustainability-related Benefits of the Connected Workplace Study

In FY16, Dell conducted a Benefits of the Connected Workplace Study to develop a deeper understanding of employee commute patterns and the sustainability-related effects of our flexible work initiatives. We surveyed more than 1,300 U.S. Dell employees on their work location, average number of remote work days per month, average commute distances, as well as vehicle mileage data.

According to our study, the average U.S. Dell employee, whether working through a formal program or informal arrangement:

- Works remotely 9.7 times per month. This is significant compared to the national average of 2.3 times per month identified by Gallup in its 2015 poll on telecommuting.

- Avoids using 175 gallons of gas, at a savings of $350 per year.

- Sees a reduction in their greenhouse gas footprint of over one metric ton of CO2e per year.

These figures include consideration of rebound effects such as employees' increased use of electricity while at home during the day. Collectively, U.S. Dell employees:

- Save over $12 million in fuel costs per year

- Avoid 136 million miles of travel per year

- Avoid over 35,000 metric tons of CO2e per year

This study was one of our pilot measurement initiatives in our work to quantify the environmental benefits of Dell-developed solutions (see page 75).

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* Calculations based on assumption that the energy and emissions avoidance takes place for a three-year period after Connected Workplace-related project roll-out.

Next steps

- In FY17, we will launch a crowdsourcing challenge, which will solicit team member ideas for how we can support work flexibility in new ways.

- We will look for ways to properly quantify team members' informal usage of flexible work arrangements so we can better support their success.

- We will continue to develop our thought leadership on the topic of flexible work. We'll participate in webinars and conferences throughout FY17, including the Telecommuting, Remote, and Distributed—or TRaD—Works Conference, that will advance ideas for increasing flexible work's positive impact for both employees and employers.

- We will continue to explore customer partnerships on joint topics that explore the impacts of work flexibility.

- We will continue to introduce Workplace Innovation projects, including our new evolving workplace lab, that will allow Dell teams to test different work environments and new technologies and also offer Dell customers the opportunity to tour the space.

- We'll continue to study the sustainability-related benefits of our Connected Workplace program in FY17, based on the positive results we have seen so far from our initial study.

How Connected Workplace helps our environment

13,000
metric tons of GHGs avoided

is similar to

31 million
miles **not** driven

65
car trips to the moon and back

which is approximately
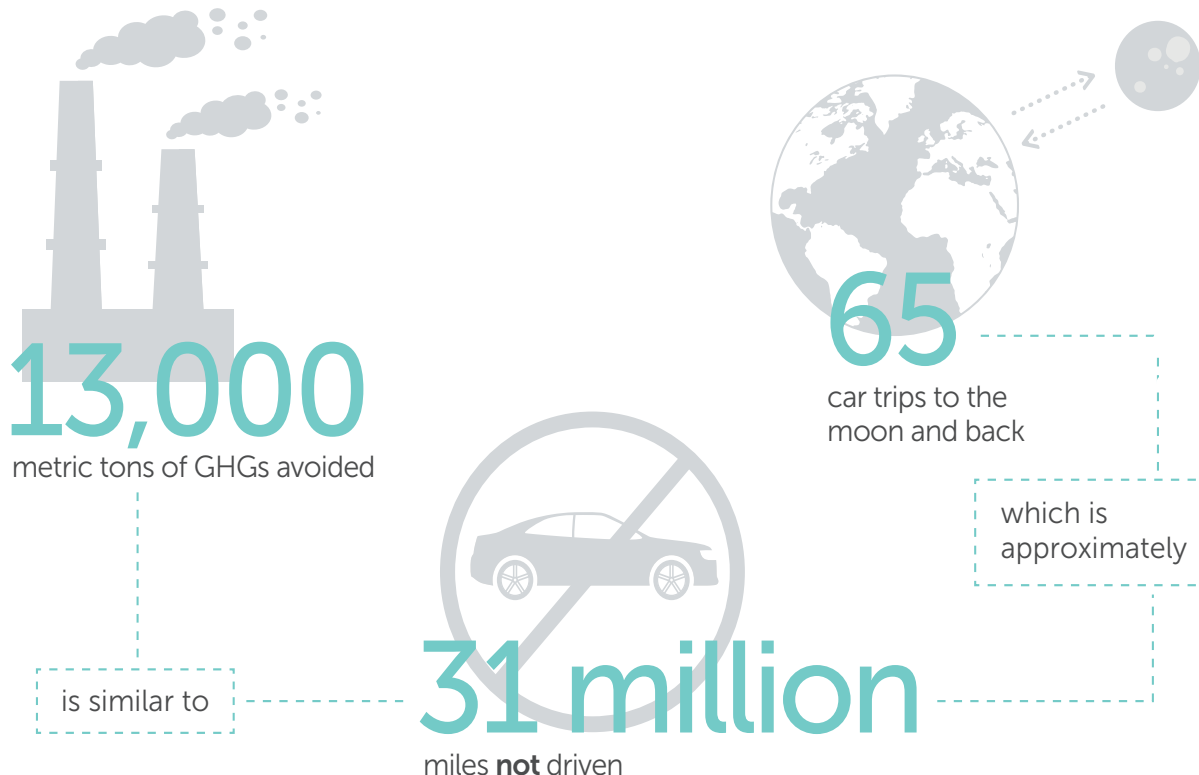
Dell team member Chelsea Rigney with her active dog, Beau.

A Millennial perspective on work-life balance

When Chelsea Rigney was recruited to Dell after graduating from Texas A&M University in 2011, the company's flexible work options were a big selling point.

"Based on my role and responsibilities at Dell, my manager told me I could arrange my day in the way that works best for me. It didn't matter when or where I did my work, as long as I got the job done," said Chelsea, now a global internship program manager at Dell. "I'm very independent, so that was attractive to me. And it was something I hadn't really heard from other companies."

Chelsea is part of a Millennial generation that is changing the workforce composition at Dell and elsewhere. According to the Pew Research Center, in 2015 Millennials (adults ages 18-34) became the largest generation in the U.S. workforce, making up a third of all workers. Turns out Millennials value work flexibility as much as any other generation working at Dell because of the work-life balance they experience. Dell's 2015 team member survey revealed our Millennial, Generation X, and Baby Boomer employees all ranked work-life balance as their top career goal and flexible work arrangements as their most important Dell benefit.

For Chelsea, work-life balance means making time for personal priorities during the day, without guilt. "Working from home four days a week allows me to give my very active dog, Beau, more of the exercise he needs," said Chelsea. "Because my team is global, I may be on a call at 6 a.m. So I'll take a long lunch break to walk Beau, take a spin class or put dinner in the crock pot. Once a week I wrap up early to visit my sister and grandma."

Chelsea admits she was afraid of feeling lonely when she made the move from working at Dell's U.S. headquarters in Round Rock, Texas, to working from home. Because she's on the phone most of the day, she discovered her experience was largely the same, and her verbal communication skills even improved. And Chelsea adds, "Having no commute and fewer distractions has improved my productivity and quality of life dramatically!"

Learn more about Dell's flexible work programs.

People Spotlight

Aspiration

Be a compelling destination for our team members to thrive, achieve their career aspirations and have fun

Goals

Increase university hiring to a rate of 25% of all external hiring

Be recognized as best-in-class Employer of Choice

Increase university hiring to a rate of 25% of all external hiring

Status: At the close of FY16, Dell's university hiring represented 32 percent of all external hires, up from 24 percent in FY15. We're on track for meeting this goal by 2020.

Background, challenges and opportunities

Dell puts a lot of value on attracting the world's best and brightest minds from universities around the world, as they are a source of diverse perspectives and cutting-edge technology skills. We must build long-term relationships with current students to strengthen our employment brand and use a dedicated, visible and authentic approach to recruiting. To do so in a large, global hiring market we utilize both social media and face-to-face contact.

This past year, we continued our work to stay ahead of the rapidly changing social media landscape and maintain a presence where our candidates are spending their time. We now have an active Life at Dell presence on Instagram. We also made applying for a Dell job faster and more accessible via mobile devices—a feature we believe is critical to attracting today's talent.

And we've answered student demand for professional development opportunities by launching Jump Start, a program for our new Dell hires.

We're inspired by our success in meeting this goal in FY16, and we'll continue our annual work to sustain our performance all the way to 2020. To accomplish this, we'll address the challenges of a competitive hiring market and address the needs of our student demographic.

Progress to goal

One of Dell's FY16 goals was to hire 4,000 students, graduate students or recent graduates, within 12 months of graduating. We ended up making 6,200 university hires this year, which was 32 percent more than our goal and an 8 percent increase over our FY15 performance.

The tactics we employed to realize this success included evolving our recruitment strategy to reach tech-savvy students in more engaging ways. For example, we improved candidates' accessibility to Dell job applications though our mobile Dell.com website. According to Jobvite's 2015 Jobseeker survey, 47 percent of Millennials are using mobile technology in their job search. Our functionality upgrades have reduced the average mobile applicant session time by over five minutes—improving efficiency and the overall candidate experience. In our first six months of accepting mobile job applications in August of 2015, we received more than 15,000 submissions.

Dell also received dozens of global and country-specific recognitions in Universum's 2015 Employer Brand Study, which asks more than 200,000 university students worldwide to choose their ideal employers. In FY16, we ranked #23 on the Universum "World's Most Attractive Employers—Engineering/IT" list, up from #38 last year. In the Asia Pacific-Japan region, Dell jumped from #48 to #14 on Universum's list. In Latin America, Universum also ranked Dell #12 for Engineering/IT students and #30 for Business students.

These rankings are based on student surveys which reveal how they perceive employers. In Malaysia, Dell was recognized as the IT Employer of Choice for the third year in a row.

Deepening our relationships with universities and organizations

Over FY16, we cultivated deep relationships with major universities and student organizations in all Dell regions. We engaged actively with them to shape innovative ideas for inviting new graduates to explore careers at Dell.

Examples of this work in FY16 include:

- Partnering with The University of Texas at Austin to present HackTX, a 24-hour hackathon at which hundreds of students created technology inventions including apps and computer hardware.

- Developing a new external Tech Support University Program, where students in Brazil learn Dell-specific technical job skills. Classes teach hardware and software skills used in our customer support centers. This has proven to be a new talent pipeline that resulted in 15 direct hires.

- Collaborating with the University Visvesvaraya College of Engineering in Bangalore (one of the oldest Engineering schools in India) to set up a Dell lab for on-campus project execution by students. Professors and students worked on real Dell projects, giving them tangible business experience and providing Dell with fresh perspective and ideas.

- Organizing our first Dell Inter-University case competition and inviting MBA students from the top universities in Singapore to discuss with Dell business leaders the best business practices in supply chain management.

- Strengthening our relationship with the United Negro College Fund (UNCF), one of the U.S.'s largest educational resources for minorities. The partnership has enabled UNCF to provide college sponsorships and enabled Dell to hire top talent into our summer internship program.

Engaging students through social media

In FY16, we launched a global social engagement strategy designed to more effectively leverage our current team members' voices. We captured more "real life" stories from the perspectives of interns and recent university hires and used our social media communities and Dell Champions programs to help amplify our career development programs. Dell Champions are social media and brand-certified team members who have elected to be advocates for Dell both internally and externally. This includes participating in events and activities and sharing Dell content on social media.

We constantly examine how social media use shifts with our target audiences. This helps us broaden our reach by engaging students on the platforms where they spend the most time, and through groups targeted to various fields of study and professional interests.

Progress to goal (continued)

For example, our Careers at Dell group on Facebook has grown steadily year over year for certain age demographics, in particular ages 25-34. In FY16, this age group grew nearly 18 percent.

In just a few short weeks after launching, our Life at Dell account on Instagram—one of the fastest growing social media platform among Millennials—experienced rapid growth, demonstrating that this was the right place for us. Other examples of how we're using rich content and proactive communications to engage online include:

• Attracting students on social sites, including Twitter, where our team curates, creates and shares team member success stories. Over the past year we've shared many recent campus hire stories using the hashtag #DiscoverURFuture. We also share videos on YouTube and Facebook starring recent university hires discussing their favorite parts of working at Dell.

• Sharing information about our Career Development Programs to generate interest in Dell as a place to grow and thrive. In these programs, new hires early in their career can learn the inner facets of the department they're interested in. We're reaching this audience of prospective employees by engaging with students on Facebook and LinkedIn's social and business networks with a combined total of nearly 2 billion users. Explore examples of this content on our YouTube page.

• Posting a Slideshare presentation showcasing why we're a great employment choice, told from the perspective of actual Dell interns. Just four months after posting this content, over 2,200 individuals had viewed the presentation—with shares on Facebook and LinkedIn.

• Blogging on LinkedIn to engage with students and share personal, real-life stories about what life at Dell is like. FY16 was the third year of Dell's Most Influential Intern Blogging Contest in the United States. These submitted blog posts showed potential interns what a summer at Dell would be like through peer perspectives on the culture, projects and people.

• Broadcasting online video to attract great viewership. Our DellCareers YouTube channel features video testimonials from team members as well as behind-the-scenes footage from our offices. We also enlist team members to share their experiences through more informal, 15-second video clips we share via our Careers at Dell Facebook page, Twitter account, LinkedIn page and Instagram.

Professional development for new team members

In FY16 we launched Jump Start, a development program. We find students are looking for professional development in a prospective employer and Jump Start is one way we provide it for every new campus hire, regardless of their role or location. Jump Start offers development programs in a new hire's first year to guide their transition into Dell while networking and building professional relationships.

▶ youtube.com/DellCareers

Explore video testimonials from Dell team members and hear what their careers mean to them.
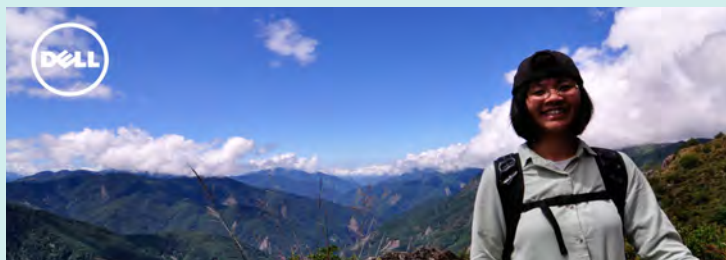
Sharing early-in-career stories on social media

Real-life examples of team member testimonials used in social media

"Dell's Jump Start program has helped me build better relationships with my colleagues and taught me how to build my personal brand effectively."
—Bhawna, Dell India

"When just starting your career, Dell is like a huge giant whose shoulder you can stand on to gain a lot of exposure and experience."
—Sunny, Dell Taiwan

Next steps

- In FY17, university hiring will be a more integrated part of each Dell business unit's talent strategy, with country-specific targets and roles to be filled.

- We will continue to share the impact graduates are having on our overall level of innovation, by highlighting success stories, tracking performance and engaging our graduates in very visible ways like our Global Game Changers competition, which is run by our GenNext employee resource group.

- We will adjust our university hiring strategy to be more effective and also find new ways to forecast hiring volumes even further in advance. To do this, we will complete an end-to-end review of Dell's university recruitment strategy in FY17, examining every step from headcount planning to onboarding new hires.

- We will continue to study the success of our mobile Dell.com website and applications—and maintain our presence where candidates are present, partnering with schools, businesses and governments to connect with students.

- In FY17, we will take the intern blogging contest global to help showcase Dell as a multicultural company with opportunities around the world. We will achieve this by sharing stories of our team members from every corner of the globe.

Be recognized as a best-in-class Employer of Choice

Status: In FY16, we garnered more than 40 awards worldwide related to being an employer of choice. Results from our annual employee satisfaction survey—Tell Dell—measured that 85 percent of our global team members were satisfied with their experience at Dell. This exceeds our ongoing goal of achieving a favorable score of 75 percent or higher.

Background, challenges and opportunities

Just as we aspire to be the best partner for our customers, Dell also aspires to and continuously works on being a best-in-class Employer of Choice. Below is how we define what employer of choice means and how it aligns with the work we do at Dell:

• Attracting and hiring the best talent

• Making Dell leaders inspirational

• Focusing on employee satisfaction

• Building a great place to work

• Making a lasting community impact through volunteerism

While we are happy to see progress on most areas as outlined below, we also acknowledge the need for an ongoing review of the key pillars that define us as an employer of choice so we may ensure they continue to reflect our aspiration to be a best-in-class employer of choice.

Progress to goal

In FY16, 37 percent of new hires came from team member referrals.

Our team members' enthusiasm for working here also drove external recognition of Dell's employment brand by organizations around the globe.

The importance we place on integrity was recognized by Ethisphere Institute's World's Most Ethical Companies award. And FlexJobs named Dell one of its 100 Top Companies for Remote Jobs. These entities and others have honored us for consecutive years.

Building team member satisfaction by using feedback

Our annual Tell Dell survey, which measures how team members feel about various aspects of working at Dell, revealed an overall engagement level of 85 percent. This represents a five-point increase from our FY15 results, on average, across all 41 items measured in the survey. We saw the largest increase in areas measuring employees' confidence about Dell's future. This indicates team members feel good about their jobs and the company.

Progress to goal (continued)

Our "Great Place to Work" net promoter score increased by 13 points from FY15 to FY16. This was Dell's second year as a private company, and given the recent changes to our business, we're proud we were able to improve our levels of engagement and by extension, demonstrate the strength of our People Strategy (see page 95) and culture.

By listening to team members' feedback through Tell Dell and other vehicles, we've been able to develop many global initiatives that meet their needs—and differentiate Dell from other potential employers. For example, our FY16 Evolving Workplace survey revealed work-life balance as the most important career goal for team members across all generations. We continued to invest in training, technology and other resources to help team members succeed when working flexibly. Dell's ongoing commitment to work-life balance for all team members earned us a spot on FlexJobs' 100 Top Companies for Remote Jobs for the third year in a row.

In FY16, we added an Inclusion Index to Tell Dell, with survey questions measuring leaders' treatment of team members and actions to support diversity, such as supporting employees' involvement in employee resource groups (ERGs). Research has repeatedly demonstrated that diversity and inclusion in an organization attracts high quality talent and customers, retains top performers and drives business performance.

Overall, 87 percent of team members gave their leaders a "favorable" rating on the Inclusion Index. There was no significant difference in employees' scores across generation, race, ethnicity or gender, which indicates we have a highly inclusive Dell culture.

We also listen to potential new hires, and in FY16 we answered their demand for more professional development opportunities by launching Jump Start, a development program to help new hires learn how to navigate their careers and begin to build a personal brand.

Programs that support an inspiring work environment

We encourage our employees to pursue their passions inside and outside of work. When our team members volunteer their time and talents to nonprofit organizations that receive grants through Dell's giving programs, it amplifies the impact of our support. We also encourage community service because it boosts team members' happiness.

Our Tell Dell survey shows team members who volunteer score higher in all measures of job satisfaction than those who do not volunteer. Volunteering also helps team members gain new skills and insights they can use in service to our customers.

Dell team members also build skills through Dell's 11 employee resource groups, designed to build upon Dell's culture of inclusion by enabling team members with common interests to come together to positively impact Dell's business, give back through volunteering, network, and develop inspiring leaders. Dell's ERG program was recognized as number four on the 2015 Diversity Inc Top 10 Companies for Employee Resource Groups. Membership in ERGs has grown from 18 percent enrollment in FY15 to 24 percent in FY16.

Progress to goal (continued)

Encouraging team member referrals and sharing

One of the best ways to have a strong voice in a competitive hiring market is to encourage team members to share their experiences and refer their friends and families to Dell.

In FY16, 37 percent of Dell's new hires came from team member referrals.

According to the Edelman Trust Barometer, individuals trust people they perceive to be "like themselves." Individuals value and trust others who share their same career field. This is why our employees' voice in the marketplace is so powerful—in particular when it comes to our referral program.

In FY16, we recorded over 700,000 page views on the Dell Talent Community, our global job referral tool. This online community enables team members to easily share jobs with their social networks and allows candidates to join the community and sign up for job notifications. Sharing and promoting our referral program internally, by using testimonials of team members who received a referral bonus, has also been quite powerful and effective in driving referrals.

Our team members have shared more than 117,000 jobs through the Dell Talent Community since it launched in FY14, with 60,000 jobs shared in FY16 alone. Technology and social media also play a big role in employment brand-building and we've embraced this by building a robust social media strategy. In FY16, we continued our relationship with Glassdoor, the leading job listing and recruiting site, by listening and responding to the experiences users share about working at Dell. Since FY15, we've reviewed our Tell Dell employee survey responses in conjunction with the feedback from Glassdoor to further analyze our strengths and weaknesses as an employer.

In FY16, we continued to empower team members to share their experiences of working at Dell. Dell has more than 12,000 Social Media and Community (SMaC)-certified team members who are encouraged to socially amplify and share Dell news, events, testimonials and video.

Next steps

- In FY17, we will continue to listen to our team members' needs and invest in programs that help keep them engaged in their work at Dell. Leadership training, employee resource groups, flexible work opportunities, and culture-building activities all help build our status as an Employer of Choice.

- In FY17 we will examine the impact referrals can have on the organization, to identify the best sources for hiring.

- We will continue to monitor and respond to feedback posted by employer review companies, including Glassdoor, to enhance our marketplace visibility and encourage more user reviews.

- We will continue our participation in The Talent Board's Candidate Experience surveys program as well as increase our number of surveys and the locations where they take place. The Talent Board is a not-for-profit organization that leads surveys to evaluate our recruiting practices and candidates' own experiences in multiple markets around the world—both internal at Dell and external.

- We will continue to use social platforms such as LinkedIn to share open positions and content.

Achieving external recognition

We continued to be recognized both globally and locally in the countries where we compete for talent, earning more than **40 major awards**, including:

- DiversityInc—#4 on 2015 DiversityInc Top 10 Companies for Employee Resource Groups

- DiversityInc—#31 on 2015 DiversityInc Top 50 List (fifth consecutive year)

- Human Rights Campaign—Received 100% on HRC's Corporate Equality Index, which rates lesbian, gay, bisexual and transgender equality in the workplace (12th consecutive year)

- Springboard Consulting—Received the 2015 Disability BRG Award of Excellence Recipient (for the True Ability ERG) in both Europe, Middle East and Africa and North America

- Universum—Many global and country-specific recognitions, including:

    » #23 on World's Most Attractive Employers —Engineering

    » #14 on World's Most Attractive Employers —Asia Pacific-Japan

- Great Place to Work® Institute—#6 on Best Multinational Workplaces in Latin America (Listed in Brazil, Mexico and Panama)

- LinkedIn—#69 on The World's 100 Most InDemand North America Employers: 2015

- FlexJobs—#6 on FlexJobs' 100 Top Companies for Remote Jobs in 2016 (third consecutive year)

- World at Work's—Work-Life Seal of Distinction

- Ethisphere Institute World's Most Ethical Companies for the third year in a row

Aspiration

Give team members a voice that influences leadership and shapes the direction of our company

Goal

Achieve 75% favorable responses (or higher) in team member satisfaction globally as measured through the annual employee satisfaction survey

> ### Achieve 75% favorable responses (or higher) in team member satisfaction globally as measured through the annual employee satisfaction survey
>
> ---
>
> **Status:** In FY16, our annual employee satisfaction survey—Tell Dell—measured that 85 percent of our global team members were satisfied with their experience at Dell. This was evidenced by their responses across multiple survey categories and marks an increase from the 80 percent satisfaction rate measured in FY15.

Background, challenges and opportunities

Engaged team members are fundamental to driving business performance, as they are highly committed to their work and team, go above and beyond their job requirements, and collaborate effectively with others.

To measure and drive team member engagement and a winning culture, Dell continues to use Tell Dell, our annual survey, as a key feedback mechanism. This online survey provides a voluntary, confidential forum for team members to share their feedback about their leaders and overall experience working at Dell. It provides Dell valuable information about what's working well, areas for improvement, and our progress in deploying our People Strategy (see page 95).

This survey has proven to be a highly successful tool, with a response rate above 85 percent and with more than 90 percent of Dell team members saying they find Tell Dell valuable. We are proud that we continue to achieve our team member engagement goals.

We remain committed to continuously reviewing our People Strategy and culture for opportunities to stay aligned to our dynamic business needs and to ensure Dell remains an employer of choice and a great place to work.

In FY16, we also asked several survey questions that measured how Dell leaders behave inclusively, treat others with respect, and take actions to support diversity. Research shows that diversity and inclusion helps an organization attract high-quality talent and customers, retain top performers, and drive business performance. Overall, 87 percent of team members rated their leaders favorably on questions related to inclusion, respect and diversity. These high scores were consistent across generation, race, ethnicity or gender, which indicates we have a highly inclusive culture at Dell.

Progress to goal

In FY16, we saw an increase in team member engagement. Tell Dell results revealed an overall engagement level of 85 percent. This represents a five-point increase from our FY15 results, on average, across all 41 questions measured in the survey. The largest increases came in areas measuring employees' confidence about Dell's future, where we saw some of the highest scores in company history.

Continuous improvement shaped by listening to employees

The competitive nature of our industry requires that we inspire, engage and retain top talent. That's why we continuously ask our team members for feedback to help us examine how we can improve their Dell experience. This year we asked our team members, "What do you think of Tell Dell and the types of questions we're asking?" The responses were very insightful. Based on feedback we collected globally, we'll be making some changes to the FY17 Tell Dell Survey. We intend to incorporate some new questions that help team members provide even better and more focused feedback to our company and leaders.

This year we also administered a company-wide Culture Survey. This online survey was administered alongside the Tell Dell survey to gain richer insight into team member perceptions of Dell's culture. We received over 52,000 responses, which revealed that team members across geographies, business units, and other demographics had a common understanding of the key culture attributes needed for Dell to succeed.

These top attributes are:

• Putting our relationships with customers first in our decisions and actions

• Having a passion for winning and beating the competition

• Focusing innovation on solutions that matter most to customers

• Delivering results; we do what we say

• Acting with integrity and ethics

We also asked in the survey how frequently our team members experience different aspects of our Dell culture. Responses show team members recognize our high and uncompromising standards for ethical decision-making. These standards were also recognized externally in FY17 when Dell received Ethisphere Institute's World's Most Ethical Companies award.

An area our people told us we can continue to focus on is simplification and reducing complexity of processes. These findings help guide our actions. One example is that based on this feedback we reduced the complexity of our salesforce tools and processes. A follow-up survey showed 75 percent of team members recognize this effort.

Another example is the changes we made two years ago to our performance management practice. The new practice supplements formal annual reviews with quarterly check-ins for more frequent performance discussions. It also eliminates forced distribution and performance ratings so that managers can focus on high-quality feedback, which team members find more motivating and helpful. Two years in, the majority of our team members believe the changes significantly help them improve their performance and provide them with a more accurate evaluation of their work.

These findings are a few examples of how our team members shape our actions, decisions and culture and deliver a positive impact.

Progress to goal (continued)

Building a culture of customer service

We are committed to delighting customers and ask our team members for ideas on how we can better serve Dell customers. In FY16, our Executive Leadership Team sponsored several innovation challenges on our internal crowdsourcing website, asking for ideas to solve specific customer support, IT, finance, procurement and marketing challenges. Team members submitted more than 3,000 distinct ideas, and more than 14,000 team members commented on and voted for the ideas. We've already started implementing many of the top-rated ideas into our daily operations, including an application to improve how we gather customer feedback and a supplier information portal to increase procurement efficiencies.

Nurturing a flexible work culture

Team members also shared that they recognize Dell's tremendous support for work-life flexibility, including informal flexible work arrangements. Based on our 2015 Tell Dell survey, 53 percent of Dell employees—while not officially enrolled in the Connected Workplace program—often work remotely or in a flex work type of capacity, with the approval of their managers.

This gives employees the chance to try work flexibly without committing to a permanent work arrangement— and we embrace that approach.

Overall, the findings reinforced our flex work offerings and we will continue to provide team members with various options that will drive their satisfaction and engagement in Dell.

Next steps

- In FY17, we'll continue to focus on engaging our team members by further articulating the behavioral expectations we have for leaders and team members in support of our culture and People Strategy.

- We will continue to use team members' feedback to ensure our culture and human resources practices position Dell as a great company and great place to work.

- We will sponsor more innovation challenges, which invigorate the innovative and entrepreneurial spirit of our team members and further reinforce our People Strategy and cultural strengths.

- We will maintain our model of quarterly performance conversations and provide leaders with the tools and structure for giving constructive feedback and making performance-based decisions that are good for all team members.

Governance

Dell believes fostering a culture of integrity requires winning individuals' hearts and minds. Strong policies and a clear Code of Conduct are crucial, but they can only achieve so much without a shared, enterprise-wide belief in doing the right thing. That's why our culture of "winning with integrity" starts at the top with Michael Dell and our senior leadership, who champion the highest ethical standards. And it is strengthened through our team members' daily decision-making.

Dell's brand extends beyond our more than 100,000 team members to an ecosystem that also includes our suppliers, distributors, channel and marketing partners and contractors. Our customers and stakeholders have become increasingly interested in how this ecosystem conducts business and follows through on Dell's commitments. We view integrity as a key differentiator in the marketplace and have placed a great deal of focus on extending our expectations to those who operate in Dell's name.

In FY16, our Global Ethics and Compliance Office took a much more active role in sharing our philosophy and programs with customers. We launched an innovative sales education program that connects compliance concepts with account planning and acquisition. We deployed a gaming engine that enables team members to test their data protection, privacy and security skills in a safe environment. And we began a comprehensive review of all regulatory compliance programs and discovered ways to build additional capability.

Increasing engagement, alignment through innovation

Dell sales representatives act as front-line ambassadors to customers, conveying our values through their every word and action. In FY16, we launched a highly interactive, in-person training called "Leading from the Front."

The training challenged sales representatives to work through real-life scenarios involving critical risk areas such as trade, anti-corruption, privacy, data protection and security, contracts, and gifts and entertainment. More than 2,400 sales representatives and direct managers from Dell's Latin America and Europe, Middle East and Africa regions completed the four-hour, experiential course. Participants gave it a net promoter score (NPS) of 9 out of 10 and displayed an increased understanding of compliance concepts. Based on this success, we plan to expand this training to the Asia Pacific-Japan region in FY17.

To help all Dell team members internalize the importance of privacy, data protection and security, in late FY16 we launched a new, game-based educational experience called The Responsibility Project.

The game provides an engaging, interactive and safe environment in which team members address real-life security scenarios to prevent a doomsday fantasy scenario called "The Breach."

Nearly 80,000 team members completed the game. Ninety-four percent of those who took a post-game survey said they would recommend it to a colleague and thought it would make a difference in how they do their daily work. This follows the success of Dell's first game-based course, The Honesty Project, launched in FY15 to focus on anti-corruption. In FY17, we plan to introduce our next game-based training, The Courage Project, based on Dell's Code of Conduct and leadership principles.

**Increasing engagement and
alignment through innovation (continued)**

Beyond our own team members, the Global Ethics and Compliance Office significantly increased its focus on educating customers, partners and suppliers about Dell's compliance efforts. Customers are particularly interested in data protection, privacy, information security and anti-corruption topics, so in FY16 we engaged them in our programs within these areas.

For the first time ever, the Global Ethics and Compliance team had a major presence at our annual Dell World event for customers, where we shared The Responsibility Project game. We also provided customers with e-literature that details how Dell builds compliance concepts into Big Data solutions to help customers navigate this exciting area while protecting their information security and privacy.

Protecting customer and Dell data

Protecting Dell's confidential information, as well as that of our customers, partners, suppliers and key stakeholders, continued to be one of Dell's top priorities. To help Dell team members thoroughly understand and consistently implement the tenets of our privacy policy, in FY16 we expanded our already-stringent expectations around data protection and cyber security. We deployed a two-level authentication tool across the globe to increase team members' security protocol for accessing the Dell network. We added new communications around our Secure Workplace program, providing team members with clear steps for protecting, managing and properly disposing of the confidential information and assets of Dell and our customers.
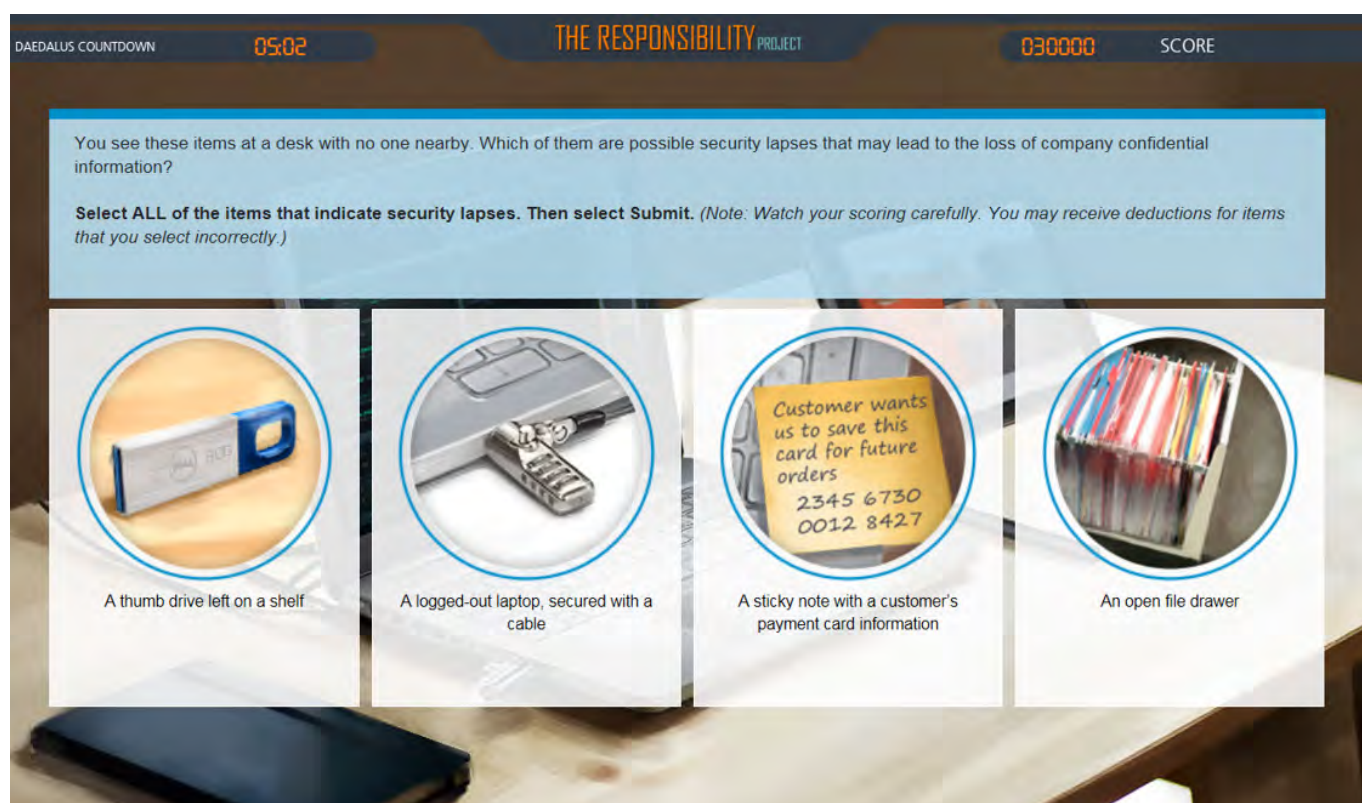
The Honesty Project is Dell's game-based compliance course meant to reinforce concepts relating to anti-corruption through an engaging experience.

Protecting customer and Dell data (continued)

We also deployed an enhanced privacy and security breach notification process, including a dedicated team to accelerate response time to potential issues.

We conducted a two-day Cyber Security Forum for program stakeholders that highlighted our current and planned efforts to keep Dell's infrastructure—and thus our customer's information—safe. Additionally, we held interactive security fairs at several Dell sites around the world, which helped thousands of team members gain increased awareness of proper data classification standards and effective methods for securing laptops, phones and workspaces. We also enhanced our Privacy Impact Assessments—tools we use to build compliance into Dell products, adding more criteria about data collection and usage. Additionally, we optimized Dell's customer privacy notices on Dell.com in all required languages.

We also worked with the Future of Privacy Forum and the Conference Board's Council of Chief Privacy Officers to draft a risk-benefit analysis tool for big data projects. The tool enables users to weigh various risks and benefits arising from a proposed use of Big Data that includes personal information. The results are displayed in a simple visual format and help users decide whether to proceed with a given project.

Working with third parties

We introduced new measures to further expand our compliance efforts within Dell's supply chain as well as among distribution and channel partners and other third parties. We helped design and develop a new compliance office within Dell's sales operations organization. This office will manage our channel risk mitigation strategy, which includes a comprehensive vetting process through Dun & Bradstreet, enhanced contract terms, third-party focused training, and awareness programs that connect to Dell's PartnerDirect Portal.

This PartnerDirect Portal gives our Dell Partners access to solutions, tools and resources. We also launched Vistex, a new tool for standard administration of partner rebates and incentives. Through this automation, we have tighter controls with the elimination of manual work. We implemented a new tool to more effectively track and investigate potential misconduct among third parties. Additionally, we hosted a Third Party Symposium to help Dell leaders better understand our areas of third-party compliance focus.

During this workshop, best practices were shared by key leaders and our Global Audit and Transformation team, along with insights from a current channel partner. The Global Audit and Transformation team also performed 55 audits with channel partners and marketing agents, which goes beyond the industry standard.

Building leadership at all levels

We continued to evolve our global ethics and compliance programs to enhance the involvement and accountability of regional and local leaders. We added two new Ethics Committees in India and China, the latter with Dell China's president as its chair. Our four global committees implement ethics awareness campaigns as well as compliance controls that are locally focused, yet aligned with the Global Ethics and Compliance Office's overall strategy. They can elevate regional issues to the global level and recommend management action plans.

To build Dell's compliance capacity, our Global Ethics and Compliance Office works not only across regions but also across departments such as legal, human resources, finance and operations. This year we launched the Compliance Lawyers Network, a professional development program that enables top Dell lawyers to work with Dell's Chief Compliance Counsel to build their compliance and ethics portfolio, share best practices, and become subject matter experts.

Similarly, we partnered with Dell's Global Audit and Transformation team as they engaged with a cross-functional group that brings together data analytics experts from across the enterprise. We launched an initiative that uses data analytics to assess adherence to compliance controls at the enterprise rather than the individual level. We also chose travel and expense controls as our first focus area for FY16, and in FY17 will explore other topics such anti-corruption, gifts and entertainment.

To promote leadership at all levels and celebrate small acts of integrity, we launched a "How I Win" recognition program that enables any Dell team member to nominate a colleague who embodies Dell's values and ethical principles. A small committee within the Global Ethics and Compliance Office reviews each nomination. Every team member who is nominated and validated has an online badge displayed on their Chatter instant messaging window to recognize the ethical principle—such as courage or trust—that they embody.

Turning findings into fixes

We continued to examine trends revealed by Dell's internal audits and investigations, and launched new methods and tools for enhancing controls. The Global Audit and Transformation team and Global Ethics and Compliance team began jointly creating and issuing management action plans to hold the business accountable for compliance program corrective action outside of the normal audit schedule. The identified gaps have been successfully closed and we plan to monitor the changes.

We updated Dell's Ethics Helpline and EthicsLine web portal to ensure global team members and other stakeholders can easily raise concerns or questions at any time, from any location, online or over the phone. To enable anonymous reporting, where allowed by law, we updated the third party-managed web portal with more language options and self-help tools. We also expanded the investigations management tool with a new module for our channel operations and compliance teams, which will help them manage potential ethical violations related to Dell's distributors and channel partners.

Collaborating with industry leadership

The Ethisphere® Institute honored Dell as one of the World's Most Ethical Companies for the third year in a row.

To share best practices with others in the industry, we continued to partner with leading ethics and compliance associations and partner organizations including the following:

• Business Ethics Leadership Alliance

• Ethics & Compliance Initiative

• Future of Privacy Forum

• Privacy Officers Roundtable of the Conference Board

• Society of Corporate Compliance and Ethics

• Corporate Executive Board's Compliance & Ethics Leadership Council

Engaging to help shape public policy

Dell is committed to engaging in the process to help shape public policy in a responsible and transparent way to ensure the interests of customers, employees and other stakeholders are fairly represented at all levels of government. We encourage governments to enact policies that:

- *Foster innovation* – creating an environment where entrepreneurs can thrive and a data-driven economy can realize its full potential by. This includes:

  » Improving entrepreneurs' access to capital, with incentives to invest in startups and supporting infrastructures to reduce scale-up costs.

  » Facilitating technology access, including promoting high-speed internet and allocating wireless telecom spectrum for mobile services, especially for unlicensed uses.

  » Cultivating a skilled workforce by emphasizing science, technology, engineering and mathematics (STEM), digital literacy and entrepreneurship in public education as well as in training programs.

  » Providing a favorable regulatory framework for new business models driven by innovative technologies such as big data analytics, cloud computing and the Internet of Things.

  » Implementing state-of-the art e-Government solutions and opening up government data to provide better and more transparent public services, reduce red tape and enable new data-driven applications.

- *Preserve trust* – adopting data safeguards to address concerns about privacy and cybersecurity while providing legal certainty for businesses by:

  » Encouraging developers to adopt privacy-by-design approaches in their technology solutions.

  » Promoting data privacy and cybersecurity, via voluntary conformance with open, global standards.

  » Resolving conflicts of law or jurisdiction caused by different approaches to cybersecurity and data privacy, using standardized agreements among governments.

- *Enable social responsibility* – working with businesses to help them integrate commitments to environmental sustainability, human rights and ethics into their organizational cultures and operations by:

  » Encouraging businesses to use globally recognized third-party certifications to show compliance with environmental and social standards.

  » Promoting development, procurement and use of sustainable goods, taking into account the whole product lifecycle.

  » Engaging businesses in frank human rights discussions to ensure respect for justice, transparency and sustainable practices across all operations and supply chains.

- *Maintain open markets* – enabling the flow of goods, services and data across the world to generate opportunities for economic growth and jobs by:

  » Helping businesses gain access to global markets, by promoting global and open standards as well as reliable mechanisms for cross-border data transfers, business support services and networks.

  » Supporting trade agreements to open new markets for businesses of all sizes, while addressing investment safeguards, transparency and due process in government procurement and intellectual property protection and enforcement.

  » Adopting competitive, fair and transparent tax policies that encourage businesses to invest in innovation, infrastructure and training.

  » Empowering businesses to grow by providing open access to the internet, supporting diverse workforces and fostering mobility for highly skilled workers.

Political Disclosure and Accountability

Dell embraces a policy of strict adherence to campaign finance laws and regulations that govern political contributions and the disclosure of those contributions. Dell Inc. does not contribute corporate funds to political candidates, national political party committees or other political committees.

Dell belongs to several trade associations and pays regular dues to these groups. Dell does not normally make additional, non-dues contributions to these organizations to support the groups' political activities.

Pursuant to U.S. federal law, Dell employees have established a separate, segregated fund or Political Action Committee (PAC)—the Dell PAC—which is supported solely by voluntary contributions from eligible employees and spouses of eligible employees who collectively choose to allocate those contributions to U.S. federal candidates and committees.

Dell encourages its employees to be active and engaged in their communities, through both charitable activities and political engagements. Employees are free to volunteer in political activities and contribute personal resources to candidates and parties in any manner consistent with applicable federal, state and local laws as long as such activities do not interfere with their job at Dell.

Visit the public policy section of our website to learn more about our policies pertaining to political contributions and more.

Disclosures

To enable interested parties to review Dell PAC contributions, Dell posts links on its company website to specific databases compiled by the Federal Election Commission (FEC), The Center for Responsive Politics and The Center for Public Integrity.

For U.S. Federal Lobbying Reports go to lobbyingdisclosure.house.gov or disclosure.senate.gov.

For PAC Reports go to www.fec.gov/ and search for Dell.

Materiality and our GRI report

Materiality—the identification of and focus on material topics—is a concept that is central to corporate responsibility. It is how we understand which topics have a direct or indirect impact on our ability to create, preserve or erode economic, environmental and social value for Dell, our stakeholders and society at large. These topics then form the basis of what we focus our corporate responsibility efforts on and consequently what we report on. We trust this approach leads to greater credibility and a more informed audience.

We identify and prioritize these material topics by engaging internally across the business as well as externally with a broad set of stakeholders. Over the years, we've been grateful for our stakeholders' contributions. Their encouragement, ideas and constructive feedback definitely help us improve. For example, in preparing Dell's FY16 Corporate Social Responsibility report, we engaged with Ceres—an advocate for sustainability leadership with strong ties to investors, public interest groups and other companies. As they have in past years, the Ceres team reviewed initial drafts of this report and provided valuable feedback on the depth of our reporting on key impacts.

We revisit our materiality analysis regularly to ensure our efforts remain aligned with what is most important to our business and our stakeholders. As we expect material changes to our business to happen this year, including the expected merger with EMC and potential additional acquisitions and divestitures, we will do a comprehensive refresh of our materiality assessment.

The principles behind our goals

The following tenets helped guide the formulation of our 2020 Plan and the goals we report against:

- Focus on our customers: We will succeed if we keep the customer foremost in our mind, linking our goals back to providing them with value.

- Innovate: Business as usual across the board is not enough. We must reimagine what is possible.

- Scale globally: From managing a complex supply chain to understanding and appreciating the different cultures where we live and work, we must view our activities with a global lens.

- Be transparent and accountable: Better and more strategic reporting will make clear our impacts and progress each year.

- Lead by example: We will strengthen our work as an advocate and partner for social and environmental change, pushing sustainability more into the mainstream market.

- Welcome collaboration: To achieve our aspirations at the necessary scale, we will need engaged, courageous collaborators.

Our annual GRI Report

In addition to our annual corporate social responsibility report, we provide a comprehensive Global Reporting Initiative (GRI) online index each year, following the GRI G4 Sustainability Reporting Guidelines. The GRI established these guidelines to identify a core set of material issues for inclusion in sustainability reports. The guidelines create a framework that reflects diverse stakeholders' perspectives and is harmonized across various internationally accepted standards. Dell has long been a supporter of such an approach and is proud to support the GRI's work. We have been a GRI Organizational Stakeholder for several years.

By the numbers

Each year we report on material indicators from across our business. Some tie directly to the goals set forth in our 2020 Legacy of Good Plan while others provide additional insight into other business indicators. We also assess our performance against the Global Reporting Initiative's (GRI) G4 guidelines, and you may find other measurement reporting within our GRI online index.

Supply Chain	Unit of measure	FY14	FY15	FY16	Comments
Diverse supplier spending	Billions of U.S. dollars	4.19	4.10	4.90	—
Supplier audits	Number of total audits	135	144	247	Initial audits; does not include follow-up audits in total
Labor & Human Rights					
Young workers improperly managed	% of facilities in compliance per EICC audit	**	77	91	See Supply Chain section of report for additional detail, on page 15
Freely chosen employment protections	% of facilities in compliance per EICC audit	**	64	87	See Supply Chain section of report for additional detail, on page 15
Proper wages and benefits	% of facilities in compliance per EICC audit	**	42	63	See Supply Chain section of report for additional detail, on page 15
Working hours and rest days	% of facilities in compliance per EICC audit	**	21	40	See Supply Chain section of report for additional detail, on page 15
Health & Safety					
Emergency preparedness	% of facilities in compliance per EICC audit)	**	44	60	See Supply Chain section of report for additional detail, on page 15
Industrial hygiene	% of facilities in compliance per EICC audit	**	48	74	See Supply Chain section of report for additional detail, on page 15
Occupational injury and illness prevention	% of facilities in compliance per EICC audit	**	58	72	See Supply Chain section of report for additional detail, on page 15
Occupational safety	% of facilities in compliance per EICC audit	**	40	64	See Supply Chain section of report for additional detail, on page 15

** due to a change in EICC audit protocols FY14 numbers are not comparable to FY15 and FY16

Supply Chain (continued)

Environment

	Unit of measure	FY14	FY15	FY16	Comments
Air emissions	% of facilities in compliance per EICC audit	**	80	92	See Supply Chain section of report for additional detail, on page 15
Hazardous substances	% of facilities in compliance per EICC audit	**	43	74	See Supply Chain section of report for additional detail, on page 15
Pollution prevention and resource reduction	% of facilities in compliance per EICC audit	**	85	91	See Supply Chain section of report for additional detail, on page 15
Wastewater and solid waste	% of facilities in compliance per EICC audit	**	83	93	See Supply Chain section of report for additional detail, on page 15

Management System

	Unit of measure	FY14	FY15	FY16	Comments
Legal and customer requirements	% of facilities in compliance per EICC audit	**	80	89	See Supply Chain section of report for additional detail, on page 15
Management accountability and responsibility	% of facilities in compliance per EICC audit	**	73	90	See Supply Chain section of report for additional detail, on page 15
Risk assessment and risk management	% of facilities in compliance per EICC audit	**	69	88	See Supply Chain section of report for additional detail, on page 15
Supplier responsibility	% of facilities in compliance per EICC audit	**	63	77	See Supply Chain section of report for additional detail, on page 15
Worker feedback and participation	% of facilities in compliance per EICC audit	**	91	99	See Supply Chain section of report for additional detail, on page 15

Ethics

	Unit of measure	FY14	FY15	FY16	Comments
Protection of identity and non-retaliation	% of facilities in compliance per EICC audit	**	79	95	See Supply Chain section of report for additional detail, on page 15
Responsible sourcing of minerals	% of facilities in compliance per EICC audit	**	92	98	See Supply Chain section of report for additional detail, on page 15

Sustainable operations

Waste

	Unit of measure	FY14	FY15	FY16	Comments
Non-hazardous waste generated	Metric tons	13,735	11,951	11,108	Manufacturing and fulfillment facilities
Landfill avoidance rate	Percentage	96	95	97	Manufacturing and fulfillment facilities
Worldwide cumulative e-waste volume takeback and recycling	Million kilograms	564.2	644.1	720.3	Since 2008

*** due to a change in EICC audit protocols FY14 numbers are not comparable to FY15 and FY16*

Sustainable operations (continued)

	Unit of measure	FY14	FY15	FY16	Comments
Emissions					
Scope 1 GHG emissions	Metric tons of CO2e	39,233	38,467	38,690	Direct emissions
Scope 2 GHG emissions, net (market-based)	Metric tons of CO2e	255,999	238,471	211,823	After subtraction for green electricity purchases. Calculated using "market-based" Scope 2 methodology starting in FY15
Scope 2 GHG emissions, total (location-based)	Metric tons of CO2e	400,257	384,387	355,228	Calculated using "location-based" Scope 2 methodology starting in FY15
Scope 3 GHG emissions (business air travel)	Metric tons of CO2e	86,942	81,297	81,496	—
Scope 3 GHG emissions (supply chain)	Metric tons of CO2e	—	2,035,717	2,371,503	Calculated based on revenue-apportioned emissions reported to Dell via CDP Supply Chain by FY16 production and select services suppliers representing 88% of spend (95% in FY15)
Scope 3 GHG emissions (use of sold products)	Metric tons of CO2e	12,590,000	12,540,000	12,040,000	Calculations use the U.S. average emissions factor of 0.56178 metric tons CO2e per MWh. FY14 and FY15 restated to include additional product types and model updates
Energy					
Electricity consumed (total)	Million kilowatt-hours (kWh)	691.3	674.8	652.7	All electricity purchased or generated on-site
Green electricity consumed	Million kWh	263.1	259.3	268.0	Renewable-source electricity purchased from suppliers or generated on-site
% of green electricity	Percentage	38.1	38.4	41.1	—
Other energy consumed	Million kWh	129.6	132.4	123.6	Purchased heat, liquid and gas fuels used in buildings and vehicles
Total energy consumed	Million kWh	820.9	807.2	776.3	—
Water					
Fresh water use	Cubic meters (1000s)	2,063	1,955	1,866	All Dell facilities globally, including leased spaces
Fresh water use (water-stressed Dell locations)	Cubic meters (1000s)	301	281	284	Dell-operated facilities in locations considered to have high or extremely high overall water risk (adjusted according to WRI 2014 ratings)
Fresh water intensity (water-stressed Dell locations)	Cubic meters of water per square meter of building space	1.27	1.20	1.21	Dell-operated facilities in locations considered to have high or extremely high overall water risk (adjusted according to WRI 2014 ratings)
Fresh water use (supply chain)	Cubic meters (1000s)	—	23,772	127,380	Calculated based on revenue-apportioned fresh water withdrawals reported to Dell via CDP Supply Chain by FY16 production and select services suppliers representing 40% of spend (65% in FY15)

Communities

Communities	Unit of measure	FY14	FY15	FY16	Comments
Percentage of team member volunteering	Percentage	57%	66%	63%	—
Total volunteer hours	Hours in thousands	739	713	811	—
Children directly impacted through giving programs	Number of children in thousands	504	657	444	—
People indirectly impacted through strategic giving programs	Number of people in millions	3.3	3.5	1.0	—
Total contributions	Millions of dollars (USD)	32.8	32.2	29.6	—

People

People	Unit of measure	FY14	FY15	FY16	Comments
Women team members	Percentage	32%	32%	32%	Applies to global operations
Women managers	Percentage	24%	24%	24%	Applies to global operations
People of color — team members (U.S.)	Percentage	30%	31%	32%	Applies to U.S. operations only
People of color — managers (U.S.)	Percentage	22%	22%	23%	Applies to U.S. operations only
Employee Resource Group participation	Percent of Dell employees	10%	18%	24%	Global
Employee Resource Group locations	Number of locations	131	185	256	Global chapters
Human Rights Campaign Corporate Equality Index score	Score range: 1 - 100	100	100	100	Twelfth year in a row with a score of 100

Occupational Health and Safety

	Unit of measure	FY14	FY15	FY16	Comments
Recordable injury/illness rate	Cases per 100 FTEs	0.14	0.11	0.09	Annual figures are for calendar years 2013, 2014, 2015
DART rate (Days Away, Restricted or Transferred)	Cases per 100 FTEs	0.07	0.07	0.04	Annual figures are for calendar years 2013, 2014, 2015
Work-related fatalities	Number	0	0	0	Annual figures are for calendar years 2013, 2014, 2015

We are proud of the work we've done since announcing our 2020 Plan and the meaningful progress we've made against our long-term goals. We recognize we cannot do it alone, however: collaboration with customers, partners and stakeholders worldwide remains critical to achieving our goals. We welcome an open dialogue and encourage you to share your feedback and ideas.

Join the conversation

Visit **Dell.com/legacyofgoodupdate** for the interactive experience that summarizes our progress toward our 2020 goals

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Email us with your comments or to be included in future discussions about our progress and how you can participate.