



# Supplier Responsibility

2018 Progress Report

A photograph showing several workers from behind and slightly to the side. They are all wearing light-colored, long-sleeved shirts and blue caps. The woman in the center is looking directly at the camera with a slight smile. The background is blurred, showing more of the industrial or factory environment.

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# A commitment to people and the planet.

Treating people with dignity and respect, providing advancement opportunities, and conserving our planet's resources are fundamental to how an Apple product is made. That's why we develop programs throughout our supply chain that drive progress with suppliers, while benefiting the people in our supply chain — and the planet.

We partner with our suppliers to offer global programs that provide education and advancement opportunities to their employees. To date, these partnerships have helped millions of people take advantage of opportunities outside of the workplace. At the core of every employee's livelihood is a safe and healthy workplace where their rights are respected each day. We're committed to implementing responsible practices in our supply chain to make a positive impact on employee well-being.

An environmentally responsible supply chain is a major part of Apple's mission to leave the world better than we found it. Along with our suppliers, we continue to fight climate change, reduce water use, implement green chemicals in manufacturing operations, and eliminate waste.

Apple's Supplier Code of Conduct underscores a commitment to human rights, environmental protections, and sound business practices. Every year, we conduct assessments to ensure suppliers are meeting our high standards. The number we conduct increases each year and the amount of high-performing suppliers continues to grow. It's all possible thanks to strong partnerships between our suppliers and Apple.

A commitment to people, the planet, and the progress of our suppliers is at the heart of our work. We will always seek to extend our efforts to make positive impacts and drive lasting change.

We're always looking for ways to advance the lives of the **People** in our supply chain. With our suppliers in 2017, we:

- Trained more than 3 million supplier employees on their rights, including local labor laws, and Apple's Supplier Code of Conduct.
- Launched health programming that empowers female employees to improve their health awareness with a goal of training 1 million women by 2020.
- Were named the world's top company for responsible sourcing of conflict minerals by the Enough Project.
- Returned US\$1.9M in excessive recruitment fees to 1558 people affected by bonded labor, bringing the total to US\$30M repaid to over 35,000 employees since 2008.

We believe the best products are made with respect for the **Planet**. With our suppliers in 2017, we:

- Were awarded the number one spot in the Corporate Information Transparency Index by the Institute of Public and Environmental Affairs.
- Expanded Zero Waste to Landfill efforts to India and attained 100 percent UL requirements for all iPhone final assembly facilities.
- Replaced all GreenScreen® Benchmark 1 and 2 cleaners with green alternatives in all final assembly facilities.
- Achieved a 37 percent average wastewater reuse rate and freshwater savings of 5.1 billion gallons.

We partner with new suppliers to help them meet our strict standards, and with existing suppliers to maintain their **Progress** toward providing a safe and healthy workplace. In 2017, we:

- Conducted 756 assessments in 30 countries, covering 95 percent of our total spend. In addition, 26 percent were first-time assessments.
- Increased the number of high-performing suppliers by 35 percent, while low-performers decreased by 71 percent.

# 2017 Results Highlights

## People

3M+

supplier employees trained  
on their rights worldwide

US\$1.9M

in recruitment fees returned  
to supplier employees in 2017

12K+

enrolled in higher education  
degree since 2008

4K+

participants received  
preventative and women's  
health training

## Planet

625K

metric tons of waste  
diverted from landfill since  
2015 — that's enough to  
cover 2,545 soccer fields  
about 1 meter deep

100%

of all iPhone final assembly  
facilities worldwide  
diverted 100 percent of  
waste from landfills

320K

annualized metric tons of  
carbon emissions reduced  
in 2017, enough to remove  
every car off the road in  
Hong Kong for 62 days

5.1B

gallons of water conserved  
in 2017, enough to fill 7,722  
Olympic-size swimming pools

## Progress

756

supplier facility assessments  
conducted in 2017

30

countries in which  
assessments took place

35%

increase in high-performing  
suppliers year over year

# People



Carpenter, Apple Retail fixtures  
United States



iPhone Production Line Manager  
India

## People are the strongest link in our supply chain.

At the heart of Apple's supply chain are the people who make our products. Apple is dedicated to empowering those who work in our supply chain with opportunities to receive an education and advance their careers. We also work to ensure they are provided a safe and healthy workplace, where their rights are respected and they are treated with dignity.

# Empowering women through health education.

We are setting a goal to bring health awareness programming to:



**1M women** at Apple suppliers around the world by 2020, who will extend health awareness through their community interactions

At Apple, we are committed to helping our supplier employees gain access to knowledge and opportunities that allow them to take charge of their own health and well-being.

In 2017, efforts to empower women through health education began at several of our supplier facilities in China and India. Our goal is to enable women in factories to take charge of their personal health and well-being by becoming well-informed of risks specific to women. The program also encourages them to take a leadership role by sharing their new health awareness with their colleagues, friends, and community.

Our curriculum provides vital information and access to services that women need to maintain their health, including critical topics such as self-examination for early cancer detection, nutrition, personal care, and maternal health. Extended collaboration among Apple teams, factory management, major medical institutions including the Department of Community Health, St. John's National Academy of Health Sciences in Bangalore, welfare officers, trainers, and the women themselves is essential to achieve the program's goals. All training is conducted in the participants' local language and tailored to the needs of factory employees.

## Growing Health Knowledge



Early Cancer Detection



Nutrition



Personal Care



Women's Health

The program builds upon itself by leveraging a peer-to-peer model. Each supplier site's peer educators are trained on a specific health issue each month. Through soft skills and leadership training, the employees develop more self-confidence. As they continue to learn new topics, peer educators host sessions to share their knowledge with program participants.

For our programs based in China, we're working with Peking University (PKU) to develop a rigorous independent evaluation process to measure program impacts. This will allow us to better understand the resources available to women and their current level of health awareness. With this data, we will be able to continually shape the programming to best suit employee needs into the future.

## Feeling good about health.

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"I have been sharing what I learn in the class about preventative care and women's health with my mom. As a result, she visited her physician for an annual checkup, something she had stopped doing prior to my taking the class."

Miao Minghui  
Women's health program participant

Women's health program participants  
China



# Training people today to be tomorrow's leaders.

We're committed to helping advance the skills of our supplier employees. There is a growing need for qualified factory line leaders with the right mix of technical and soft skills. Since they are a part of the production labor force, but also act as a bridge between employees and management, factory line leaders play a special role.

A comprehensive survey of key supplier sites, covering nearly half of our supplier workforce in China, showed that most of our suppliers face challenges recruiting qualified line leaders during peak season. In 2017, we launched Apple's Factory Line Leader Program to provide vocational training students with the technical and soft skills necessary to become qualified line leaders.

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## Factory Line Leader Program



Technical and soft skills training



A guaranteed internship with an Apple supplier



Opportunity for full-time employment after graduation

In its first phase, the program brought together four suppliers and eight schools with a curriculum team headed by one of China's top Vocational Education Training (VET) experts, Dr. Zhao Zhiqun of Beijing Normal University. The factory teams include human resources and training professionals, technical teams, and high-performing line leaders who serve as advisors.

After completing Factory Line Leader training, students are guaranteed an internship with an Apple supplier and full-time employment opportunities.

# A teacher dedicated to student achievement.

Chen Changwei teaches business classes as part of the Apple Factory Line Leader Program at a school in Kunshan, Jiangsu province. She discusses her experience as a teacher for the program.

**"Apple can lead in bridging the gap between schools and companies to drive opportunities that benefit both."**

Chen Changwei  
Factory Line Leader Program  
instructor, China

## How is the Apple Factory Line Leader Program different from other educational programs you have seen in China?

I've led many enterprise corporation projects and have seen many similar projects at other schools. The biggest differences from this program to other projects are: 1) The innovation. It's the first time this kind of program, which develops technical employees, has been initiated by a Supplier Responsibility department of a big company. 2) The wide scope and multiple partners. 3) Third-party monitoring systems. The program will be evaluated by a leading university to test its validity. 4) Program diversity. Students come from different backgrounds and a wide range of public and private schools.

## Why do you feel it's important to offer vocational education opportunities?

I think regular college offers high-level academic talent development, while vocational initiatives such as the Factory Line Leader Program can offer more skills-based talent development that is necessary in China.

Factory Line Leader  
Program Instructor  
China



## Enabling learning through smarter educational content offerings.

In the last 10 years:



**2.5M+** supplier employees participated in SEED offerings



**12K+** people enrolled in higher education degree

In 2008, we set up classrooms for employees to access educational content before and after work at our supplier sites across China. The program was named the Supplier Employee Education and Development (SEED) program. SEED gives employees the opportunity to study topics such as language learning, software animation, and small business start-up training. We also partner with our suppliers to provide scholarships to employees who want to study for an associate's or bachelor's degree. To date, more than 2.5 million people have participated in SEED and more than 12,000 have enrolled for a degree.

In 2017, we focused on developing high-demand content to address students' specific development goals. We also introduced a vocational certification program for workers who aren't interested in studying for a degree, but would like to grow more job-based skills. Manufacturing skills gained through SEED's vocational certification can increase a supplier employee's opportunities for job advancement.

iPad Production Line Operators  
China



## **Empowering employees through environmental, health and safety education.**

In 2013, we identified a gap in skills needed to proactively address and manage workplace health, safety, and environmental concerns at supplier sites. In response, we partnered with the EHS Center at Nanjing University to develop the Environmental Health and Safety (EHS) Academy, an intensive curriculum that integrates international best practices with local policies.

To date, EHS Academy  
participants have launched:

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**~3400**

projects across 274 supplier facilities

While receiving training at the EHS Academy, local managers learn about environmental protection, air pollution, water management, chemical management, emergency preparedness, and safety equipment. In addition to their coursework, managers must create and implement projects to improve environment, health, and safety conditions at their facilities. EHS Academy provides in-depth expertise that improves the workplace environment and opens up opportunities for supply chain employees to advance in their careers. Armed with more in-depth environment, health, and safety skills, the people in our supply chain are also able to find opportunities to advance.



iPhone Production Line Operator  
China

## A workplace that empowers and protects people.

We hold ourselves and our suppliers to the highest standard when it comes to human protections. Our dedication to treating the people in Apple's supply chain with dignity and respect is unwavering. We will continue to go beyond what's regulated to do what's right for those who work in Apple's supply chain.

## Training employees, starting on day one.

In 2008, our Supplier Employee Training Program was developed to ensure that all people in our supply chain receive training on their rights as employees during new hire orientation. In addition to local labor law requirements, the training covers the protections outlined in our Supplier Code of Conduct, such as permissible working hours, proper working and living conditions, and fundamental health and safety information. Suppliers are also required to provide grievance channels that enable their employees to safely report any violation.

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### Supplier Employee Training Program



Training on local  
employment laws



Training on Apple's Supplier  
Code of Conduct



Notification of  
grievance mechanisms

## Providing a voice for employees.

Interviews and grievance channels that encourage employee voice and communication are fundamental to meeting our Supplier Code of Conduct. After interviews, employees are given a phone number so they can confidentially provide additional feedback to Apple, including anything they consider to be unethical behavior.

Employees are encouraged to report any retaliation to Apple. We investigate every claim to ensure suppliers appropriately remedy each situation as necessary.

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3M+

people trained on  
workplace protections  
in 2017

14.7M

people trained on  
workplace protections  
since 2007

31k+

supplier employees  
interviewed in 2017

# A supplier employee takes worker voice to new heights.

In 2013, Xu Yuexia joined CSMC, an Apple final assembly facility in Jiangsu, China, as an operator. On her first day of work, Xu was trained on local employment laws, as well as Apple's Supplier Code of Conduct.

Through the years, Xu rose up the ranks from management trainee to multifunction employee to supervisor. While developing her career, Xu also worked to develop a team of employees dedicated to providing worker rights advocacy to the over 40,000 employees at CSMC. In 2015, Xu became a member of the Moral Support team. The team acts as a support network for employees, providing a place where they can voice their concerns, which are then brought to management. The Moral Support team also arranges community service projects and team-building activities, and promotes company culture.

Xu is very dedicated to the Moral Support team and has helped increase their impact significantly. In 2017, she organized over 50 employee forums. As a result of these forums, more than 100 cases were brought to management and workplace improvements were made. Xu and team also work directly with Apple to identify employees with grievances during assessment visits and interviews. Xu finds that her role is always evolving, but she enjoys the challenge of learning new things. She's very proud of the Moral Support team's results and their ability to improve the lives of her fellow employees.

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## Workplace training leads to workplace advocacy.



2013: New Hire Training of Local Employment Law and Apple's Supplier Code of Conduct



2015: Moral Support team founded



2017: Support and advocacy provided to over 40,000 employees

## Going further to fight bonded labor.



**2008:** All forms of forced labor prohibited in our Supplier Code of Conduct

**2015:** First company in our industry to enact a zero tolerance policy for any fees uncovered, even those within legal limits of the supplier's operating country

Bonded labor occurs when a person is forced to work in exchange for the repayment of a debt or other obligation — sometimes levied as a fee for receiving a job in the first place. In 2008, we made this a Core Violation of the Apple Supplier Code of Conduct and limited permissible fees to one month's wages.

In 2015, Apple went even further — leading the way in mandating that zero fees can be charged to supplier employees for recruitment opportunities, even if those fees fall within the legal limits of the supplier's operating country. If bonded labor is discovered, the supplier is required to repay the recruitment fees in full to all impacted employees.

We ensure safe channels for employees and suppliers to communicate concerns, and continue to be recognized as a leader among all industries in efforts to eliminate this vicious practice.



**Zero tolerance policy**  
for suppression of  
employee voice

Since 2008:

**US\$30M+**

repaid from suppliers with  
identified Debt-Bonded  
Labor Violations

**35K+**

of offending suppliers'  
employees received repayment

In 2017:

**US\$1.9M**

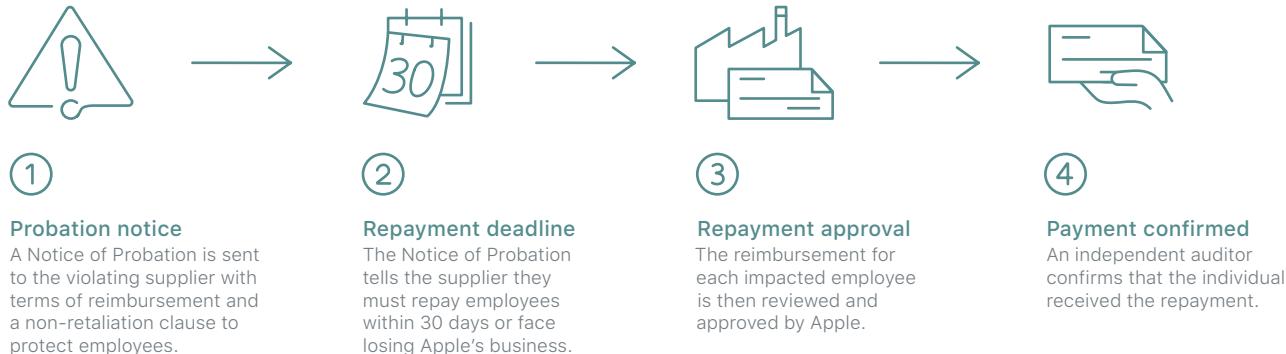
in total payments as a result  
of bonded labor violations

**1558**

people received payment

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If debt-bonded labor is uncovered, immediate action is taken.

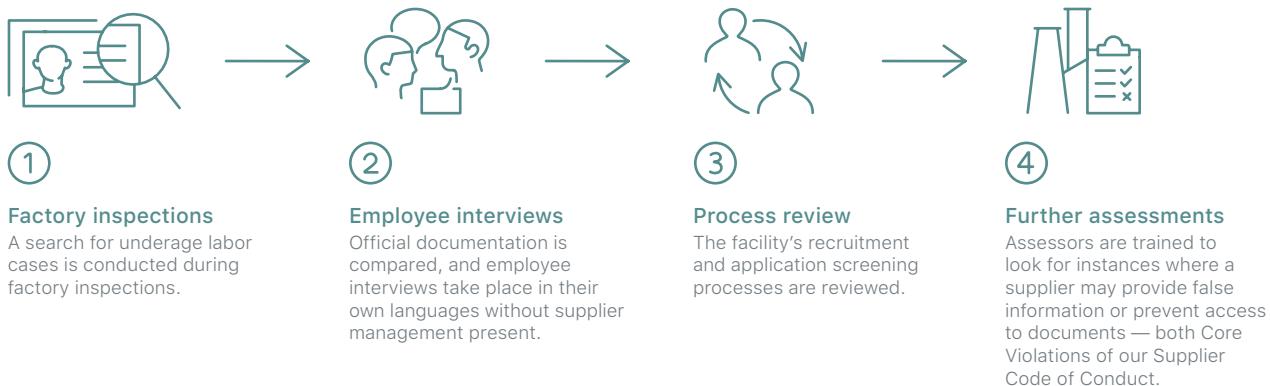


We have made consistent progress to eliminate involuntary labor in our supply chain. Year-over-year annual assessments, combined with capability building for suppliers, helped drive the violation recurrence rate to zero in 2017. In addition, since 2013, the total number of debt-bonded labor cases has steadily decreased.

# Underage labor is unacceptable.

Apple strictly prohibits underage labor in our Supplier Code of Conduct. In addition to a zero tolerance policy, we partner with suppliers to continuously improve training, communication, and detection methods for false identification to eliminate underage labor throughout the supply chain.

## How We Identify Underage Labor



In 2017, we assessed 756 facilities and nearly 1.3 million people and uncovered two cases of underage labor. The two underage employees were ages 14 and 15. In both cases, individuals used false identification to gain employment. Once identified, both were immediately transported home and enrolled in their school of choice, while continuing to receive wages from the supplier. Upon reaching legal working age, they will be offered a job at the supplier facility they departed, should they wish to return.

## Identifying underage labor is not enough, the supplier must:



Finance employee's safe return home



Fund employee's education



Continue paying the full wages the employee would have earned at the factory



Guarantee an opportunity to return to work upon reaching legal working age

## Standards that encourage a more inclusive workplace.

Apple's Supplier Code of Conduct requires safe and respectful working conditions. While we work with suppliers to ensure they are meeting our standards of non-discriminatory practices, we sometimes find a supplier who will go above and beyond to provide an equitable workplace. Compal, a supplier in Nanjing, China, aims to build an inclusive setting for all of their employees.

To give all employees a strong sense of belonging and a more inclusive atmosphere, Compal has taken measures including giving employees the choice to live in dorms with people who practice the same faith or religion. Compal also provides specially prepared food options that adhere to the religious customs and traditions of their employees.

iPad Production Line Operators  
China





Environmental Health  
and Safety Manager  
India

## A respect for human rights, at the deepest levels of our supply chain.

Apple has an enduring commitment to the responsible sourcing of materials for our products. We identify and map both regulated and unregulated materials in our products to the farthest reaches of our supply chain, and proudly lead our industry in establishing the strictest standards for smelters and refiners.

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## From the Mine to the Factory Line



## Leading the way on materials due diligence.

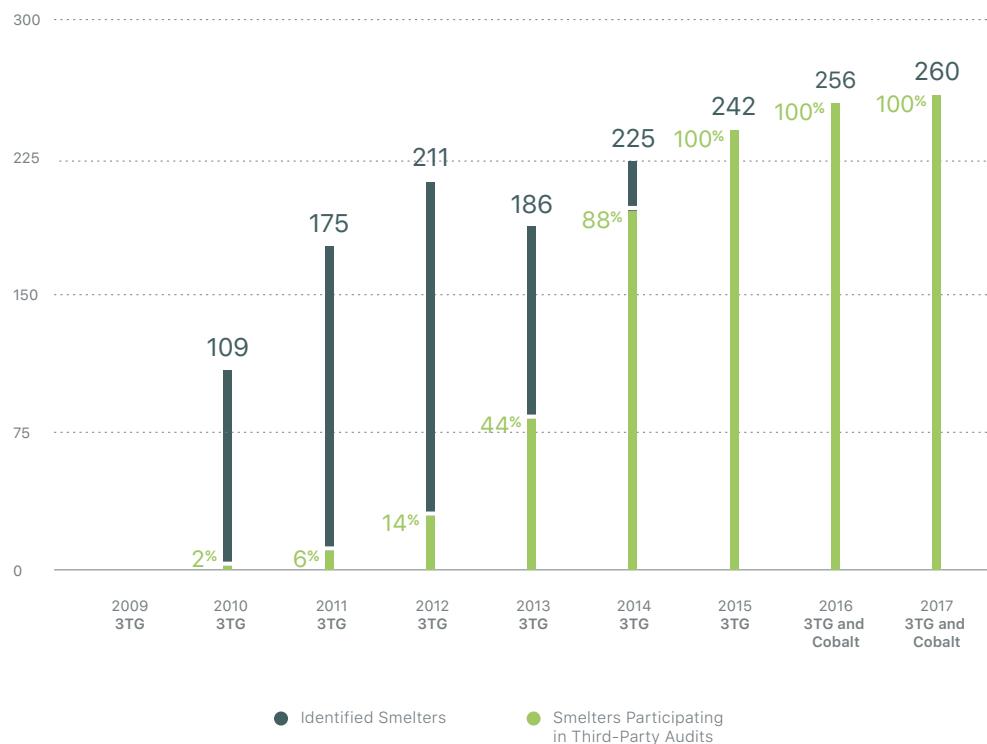
In 2010, we were the first company to map our supply chain from manufacturing to the smelter level for tin, tantalum, tungsten, and gold (3TG). In 2014, we started mapping our supply chain for cobalt and completed that mapping in 2016. This work is done to ensure the minerals in our products are responsibly sourced, based on our suppliers' efforts to identify and address risks in their own operations. Our programs are informed and designed in accordance with The Organisation for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, and other internationally recognized human rights instruments.

In 2017, for the second year in a row, 100 percent of our identified 3TG and cobalt smelters participated in independent third-party audits. Our efforts go beyond conflict to consider human rights and other risks, and we go above and beyond what's required by law to help smelters report, assess, and mitigate risk in their business practices. In-person spot audits of suppliers are conducted to verify the accuracy of reported data and to ensure corrective actions are taken where gaps may exist. In addition to offering new and current suppliers online trainings in English and Mandarin, Apple provides tailored support to suppliers where material gaps in management systems are identified. We are also the first company to publish our smelter list.

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### Third-Party Assessment Participation

3TG and Cobalt



We're proudly recognized as a worldwide leader in the responsible sourcing of minerals in our products.



#1 Ranking  
Enough Project

**"Apple proved to be the top industry leader in the Enough Project's 2017 conflict minerals rankings due to the company's leading work on supply chain risk assessment and mitigation, active participation in multi-stakeholder working groups, and support for programs in Congolese mining communities."**

John Prendergast  
Founding Director, Enough Project

## Sharing our work for others to follow.

In 2016, we developed the Risk Readiness Assessment (RRA), an assessment tool for prospective and current suppliers to understand their exposure and track key risks in their operations. 3TG smelters and refiners in our supply chain that completed an RRA were provided a summary benchmarking their risk readiness compared to their peers. These results allow smelters and refiners to self-correct and collaborate for better overall industry performance.

### Expanding the RRA to Other Industries

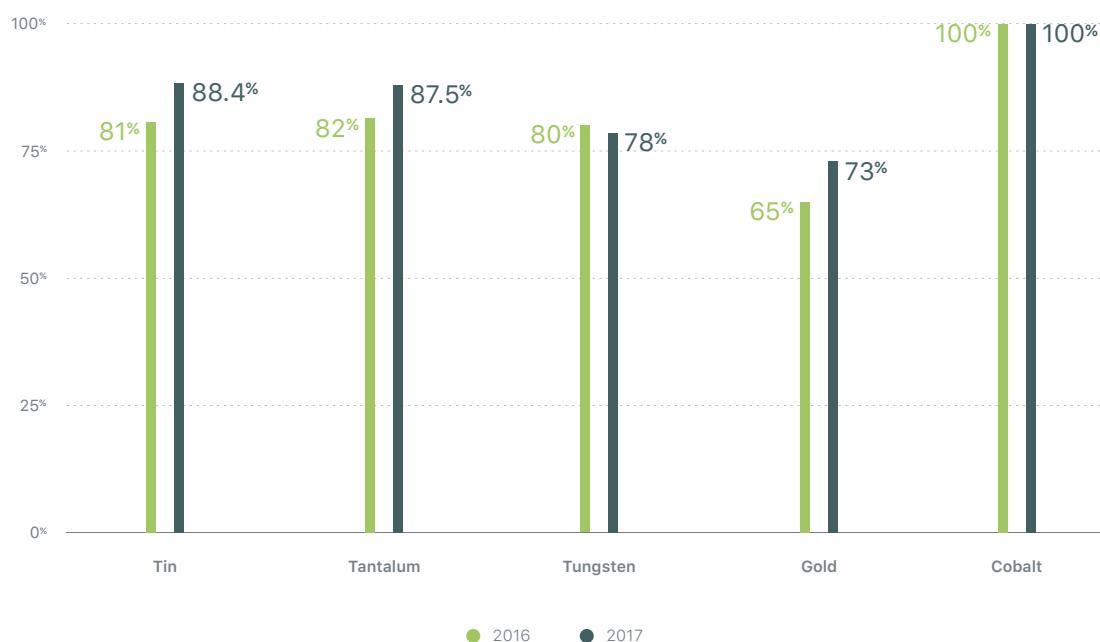


211 companies utilized the RRA tool in 2017

To encourage collective action across many industries, the RRA was open sourced through the Responsible Business Alliance (RBA), formerly the Electronic Industry Citizenship Coalition (EICC). The RRA online platform provides a centralized database of participating smelter information, supporting global comparability, easy access, and scalability that can be used across industries.

In 2017, 151 smelting or refining companies utilized the RRA platform. In addition, 60 companies (members of the RBA and Responsible Minerals Initiative, or RMI) utilized the RRA online platform in 2017, representing supply chain professionals from the electronics and electrical equipment manufacturers, automotive, aviation, retail, and consumer goods industries.

### 3TG and Cobalt Smelters and Refiners Utilizing the RRA



In addition to third-party audits and risk assessments, it's also important to empower and provide a channel for anyone to identify a challenge that may be occurring in any industry scheme that audits and monitors mine sites for conflict risks. The International Tin Association (ITRI)'s Tin Supply Chain Initiative (iTSCi) program assists companies in responsible sourcing of minerals from high-risk areas, and monitors the mine sites participating in iTSCI's traceability program in the DRC.

In 2017, we helped expand a whistle-blowing program implemented by iTSCI into five new risk categories, so that supply chain misconduct and incidents are surfaced and addressed. Through this program, people can place anonymous calls to report allegations such as underage labor at mine sites, mineral smuggling, or illegal mining in protected areas. We remain committed to improving existing systems and driving for greater human rights protections in the upstream portions of our supply chains.

## Making an impact on the ground.

We believe driving for compliance is not enough. To make a lasting impact, work must go deeper with on-the-ground organizations. We believe in supporting vulnerable communities and giving a voice to individuals, particularly in those regions where minerals that are in our products may be mined. We also support efforts to help provide vocational education, so people can find livelihoods other than mining and break the cycle of poverty.

While our long term aim is to end our reliance on mining, we know that today, millions of people around the world depend on mining for their livelihoods. In 2016, we helped fund research by Faber, Krause and Sanchez de la Sierra (2017) at the Center for Effective Global Action (CEGA) at the University of California, Berkeley, which indicated that approximately 90 percent of cobalt miners in the Democratic Republic of Congo's (DRC) former Katanga province work in artisanal mining. In these communities, 60 percent of the households rely on mining as a source of livelihood or have in the past. Mining communities are especially vulnerable to human rights violations.

In 2016, work began with Pact, a nonprofit organization that works to help mining communities in the DRC organize, and protect miners, mining communities, and their children. In 2017, on Apple's behalf, Pact launched an extensive awareness campaign that outlines mining risks and brings them to the attention of DRC communities. Neighborhood committees and local leaders work with children and their families to explain the risks intrinsic to child mining, both physical and psychological, and the benefits of health and education. Pact also launched a vocational education program where at-risk youth learn skills other than mining. The vocational training opportunity led to some youths withdrawing directly from the mines.

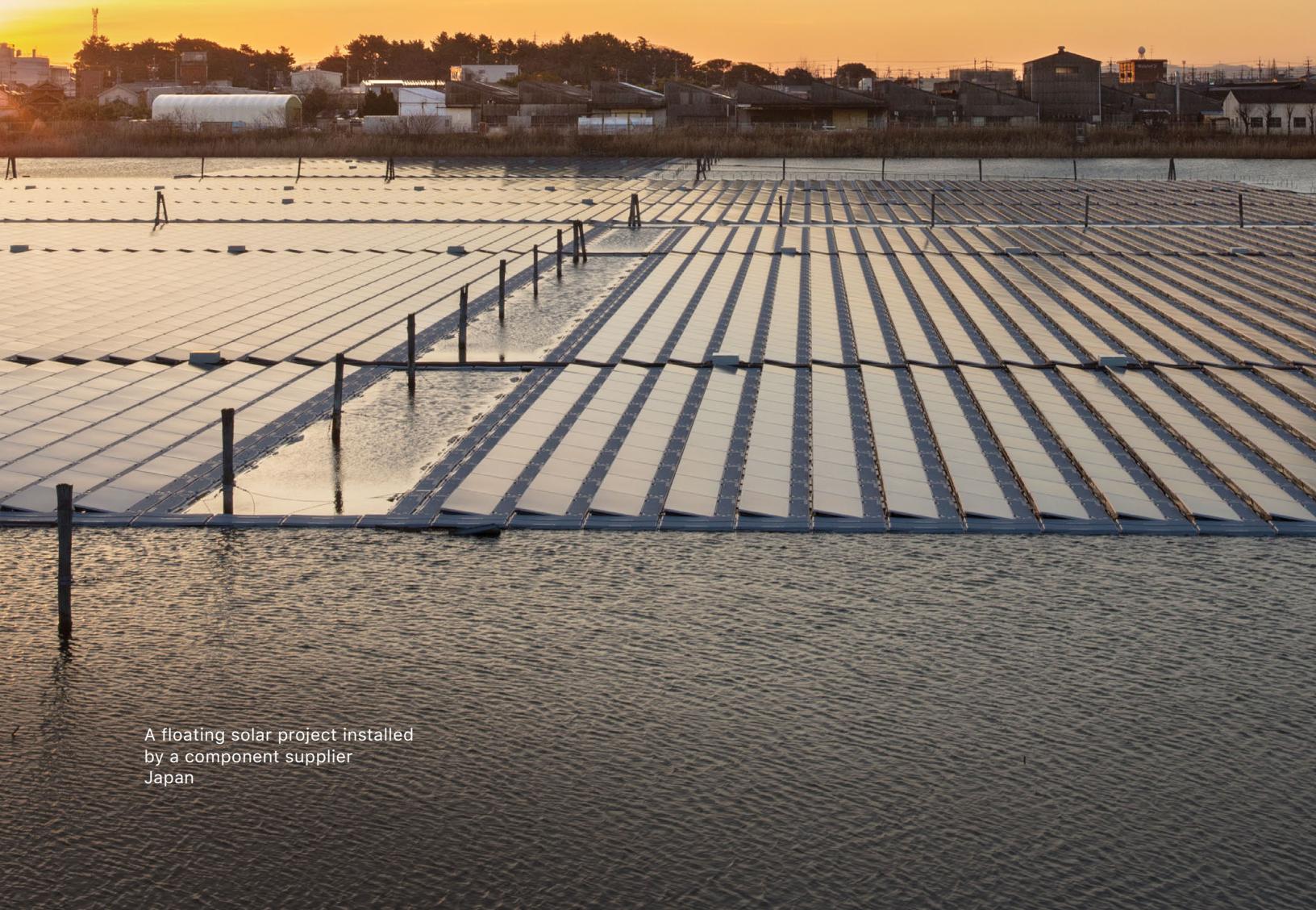
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**"Private-sector involvement is one of the fastest ways to achieve change at scale and is critical for the systemic change necessary to tackle child labor in mining. Apple's support of vocational education promotes more career opportunities for future generations."**

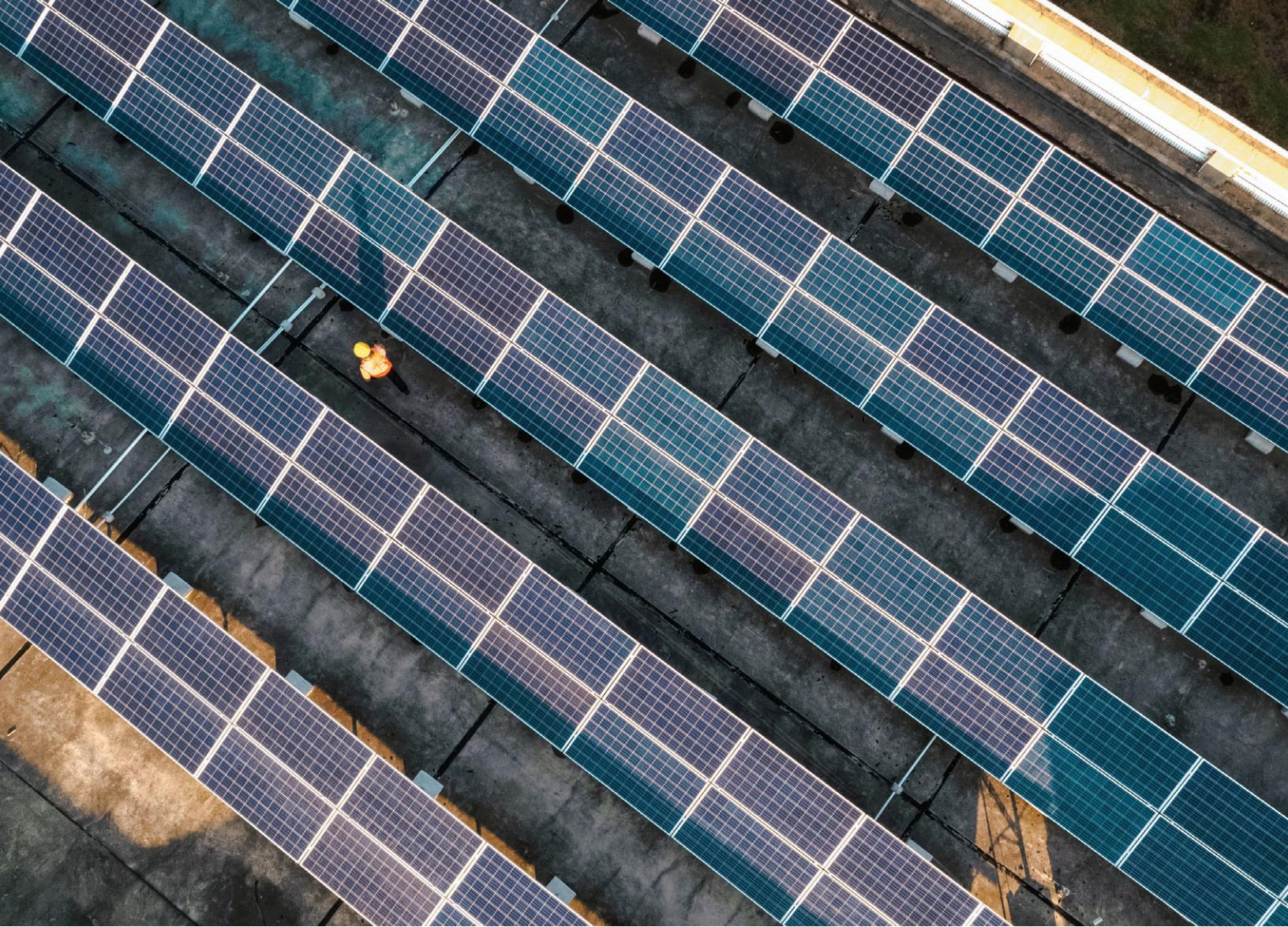
Mark Viso  
President and CEO, Pact

In addition to our on-the-ground efforts with Pact, Apple awarded a grant to the Fund for Global Human Rights in 2017. Since 2003, the Fund has worked to advance human rights by providing resources to activists and grassroots organizations that have the potential to generate positive change in over 17 countries. Apple partnered with the Fund to support their work in the DRC. Local organizations in the DRC receive grants from the Fund working on a range of issues, including the rights of women and children; economic and social rights of mining communities; inclusive economic growth; judicial advocacy; and health, safety, and fair compensation for mining communities.

# Planet



A floating solar project installed  
by a component supplier  
Japan



Solar panels used to  
power an Apple supplier  
China

## Progress toward a greener supply chain.

In 2017, we made significant progress with our suppliers in our ongoing effort to protect the environment. We worked to divert waste from landfills, reuse and recycle materials, and conserve our planet's precious resources; and we continued our efforts on fighting climate change.

## Environment first. Transparency first. And Apple first.



**#1 ranking** awarded to Apple by IPE's Corporate Information Transparency Index for the fourth straight year

In 2017, Apple was awarded the top score in the Corporate Information Transparency Index (CITI) for the fourth straight year. The CITI is run by the Institute of Public and Environmental Affairs (IPE), a Chinese non-governmental organization with expertise in environmental protection.

Through an ongoing partnership, Apple and IPE identify opportunities for our suppliers to improve their environmental performance, and we partner with IPE personnel to conduct third-party validation on improvements to correct identified gaps.

IPE also directly facilitates and supervises independent third-party validations of enhancements made in our suppliers' environmental management systems. Of our suppliers involved in this process, 100 percent also share annual environmental monitoring data through IPE's platform to demonstrate that they are sustaining improvements they have implemented.

iPhone Production Line Operator  
China



# When we waste nothing, that will truly be something.

One of the ways we minimize our impact on the planet is to reduce the amount of waste generated while manufacturing Apple products.

In 2015, we launched a Zero Waste Program that provides onsite support to help suppliers learn how to recycle and reuse materials, and divert waste from landfills. To achieve a Zero Waste to Landfill certification through Underwriters Laboratories (UL), a factory must divert 100 percent of its waste from landfills, with a maximum of 10 percent sent to a waste-to-energy facility.

When the program began, suppliers with the most significant waste impact were selected: final assembly facilities in China. In just two years, 100 percent of our final assembly locations in China had attained Zero Waste certifications, and our newest final assembly facility, which came online in 2017, will be certified in 2018.



**100%** of iPhone final assembly facilities worldwide are zero waste certified

In 2017, we also expanded efforts globally to include operations in India. Worldwide, 100 percent of iPhone final assembly facilities have achieved their Zero Waste to Landfill certification. In addition, we increased commodity facility participation by 136 percent year over year from 2016.

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**100%**

final assembly facilities participating

**136%**

increase in participating commodity facilities from 2016

**625K**

metric tons of waste diverted from landfill since 2015 — that's enough to cover 2,545 soccer fields about 1 meter deep

To help our suppliers achieve this objective, Apple provides necessary tools and guidance, including the services of experts in sustainable waste management solutions. Suppliers dedicate months identifying ways to reuse or recycle materials. This can result in suppliers not only improving their environmental management systems, but also benefiting from sustained energy savings.

## Zero waste from the factory to the community.

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"It's exciting to see how the Zero Waste program is increasing recycling and waste segregation awareness. I look forward to seeing how Wistron employees will implement their learnings from their Zero Waste training to positively impact the factory, and beyond."

Shobha Savalgi  
Environmental Health and Safety expert, Zero Waste instructor at Wistron

In early 2017, we began work with Wistron at a new supplier facility in India. During onboarding, we found ways to not only reach a Zero Waste to Landfill certification in record time, but also benefit the local community.

A key part of the Zero Waste program is to provide waste management training to all facility employees. This provides Wistron India employees with more recycling and waste segregation knowledge, inspiring them to implement their learnings at home. The community where Wistron is located is doing their part as well. The local government is also promoting waste segregation in the city to build a "Clean Bengaluru."

From the beginning of the facility's development, waste management practices were incorporated into Wistron India's operating plan to help them avoid sending any waste to landfills. The partnership includes assistance in selecting recyclable protective materials and finding service providers to reclaim materials at the end of life.

Wistron reached a 100 percent waste diversion rate in their first year of operation and was certified by UL in late 2017, faster than any supplier yet.

Zero Waste Instructor  
India



## New life for landfill waste.

In the manufacturing of iPhone, Apple uses films to protect both the display and enclosure. These films, their backing liner as well as trays that transport the product down the assembly line, are made of polyethylene terephthalate (PET). Partnering with Foxconn, we developed a new PET recycling process that uses the waste film liner material to make trays. Reusing the liners reduces transportation costs, carbon emissions, and eliminates 200 metric tons or more of solid waste every year.

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### PET Liner Process

Before



## PET Liner Process

After

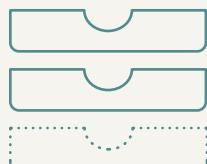
①

A protective film and liner used to protect iPhone screens during manufacturing are no longer needed.



②

The protective film and liner are separated. One is recycled and the other is used for energy recovery.



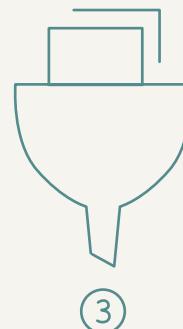
③

The recycled piece is turned into trays for use in production.



④

The trays are used to hold iPhone devices in a later phase of their production.



Exploring other waste diversion methods involves working with our operations teams to find ways to optimize material use in manufacturing processes. The work doesn't stop there. The chemicals used during the manufacturing process are also considered.

## Partnering with suppliers to safely manage chemicals.



100% of process chemicals used at final assembly facilities were verified to comply with Apple's Regulated Substances Specification for the third year in a row

In 2017, process chemicals at our final assembly facilities were verified at 100 percent compliant with Apple Regulated Substances Specification (RSS) for the third year in a row. We also sought to expand our RSS compliance to commodity and component manufacturers deeper in our supply chain.

We launched our Chemical Management Program in 2014 to help suppliers develop a comprehensive approach to managing chemicals safely. The program provides Apple subject matter experts to help suppliers implement greener, less toxic alternative chemicals in their processes. We also partner with factory leaders to assess critical elements of a comprehensive chemical management program, and develop capabilities to independently manage chemicals safely in factory settings. These elements include chemical inventory, risk assessment, risk control, hazard communication training for employees, management training, medical surveillance, chemical handling, and emergency response.

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80%

increase in number of program participants from 2016

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113

supplier facilities participating in the program



A rating from Report Card on Retailer Actions to Eliminate Toxic Chemicals, Mind the Store

## Identifying greener alternatives.

In 2017, the Chemical Management Program focused efforts to identify safer green alternatives. To better understand the opportunities for greener alternatives, we mapped which chemicals are used in our final assembly facilities and evaluated all control measures, such as ventilation, personal protective equipment, and worker training programs.

The results of mapping and assessment activities are the basis for an innovative partnership in 2017 to drive the adoption of greener cleaners. Substitutions were identified and replacement feasibility studies were conducted leading to the elimination of all Benchmark 1 and 2 cleaners from our final assembly facilities. This involved the identification and replacement of three Benchmark 1 and 26 Benchmark 2 cleaners and degreasers.

Both the GreenScreen® framework and the Environmental Protection Agency's Safer Choice Program were used to evaluate the health and environmental impacts of a chemical and identify better alternatives. In 2017, this process was completed at 18 final assembly facilities worldwide.

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We categorize chemicals according to GreenScreen® Chemicals' Benchmark categories:



**Benchmark 4**  
Prefer, safer chemical



**Benchmark 3**  
Use, but still opportunity  
for improvement



**Benchmark 2**  
Use, but search for  
safer substitutes



**Benchmark 1**  
Avoid, chemical  
of high concern

## A clear plan for using less water.

In 2013, our Clean Water Program was launched at 13 facilities. We take a risk-based approach by focusing on facilities with water-intensive processes, located in water-scarce or water-stressed regions, and in need of comprehensive water management programs.

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The Clean Water Program is specifically designed to help suppliers develop long-term water management systems to improve their performance and increase efficiencies over time. This is achieved by assessing the type and amount of water usage, current wastewater treatment, and ongoing water management efforts at a supplier site.

Suppliers are trained to reduce their water usage, promote water recycling, ensure high-quality wastewater discharge, and prevent water pollution. The process provides suppliers with tools for identifying long-term environmental and financial benefits.

We host technical seminars for facilities to communicate and share best practices. Education is a key component of the program. Depending on the local environment and stringency of regional requirements, suppliers are taught water permitting for specific processes to help minimize risks in water-scarce areas. This program is about more than improving assessment performance, it is about capacity building to enable suppliers to maintain long-term high performance and become responsible neighbors in their own communities.

In 2017, our supplier partners achieved freshwater savings of 5.1 billion gallons, marking 13.6 billion gallons of water saved since the program was established in 2013.

Participating factories in China have achieved an average reuse rate of 37 percent.

## Finding water solutions that make community impacts.

In 2017, what began as an investigation into a drinking water supplier turned into an effort to implement a more efficient drinking water dispensing system in our retail locations. A planet-friendly water filtration solution was just the beginning. Recognizing a unique opportunity to give back to the communities where we operate, particularly in water-stressed Southern California, we created a net positive impact for water consumption in our Los Angeles area Retail operations.

We teamed up with Bonneville Environmental Foundation (BEF) to buy Water Restoration Certifications (WRCs) to help restore rivers and wetlands that supply water to Southern California. The BEF program incentivizes farmers, ranchers, and other heavy water users to develop solutions that restore water to water-scarce ecosystems. Each WRC Apple buys represents 1000 gallons of water restored to the Sacramento River Wetlands conservation area. Our support will restore twice the amount of water consumed by our 26 Southern California retail stores last year.

Beyond driving a net positive water impact, our employees wanted to help their community. We partnered with BEF and Heal the Bay to contribute to the revitalization of the Los Angeles River through the LA WAYS Water Smart Park. The improvements to this 9-acre stormwater retention and filtration park in South Central Los Angeles began in late 2017 and will be finished later this year. The self-sustaining park will reduce pollution, recharge groundwater, and combat local climate change. As a living classroom, it will also provide valuable environmental education opportunities to local residents in a historically underserved community.

Render of LA WAYS Park  
United States



# The power of energy efficiency.

2017 Results:



**320K annualized metric tons** of greenhouse gas emissions reduced



**77%** increase in program participants

We work closely with suppliers to reduce their energy use and invest in renewable energy projects. Each program sets ambitious goals and supports Apple's mission to leave the world better than we found it.

In 2015, Apple launched the supplier Energy Efficiency Program. This program trains suppliers to uncover opportunities that reduce their energy usage and carbon emissions. In the program's first year, efforts were focused on manufacturing facilities with the highest energy use and potential for improvement, including aluminum casing, electrical, glass, and optics suppliers. In 2018, requirements were added to our Supplier Code of Conduct for suppliers to set annual carbon reduction goals.

Apple conducts in-depth energy assessments to identify areas for improvement at supplier facilities. Suppliers are encouraged to invest in energy-reducing infrastructure, such as lighting upgrades and motion sensors, processed heating and cooling, and compressed air. The assessments provide suppliers with a cost-benefit analysis of the potential return on their investment for implementing energy efficiency improvements.

In 2017, the total number of program participants increased by 77 percent, and carbon emission reductions increased by 113 percent. Suppliers participating in the program have implemented energy efficiency improvements that reduced more than 320,000 annualized metric tons of greenhouse gas emissions in 2017.

## Supplier Clean Energy Program



**4 gigawatts** of clean energy by 2020 to address manufacturing emissions

Driving broader awareness of the need to manage carbon emissions in every supplier facility is critical to our efforts to protect the planet. Through our clean energy program, Apple and our suppliers will generate and procure more than 4 gigawatts of clean energy worldwide by 2020 to avoid emissions associated with Apple manufacturing.

We work with governments where our operations exist to align the program with their priorities and encourage renewable energy policy. Suppliers are given access to our SupplierCare platform that offers regional guidance and tools to procure clean energy and is available in their native languages. SupplierCare also provides our suppliers with global insights and updates on global renewable energy markets and policies.

Since implementing the program, 16 suppliers have made commitments to 100 percent clean energy for Apple production. Together with Apple investments and other supplier commitments, we now have close to 3 gigawatts of clean energy committed to addressing Apple's manufacturing emissions.



We continue to move forward on our environmental priorities, which address our facilities, products and supply chain. To learn more about our progress to-date,

[Download the 2018 Environmental Responsibility Report](#) 

Ultimately, the combined efforts of Apple and our suppliers' will result in improved energy efficiency, and new clean energy commitments of more than 4 gigawatts dedicated to Apple production. With every program, the overarching goal is to empower our suppliers to set goals for their own suppliers, extending each program's overall impact.

Solar panels used to power an Apple supplier China



## A supplier goes above and beyond for the environment.

Avary Holding in Shenzhen, China, has been an Apple supplier for over seven years. Avary strongly supports green initiatives and has worked with Apple to develop programs that go above and beyond what's required by our Supplier Code of Conduct.

While Avary is working towards attaining a Zero Waste certification, they are also extending their impact beyond eliminating landfill waste. Avary has a number of green initiatives occurring in their factory, including investing in systems to recover copper from process waste streams, and establishing industry-leading chemical management practices that protect workers and the environment. As the first graduate of the Clean Water Program in 2016, Avary has achieved an impressive 58 percent wastewater reuse rate, by installing a comprehensive water metering system, optimizing their water consumption for component manufacturing and finding ways to reuse process water for cooling systems, landscaping, and sanitation systems.

Avary's commitment to the environment has not gone unnoticed. As a result of their efforts, the national government, as part of an initiative to promote green manufacturing in China, named Avary as a Green Manufacturing pilot site. In addition, for their water conservation progress, in 2016 Avary was named the first Clean Water Program graduated site in China.

2017 Code of Conduct Assessment Results

# Progress



iPhone Production Line Managers  
China



iPhone Production Line Manager  
India

## Leading in raising the bar.

We currently work with suppliers in 30 countries, whose operations range in size from a dozen employees to hundreds of thousands. It's a continuous effort to drive our industry's most stringent set of protections for people and the planet. Through these supplier partnerships, we're creating a more responsible and greener supply chain.

## Strong partnerships. Strong results.

Our supplier partnerships begin with a shared commitment to Apple's Supplier Code of Conduct. Our Supplier Code of Conduct and associated Standards set Apple's expectations for how our suppliers should conduct business responsibly in labor and human rights, workplace health and safety, environmental protections, and management systems. We add new requirements to our Code every year, and are proud that it's one of the industry's most stringent.

Our suppliers' level of adherence to the Code is evaluated during annual assessments. A standardized scoring methodology with more than 500 data points is used to evaluate suppliers and categorize them as high, medium, or low performers. Every year, we expand our efforts to reach more suppliers through first-time assessments. Whether we are working with suppliers for the first time or on repeat engagements, the goal is the same: to develop their capabilities so that one day they can independently uphold our Supplier Code of Conduct's high standards in their own business operations.

iPhone Production Line Operator  
China



## 2017 Data

In 2017, we conducted 756 assessments in 30 countries, covering suppliers who represent 95 percent of our total annual spend. Of these 756 assessments, 197 were initial assessments where we visited facilities for the first time. While we remain focused on a risk-based approach, it is vital that our capability building efforts continue to reach a broader set of suppliers year over year.

Our 2017 supplier progress results cover assessments at manufacturing facilities, logistics and repair centers, and contact center facilities. Each assessed facility is ranked on a 100-point scale based on its performance relative to our Code of Conduct. A score of 90 to 100 is representative of a high performer. A score less than or equal to 59 is representative of a low performer. A score of 60 to 89 is representative of a medium performer.

In 2017, low-performing sites in our supply chain decreased by 71 percent, while the number of high-performing supplier sites increased by 35 percent. Last year, 26 percent of our total number of assessments were initial assessments.

In 2017:

35%

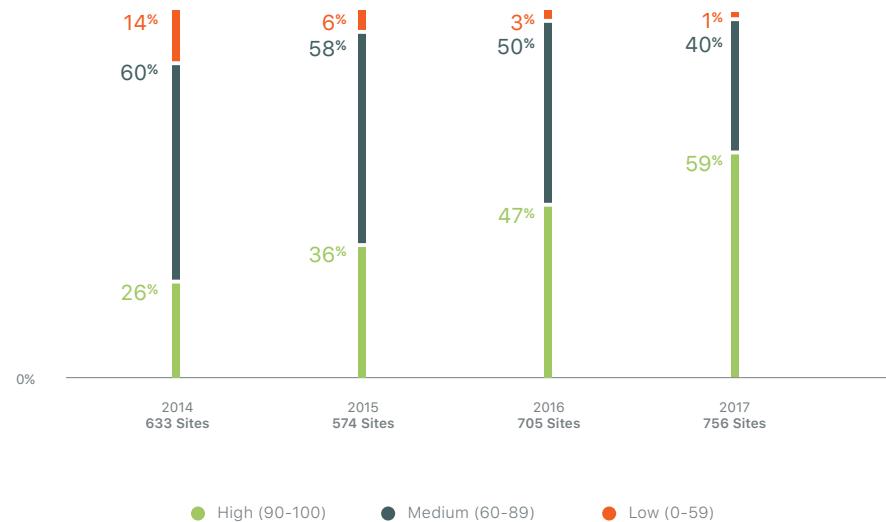
increase in the number  
of high performers in our  
supply chain

71%

decrease in the number of low  
performers in our supply chain

Our goal is to help suppliers run more ethical, responsible, and greener businesses. We spend weeks, and sometimes months, with low- and medium-performing suppliers to create facility-specific capability building programs. Apple subject matter experts work with suppliers to complete comprehensive root cause analyses and build customized development plans. Through regular site visits, we continually drive supplier development and conduct trainings to elevate capabilities. Over 150 Apple-developed technical tools are drawn on to advise suppliers on capability building and process improvement, enabling them to independently maintain and improve performance over time.

## Scaling Capability Building



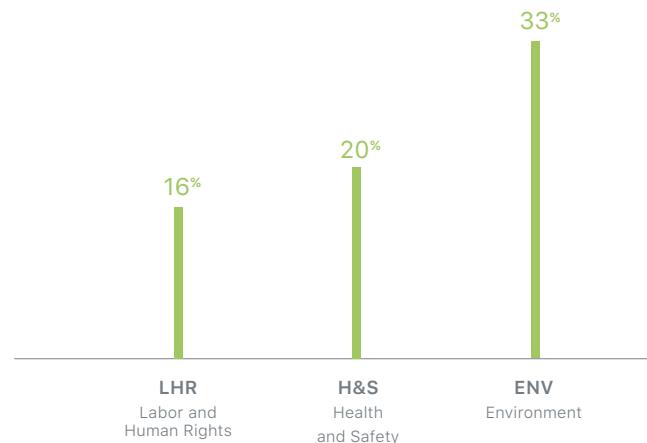
39 new tools  
developed for supplier  
capability building

**"Apple's consultation broadened our mindset and helped us develop a more complete management plan. Through multiple onsite visits, problem identification and collaboration for a solution, we felt a true partnership from Apple."**

Lin Shih-Ming  
Administration Division General Manager, Mektec Taiwan

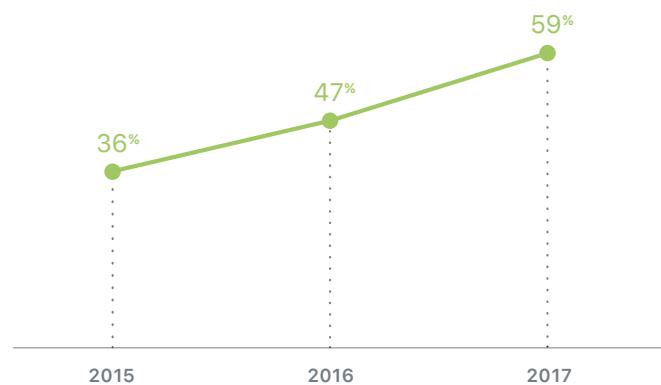
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Average Year-Over-Year Percent Improvement in Participating Suppliers' Scores



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Percentage of High-Performing Suppliers



# 2017 Assessment Scores

We categorize our supplier assessment findings in three degrees of severity:

## ● **Administrative Non-Compliance**

Denotes policy, procedure, training, or communication-related findings.

Examples include:

- Inadequate record keeping
- Inadequate documentation of policy or procedures
- Insufficient training on policy

## ● **Violations**

Denote implementation-related findings.

Examples include:

- Insufficient provision of benefits
- No or inadequate pre-placement/on-job/post-employment occupational health check
- No or inadequate environmental permits

## ● **Core Violations**

Include what Apple considers the most serious breaches of compliance. These are issues for which we have zero tolerance.

Examples include:

- Underage workers or involuntary labor
- Document falsification
- Intimidation of or retaliation against workers
- Environmental and safety threats

## 2017 Assessment Results

# Labor and Human Rights



**86 out of 100** Average  
Labor and Human Rights  
Assessment Score

The average Labor and Human Rights score across our 756 supply chain assessments in 2017 was 86 out of 100.

In 2017, the bar for Labor and Human Rights performance was raised for wages and benefits, involuntary labor prevention, and student intern management.

For wages and benefits, Apple suppliers are now required to pay a minimum of 125 percent base wages for overtime worked in countries where there are no legally established overtime rates. In addition, to prevent excessive deductions of wages due to tardiness, a new requirement was added to limit deductions for tardiness based on the exact hours and minutes a supplier employee is tardy.

To emphasize our requirements to prevent involuntary labor, standards were added for suppliers to establish due diligence processes to ensure that employees hired through private employment agencies are provided legally required benefits and pay on an accurate, timely basis. Suppliers who work with private employment agencies are also required to have all fees and expenses related to a foreign contract employee's recruitment clearly stated in the contracts between the employment agency and the facility to ensure compliance with Apple's zero fee policy.

Requirements were also raised in 2017 to limit the number of student interns at a supplier facility to no more than 10 percent of their total workforce.

## Raising the Bar in Labor and Human Rights Compliance



Universal overtime  
wage requirements



Limited deductions  
for tardiness



Safeguards for foreign  
contract workers  
hired through private  
employment agencies



Limit of no more than  
10% student workforce  
at a supplier facility

In 2017, the majority of violations found were related to improper provision of wages and benefits and working hours violations. An example of an Improper Provision of Wages Violation is failure to pay for mandatory pre-shift meetings, including one case where we required the supplier to pay employees for a pre-shift meeting that lasted five minutes.

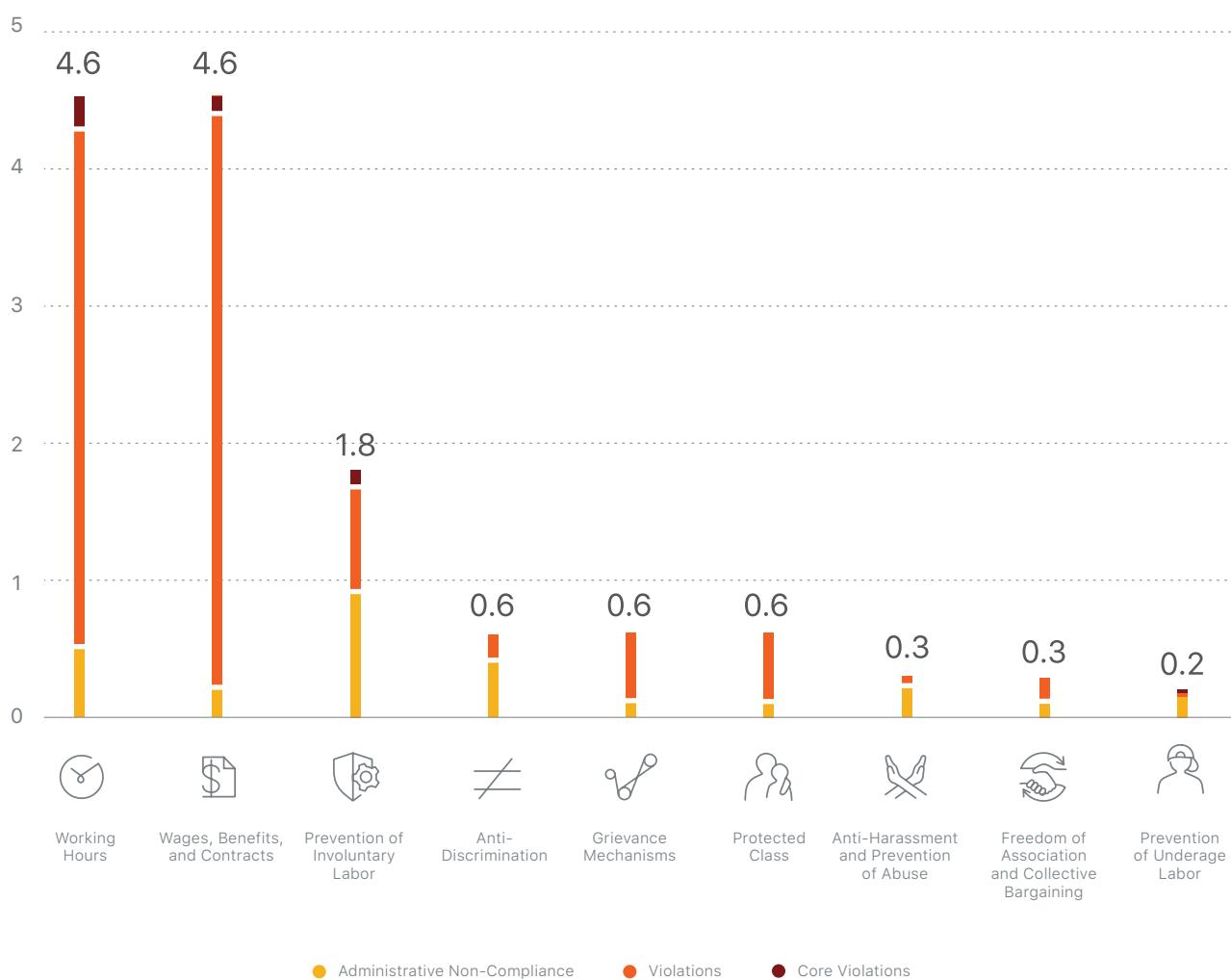
Examples of Benefits Violations include suppliers not providing legally mandated benefits, or overtime not paid at premium rates as stipulated by law and Apple's requirement. In all cases, we work with suppliers to ensure their employees are fully paid back.

Examples of Working Hours Violations include exceeding the 60 hour workweek limit, and providing no day of rest after six consecutive days of work.

A lower percentage of assessment violations were found relating to Anti-Discrimination and Anti-Harassment, Grievance Mechanisms, and processes related to the protection of special classes, such as juvenile and student employees.

### Labor and Human Rights Non-Compliance Breakdown

Based on 756 assessments, on a 100-point scoring system.



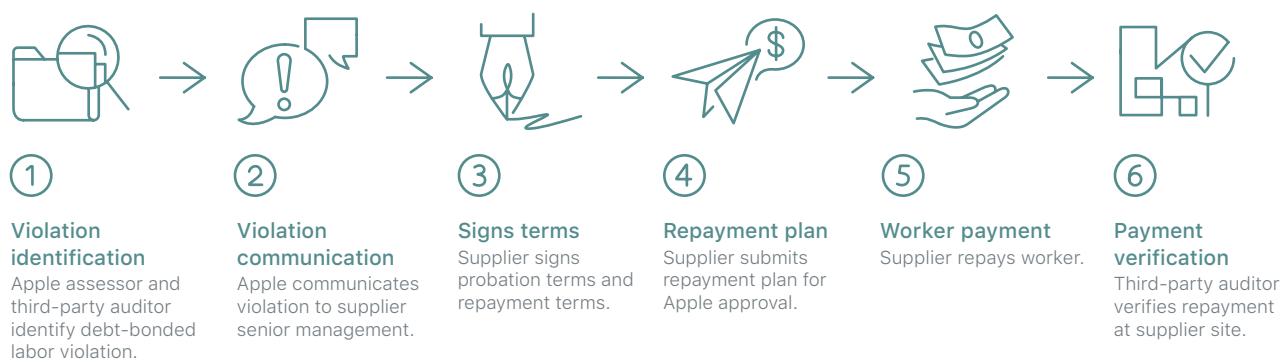
In 2017, 44 Core Violations were uncovered in Labor and Human Rights; these included three Bonded-Labor Violations, 38 Working Hours Falsification Violations, 1 Access Restriction Violation, and 2 Underage Labor Violations.

## Debt-Bonded Labor

Since 2015, Apple has mandated that zero fees can be charged to foreign contract workers for recruitment opportunities. In 2017, three suppliers were identified with foreign contract workers who were charged recruitment fees. In each case, the supplier was required to repay the recruitment fees in full to all impacted workers. In one case, over 700 foreign contract workers were recruited from the Philippines to work for a supplier through a private employment agency. This resulted in excessive placement fees of more than US\$1M. We review the reimbursement amount for each impacted employee, and confirm its repayment by onsite validation. We also require our suppliers to terminate business relationships with private employment agencies that charge employees up-front recruitment fees, unless the agencies demonstrate a commitment to improve their practices and avoid such violations in future business. Since 2008, more than US\$30M has been repaid to more than 35,000 foreign contract workers.

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### Debt-Bonded Labor Remediation Process



## Working Hours Falsification

Our Working Hours policy is based on International Labour Organization and Responsible Business Alliance (RBA) standards that limit working hours to no more than 60 hours a week. Also, suppliers can offer overtime only on a voluntary basis and factories must give employees one full day of rest for every six days worked.

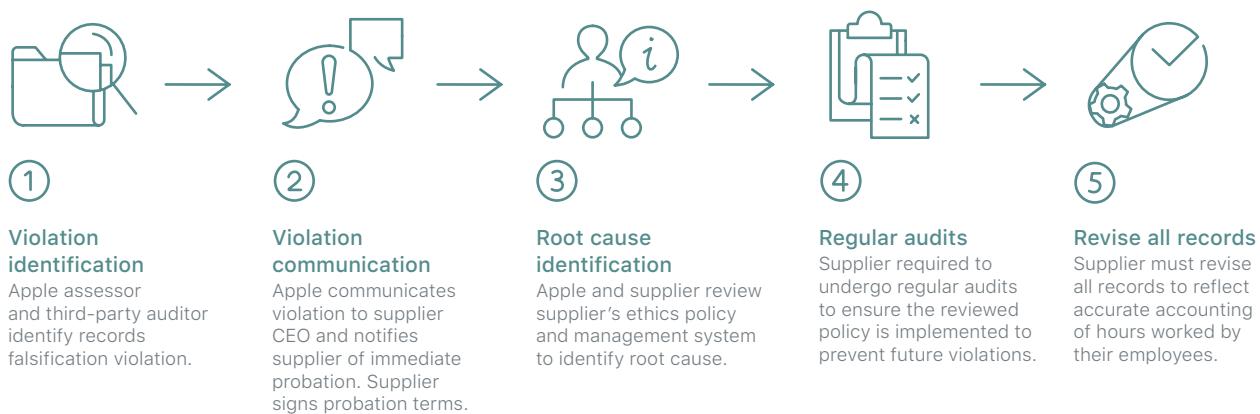
We launched a Working Hours Program in 2011 to better manage working hours across our vast supply base. In 2012, the weekly working hours of more than 1 million supplier employees were monitored. Since then, coverage of employees monitored in the program has expanded year over year and, in 2017, the working hours of 1.3 million people were tracked on a weekly basis.



**1.3M employees**  
monitored on a  
weekly basis

If falsification of employee working hours is discovered, the violation is escalated to the supplier CEO and the supplier is placed on immediate probation. The supplier's ethics policy and management systems are then thoroughly reviewed to identify the root causes and systematically correct them. The supplier is required to undergo regular audits to ensure the reviewed policy is implemented to prevent future violations. In addition, the supplier must revise all records to reflect an accurate accounting of hours worked by their employees. In 2017, we uncovered 38 cases of falsification of working hours data. In all cases, suppliers were placed on immediate probation. Our suppliers' compliance for overall working hours for the year was 94 percent.

### Working Hours Falsification Remediation Process



## Access Restriction

When access is restricted at a supplier site during an assessment, the supplier is required to provide complete records to Apple's assessment team, or a qualified third-party auditor approved by Apple.

In 2017, one supplier restricted site access and refused to provide production records, a third-party audit, or documentation to justify wage calculation, which resulted in the supplier receiving a Core Violation. If the supplier refuses to provide the required documents for review during the assessment, it is cited as a Core Violation. The supplier is then required to hire an independent third party to do a comprehensive review of all relevant records and demonstrate compliance. The supplier is also required to conduct reviews of their ethics policies and management systems to identify the root cause of the access restriction, and deliver a corrective action plan to be implemented within 30 days of the discovery of the violation. Lastly, the supplier is required to provide training to their management staff to mitigate future obstruction during assessments.

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### Access Restriction Remediation Process



## Underage Labor

During an assessment, a supplier's management system is thoroughly analyzed for the ability to prevent underage labor. Assessors review what steps the supplier takes to identify the job applicant's age, if they are proactively vetting for underage applicants during the interview process, and how they continue to verify age during their onboarding process. Auditors also review employee personnel files and have face-to-face interviews with workers who appear underage.

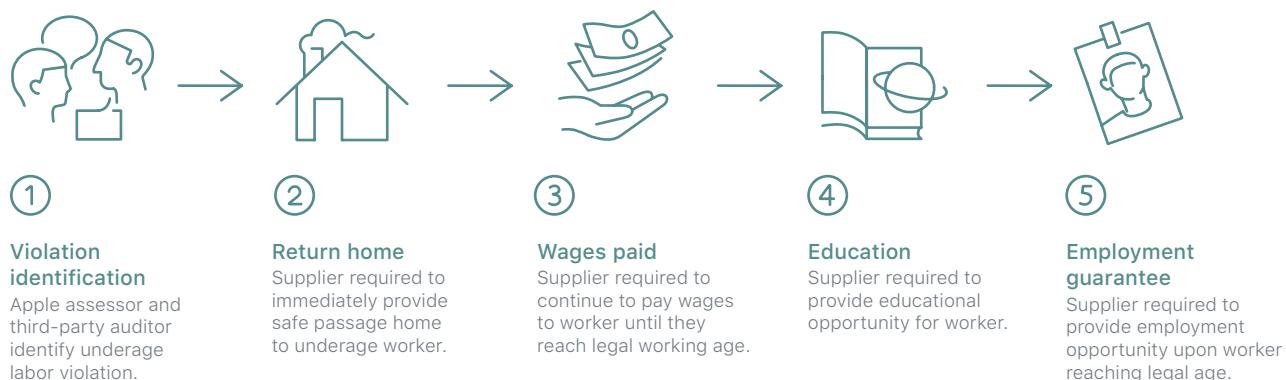
When underage labor is identified, specialized third-party assessors are brought in for an in-depth review of the case. The supplier is required to stop the underage employee from continuing to work and to return them safely home. Educational opportunities are presented to the underage employee and their guardians.

While the underage employee is attending school, the supplier is required to pay tuition and other associated fees, and continue to pay their wages. Third-party assessors visit the underage employee regularly at school to ensure they are progressing. Once the student reaches legal working age, the supplier is also required to offer them reemployment.

In 2017, we uncovered two cases of underage labor. The two underage employees were ages 14 and 15. In both cases, individuals used false identification to gain employment. Once identified, both were immediately transported home and enrolled in their choice of schools while continuing to receive wages from the supplier. Upon reaching legal working age, they will be offered a job at the supplier facility they departed, should they wish to return.

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### Underage Labor Process





**90 out of 100** Average Health and Safety Score

## 2017 Assessment Results

# Health and Safety

The average Health and Safety score across our 756 supply chain assessments in 2017 was 90 out of 100.

In 2017, the majority of violations discovered were in the Health and Safety Hazard Prevention and the Emergency Prevention, Preparedness, and Response categories.

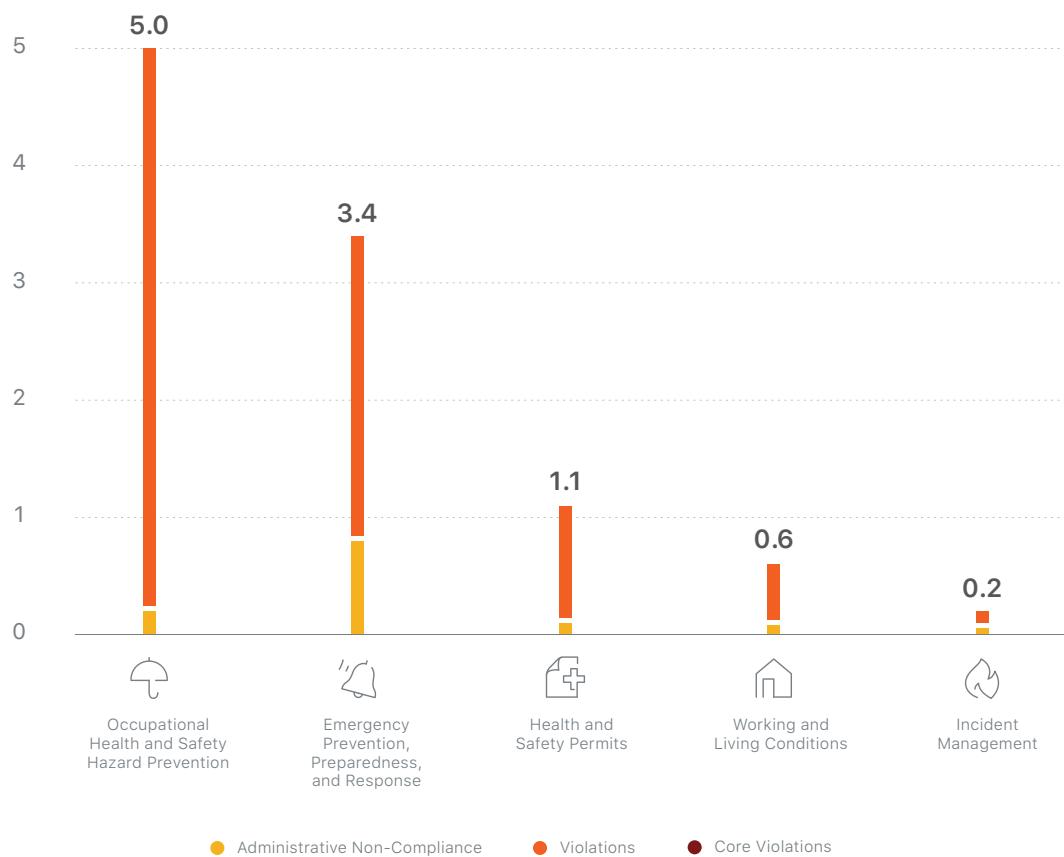
Examples of Health and Safety Hazard Prevention violations include inadequate monitoring of chemical, biological, or physical hazards. If inadequacies are found, the supplier is required to employ qualified testing firms to conduct monitoring according to legal standards and Apple requirements. Furthermore, Apple subject matter experts teach suppliers to conduct comprehensive occupational health and safety risk assessments, develop a full inventory of occupational health and safety hazards in the facility, set up a regular monitoring plan, and provide coaching to their team members to ensure their understanding of all requirements. A facility that has an appointed health manager who inspects chemical, biological, and physical hazards, but lacks a regular monitoring scheme occurring on a weekly basis, would receive a violation.

One example of an Emergency Prevention, Preparedness, and Response Violation is inadequate smoke detector installation. In 2017, we found instances of facilities that installed fire equipment, but did not install fire detectors in all rooms and public dormitory areas. Suppliers receive a violation if proper equipment is not installed or if they fail to complete regular fire detector inspections. A lower percentage of assessment violations were related to health and safety permitting, incident management, and working and living conditions.

In 2017, no Core Violations were discovered in the Health and Safety category.

## Health and Safety Non-Compliance Breakdown

Based on 756 assessments, on a 100-point scoring system.



## 2017 Assessment Results

# Environment



**91**  
91 out of 100  
Average Environment  
Assessment Score

The average Environment Assessment Score across our 756 supply chain assessments in 2017 was 91 out of 100.

The bar for environmental performance standards was elevated in 2017. We enhanced our requirements for wastewater discharge quality standards. In situations where legal limits are not established for a receiving water body, the enhanced standards set clearer guidance on how to monitor stormwater discharge to prevent potential contamination. Managing stormwater is a critical part of a comprehensive strategy to improve receiving water quality. Apple has made stormwater management training a core part of our Clean Water Program's training curriculum as well.

The majority of Environmental Violations found in 2017 were related to hazardous substance management and environmental permits.

### Raising the Bar in Environmental Compliance



Hazardous Substance Management Violations include improper waste storage or inadequate segregation of waste types. When Hazardous Substance Management Violations are discovered, an Apple subject matter expert engages onsite with supplier leadership to define clear roles and responsibilities on hazardous waste management and provides practical tools. The supplier is required to renovate or even rebuild their hazardous substance storage area to ensure storage conditions minimize or prevent safety hazards and environmental impacts. For example, one facility's waste storage area had a standard warning sign indicating the presence of hazardous materials, but no signs indicating the specific types of waste stored. This resulted in the facility receiving a violation.

Improper segregation of waste can pose a potential risk of creating secondary hazards. When this is uncovered, Apple subject matter experts go onsite to work with the supplier's environmental health and safety staff to review gaps and root causes, and provide tools and guidance to the supplier on how to segregate their waste properly to mitigate risks.

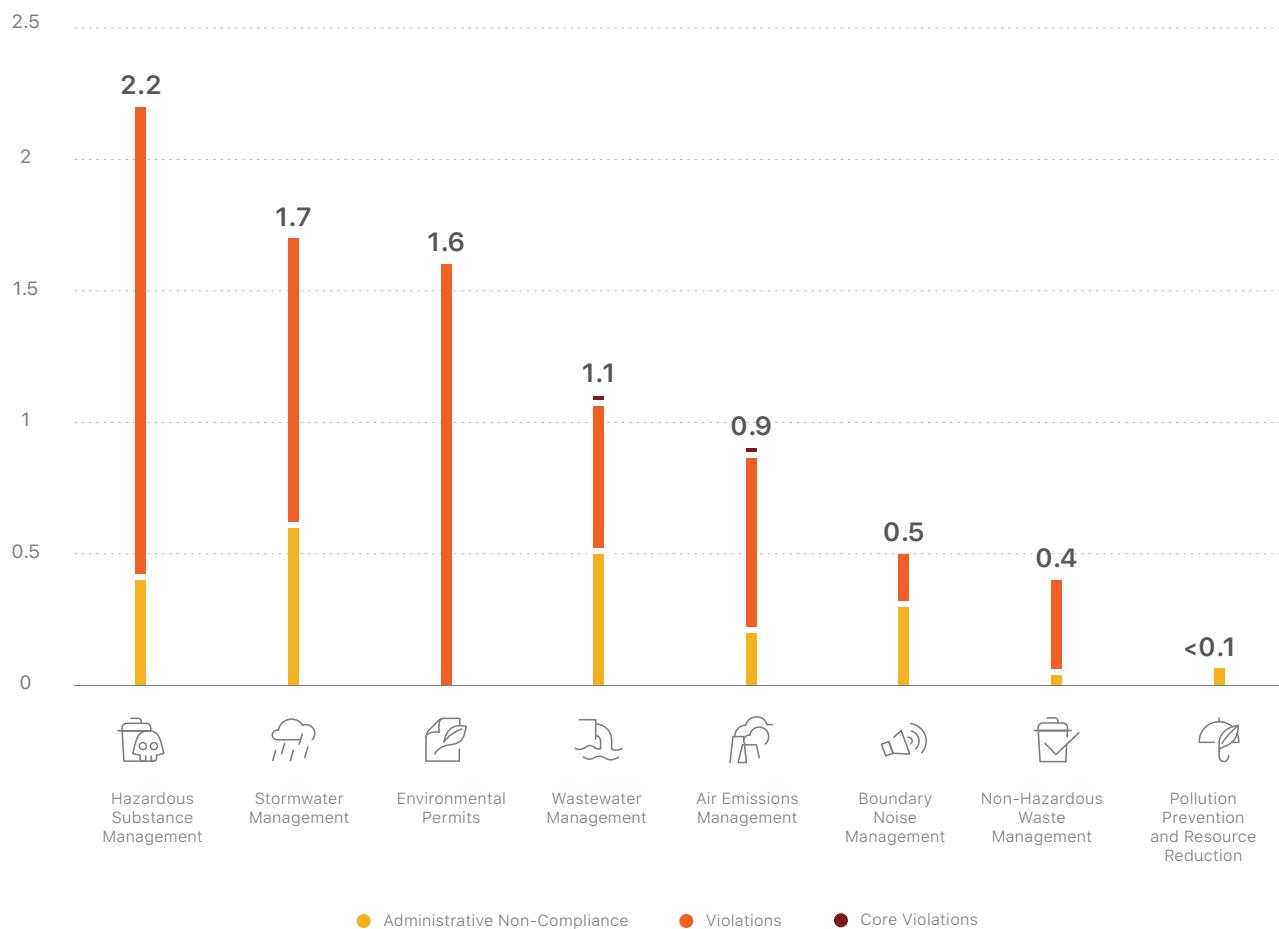
Apple subject matter experts also work with suppliers to set up a complete inventory of hazardous substances, develop a matrix based on substance characteristics and compatibility, and teach them how to conduct regular checks and maintenance to ensure all risks are mitigated.

Examples of Environmental Permit Violations include expired permits or insufficient operating licenses. Environmental permitting is a basic legal requirement for an operation. When expired permits or insufficient licenses are uncovered, the supplier is required to follow applicable laws and administrative processes to renew their permit or apply for a new license. For example, a facility that had a Pollution Discharge Permit, but failed to update it after a construction project, was issued a violation. Support was provided as necessary during this time to assist suppliers by providing consultation in circumstances where improvements of environmental facilities may be necessary to meet requirements.

A lower percentage of assessment violations were identified in air emissions management, non-hazardous waste management, boundary noise management, and pollution prevention.

### Environment Non-Compliance Breakdown

Based on 756 assessments, on a 100-point scoring system.



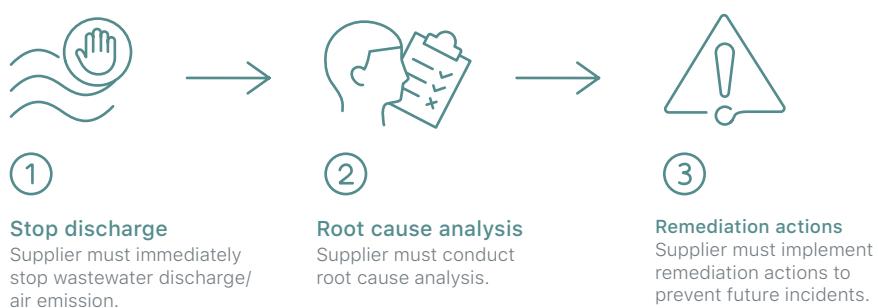
In 2017, four environmental-related Core Violations were identified, and suppliers were placed on immediate probation. Three Core Violations were related to improper wastewater management, for which we elevated the focus in 2017. One Core Violation was related to air emissions.

## Wastewater and Air Emission

With every Wastewater and Air Emission Core Violation, the supplier is required to immediately stop the wastewater discharge or air emission, including the suspension of production if necessary. The supplier must then conduct a comprehensive root cause analysis, and implement remediation actions to prevent future incidents of wastewater or air emission pollution. An example of a Wastewater Core Violation is a facility that discharged process wastewater into public drainage with pollutant concentrations higher than the legal limit. This facility was required to immediately stop discharging the wastewater, store the wastewater in temporary containers, and fix their wastewater treatment plant to ensure they met the legal limits. An example of an Air Emission Core Violation is the waste air generated from manufacturing processes that release volatile organic compounds into the atmosphere directly without any treatment. This facility was required to immediately stop the air emission, and install proper air treatment equipment to ensure the air meets legal limits.

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### Wastewater/Air Emission Violation Remediation Process





Carpenter, Apple Retail fixtures  
United States

## Driving higher standards with all suppliers, big and small.

The Apple Supplier Code of Conduct drives performance with suppliers both big and small. From large final assembly facilities, to small suppliers with a dozen employees, we work every year to expand our partnerships to help suppliers provide responsible and environmentally conscious workplaces.

# Apple Services and Logistics Suppliers

In 2012, a partnership began with Apple's Services and Logistics suppliers to extend our Supplier Code of Conduct further into the service domain. These efforts help our suppliers avoid Working Hours Violations, provide proper health and safety training, and maintain a fair workplace. In 2017, we visited 30 AppleCare Centers and 10 logistics centers in 16 countries to conduct assessments.

## Retail Suppliers



**400%** year-over-year increase in retail manufacturing assessments

In 2016, our Supplier Code of Conduct engagement was extended to include employees working for retail store suppliers. Assessments were conducted on suppliers supporting 20 of our stores, identifying opportunities to improve and strengthen both their management systems and employee training.

In 2017, we expanded the program, assessing suppliers conducting services for 100 of our stores. We strengthened suppliers' management systems, working hours compliance, employment contracts, and grievance channels. Employees were provided extensive training on worker protections, health, and safety.



iPad Production Line Operators  
China

## Where we're headed.

Every day, we're working toward our vision for the future. A future where people feel empowered and respected at work. Where our supply chain is always working to protect our planet. And where our suppliers have the capability to provide an industry-leading workplace.

Our work is never done. By partnering with our suppliers to drive the highest standards in the industry, we remain committed to making a positive impact on the people in our supply chain and the planet.