

*2017 Supply Chain Social and  
Environmental Responsibility  
Progress Report*



We are committed to responsible business practices at Dell, and we hold ourselves and our suppliers to a high standard of excellence. It is our priority that our products are manufactured responsibly and with sustainability in mind. To do this, we have set and abide by high standards that respect and protect our workers, communities, and the environment.

Last year was an exciting one for Dell as we joined with the EMC family of companies to form Dell Technologies. Our unprecedented capabilities power real transformation for people and organizations everywhere and extend our technology portfolio to drive human progress on a global scale. As we integrated both companies, we reviewed and updated our 2020 Legacy of Good goals around sustainability and corporate social responsibility, and continue our commitment to build a responsible and resilient supply chain.

Over the past several years, Dell has created a range of industry-leading sustainability initiatives in our supply chain. In fiscal year 2017<sup>1</sup> :

- Our water risk mitigation program helped suppliers identify 179 water efficiency opportunities, with the potential to save a collective 2.7M cubic liters of water per year – enough to fill more than 1,000 Olympic swimming pools.
- We expanded our weekly working hours monitoring program to cover over 190,000 workers, 91 percent of whom did not work more than the 60-hour maximum set by the EICC Code of Conduct.
- We conducted 456 initial and closure EICC third-party audits at our suppliers' and our own facilities.
- The Institute of Public and Environmental Affairs (IPE) ranked Dell #2 in the Green Choice Alliance's Corporate Information Transparency Index..
- Our supplier capability-building programs benefitted over 7,000 workers.
- We launched an innovative mobile training program for workers on health and safety practices.
- We collaborated with industry peers to offer a special management training on the risks of forced and bonded labor to suppliers in Malaysia, Singapore, and Taiwan.

We are committed to transparency and providing our customers and other stakeholders with insight into our supply chain Social and Environmental Responsibility (SER) performance. This Supply Chain SER Progress Report provides an overview of key activities, with a focus on FY17 audit results for the five areas of the EICC Code of Conduct and Dell's programs for continuous improvement in those areas. We look forward to continuing to raise the bar in the electronics supply chain and to creating sustainable, positive change for our people and planet.



Kevin Brown

Executive Vice President, Global Operations and Chief Supply Chain Officer

Dell Technologies

<sup>1</sup>Dell fiscal years are used throughout this report. FY17 refers to February 2016 – January 2017.

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# Dell's Supply Chain Social and Environmental Responsibility Program

## A comprehensive approach to supply chain social and environmental responsibility

The supply chain of the electronics industry is highly complex, with many suppliers involved at multiple tiers in the process of manufacturing a final product. Millions of workers, and communities around the globe, are involved in or connected to the industry.





At Dell we have a large and dynamic supply chain, with [supplier facilities](#) located in many regions across the world. Our Supply Chain Social and Environmental Responsibility (SER) program takes a comprehensive approach to hold ourselves and our suppliers to high standards of responsible business practices and to work in partnership with them for continuous improvement.


Sometimes our customers want to know which of our suppliers make the products they buy, and the social and environmental risks specific to that product. Our answer is that we manage social and environmental responsibility holistically across the supply chain, instead of by product. Most suppliers provide inputs to multiple products and sometimes multiple suppliers are qualified for a single component. As production levels around the world shift on a daily basis, supplier volumes also shift to meet demand, altering the mix of suppliers used for a specific product. Focusing solely on the last facility that a product left before it entered our customers' homes or businesses would limit our visibility to the vast majority of the businesses and people around the world who contributed to manufacturing that product.

Therefore, we take a comprehensive approach to monitoring SER performance, and are committed to being transparent about what happens in our supply chain. We establish a wide coverage through our audits – approximately 100 audits per quarter of first tier and managed sub-tier supplier facilities – and are consistently monitoring compliance for all product

lines across multiple tiers of our supply chain. In this report, we share FY17 aggregate audit findings for our suppliers and our own facilities, as well as an overview of the systems we have in place to address industry challenges and to rapidly engage where we identify risk.

### EICC Code of Conduct

 <p><b>LABOR</b> Uphold the human rights of workers</p> <hr/> <ul style="list-style-type: none"> <li>Working hours</li> <li>Wages &amp; benefits</li> <li>No child labor</li> <li>Humane treatment</li> <li>Non-discrimination</li> </ul>	 <p><b>ENVIRONMENTAL</b> Minimize adverse effects</p> <hr/> <ul style="list-style-type: none"> <li>Permits &amp; reporting</li> <li>Control pollution</li> <li>Hazardous substances</li> <li>Waste water</li> </ul>
 <p><b>HEALTH &amp; SAFETY</b> Minimize injury and illness</p> <hr/> <ul style="list-style-type: none"> <li>Occupational safety</li> <li>Emergency preparedness</li> <li>Prevention of injury &amp; illness</li> <li>Machine safety</li> </ul>	 <p><b>MGMT. SYSTEM</b> Conform to code &amp; comply with regulations</p> <hr/> <ul style="list-style-type: none"> <li>Accountability &amp; responsibility</li> <li>Legal compliance</li> <li>Training &amp; communication</li> <li>Audits</li> </ul>



**ETHICS**  
Uphold the highest standards

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- Business integrity
- Anti-Bribery
- Protection of IP
- Fair competition
- Responsible mineral sourcing

## Industry collaboration to address common challenges

In 2004, Dell and other leading electronics companies joined forces and founded the Electronic Industry Citizenship Coalition (EICC), a nonprofit organization

with a common goal to use shared standards and tools to advance social, ethical, and environmental responsibility in the global electronics supply chain. As members of the EICC, we commit to and are held accountable to responsible business standards set forth in the EICC Code of Conduct, which addresses performance in the areas of labor, health and safety, environment, ethics, and management systems. Many of our suppliers build components for multiple companies in the electronics industry. It is therefore particularly important that companies work together and consistently in how we monitor supplier performance, address systemic challenges, and continuously raise the bar.

In addition to complying with all applicable laws and recognized international standards, we ask our suppliers to abide by the EICC Code of Conduct and our Supplier Principles as a condition of doing business with Dell. We monitor and seek to improve suppliers' compliance with these expectations through our risk assessment, audit process, corrective action plan management, and capability building programs.

**Continuous improvement through EICC compliance and risk mitigation**



**Risk Assessment**

Every year, the Dell SER team evaluates supplier risk and develops the annual audit plan for our supplier facilities. During our risk assessment process, we evaluate all direct material suppliers based on geographic location, manufacturing processes, past SER performance, and public reports. This assessment is conducted at the facility level. If a supplier has several facilities providing product to Dell, each is evaluated independently and assigned its own SER risk level.

**Audit Process**

**It is our policy that 100 percent of high-risk\* suppliers undergo EICC-certified third-party audits every two years** (referred to as an “initial audit”), and we conduct as many follow-up audits as necessary to confirm closure of all priority and major findings. As a result of our larger, combined supply chain with the acquisition of EMC in FY17, the number of facilities has increased. In the past two years, we’ve audited 90% of our high risk facilities. We also audit all Dell facilities regardless of risk level, and select medium and low-risk facilities.

In FY17, we completed 456 audits, including 218 initial and 238 closure audits across our supply chain. We had more closure audits than initial audits in FY17 since the closure audits were following up on initial audits from both FY16 and FY17.

AUDIT TYPE	FY15 (Dell)	FY16 (Dell)	FY17 (Dell+ DellEMC)	FY16-17 Change
Initial Audit	144	247	218	-12%
Follow-up	43	105	238	+127%
<b>Total Audits</b>	<b>187</b>	<b>352</b>	<b>456</b>	<b>+30%</b>

**CAP Management**

Suppliers are required to complete a corrective action plan (CAP) if a nonconformance is found in an audit. Our dedicated SER specialists review the CAP and work closely with our suppliers to make sure the corrective actions are implemented and the findings are closed. Follow-up audits are typically scheduled

\* As defined by our internal risk assessment process.

six to 12 months after the initial audit, or one to six months after the initial audit for certain priority findings such as those involving health and safety. The Dell Supply Chain SER team is constantly reviewing audit findings and monitoring our [closure rate](#) to ensure timely completion.

### **Capability Building**

As part of the continuous improvement process, we offer suppliers different training opportunities to help develop their own capabilities, embrace efficiency opportunities, and improve SER performance. Our online trainings are available to our entire supply base, and we offer in-person trainings in select locations. An in-depth look into these programs is provided in the [Management Systems](#) section of this report.

# Labor



## Upholding the human rights of workers in our supply chain

Dell supports and respects the principles proclaimed in the Universal Declaration of Human Rights. These rights are of utmost importance to us, to our customers, and to the communities in which we live and work. We are committed to upholding the human rights of workers throughout our supply chain, and to treating them with dignity and respect.

Through our Supply Chain SER program, we monitor working conditions at our supplier facilities and partner with suppliers to address any issues we identify. In FY17, the most common audit finding related to the labor provision in the EICC Code of Conduct was working hours non-compliance.

### FY17 Audit Assessment Results

EICC Code of Conduct provision	Number of facilities with a finding of non-compliance									% of Facilities in compliance**
	First tier by commodity type							Subtier	Total	
	ODM / Final Assembly*	Components	Display / LCD	Accessories	Batteries	Networking	Services			
<b>LABOR &amp; HUMAN RIGHTS</b>										
Freely chosen employment protections	1	10	11	2	3	1	2	18	48	<b>87%</b>
Young worker protections	0	1	5	2	1	1	0	10	20	<b>95%</b>
Working hours and rest days	9	45	18	13	6	1	7	153	252	<b>32%</b>
Proper wages and benefits	5	22	10	6	6	1	5	64	119	<b>68%</b>
Humane treatment	1	0	0	0	0	0	0	0	1	<b>99%</b>
Non-discrimination	1	12	9	3	2	0	2	40	69	<b>81%</b>
Freedom of association	1	10	2	2	2	1	1	20	39	<b>89%</b>

\* Original Design Manufacturers (ODM) and Final Assembly findings include Dell and DellEMC factories

\*\*Facilities with least one priority or major finding in an audit are defined as non-compliant

## Improving compliance on weekly working hours

Working in excess of 60 hours per week is one of the most common audit findings and a key challenge across the industry. This is a complex issue that requires consideration of workers' health and safety, quality of life, and earning potential, as well as other factors including business demand and holidays. We require suppliers to abide by the EICC standard of a maximum 60 hour work week with one rest day, and no mandatory overtime.

In order to address this systemic challenge and improve compliance, we have implemented a working hours monitoring program to track performance on a weekly basis. In FY17, we tracked over 190,000 workers across 121 supplier facilities, **91 percent of whom did not work more than the 60-hour maximum**. This was an increase from 88 percent compliance in FY16. Supplier facilities with findings related to working hours compliance are added to our monitoring program throughout the year to increase visibility and drive corrective action. (Note: audit findings results in table above indicate how many facilities have a finding related to working hours, not how many workers were within the 60 hour maximum).

Weekly Supply Chain Monitoring (annual average)*	FY16	FY17
Number of workers monitored	168,268	190,107
Maximum number of facilities monitored	117	121
Percent of workers compliant with 60 hour workweek	88%	91%
Percent of workers with at least 1 day of rest per week	89%	90%

\* Weekly working hours coverage fluctuates based on seasonality and suppliers in scope. Numbers reflect annual averages.

## Protecting the most vulnerable

Dell does not tolerate any form of forced, bonded, or child labor at any step in our supply chain. Our Vulnerable Worker Policy is designed to protect workers, and explicitly ban behaviors that may indicate a risk of human trafficking (including forced or bonded labor) or child labor. In order to hold suppliers accountable to this policy and take immediate action when a risk is identified, **Dell's Executive Review Board (ERB) – comprised of Dell executives across procurement and global operations – reviews all supply chain audit findings and allegations related to forced and child labor (A.1 and A.2 provisions in the EICC Code of Conduct)**. Examples of these findings and allegations include charging recruitment fees, holding identification documents, or failing to provide employment contracts in the native language of the worker. This governance structure has increased visibility and transparency throughout Dell's Global Operations organization and enables cross-functional work with suppliers to address root causes.

In FY17, the ERB reviewed 87 A.1 and A.2 audit findings in 60 of our supplier facilities. These included findings such as unacceptable recruiting practices and inadequate worker contracts. For example, we found that workers at five of our supplier facilities were required to pay termination fees if they wanted to resign. We worked with these suppliers to investigate the root cause and drive corrective action, and all five suppliers removed this practice as a result. We also require these suppliers to take trainings and adopt management systems to prevent this practice from happening again.

In addition to monitoring labor practices in Dell production lines, we are extending our monitoring program to include non-production onsite service providers (such as janitorial or cafeteria workers) at Dell factories. In the last quarter of FY17, we launched an onsite service provider governance pilot in one of our factories to gain a deeper understanding of the service provider landscape and associated risks. Through this program, service providers in Dell



factories conducted an initial self-assessment survey and were assigned a risk status by the SER team. Based on their risk categorization, on-site service providers will undergo spot checks to increase visibility to worker conditions beyond the production line and help drive continuous improvement.

## Empowering workers

A key aspect of respecting workers' human rights is providing the right empowerment channels and grievance mechanisms for communication and feedback. We expect all suppliers to facilitate open communication and direct engagement between workers and management. This is particularly important in countries where worker representation and collective bargaining are restricted by law.

In FY17, we launched a worker hotline at five of our large supplier facilities to enable workers to contact Dell without having to go through their supervisors – giving them an independent outlet to speak up about issues. The hotline received 284 communications from workers, the vast majority of which were seeking – and received – counseling related to their personal lives such as relationships or parenting. There were four instances where workers had specific complaints about their working conditions, and we worked with the suppliers to address concerns such as adjusting the air conditioning temperature at the facility and changing a mattress in the worker dormitories. We followed up with the workers throughout the process until they were satisfied with the result.

This initiative has been very well-received by the workers, and we have shared the aggregate feedback with the suppliers. We also provide suppliers with training on worker-management dialogue and encourage them to continuously improve their internal grievance mechanisms and work to gain workers' trust that their concerns will be addressed. We are expanding this program to all Original Design Manufacturers (ODMs) in FY18.

## Worker engagement

Many workers in the electronics industry are migrant workers who come from various provinces within their home country or other countries to find work. They are searching for ways to experience different locations and gain life experiences while working in the factories, and seek to be connected, respected, and feel engaged. In order to help address workers' interests and increase engagement, in April 2016 we launched an innovative worker engagement program that focuses on activities outside of the work place. We surveyed 861 workers at six of our supplier facilities in China to understand workers' interests and motivation, and set up a **WeChat** (an instant messaging application) communication platform to engage directly with workers based on this feedback. The program is free and available to all workers in the participating facilities.

Every week, we post three articles on WeChat on topics targeted to enrich workers' personal lives, develop their hobbies, and help them in their career development. In FY17, we also conducted a photography competition through the platform, which was enthusiastically received by workers. We received 51 pictures from participants, and a total of 2,874 people voted online to select the winner. In FY18, we will continue developing program activities that appeal to workers' interests and encourage more participants to join.

# Health & Safety



## Prioritizing workers' health and safety

Dell is committed to fostering manufacturing practices that safeguard workers' health and safety and minimize risks that could lead to harm. The most common health and safety finding across supplier facilities in FY17 was related to emergency preparedness. This includes having emergency plans and response procedures in place to minimize harm to life, the environment, and property in the event of an unexpected emergency. When a health and safety violation is identified, suppliers must investigate the root cause and work on a corrective action plan to close out the finding.

### FY17 Audit Assessment Results

EICC Code of Conduct provision	Number of facilities with a finding of non-compliance									% of Facilities in compliance
	First tier by commodity type								Total	
	ODM / Final Assembly*	Components	Display / LCD	Accessories	Batteries	Networking	Services	Subtier		
<b>HEALTH &amp; SAFETY</b>										
Occupational safety	4	24	9	10	2	1	3	66	119	<b>68%</b>
Emergency preparedness	2	31	12	10	5	1	3	91	155	<b>58%</b>
Occupational injury and illness prevention	0	16	9	7	3	0	3	56	94	<b>75%</b>
Industrial hygiene	2	14	4	6	2	0	2	56	86	<b>77%</b>
Physically demanding work	1	3	3	3	1	0	1	5	17	<b>95%</b>
Machine safeguarding	1	3	1	2	1	1	1	16	26	<b>93%</b>
Food, sanitation and housing	2	17	3	5	2	1	1	44	75	<b>80%</b>
Health and safety communication	0	5	0	2	0	0	0	8	15	<b>96%</b>

\*Original Design Manufacturers (ODM) and Final Assembly findings include Dell factories

## Engaging workers in addressing health and safety

We believe workers should be part of our activities to address health and safety risks – so we engage them directly. In FY17, we partnered with a third-party to conduct a worker survey at 10 supplier facilities to help us understand workers’ knowledge of occupational health and safety as well as implementation of our SER policies. We received responses from 5,442 workers and compared the results against a benchmark of 60 other suppliers in the electronics industry who also responded to that survey.

In aggregate, our suppliers scored above the median industry benchmark in all of the categories where median scores were available. We reviewed the

areas where individual suppliers scored below the industry benchmark and are working with them to develop corrective action plans and improve their performance. We will repeat the survey at the end of this year to evaluate the impact of this work.

Aligned with these efforts, in FY18 we are launching a mobile training program to enhance workers’ health and safety knowledge and skills. We have invited 30 suppliers to participate and expect to reach over 20,000 workers. Through their mobile phones, workers will have access to brief and targeted training courses on health and safety topics such as chemical, machine, and electrical safety; appropriate use of personal protective equipment (PPE); and emergency response procedures.

## Survey to gauge level of understanding among factory workers for EH&S processes



\*Median benchmark results were not available for 2 questions that were included in the newest version of the questionnaire

 Industry Benchmark score

## Addressing safe chemical use in manufacturing processes

In early FY18, we launched a Manufacturing Process Chemicals program to enhance our risk management and further safeguard human and environmental health. This program monitors the use of substances in manufacturing that could pose a risk for people as well as the environment, and helps address the handling of hazardous substances in our supply chain – a key area identified from EICC audit results. To clearly state our expectations, we published [Guidelines for Management of Manufacturing Process Chemicals](#), which promote the implementation of best practices that go beyond regulatory requirements and support continuous improvement.

We started to engage with select suppliers through targeted supply chain monitoring activities such as surveys, risk assessments, and on-site visits. We also initiated capability-building activities to improve their chemical management systems and their implementation in manufacturing operations. As the first step, we focused on process chemical management in our Supplier Networking Session (one of our existing capability building programs) and engaged 32 supplier facilities to collaborate and exchange best practices.

Dell recognizes that chemical management risks are complex and linked with systemic supply chain risks, and believes that no one company or actor can successfully address these risks on its own. We are therefore actively contributing to the [EICC's Chemical Management Taskforce](#) to develop industry-wide initiatives that can be propagated through EICC membership. To more effectively address chemical exposure risks, Dell is also taking a leadership role as a member of [Green America's Clean Electronics Production Network \(CEPN\)](#). Through this engagement, Dell is working collaboratively with a diverse group of stakeholders including suppliers, labor and environmental health advocates, and academics. Dell's goal is to innovate and develop practical solutions to reduce worker exposure to toxic chemicals within the electronics manufacturing process.

# Environmental



## Minimizing our negative environmental impact

As a global citizen, we are working to build a resilient supply chain that minimizes our negative environmental impact and mitigates risks. In order to do so, we are committed to conserving resources and to properly control any waste or effluents that may result from our operations, and expect our supplier to do the same. In FY17, a high percentage of our facilities were in compliance with EICC environmental standards. A key area of opportunity identified in the audits was related to the proper identification and handling of hazardous substances—which we seek to address through our Manufacturing Process Chemicals Program (see previous section).

### FY17 Audit Assessment Results

EICC Code of Conduct provision	Number of facilities with a finding of non-compliance									% of Facilities in compliance
	First tier by commodity type							Subtier	Total	
	ODM / Final Assembly*	Components	Display / LCD	Accessories	Batteries	Networking	Services			
<b>ENVIRONMENT</b>										
Environmental permits & reporting	0	10	1	2	2	1	1	50	67	82%
Pollution prevention & resource reduction	0	2	3	2	0	0	0	11	18	95%
Hazardous substances	0	17	8	5	3	1	4	69	107	71%
Wastewater and solid waste	1	7	2	2	1	1	0	21	35	91%
Air emissions	1	6	2	3	0	0	1	30	43	88%
Materials restrictions	0	0	1	0	0	0	0	2	3	99%
Storm water management	1	13	1	1	2	1	1	30	50	87%
Energy consumption & greenhouse gas	0	3	3	3	1	0	2	14	26	93%

## Engaging with suppliers to drive an environmentally sustainable supply chain

Through proactive supply chain management and SER processes, our ranking improved from #22 to #2 in the Institute of Public and Environmental Affairs (IPE) Green Choice Alliance's Corporate Information Transparency Index (CITI), which assesses a brand's environmental management of their supply chain. We are currently **ranked #2 among IT companies and #3 for all industries.**

*"Ranking in the top 3 on the Corporate Information Transparency Index (CITI), Dell has built great cooperation with IPE on information disclosure and supply chain management.*

*From 2014 onward, Dell has tightly coordinated supply chain environmental performance with the brand's procurement strategies. To manage environmental compliance in the supply chain, Dell applies IPE's Blue Map Database to screen suppliers for violations and asks suppliers with environmental problems to take corrective actions.*

*Not only does Dell manage supplier's environmental performance, Dell also asks suppliers with high water consumptions to disclose pollutant release and transfer information to the public. IPE recognizes Dell's continuous efforts and looks forward to further cooperation with Dell in greening its supply chain in China."*

*-Institute of Public & Environmental Affairs*

## A new carbon emissions goal

As part of our efforts to measure and reduce our carbon footprint, we ask suppliers to report their greenhouse gas emissions (GHG) to the CDP (formerly known as the Carbon Disclosure Project). Last year, we achieved an industry-leading response rate of 95.4 percent, which represents suppliers comprising 90 percent of our direct materials spend. As a result, we improved our score in the 2016 CDP Climate Section from B to A-. In aggregate, our suppliers reduced 6.1M metric tons of CO<sub>2</sub>e in the last reporting year, equal to \$606M in savings related to emissions reductions.

This year, we increased our commitment by setting a new goal to address product-related carbon emissions generated by our supply chain. In addition to reporting their greenhouse gas emissions to CDP, suppliers are now required to set GHG reduction targets. It is our goal that by 2020, Dell's suppliers representing 95 percent of direct materials spend and key logistics suppliers will set specific greenhouse gas emissions targets and report on their emissions inventory. This requirement is incorporated into suppliers' overall business performance metrics.

*"Water is a shared resource and has to be managed collaboratively. Global brands like Dell can play a leadership role in solving shared water challenges through supply chain water programs.*

*Dell's Supplier Water Risk Mitigation program has demonstrated a mechanism to systematically engage suppliers to raise water awareness, identify improvement opportunities and disclose water information. The program built a solid foundation for further river basin level multi-stakeholder collaboration to protect water resources for all..."*

*—Zhenzhen XU  
Asia Pacific Regional Director,  
Alliance for Water Stewardship*

## Environmental risk monitoring

To proactively manage environmental risks, in FY17 we developed and implemented an environmental risk assessment tool for suppliers in East China. We launched the pilot with 21 sub-tier mechanical suppliers with high environmental impact processes such as painting and metalizing, and required them to conduct a self-assessment using this tool. The assessment incorporates factors such as location, municipal planning, and environmental pollution prevention systems to identify potential regulatory and environmental risks. It is also designed to drive alignment with the local government's industry planning, and infrastructure requirements.

Based on the assessment results, we engaged with the suppliers to review and close out any identified environmental risks such as updating environmental protection permits and improving wastewater treatment processes. As of publication, 96.2% of the identified issues have been closed, and we will keep tracking and working with the suppliers to close those that remain open. Through this initiative, suppliers have been able to set up or improve their environmental control and pollution prevention systems. In FY18, we are expanding this program to Southern China and will include printed circuit board (PCB) and battery suppliers with high environmental impact manufacturing processes.

## Expanding water risk management

Environmental risks are closely tied to the resiliency of a supply chain. According to the World Economic Forum, water crises pose one of the five greatest global risks for the next 10 years. Growing demand, pollution, inefficient use of freshwater, and climate change have all contributed to increased water shortages and risks. As part of our water risk management processes, we are introducing innovation such as closed-loop and rainwater collection systems at our own facilities and are working with suppliers to address water risks in their local areas.

In 2014, we conducted a "water hotspot survey" with over 200 suppliers to gather data on their water usage, conservation strategies, local laws and other critical pieces of information. Based on the results of this survey, in 2016 we launched a water risk mitigation program for direct material supplier facilities in water-stressed regions or with water-intensive processes, requiring them to develop five-year water risk mitigation plans.

We rolled out this requirement to the first 50 suppliers with the highest water consumption and provided them with training on how to develop robust and impactful water conservation strategies. In the first round of review of these plans, suppliers **identified 179 water efficiency opportunities, with potential to save 2.7 million cubic liters** of water per year. We will continue collecting water plans from 50 suppliers each year, reaching 250 supplier facilities by 2020.

# Ethics



## Responsible and ethical business practices

At Dell, we are committed to doing business the right way; integrity is one of our core values. In FY17, audit results showed a high percentage of facilities compliant with ethical standards. We continue to promote public disclosure and transparency in our supply chain, and are committed to providing suppliers with the tools they need to meet our expectations as stated in the EICC Code of Conduct and our Supplier Principles.

### FY17 Audit Assessment Results

EICC Code of Conduct provision	Number of facilities with a finding of non-compliance									% of Facilities in compliance	
	First tier by commodity type							Subtier	Total		
	ODM / Final Assembly*	Components	Display / LCD	Accessories	Batteries	Networking	Services				
<b>ETHICS</b>											
Business integrity	0	2	1	1	0	0	0	6	10	97%	
No improper advantage	0	1	0	1	0	0	0	2	4	99%	
Disclosure of information	0	1	1	0	0	0	1	6	9	98%	
Intellectual property	0	2	1	0	0	0	0	4	7	98%	
Fair business, advertising and competition	2	4	1	1	0	0	0	8	16	96%	
Protection of identity and non-retaliation	1	1	1	1	1	0	0	1	6	98%	
Privacy	0	1	1	1	0	0	0	2	5	99%	
Responsible sourcing of minerals	1	1	1	0	1	0	0	4	8	98%	



## Increasing transparency

We believe that pushing toward greater levels of transparency in our supply chain makes us a stronger company. To this end, we have set a goal to demonstrate 100 percent transparency in key issues in our supply chain by 2020. This serves as a guiding principle for our actions and work throughout our supply chain.

In FY17 we introduced a new level of transparency by hosting representatives from enterprise customers on a tour of supplier manufacturing facilities in China – an industry first. The tour allowed customers to interact with workers and experience their working and living conditions. This helped customers enhance their understanding of our suppliers’ operations and industry challenges, as well as to better understand Dell’s work with our suppliers to advance social and environmental responsibility. Based on positive customer feedback, we will hold additional tours in FY18.

It is important to Dell that our suppliers have strong sustainability and risk management programs, and we have set a 2020 goal that all suppliers in our top 95% of direct materials spend will publish a sustainability report in accordance with Global Reporting Initiative (GRI) or equivalent recognized global framework. GRI reports publicly communicate the business’s social and environmental impacts, and we believe that shining a light on these issues encourages all of us to do better and helps our suppliers manage their risk. Currently, suppliers representing 87 percent of direct materials spend have met that goal. We also incorporated public disclosure and GRI reporting into our production supplier performance scorecards, and evaluate data disclosure as part of their Quarterly Business Reviews.

## Ethical sourcing with human rights in mind

Mining is an intensive process, and some mining operations in conflict-affected and high-risk areas have been linked to human rights violations including child labor, labor abuses, and environmental degradation. As part of our global approach to

respecting human rights, we are committed to the responsible sourcing of materials used in our products, and we expect our suppliers to adhere to the same high standards.

Since 2009, Dell has been actively working to promote responsible mineral sourcing and address the risks associated with mining operations in conflict-affected and high-risk areas. We were a leading voice in the industry-wide collaborations that led to the formation of the Conflict Free Smelter Initiative (CFSI) in 2011, whose programs, tools, and guidance documents help companies address responsible sourcing issues for tin, tungsten, tantalum, and gold (often referred to as 3TG or “conflict minerals”). Since then, we have implemented a management system for conflict minerals based on the OECD’s five-step framework for due diligence in the mineral supply chain, and incorporated conflict minerals reporting into our contracts with suppliers – setting up a robust process to identify risks and remove smelters from our supply chain.

Dell’s goal is to continue developing our due diligence systems to apply to the sourcing of raw materials beyond those defined as conflict minerals. As a first step, we broadened our responsible raw material policy and management system to include cobalt – which is used in the production of lithium-ion batteries – and are implementing the OECD Due Diligence Guidelines for the sourcing of this mineral. We expect suppliers to follow this same framework and participate in our cobalt due diligence processes and capability building efforts around responsible sourcing. Aligned with this expectation, in early FY18 we provided our battery suppliers with training on cobalt sourcing and implementing OECD due diligence.

This is a complex issue that requires broad collaboration to reach our objectives, and we are working with our industry peers, suppliers, and other stakeholders through the Conflict Free Sourcing Initiative (CFSI), the Responsible Raw Materials Initiative (RRMI) and the Responsible Cobalt Initiative. We are working with RRMI to develop a standardized reporting template (based on the

CMRT template of CFSI) to map the upstream cobalt supply chain to the point of the smelter. We will continue collaborating across the industry to build the infrastructure necessary to respect human rights and address behaviors at all levels of the cobalt supply chain.

For more information on Dell's Responsible Sourcing policy and due diligence efforts, please see our 2017 Responsible Raw Materials Sourcing Report.

## Dell's actions around conflict minerals



# Management Systems



## Embedding sustainability through our management systems

Our efforts towards social and environmental responsibility are only effective if there are management systems in place to reinforce our activities and prevent issues from happening in the future. We have developed internal management systems to embed sustainability across our organization, and we are committed to helping our suppliers develop and maintain strong management systems. Based on our FY17 audit findings, a key area for improvement is helping suppliers extend the EICC Code of Conduct requirements to their own suppliers.

### FY17 Audit Assessment Results

EICC Code of Conduct provision	Number of facilities with a finding of non-compliance								% of Facilities in compliance	
	First tier by commodity type							Subtier		Total
	ODM / Final Assembly*	Components	Display / LCD	Accessories	Batteries	Networking	Services			
<b>MANAGEMENT SYSTEMS</b>										
Company commitment	0	0	1	0	0	0	0	3	4	99%
Corrective action process	0	2	1	1	0	0	0	6	10	97%
Documentation and records	0	1	1	0	1	0	0	4	7	98%
Supplier responsibility	1	10	4	0	2	0	1	27	45	88%
Mngmnt accountability & responsibility	0	7	3	1	3	1	0	11	26	93%
Legal and customer requirements	0	2	4	2	2	0	1	17	28	92%
Risk assessment and risk management	0	5	4	1	2	0	2	22	36	90%
Improvement objectives	1	5	3	2	2	0	1	14	28	92%
Training	0	2	2	0	2	0	0	9	15	96%
Communication	1	3	1	0	0	0	2	8	15	96%
Worker feedback and participation	1	0	1	0	1	0	0	1	4	99%
Audits and assessments	0	5	2	3	3	0	0	11	24	94%

## Developing supplier empowerment networks

Driving sustainable change requires collaboration and sharing best practices to advance capabilities across our industry. Through our capability-building programs, we help suppliers embrace opportunities to improve SER performance. We offer a variety of online and in-person trainings, helping suppliers to understand expectations in their onboarding process and to improve suppliers' adherence to our standards for social and environmental responsibility, such as working hours, vulnerable workers, environmental management, and health and safety.

In 2016, more than 1,000 participants from 114 supplier facilities participated in at least one of our training programs. The actual impact of

*“We appreciate this opportunity to share what we achieved over this project with Dell, which motivates us to do more in the future. Dell is investing resources to help suppliers improve EHS management practices by connecting us with industry experts. The professional advice provided by the instructors saved us money and time while implementing improvements. This innovative project and partnership is unique and unprecedented among our industry.”*

*—Zhuli, EHS Manager,  
Fuyu Participant in  
Dell's SER Networking Session*

In FY17, Dell launched the SER Practitioners capability building program to help suppliers identify and address root causes impacting EICC compliance. As part of this program, suppliers implemented a project in their facilities using the methodology and best practices learned during the training sessions. One of our suppliers, **Da-Ding**, implemented an improvement project to address high turnover rates in their facility.

Da-Ding put together a team with representatives from the human resources, finance, production, and quality departments to identify the root causes of the high turnover. In their research, the team found three root causes: incentives mechanisms were not linked to productivity, mid-level managers used a strict, ineffective coaching style, and there was a lack of career development opportunities. In addition to high turnover rates, these factors also resulted in low morale and decreased productivity.

To address these issues, Da-Ding developed an action plan and took steps to:

- Train line leaders in communication skills, coaching, and stress management

- Redefine the wage structure for line leaders and reward people-oriented management practices
- Provide workers with multi-skill trainings and reward multi-skillful workers
- Offer workers diverse courses targeted to enhance their career development
- Provide a bonus incentive for workers who exceed production targets
- Introduce advanced industrial engineering techniques to measure working hours and optimize the manufacturing processes

The project was very successful and impacted both productivity and turnover:

- Productivity increased by 50 percent
- Overtime hours decreased by 15 percent (resulting in labor cost savings)
- Product defect rate decreased from 14 to 12 percent
- Worker turnover decreased from 10 to five percent

In addition to these improvements, the team also noted better cooperation between line workers and leaders, reductions in idle time, and more on-time delivery.

these trainings reaches many more people, since participants in our EICC e-learning academy program then conduct their own team study sessions with 50-100 workers within their facilities. As a result of this model, approximately 7,000 workers benefited from the programs last year. Suppliers also realized significant improvements as a direct result of programs and projects that accompany the trainings, including:

- 71% of facilities participating in the SER HR practitioner training reduced worker turnover rate
- 70% of facilities participating in the SER EHS

practitioner training improved Job Safety Analysis

- 64% of facilities participating in the SER EHS practitioner training improved onsite subcontractor safety management

While our audits cover suppliers in multiple tiers of our supply chain, we have also begun to assist our first tier suppliers in monitoring the parts of their own supply chain that Dell does not already audit. Building capabilities for sub-tier SER management is a priority that we believe will strengthen the electronics industry as a whole.

## A look into our programs:

PROGRAM	DESCRIPTION	PARTICIPATION IN FY17
EICC e-learning Academy	Online training provided by the EICC. Dell develops a training plan for suppliers and monitors their completion. After the training is completed, participants lead their own team study inside manufacturing facilities.	471 participants from 114 supplier facilities
Smart Library	Internal training platform with targeted courses on SER and risk management	63 participants from 25 supplier facilities
SER Supplier Orientation	Instructor-led training designed to understand Dell's SER Requirements and the EICC Code of Conduct	126 participants from 76 supplier facilities
SER Networking Session	Six sessions throughout the year designed to connect Sustainability Practitioners from our suppliers so they may share best practices on SER topics (i.e. chemicals management, employee management and communication, working hours management)	224 participants from 112 supplier facilities
SER Practitioner Training	Instructor-led training for HR and EHS practitioners to develop skills in labor and EHS practices. Each supplier was required to implement one improvement project either on HR or EHS in their facilities	166 participants from 113 supplier facilities

\* Suppliers may participate in more than one training session

## Championing social and environmental responsibility

A social and environmental responsibility program starts with internal alignment and cross-functional commitment toward a common goal. The SER Champions team is composed of procurement category managers from across Dell who in addition to their procurement role, are trained on SER topics to build our capabilities across the organization and drive SER performance and accountability with suppliers. We have incorporated sustainability metrics into quarterly business reviews and the champions and commodity teams help enforce our SER expectations. This has increased the number of people we have working on building supplier capabilities, closing open audit findings, and integrating social and environmental responsibility into how we do business.

In addition to the governance councils that operate within the procurement/supply chain organization, Dell has a governance structure to examine issues of corporate responsibility across the company. The Sustainability Operations Council meets quarterly and reviews performance related to sustainability and corporate responsibility, including progress towards our 2020 Legacy of Good goals.



*“Being an SER Champion has given me a broader perspective, and I’m able to interact with SER Champions from all over the world. We can discuss situations we face in different regions and share best practices on how to address them.*

*Speak up. That’s what I would say to others. Take accountability for what you are managing. Even if it doesn’t directly impact your procurement role, it might be something we just have never looked into and can influence. All we need to be is a voice, advocate for people.”*

*—Jeffrey Mathews  
Regional Commodity Manager,  
Facilities and Securities, Dell*



# *Moving Forward*

In FY17, bringing together Dell and EMC was a great opportunity to adopt best practices in SER from both companies and extend our existing programs and capabilities to our facilities and suppliers. As we look into FY18, we will continue partnering with suppliers to improve SER performance throughout the supply chain and collaborating with industry peers to address industry-wide issues. We are excited about our future as Dell Technologies and are committed to continue putting our technology and expertise to work where it can do the most good in the world.

## Key Performance Indicators

DESCRIPTION	FY17	COMMENTS
<b>SER Compliance</b>		
Number of initial audits conducted	218	All high risk facilities must undergo a full, initial audit every 2 years. We also audit all Dell facilities regardless of risk level, and select medium and low-risk facilities.
Number of Follow Up / Closure Audits conducted	238	Follow up/closure audits are conducted to confirm the closure of findings from previous initial audits.
Percentage of high-risk facilities audited	90	It is Dell's goal to audit 100% of high risk facilities, as defined by our internal risk assessment process, on a two-year cycle. As a result of our larger, combined supply chain with the acquisition of EMC in FY17, the number of facilities increased. We are working to audit all high-risk facilities and have adjusted our audit plan for FY18.
<b>Issue Closure</b>		
Percentage of priority findings closed or downgraded	81	Dell requires that suppliers submit corrective action plans to address and close audit findings within EICC-defined timelines. Once corrective action plans are complete, official closure audits are used for confirmation and our internal accountability metrics. A FY18Q1 snapshot shows 81% of priority findings have been officially closed through a closure audit (and remote verification in some cases). Dell continuously monitors all open findings until they are confirmed closed.
Percentage of audit findings closed	79	Dell requires that suppliers submit corrective action plans to address and close audit findings within EICC-defined timelines. Once corrective action plans are complete, official closure audits are used for confirmation and our internal accountability metrics. A FY18Q1 snapshot shows 79% of findings have been officially closed through a closure audit (and remote verification in some cases). Dell continuously monitors all open findings until they are confirmed closed.
<b>Capability Building</b>		
Number of participants attending capability building programs	1050	Our capability programs include six rounds of supplier networking sessions, quarterly new supplier orientations, EHS and HR capability trainings, SMaRT Library training modules, and EICC e-learning modules.
<b>Weekly Working Hours*</b>		
Percentage of workers compliant with 60 hour workweek	91	Our weekly working hours monitoring program includes over 120 supplier facilities. <i>*Weekly working hours coverage fluctuates based on seasonality and suppliers in scope. Numbers reflect annual averages.</i>
Percentage of workers compliant with 1 rest day per week	90	The EICC requires that workers have 1 rest day per week.
<b>Environmental Monitoring</b>		
Cumulative number of supplier facilities submitting five-year water risk mitigation plans	100	Our 2020 goal is to require a five-year responsible water risk mitigation plan from our top 250 direct materials supplier facilities in water-stressed regions or with water intensive processes. Metric reflects cumulative number since the launch of the program.
Percentage of direct materials spend represented by suppliers reporting GHG emissions to CDP	90	Our 2020 goal is to have suppliers in 95 percent of direct materials spend and key logistics suppliers set greenhouse gas emissions targets and report on their emissions inventory. Suppliers representing 90 percent of direct materials spend reported on their emissions and 81 percent of those reporting set emissions targets.



# FY17 Audit Assessment Results

EICC Code of Conduct provision	Number of facilities with a finding of non-compliance									% of Facilities in compliance**
	First tier by commodity type							Subtier	Total	
	ODM / Final Assembly*	Components	Display / LCD	Accessories	Batteries	Networking	Services			
<b>LABOR &amp; HUMAN RIGHTS</b>										
Freely chosen employment protections	1	10	11	2	3	1	2	18	48	87%
Young worker protections	0	1	5	2	1	1	0	10	20	95%
Working hours and rest days	9	45	18	13	6	1	7	153	252	32%
Proper wages and benefits	5	22	10	6	6	1	5	64	119	68%
Humane treatment	1	0	0	0	0	0	0	0	1	99%
Non-discrimination	1	12	9	3	2	0	2	40	69	81%
Freedom of association	1	10	2	2	2	1	1	20	39	89%
<b>HEALTH &amp; SAFETY</b>										
Occupational safety	4	24	9	10	2	1	3	66	119	68%
Emergency preparedness	2	31	12	10	5	1	3	91	155	58%
Occupational injury and illness prevention	0	16	9	7	3	0	3	56	94	75%
Industrial hygiene	2	14	4	6	2	0	2	56	86	77%
Physically demanding work	1	3	3	3	1	0	1	5	17	95%
Machine Safeguarding	1	3	1	2	1	1	1	16	26	93%
Food, sanitation and housing	2	17	3	5	2	1	1	44	75	80%
Health and safety communication	0	5	0	2	0	0	0	8	15	96%
<b>ENVIRONMENT</b>										
Environmental permits & reporting	0	10	1	2	2	1	1	50	67	82%
Pollution prevention & resource reduction	0	2	3	2	0	0	0	11	18	95%
Hazardous substances	0	17	8	5	3	1	4	69	107	71%
Wastewater and solid waste	1	7	2	2	1	1	0	21	35	91%
Air emissions	1	6	2	3	0	0	1	30	43	88%
Materials restrictions	0	0	1	0	0	0	0	2	3	99%
Storm water management	1	13	1	1	2	1	1	30	50	87%
Energy consumption & greenhouse gas	0	3	3	3	1	0	2	14	26	93%

EICC Code of Conduct provision	Number of facilities with a finding of non-compliance									% of Facilities in compliance**	
	First tier by commodity type							Subtier	Total		
	ODM / Final Assembly*	Components	Display / LCD	Accessories	Batteries	Networking	Services				
<b>ETHICS</b>											
Business integrity	0	2	1	1	0	0	0	6	10	97%	
No improper advantage	0	1	0	1	0	0	0	2	4	99%	
Disclosure of information	0	1	1	0	0	0	1	6	9	98%	
Intellectual property	0	2	1	0	0	0	0	4	7	98%	
Fair business, advertising and competition	2	4	1	1	0	0	0	8	16	96%	
Protection of identity and non-retaliation	1	1	1	1	1	0	0	1	6	98%	
Privacy	0	1	1	1	0	0	0	2	5	99%	
Responsible sourcing of minerals	1	1	1	0	1	0	0	4	8	98%	
<b>MANAGEMENT SYSTEMS</b>											
Company commitment	0	0	1	0	0	0	0	3	4	99%	
Corrective action process	0	2	1	1	0	0	0	6	10	97%	
Documentation and records	0	1	1	0	1	0	0	4	7	98%	
Supplier responsibility	1	10	4	0	2	0	1	27	45	88%	
Mngmnt accountability & responsibility	0	7	3	1	3	1	0	11	26	93%	
Legal and customer requirements	0	2	4	2	2	0	1	17	28	92%	
Risk assessment and risk management	0	5	4	1	2	0	2	22	36	90%	
Improvement objectives	1	5	3	2	2	0	1	14	28	92%	
Training	0	2	2	0	2	0	0	9	15	96%	
Communication	1	3	1	0	0	0	2	8	15	96%	
Worker feedback and participation	1	0	1	0	1	0	0	1	4	99%	
Audits and assessments	0	5	2	3	3	0	0	11	24	94%	

\* Original Design Manufacturers (ODM) and Final Assembly findings include Dell and Dell EMC factories

\*\* Facilities with at least one priority or major finding in an audit are defined as non-compliant