



# Supplier Responsibility

2020 Progress Report



**“We know that how you create is as important as what you create, so at Apple, people are at the heart of everything we do and every product we make.”**

Tim Cook  
CEO

# A letter from Sabih Khan

## **Health comes first. Now and always.**

As people around the world continue to face many challenges with the COVID-19 pandemic, we are reminded of the importance of protecting the planet and treating everyone with dignity and respect — values that inform every decision we make.

Our Supplier Responsibility Progress Report is a look back at the progress we achieved in bringing those commitments to life last year. But I first want to share some of the actions we're taking in our global supply chain right now to address COVID-19's unprecedented challenges, and to ensure people are able to return to work safely — because everyone has the right to a safe and healthy workplace.

This pandemic has left no country untouched, and we want to thank all our suppliers around the world for their commitment, flexibility and care for their teams as we navigate COVID-19's complex and rapidly evolving impacts. From the outset, we worked with our suppliers to develop and execute a plan that puts the health of people first. Thousands of Apple employees have worked tirelessly to execute that plan in partnership with our suppliers around the world.

First and foremost, that's meant working with our suppliers around the world on a range of protections suited to the circumstances in each country, including health screenings, limiting density, and ensuring strict adherence to social distancing in their facilities. We're requiring the use of personal protective equipment — both during work and in all common areas — and have worked together to implement enhanced deep cleaning protocols and deploy masks and sanitizers.

Our teams have also partnered with suppliers to redesign and reconfigure factory floorplans where needed and to implement flexible working hours — including staggered work shifts — to maximize interpersonal space. We continue to work closely with leading medical and privacy experts to develop advanced health and safety protocols.

As we develop tools and implement best practices across our entire supply chain, we are also sharing what we learn within our industry and beyond. We haven't allowed COVID-19 to undermine the values that have long defined who we are — values rooted in the responsibilities we have to one another and to the planet.

This year's Supplier Responsibility Progress Report describes our work to bring all of those commitments to life in 2019. Whether it's helping with the transition to 100 percent renewable energy, or training millions of people on their workplace rights, we apply our values in all aspects of our business, and every year, we raise the bar that our suppliers must meet as well.

We put people first in everything we do — and require everyone we work with to do the same — because we want to uphold the highest standards. Our Supplier Code of Conduct prevents discrimination and harassment of any kind, and supplier employees are provided anonymous channels to speak up. We partner with our suppliers to create educational and training opportunities, including traditional college degree programs, vocational training initiatives, and health and wellness programs so their employees can learn new skills and work toward fulfilling their goals.

We're committed to transparently reporting the progress we've made and have yet to make. This report draws on interviews from more than 50,000 employees in our supply chain and more than one thousand audits of supplier facilities across 49 countries — including surprise audits. The same attention to detail and innovation that goes into our products informs this report, and the work to ensure our worldwide network of suppliers upholds the standards themselves.

The environment we all share is fragile, and we are more dedicated than ever to fighting climate change and reducing emissions. Through strategic partnerships, we're helping our suppliers shrink their carbon footprint and conserve precious resources, like water and energy. Green manufacturing is smart manufacturing, and, more broadly, we know what is good for the environment is also good for business.

While COVID-19 has been an unprecedented challenge, we've also drawn hope and inspiration from humanity's renewed focus on the health of our colleagues, friends, and neighbors. That consciousness — of our health and the health of others — is something we can always carry with us.

Our work to protect people and the planet may never be finished — but we've never been more confident that our brightest days are still ahead.



**Sabih Khan is Apple's Senior Vice President of Operations.**

Sabih leads Apple's global supply chain, which includes Supplier Responsibility.



# 2019 Impact

## People

19.4M

supplier employees trained on their workplace rights since 2008

\$32.3M

recruitment fees paid back by suppliers to 36,599 of their employees since 2008, \$1.3M repaid to 462 supply chain employees in 2019

4M

education, skill-building, and enrichment course participants since 2008

52K+

supplier employees interviewed about their workplace experience

56%

measured increase in nutrition knowledge by health program participants in India

21

human rights and environmental organizations working to solve supply chain challenges that received support from Apple in 2019

---

## Planet

53%

increase year over year in supplier sites committed to achieving zero waste — with 50 already certified

30.5B

gallons of freshwater conserved by suppliers to date, achieving a 40 percent wastewater reuse rate. 9.3B gallons were conserved in 2019, enough to provide drinking water to over 48 million people for one year.

1M+

metric tons of supply chain combined annualized energy-efficiency-related and direct process greenhouse gas emissions avoided, equivalent to taking 220,876 cars off the road for one year

A+

Second consecutive year receiving an A+ rating from the Safer Chemicals, Healthy Families “Mind The Store” campaign for our efforts to eliminate harmful chemicals from Apple products

#1

Apple awarded the first Corporate Information Transparency Index Master’s Level designation by China’s Institute of Public and Environmental Affairs (IPE)

---

## Progress

1,142

801 Apple-managed supplier assessments + 291 smelter and refiner third-party assessments + 50 assessments in other areas of our services supply chain conducted in 49 countries

13%

increase in high-performing supplier facilities year over year

100%

participation in third-party audits across identified tin, tantalum, tungsten, gold, and cobalt smelters and refiners

# 2019 Impact

## People

We set a high bar when it comes to labor and human rights standards, and we go further by extending educational opportunities to supplier employees — including those at the furthest reaches of our supply chain. From responsible sourcing of minerals, to the adoption of safer and greener chemical alternatives, people are at the center of everything we do.

Protection starts with awareness. Supplier employees get trained on their rights before getting started, and we ensure employees have access to anonymous channels to raise any concerns — without fear of intimidation or retaliation. In 2019, Apple interviewed more than 52,000 supplier employees as part of our supplier assessments.

We are collaborating with organizations like the International Organization for Migration (IOM) to raise awareness and find solutions to deepen human rights protections in our supply chain and beyond. We also partner with organizations that support local human rights and environmental defenders.

---

## Planet

We believe Apple exists to change the world, not the planet. How we make our products is just as important as what we make. We're working with our suppliers to achieve Zero Waste in all of our facilities, sending nothing to landfills in the communities where our products are made, and to reduce our carbon emissions by helping suppliers improve their energy efficiency, and transition to renewable energy.

We're also helping to better protect precious water resources by moving from

conservation to stewardship, ensuring water use in our supply chain is environmentally sound, economically sustainable, and helps to make communities more resilient. In 2019, three Apple supplier sites became the first electronics companies in the world to earn platinum certification from the Alliance for Water Stewardship (AWS).

At the deepest levels of our supply chain, we are tracing certain minerals so we can better address any potential human rights and environmental risks, and we are continually seeking out innovative

ways to source minerals, increase recycling, and end our reliance on mining altogether. With the formation of the Salmon Gold partnership, we've supported the development of a new way to source gold, while simultaneously collaborating with governments, other companies, and indigenous communities to restore native salmon habitats.

---

## Progress

The requirements we set and the programs we create have had a measurable impact on the people and communities touched by our supply chain. From final assembly operators to service providers, our engagement with a supplier begins even before they start doing business with Apple. While we do remove suppliers if they are unable or unwilling to meet our standards, we go to great lengths to work with

suppliers to build their capabilities to help ensure their employees are protected — whether they are a part of Apple's supply chain or not.

We regularly monitor suppliers' performance, and in 2019, less than 1 percent of Apple's suppliers were considered "low-performing" based on their performance relative to our Supplier Code of Conduct, with 82 percent identified as high-performing.

While we are proud of what we've been able to achieve, we know our work will never be done. We're always listening and learning from the people in our supply chain, so we can identify issues and opportunities to improve supplier employees' experiences in the workplace. We'll continue to raise the bar and share our best thinking with others — forging solutions together so everyone can achieve progress more rapidly.

# Table of Contents

---

<b>Introduction</b>	<b>9</b>
<b>People</b>	<b>11</b>
Labor and human rights	13
Education initiatives	21
Health and safety	33
Responsible materials sourcing	39
<b>Planet</b>	<b>55</b>
Water stewardship	61
Zero waste	67
Clean energy	71
Green factories	73
<b>Progress</b>	<b>75</b>
Supplier selection and capability-building	77
Leading and listening	93
<b>Measurement</b>	<b>97</b>
2019 assessment results	99
Additional resources	109
Aligning with the United Nations Guiding Principles	111





Quality assurance,  
iMac production, China

# A global supply chain means global responsibility

49

Number of countries where assessments were conducted in 2019

1M+

People working in product manufacturing at Apple supplier facilities

At Apple, we care as much about how we make products as the products we make. The products and services that we create require resources from a global chain of suppliers and their employees who provide labor, goods, and services to Apple.

The work performed in our supply chain is complex and varied — from smelters and refiners, to the manufacturing partners that build components and perform final assembly of our products, to recyclers. It also includes services providers that support our operations, such as the logistics partners who ship our products all over the world, and the janitorial teams that maintain our Retail stores. Our programs and requirements apply to suppliers across all of these areas including deep into our chain, where raw materials are sourced by our suppliers.

---

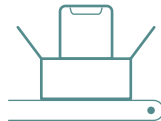
We enforce our policies by assessing and closely partnering with our suppliers at every point in our supply chain. In 2019, a total of 1,142 assessments were conducted across our supply chain.



Design & Engineering



Smelters & Refiners



Final Assembly



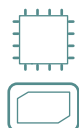
Retail Stores



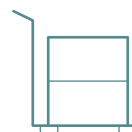
Recycling



Mine



Components



Logistics



Support

# Setting and upholding the highest standards

We have a deep commitment to ensuring that the people in our supply chain are safe at work, that they are treated with dignity and respect, and that throughout the process of building our products, our planet is protected.

In 2005, the Apple Supplier Code of Conduct and the Supplier Responsibility Standards (“Code” and “Standards,” respectively) were developed based on our work to safeguard working conditions at our manufacturing suppliers’ facilities and in alignment with international labor and human rights standards, including those from the International Labour Organization (ILO), and industry-leading health and safety standards. Our Standards supplement our Code by providing additional clarity regarding Apple’s requirements. Apple suppliers must meet these Standards to be in compliance with the Code. Suppliers are assessed against the Code and Standards through rigorous Apple-managed assessments and other third-party audit programs.

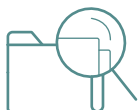
In 2012, we extended our Code beyond manufacturing into the service domain to include AppleCare contact centers, logistics, and repair centers. In 2014 we added requirements for the responsible sourcing of minerals. Our Code began to be applied to Apple’s Retail supply chain, which includes the suppliers that provide janitorial and other services to Apple’s Retail stores worldwide, in 2015. In 2018, we expanded the scope of our Responsible Sourcing Standard to include all materials.

Fifteen years later, we continue to update our Code and Standards annually, raising the bar that our suppliers must meet. We continue to raise our standards alongside evolving international standards, such as the United Nations Guiding Principles on Business and Human Rights and the Organisation for Economic Co-operation and Development due diligence guidance on responsible minerals supply chains.

Our strict human rights and environmental protections set the foundation of our work. Then, we constantly evaluate our own efforts, listen to people in our supply chain, and implement robust programs that have a measurable impact on protecting people and the planet.

---

## Areas addressed by the Apple Supplier Code of Conduct



Labor and Human Rights



Health and Safety



Environment



Ethics



Management Systems



# People

**Creating an Apple product requires considering not only the people who will use it, but also those who help build it.**

---

Labor and human rights	13
Education initiatives	21
Health and safety	33
Responsible materials sourcing	39



Quality inspection,  
repair center, United States





Rear housing unit inspection,  
iPhone production, China

## People come first. In everything we do.

People are at the center of everything we do. Making sure people in our supply chain are protected means considering a person's entire work experience, from getting the job, to getting started, to their daily experience in the workplace. These protections apply regardless of geographic location or the work being performed.

Strict labor and human rights protections set the foundation, but we strive to go further for the people that our supply chain touches by providing enriching educational opportunities that equip them with tools to advance and prepare for the future.



# Labor and human rights Code highlights

Every person has the right to a safe, healthy workplace where they are treated with dignity and respect. The labor and human rights provisions in our Code are designed to achieve just that, holding suppliers accountable at every step.



## Working Hours

Suppliers must restrict workweeks to 60 hours, including overtime, and supplier employees must be provided at least one day of rest every seven days. Regular workweeks shall not exceed 48 hours. Suppliers are also required to follow all applicable laws and regulations with respect to working hours and days of rest. Additionally, all overtime work must be voluntary.



## Wage, Benefits, and Contract

Suppliers must meet all legal requirements relating to wages and benefits, including paying accurate wages in a timely manner. In addition, the use of wage deductions as a form of disciplinary measure is prohibited. All use of temporary and outsourced labor shall be within the limits of the local law.



## Prevention of Involuntary Labor

Suppliers must ensure that all work is voluntary. Withholding an employee's government-issued identification and travel documents is strictly prohibited. Suppliers must ensure that contracts clearly convey the conditions of employment in a language understood by their employee. Supplier shall not impose unreasonable restrictions on movement within the workplace or upon entering or exiting company-provided facilities. Supplier employees shall not be required to pay employers' or their agents' recruitment fees or other similar fees to obtain their employment.



## Protected Class

Suppliers may only employ workers under the age of 18 if the employee is older than the applicable legal minimum working age and the supplier ensures they do not perform high-risk work, consistent with ILO Minimum Age Convention No. 138.

In addition, suppliers cannot require employees under the age of 18 to work overtime or perform night work. Suppliers must ensure proper management of student workers through proper maintenance of student records, rigorous due diligence of educational partners, and protection of students' rights in accordance with applicable law and Apple's Code.



### Anti-Discrimination

Supplier shall not discriminate against any worker based on age, disability, ethnicity, gender, marital status, national origin, political affiliation, race, religion, sexual orientation, gender identity, union membership, or any other status protected by applicable national or local law, in hiring and other employment practices. Supplier shall not require pregnancy or medical tests, except where required by applicable laws or regulations or prudent for workplace safety, and shall not improperly discriminate based on test results.



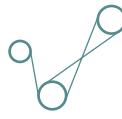
### Anti-Harassment and Abuse

Suppliers must commit to a workplace free of harassment and abuse. Supplier shall not threaten workers with, or subject them to, harsh or inhumane treatment, including but not limited to verbal abuse and harassment, psychological harassment, mental and physical coercion, and sexual harassment.



### Freedom of Association and Collective Bargaining

Suppliers shall freely allow their employees the lawful right to associate with others, form and join (or refrain from joining) organizations of their choice, and bargain collectively, without interference, discrimination, retaliation, or harassment.



### Grievance Mechanism

Supplier shall ensure that employees have an effective mechanism to report grievances and that open communication is facilitated between management and employees.



### Prevention of Underage Labor

A supplier may not employ a worker under the age of 15 years old, the applicable minimum legal age for employment, or the applicable age for completion of compulsory education, whichever is highest. Supplier may provide legitimate workplace apprenticeship programs for educational benefit that are consistent with Article 6 of ILO Minimum Age Convention 138 or light work consistent with Article 7 of ILO Minimum Age Convention No. 138.

## Protection begins with rights awareness

19.4M

Supplier employees trained on their rights since 2008

In order for a workplace to be safe, healthy, and respectful, employees must be aware of and able to exercise their rights. That's why we require all suppliers to train their employees on workplace rights. Deeper in our supply chain, we work with partners to raise rights awareness through our Responsible Sourcing program.

Supplier employees attend a new employee orientation session where they are trained on international labor standards, local labor law, and the labor and human rights protections required by our Code. Topics in the training include working hours and overtime policies, grievance mechanisms and hotlines, our zero tolerance for retaliation policy, and occupational health and safety standards.

## Zero tolerance for retaliation

52k+

Supplier employees interviewed about their workplace experience as part of Apple-managed assessments

The ability for supplier employees to speak up without fear of retaliation is fundamental to labor and human rights protections. Our Code and Standards include non-retaliation protections and feedback channels, including grievance mechanisms at supplier sites. External third-party anonymous hotlines and the ability to contact the Apple Supplier Responsibility team directly at any time and in any language ensure that these requirements are upheld. When an issue is raised, supplier management is required to immediately investigate and to resolve the issue in a timely manner. Retaliation in any form is a Core Violation of our Code — the most serious level of Code violation — and carries immediate commercial penalties.

31k+

Supplier employees contacted to ensure they did not experience retaliation as a result of participating in an Apple-managed supplier assessment

We take reports of retaliation very seriously, investigating the reports we receive. We proactively follow up with supplier employees interviewed during assessments to confirm that they were not subjected to retaliation as a result of being interviewed. Additional procedures are put in place for higher-risk or vulnerable groups, such as foreign contract workers. In 2019, Apple interviewed more than 52,000 supplier employees as part of supplier assessments and made over 31,000 follow-up calls to participating workers to verify that they did not experience retaliation as a result of being interviewed during the assessment.

## Listening and learning

Direct feedback from supplier employees helps us to better understand their experience so we can work with suppliers to identify opportunities for improvement. In 2019, we partnered with workplace rights experts to deploy mobile surveys that measure supplier employees' general satisfaction at work; the extent to which they felt their workplace rights were respected; management's responsiveness to grievances; and their rating of workplace amenities such as food service, facilities, and living conditions. The anonymous and voluntary surveys directly informed improvements that increased employee satisfaction, supplier performance, and workforce retention. This information helps us to understand employees' experience in the workplace and better assess suppliers' performance in meeting our Code.

In 2019, more than 42,000 supply chain employees participated in workplace satisfaction surveys, which resulted in actions taken to increase employee satisfaction at supplier sites. These included efforts such as enhancing content in new employee orientation, improving food service operations, and enhancements to employee living quarters.

42K+

Supplier employees participated in workplace satisfaction surveys



\$32.3M

Recruitment fees repaid by suppliers to 36,599 supplier employees since 2008

## No one should have to pay to work

Getting a job should be free of charge. Of the millions of people who work in our supply chain, a small percentage are foreign contract workers who choose to leave their home countries for opportunities abroad. People who move abroad for work are at higher risk for unfair labor recruitment practices.

Debt-bonded labor, a form of modern slavery, occurs when a person is forced to work in exchange for the repayment of a debt or other obligation, such as a recruitment fee paid to get a job, meaning that the person receives no pay until the debt is repaid. It can also involve the withholding of personal identity documents, such as passports, by the employment agent or employer, making it physically impossible for the employee to leave their job.

We have zero tolerance for debt-bonded labor, and it has been a Core Violation of our Code since 2008. When we discover any Core Violation, the supplier’s CEO is notified, and the supplier is immediately placed on probation and commercially penalized.

Global supply chains are complex, and some migration corridors are at higher risk for exploitative labor practices. If an Apple supplier uses foreign contract workers, a specialized labor and human rights assessment is conducted in the employees’ native language. If debt-bonded labor is found, we require remediation through the immediate return of personal identity documents and direct remedy, meaning suppliers repay the employees for any fees paid. We then verify that repayments were made in full and on time through an independent auditor.

\$1.3M

Recruitment fees repaid to 462 supplier employees in 2019

### Debt-bonded labor progress

2008

We made debt-bonded labor a Core Violation of our Code and limited permissible fees to one month’s net wages for foreign contract workers.

2015

We mandated that no fees can be charged to foreign contract workers.

2018

We strengthened implementation of our Code at the initial stages when labor is recruited and began assessing labor recruitment risks deeper in the supply chain and earlier in a supplier’s hiring process.

2019

We went deeper to identify the root causes of debt-bonded labor and worked with labor agents directly on fair recruitment practices.

## Moving from remedy to prevention

To truly eradicate debt-bonded labor from our supply chain, we have to stop it from happening in the first place, which requires understanding and addressing root causes. This objective is the primary goal of our Responsible Labor Recruitment program.

In 2019, through our Responsible Labor Recruitment program, we continued mapping the higher-risk migration corridors for foreign contract workers in our supply chain using our own data and information from the International Labour Organization (ILO) and the U.S. State Department in order to more deeply understand challenges at the source of labor recruitment. We also convened an expert group of leading government policymakers, non-governmental organizations, and researchers to further strengthen our efforts. We also spoke directly to migrant workers and labor agents in our supply chain to better understand their experiences.

## Prevention through engagement

We found that some suppliers and labor agents were not rigorously carrying out supply chain due diligence at the labor recruitment level and that, in some cases, people traveling for work did not receive adequate training prior to departing their home country. To address these gaps, we strengthened our partnership with the International Organization for Migration (IOM), a United Nations agency and the leading global expert on migration, and began to integrate labor agent audits into our responsible labor recruitment program. Consulting closely with stakeholders and the IOM, we created the Responsible Recruitment Due Diligence Toolkit (“the Toolkit”).

The Toolkit offers suppliers and labor agents a comprehensive “how-to” guide with practical tools covering six core areas: embedding responsible recruitment into policies and management systems; identifying and assessing risks; preventing and mitigating risks; tracking implementation and results; communicating how risks are addressed; and providing access to remediation. The tools are designed to be simple to use and easy for suppliers to adopt. They include a self-assessment checklist, worker training records, a fees and expenses calculator, and a grievance and remediation tracker.

We began holding training sessions on the Toolkit in those countries where the most prevalent migration corridors in our supply chain exist, including Malaysia, Singapore, and the Philippines. We focused our

initial efforts on the Philippines-to-Taiwan corridor, a major migration corridor in the electronics supply chain. We trained five of the key labor agents in the Philippines, who represent a significant number of workers seeking employment in Taiwan. We also strengthened our pre-departure orientation (PDO) training for labor agencies and civil society organizations that are certified by the government to carry out PDO sessions across all industries.

The Toolkit aligns with internationally accepted standards and best practices and is now being used widely in Apple's supply chain. It is also designed for broad, global adoption across industries, is being shared with other companies through the Responsible Business Alliance (RBA), the world's largest industry coalition dedicated to corporate social responsibility in supply chains. It will also be adapted for global use by the IOM.

**“Our partnership with Apple is focused on creating innovative solutions to labor recruitment challenges. The Responsible Recruitment Toolkit is a major step forward in providing user-friendly tools to address the underlying causes that lead to debt-bonded labor, especially for migrant workers in complex global supply chains.”**

Laura Thompson  
Deputy Director General,  
International Organization for Migration (IOM)





Health education participants,  
Vietnam

## New opportunities built on a strong foundation

Strong labor and human rights protections are our foundation, and we go further to provide new opportunities and pathways through educational programs. We also help supplier employees develop the skills needed to advance and prepare for future employment opportunities.

## Empowering future leaders

We continue to invest in the next generation of leaders through the expansion of the Line Leader program. Through a unique partnership between our suppliers and leading vocational schools in China, the program's tailor-made curriculum and innovative classroom model help students develop the management skills necessary to become qualified production line supervisors, also known as Line Leaders.

In 2019, we welcomed the second group of students to the program, and expanded the network of partner schools and curriculum to include other vocational majors. Program performance and impact are being measured through studies conducted at the schools and supplier sites, as well as through independent monitoring and evaluation by Peking University.

Suppliers are also benefiting from the program. The typical rate of promotion for a production line employee to Line Leader is more than one year, and moving from Line Leader to a more advanced position typically takes at least 18 months. The students in the Line Leader program advance from entry-level positions to Line Leaders in six months, with a significant percentage placed directly in more advanced production and technical positions.

## Skill-building for employees of U.S. suppliers

Many Apple products contain components built by suppliers based in the United States. In 2019, we launched a new program to support suppliers based in the U.S. by extending in-demand professional development skills training to their employees. We started by partnering with a California supplier that provides logistics support for our U.S. operations.

This new program utilizes innovative online coursework to equip supplier employees with transferable and promotable skills. Employees have the opportunity to choose courses most aligned with their interests from a selection that includes team leadership, design thinking, project management, and business writing. The program continues to expand to additional suppliers.





Ding Qiao, Line Leader,  
iPhone production, China

## Learning to lead

At Henan Polytechnic, a vocational school in China, a group of 18 students are working side by side in an assembly line simulation to learn how to be supervisors, or Line Leaders. The simulation is part of the Line Leader program, which encourages students to take an active role in their learning. “We don't tell them what is right and what is wrong,” says teacher Wang Kun. “They experience it for themselves. We let them step back and look at the situation objectively.”

Students in the Line Leader program learn critical leadership skills, including English language, computer, and management skills. The classroom environment and curriculum have had a major impact on



the students. "I feel more mature, more assertive now," says Gao Wenxiu, who now works at an Apple supplier conducting production yield analysis with other Line Leaders across multiple production floors. "I help solve problems, to make the production process smoother."

"The biggest change we see is in the students," Kun says. He describes the transformation that has taken place in Wenxiu. "She's gone from developing herself, to making changes within the group. We feel that she has grown into a leader. Now she can reach out and help others."

Zhang Jian Min, Wenxiu's teacher, works with her daily. "I encourage her to be detail-oriented and I see her thinking becoming more logical. She's able to solve problems independently on the line now, to give suggestions and find solutions," he says.

"I wasn't sure about my career goals at first," says Ding Qiao, who is just starting her internship at the supplier facility. "Through this program, I now have a career plan. I'm really excited to be entering the workforce."

## Making higher education accessible

4M

SEED classroom users since 2008

Education is a core value at Apple. For more than a decade, the Supplier Employee Education and Development (SEED) program has provided opportunities to supplier employees through access to online coursework, higher education, and a range of additional programming. For many employees, including those enrolled in degree programs, SEED represents a second chance to complete their education, many having joined the workforce out of financial necessity to support their families.

In 2019, more than 154,700 supplier employees took advantage of SEED learning opportunities, bringing the total number of supplier employees reached by the program since 2008 to 4 million.

14.8k

Supplier employees enrolled in college degree programs

SEED classrooms operate at 25 sites in China, where we review curriculum being offered with suppliers quarterly. Among the most popular courses selected by supplier employees are English language learning, IT-related coursework, and life skills. For those employees who want to pursue a degree program, we work with suppliers to connect their facilities with local schools and universities. The employees' tuition is reimbursed, and Apple shares the costs with suppliers.

In 2016, following an independent evaluation of the SEED program by Peking University and feedback from suppliers, we developed new criteria to better measure the impact and effectiveness of the SEED program. These criteria include changes in the position, job level, and annual performance of frequent users, who participate in the program at least monthly on average. The criteria map to a series of performance goals that suppliers must meet to secure degree funding from Apple for their employees. Rigorous evaluation against these criteria helps us to continually improve the program, offer opportunities that are of most interest and value to suppliers and their employees, and measure impact.

## Skill-building for smart manufacturing

10k

Participants enrolled across all vocational education programs

Smart manufacturing includes investing in educational and skill-building opportunities as well as assessing the future needs of supplier employees globally. We continue to scale our vocational education programs, helping to prepare supplier employees for career opportunities in advanced manufacturing. In scaling the program, we consider a number of key factors, including demand for particular skills, current workforce competency, availability of training and certification at local government-recognized vocational schools, and analysis of how suppliers will utilize the newly acquired skills.

82.4%

Participants who have completed coursework, earning a certificate

In 2019, we continued to focus on four key areas for vocational certification: iPhone repair; computerized numerical control (CNC) technology; robotics; and electrician services. These certifications give supplier employees an opportunity for job advancement upon completion of their training. Between 2018 and 2019, more than 10,000 certifications were earned by supplier employees.

In 2019, the robotics track continued to be one of the most popular choices for supplier employees, enabling them to gain valuable skills in robotics coding, maintenance, and troubleshooting, all of which are skill sets in high demand at our supplier sites.

Our vocational education programs have had a significant positive impact on the employment experience of participating employees. In 2019, participants who completed coursework and earned a certificate saw a promotion rate of 73 percent.

## Our coding program continues to advance

50%

Of participants had minimal or no coding experience before participating in the program

At Apple, we believe everyone can learn to code. Coding continues to be one of the skill sets most commonly sought after by our suppliers, as well as one of the highest areas of interest among supplier employees.

In 2018, we began to offer training to supplier employees on Apple's Swift coding language. To date, more than 3,500 supplier employees have taken program courses, which include iOS basics, Swift Playgrounds, and advanced app development.

In 2019, the program expanded to give more supplier employees the opportunity to participate. Taking a "train-the-trainer" approach, Apple Retail Creatives, who facilitate Today at Apple programming in our Retail stores, trained supplier employees to conduct the program's introductory iOS and macOS training sessions.

After completing introductory courses, students can move forward to intensive app development. During 2019, 41 employees took part in this program, with a 100 percent graduation rate. Ten employees have created apps that are relevant to their jobs, and the first participant-developed app became available on the App Store.

Evaluation of our coding program is conducted by Shanghai Business School and Zhejiang University. Measurements include course work and module completion rates, online quizzes, next-level entry tests, and group projects. The information captured helps us to learn about the efficacy of the program, students' progress, and the impact of newly acquired skills at their respective workplaces.





Ma Xiao Li,  
Swift coding student, China

## Coding a new path

In an on-site classroom at a supplier facility, rows of students sit behind Macs, listening as their instructor Huang Geng walks them through a basic coding exercise. Two other teachers, Zhao Qing Fei and Long Yue, circulate through the room answering students' questions. "They come from different work backgrounds with different ways of thinking about approaching problems. Some of them are doing administrative work, some are working on the assembly line," says Fei.

These students are all employees at Jabil in Wuxi, China, a city of six million people just an hour from Shanghai by high-speed train. They have signed up to participate in Apple's Swift training

program, one of the many educational opportunities offered to supplier employees to learn new skills and advance their careers.

In the space of the intensive one-month program the students learn Swift, the coding language used to create apps for Apple devices, and then work in teams to create original apps of their own design. This type of skills-based education also helps students to approach problems in their work environment in a new way.

Ma Xiao Li wanted to create a way for employees to check and manage their work schedules using their phones. "I manage scheduling for 3,000 people and every day people come to me to check on their days off, overtime, and sick days. But it's a big company, and a lot of people don't always know where to find me." Learning Swift helped Ma to think about the problem in a new way and to find a practical, mobile solution.

Li, a mother of two, says the program has also given her new lessons to share with her children. "I want them to learn coding too. It teaches you to think logically. Sometimes my kids don't want to study but I tell them that no matter how old you are or what your job is you have to keep learning new things. It feels good when my kids think their mom can do anything."

Li Yuan, a technician in Jabil's Operations Services department, developed an app for classroom management that includes features to help teachers arrange learning groups, send out assignments, track student progress, and share photos.

Yuan left school to earn money for his family after his mom was injured in an accident. Recently, he developed an interest in coding after learning some computer language skills on the job. "I bought two books and tried to teach myself, but it was really hard and work kept me busy. I thought about taking a training

class after hours, but it was too expensive. Eventually I had to put my dream aside," he remembers. "When I heard about this being offered I was so excited. It was a chance to realize my dream."

Taking part in the Swift program has given him a new goal. "I feel like this will change the direction of my life," he says. "I found the thing I like and I want to make it my career."



Li Yuan,  
Swift coding student, China

# Opportunities deeper in the supply chain

We continue to expand our educational programs to more people — including those who live in communities where some of our suppliers source their materials.

The minerals supply chain presents different challenges and opportunities than our manufacturing supply chain. Based on research we funded that was conducted by the Center for Effective Global Action at the University of California, Berkeley, we created a partnership with Pact, an international development organization that operates in nearly 40 countries, to help create vocational opportunities in the DRC. The program provides participants with opportunities to learn new skills such as auto repair, beauty and hairstyling, welding and metalwork, masonry and bricklaying, information technology, culinary arts, electronics repair, and carpentry. Of those that have participated in this program, 93 percent have gone on to full-time employment in their area of study.

Many other companies have expressed interest in joining this effort, so to accelerate the scaling of this program, we are partnering with the Responsible Business Alliance to open the program to their hundreds of member companies.

## Going even further

In 2018, Apple was awarded the Stop Slavery Award by the Thomson Reuters Foundation for leading the industry in eradicating forced labor. We have zero tolerance for debt-bonded labor in our supply chain, and have robust accountability measures to find and remedy all cases of bonded labor. But we wanted to go further, looking beyond Apple's supply chain and even beyond our industry. In 2018, we launched a program in Asia to provide employment opportunities in our Retail store janitorial supply chain for survivors of human trafficking. Building on our commitment to the prevention of modern slavery, the program continues to grow in Asia, and in 2019 began expanding across the United Kingdom and Europe.

As they adjust to their new jobs in an Apple Retail store, participants in the program are provided counseling and vocational support services, and medical services are available to them if needed.





Graduates of the Apple-supported vocational education program offered by Pact, Democratic Republic of the Congo





Operators at lunch,  
iPhone production, India

## Health and safety by design

Everyone has the right to a safe and healthy workplace. We assess supplier performance in this area across five core concentrations: occupational health and safety, including the safe handling of chemicals; emergency preparedness; health and safety permits; living and working conditions; and incident management.

Workplace safety is the foundation of a healthy workplace, but we go further by providing health education and wellness awareness programs for supplier employees. In 2019, our health education program expanded beyond China and India to include Vietnam. We also accomplished our goal of providing health education to 1 million people in the supply chain by 2020, and we continue to integrate the lessons learned along the way into future program enhancements.

# Health and safety Code and Standards highlights

Requiring a safe and healthy work environment is core to our Code and Standards, and fundamental to protecting the people in our supply chain.



## Occupational Health and Safety Hazard Prevention

Suppliers must comply with Apple's Regulated Substances Specification for all materials and goods it manufactures or provides to Apple. Suppliers must establish and implement a written program to track, review, and approve the use of all hazardous chemicals, and obtain internal EHS approval for all new purchases and maintain an up-to-date chemical inventory. Suppliers must also communicate the risks of hazardous chemicals — and subsequent control mechanisms to mitigate those risks — to their employees.



## Incident Management

Suppliers must have a system in place for their employees to report health and safety incidents, as well as a system to investigate, track, and manage such reports. Suppliers must implement corrective action plans to mitigate risks, provide necessary medical treatment, and facilitate their employees' return to work.



## Health and Safety Permits

Suppliers must obtain, keep current, and comply with all required health and safety permits.



## Emergency Prevention, Preparedness, and Response

Suppliers shall identify and assess potential emergency situations. For each scenario, suppliers shall develop and implement emergency plans and response procedures that will minimize harm to life, environment, and property.



## Working and Living Conditions

Supplier shall provide their employees with reasonably accessible and clean bathroom facilities and potable water. Supplier-provided dining, food preparation, and storage facilities shall be sanitary. Dormitories provided by suppliers or third party shall be clean and safe and provide reasonable living space.



## Training and Communication

Suppliers must provide workers with appropriate workplace health and safety training in one or more languages so that all employees are able to understand the training. Health- and safety-related information must be clearly posted in the facility.

# Promoting a culture of safety

A safe workplace comes from an ingrained culture of safety, the proper management systems to track and address safety issues, and an on-site team with deep health and safety expertise. Confirming compliance with health and safety Standards is part of every assessment we conduct at supplier sites. Our industrial hygiene Standard requires measures to prevent health and safety incidents from occurring by implementing engineering controls and conducting assessments. Suppliers are also required to maintain management systems to track, resolve, and prevent the reoccurrence of issues when they do occur. And through our emergency preparedness Standard, suppliers must have plans in place to address and protect their employees and business during emergencies such as natural disasters.

If we identify non-compliance with our Standards during an assessment, we hold our suppliers accountable and work collaboratively through tailor-made Corrective Action Plans, online training materials, and on-site coaching. Through this direct engagement, we provide solutions for technical problems, close gaps in management systems, and help to develop a sustainable culture of safety.

In 2013, we launched the Apple Environmental Health and Safety Academy (“EHS Academy”). Over a four-year period, EHS managers from over 270 supplier sites in China took courses and implemented projects to improve their site’s performance across a number of critical areas, including chemical management, emergency preparedness, and safety equipment.

Since 2017, the EHS Academy has been operating independently at Nanjing University’s Environment, Health, and Safety Center to offer training opportunities to students across China. The course material from the EHS Academy is becoming new interactive content, which is being developed with the Responsible Business Alliance (RBA) and Institute for Sustainable Communities (ISC), one of the original partners in the EHS Academy. The courses will be available globally to all RBA member companies and their suppliers in 2020, representing hundreds of companies from many industries that will benefit from tools designed and tested in Apple’s supply chain.

In 2019, we launched the Environmental Health and Safety Leadership Workshop (“the Workshop”), which provides training to supplier management teams on how to act as role models for best practices in creating safe, healthy workplaces as well as ways to better engage and communicate with their employees on safety-related topics. The Workshop has received positive feedback from supplier management teams and is continuing to scale to new facilities.



# Smart chemistry starts with strict standards



For the second year in a row, Apple was awarded an A+ rating for eliminating toxic chemicals by Safer Chemicals, Healthy Families as part of their Mind the Store ranking.

Ensuring the responsible use of chemicals and advancing the adoption of safer and greener alternatives is essential to protecting the people in our supply chain and the environment. We start with the Apple Regulated Substance Specification (RSS), which lists those substances that are not permitted to be used in our products or in the manufacturing of our products. We require that our suppliers provide us with analytical test reports from a certified laboratory to prove compliance with the RSS.

Established in 2013, our chemical management program is designed to help build supplier capability to manage chemicals safely, and to transparently share information with their employees about the chemicals in the workplace, both of which are requirements evaluated in every supplier assessment. We take extra care when a new chemical is proposed for use. In 2019, we assessed more than 110 new chemicals, which included reviewing product formulation and test reports, understanding the specific circumstances for use, and conducting exposure assessments to proactively eliminate risks to people and the environment as a result of using the proposed chemical.

## Transparency that drives safer chemical substitutions

Our chemical management program initially focused on ensuring compliance with the RSS. In 2017, the program expanded to include the reporting of full chemical inventory to Apple, beginning with final assembly sites. Based on the information obtained as part of these inventories, we prioritize and focus our efforts to drive adoption of even safer and greener alternatives.

In 2019, supplier chemical safety disclosure requirements in our Code were strengthened to enable us to more deeply understand the scope and volume of chemicals used in our supply chain, including process chemicals. We also developed a standardized process through which suppliers share information about the specific chemicals they use, what those chemicals are used for, and the measures taken to protect their employees in adherence with the strict requirements in our Code. The rollout of this tool expanded in 2019 to include 80 participating facilities.

## Making it easier to select safer cleaners

Putting people first when it comes to chemical management requires strict adherence to safety processes and the transparent sharing of information with supplier employees about the chemicals they are using. In the RSS, we provide clear instruction to suppliers on banned substances. But rather than stop at simply banning chemicals, we are working to provide guidance on how to select safer alternatives from the start.

The first focus of our safer alternatives effort has been cleaners and degreasers, which are the most used final assembly process chemicals in our supply chain by volume. Starting in 2017 and utilizing rigorous methodologies such as GreenScreen™, SciVeraLENS™, and the U.S. Environmental Protection Agency's Safer Choice, we have been developing a list of safer cleaners and degreasers for use at final assembly sites. Since the inception of this effort, all supplier final assembly sites have utilized only these safer alternatives.

In 2019, we began scaling the adoption of safer cleaners and degreasers beyond Apple's supply chain. We started with tackling the lack of a comprehensive industry-wide standard for defining safer cleaners. We worked with Clean Production Action, an independent, third-party expert on smart chemistry, to create criteria that can be used across the electronics industry to assess safer cleaners. This enables chemical manufacturers and suppliers to have the cleaners and degreasers they use assessed at hundreds of testing laboratories around the world using a common framework. The safer cleaners criteria were also reviewed by our Green Chemistry Advisory Board, a group of the world's leading toxicologists, researchers, and academics focused on integrating green chemistry into Apple's products and supply chain.

In 2020, these criteria will be shared openly with others to encourage the adoption of safer alternatives and industry standards that can be adopted globally across sectors.

## Working collectively for safer supply chains

We collaborate across our industry to scale our chemical management program, driving the elimination of exposure to hazardous chemicals beyond our industry. We serve on the board of the Clean Electronics Production Network (CEPN), which Apple helped found. The network is facilitated by the Center for Sustainability Solutions at Green America, a leading environmental advocacy organization whose members include civil society organizations and government agencies.



Health education participants, Vietnam

## Supporting supplier employee health and well-being

In addition to being safe, we want employees of our suppliers to thrive. In 2017, we set the goal of reaching one million supplier employees with health education by 2020 — a goal that we have accomplished. Our health education program provides access to knowledge and opportunities that empower employees to take charge of their own health and well-being, also extending health awareness into their communities. Working with experts, we assess the specific needs of the employee population at participating supplier sites to help us design programs.

Our health education program started in China as a peer-to-peer program providing training on reproductive health, disease prevention, and nutrition. The program expanded to India in 2018 and launched in



Vietnam in 2019. We have also integrated nutrition training into our supplier new employee orientation program, with more than 840,000 employees participating in 2019 alone.

In China, where the employee population represents a wide range of health-related needs and interests, the program continues to employ a peer-to-peer model that provides training on reproductive health, family planning, and personal relationship management. As a direct result of on-site health campaigns at two key supplier sites in late 2018, supplier employees utilized opportunities funded by Apple to seek independent, anonymous health testing for a range of typical reproductive issues and other common issues, which created a measurable change in employee knowledge and awareness.

In India, where nutrition education was a primary identified need, supplier employee training and on-site consultation with human resources and canteen staff have continued to produce significant increases in nutrition knowledge and awareness measured by post-training surveys at participating sites. In 2019, more than 1,300 people in India participated in health training programs and demonstrated a 56 percent increase in knowledge of the topics covered.

In Vietnam, where up to 80 percent of employees at participating suppliers are women, we introduced programs to provide training to health staff working at on-site clinics and to train employees as peer educators. The training offered in Vietnam focuses on sexual and reproductive health and family planning. In its first year, the program reached over 4,700 supplier employees in Vietnam, and participants demonstrated a 30 percent increase in knowledge of the topics covered.

# Respecting human rights deeper in our supply chain

Apple is committed to setting the highest standards for responsible sourcing of the materials used in our products. We work to protect the planet and safeguard the human rights of people throughout our supply chain. Our Responsible Materials Sourcing program establishes supplier standards for the sourcing of the many materials in Apple products, from advanced bio-materials to minerals sourced from the earth and recycled content.

Our goal is to one day end our reliance on mining, using only recycled and renewable materials in our products and packaging. While we work toward this goal, we continue to responsibly source minerals by conducting due diligence in our supply chain; considering the human rights impact on surrounding communities; and fostering the same opportunities as we do in other parts of Apple's supply chain.

As we continue to raise the bar for ourselves and our industry, human rights and environmental challenges remain a concern in certain minerals-producing countries and regions. Since 2010, we have been working collectively with government, industry, and civil society to help build systems so that suppliers can purchase minerals sourced responsibly from the Democratic Republic of the Congo (DRC) and surrounding countries where many people rely on mining for their livelihoods.





Gold pour, Canada

---

## Responsible Sourcing Toolbox steps



Innovate sourcing of primary materials



Map the supply chain and establish strict requirements



Understand risks by using supply chain tools like the Risk Readiness Assessment



Conduct third-party audits



Address risks that are found



Publish smelter and refiner list annually



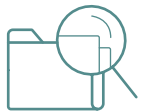
Increase recycled content



Support local communities



Engage with civil society and support local human rights defenders



Strengthen industry traceability systems to increase transparency



Develop and drive common industry standards



Provide training to supply chain actors to strengthen due diligence



---

## Responsible Materials Sourcing Standard highlights



### Supplier Code of Conduct Requirements

Suppliers must develop due diligence policies and management systems in order to identify risks and take appropriate steps to mitigate them. Due diligence must be conducted at the material processing level in order to determine whether materials originate from regions with high risks.



### Supplier Due Diligence Management Systems

Suppliers must develop a management system to conduct due diligence in accordance with the standards outlined in the Organisation for Economic Co-operation and Development's Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and other applicable international standards. The management system must include risk identification, risk prevention and mitigation, third-party verifications or audits of due diligence, and a mechanism for reporting applicable risks.



### Third-party Verifications of Audits of Supply Chain Due Diligence

Suppliers are only able to work with materials processors that have completed verifications or audits conducted by recognized third-party organizations, determined by Apple. Suppliers must communicate these requirements to their supply chains.



### Scope of the Responsible Materials Sourcing Standard

The Responsible Materials Sourcing Standard applies to all Apple suppliers, all subcontractors, and all entities in their supply chains that directly or indirectly produce goods for use in Apple's products.



### Addressing Identified Risks

If a supplier or Apple discovers alleged or actual risks associated with its supply chain, the supplier must require the relevant materials processors to identify risks within their operations and to utilize grievance channels of recognized third-party organizations. Suppliers must communicate these requirements to their supply chains.



### Tracking and Reporting on Action Taken to Address Identified Risks

As requested by Apple, suppliers must apply appropriate leverage to ensure that identified risks and their resolutions are tracked and publicly reported.



### Removal of Non-Participating Supply Chain Actors

Suppliers must terminate relationships with materials processors that are unwilling to engage in necessary risk mapping, resolutions of high risks, and verification of audits, and those that are associated with red flag risks but have not taken appropriate or timely action to mitigate those risks.

# Supporting human rights defenders

We believe that empowering local, independent voices is critical to identifying and assessing risks and opportunities in the supply chain, particularly related to responsible minerals sourcing. Our strict standards apply at all levels of our supply chain and we work with local experts who best understand the needs of their communities and who are closest to the areas where minerals in our supply chain may be sourced.

2019 marked the third year of our partnership with the Fund for Global Human Rights (“the Fund”). The Fund is a public foundation that works with more than 300 local human rights organizations in more than 25 countries around the globe. The Fund’s mission is to equip activists, mobilize movements, and improve lives by supporting courageous individuals working to create lasting change. Since its founding in 2002, the Fund has invested nearly \$100 million into the work of frontline activists and human rights defenders.

**“Apple and the Fund have broken new ground by partnering to support grassroots activists and defend human rights. Working together, we can bring positive change to communities worldwide.”**

Regan Ralph  
President and CEO of the Fund

Through the partnership, we have supported the Fund’s crucial work in the Democratic Republic of the Congo (DRC), where the organization funds and helps strengthen local groups that advance the rights of women and children; advocate for miner health and safety and environmental justice; and defend the economic and social rights of mining communities.

The Fund supports on-the-ground watchdog groups and human rights defenders, including local experts who educate communities on their rights and help develop solutions. By working with community-based activists, the Fund builds capacity from the bottom up and shifts power into local hands, strengthening local capacity and the rule of law to improve the lives of millions.

In 2019, with Apple support, the Fund partnered with 11 grassroots organizations in the DRC. Organizations received financial support along with technical support in the areas of organizational management, capacity building, and advocacy.

In 2019, we expanded our partnership with the Fund to include another key issue: the protection of migrant workers in complex, global supply chains. Through the Fund's work, we began supporting local labor groups in the Philippines working to protect the rights of migrant workers. Apple has been working to eradicate debt-bonded labor for over a decade; this new expansion of our partnership with the Fund is an important new way to accelerate progress toward that goal.

## Our approach to responsible materials sourcing

Our Responsible Materials Sourcing program is rigorous and involves many teams across Apple. We begin by assessing the highest-risk materials in our supply chain, prioritizing those materials that provide the best opportunity to innovate their primary sourcing or transition to the use of recycled materials. You can learn more about this work in our Material Impact Profiles on Apple's website.

We map higher-risk minerals; use risk assessment tools created by Apple to identify risks and opportunities in the supply chain; and then take corrective actions where human rights or other risks are identified through audits, civil society engagement, or other sources.

Conducting detailed due diligence of our supply chain allows us to learn the origins of materials in our products so that we can seek to apply our Responsible Sourcing Standards deep in our supply chain, including to primary material processors; to recyclers; and even to the mine level, even though Apple does not directly purchase or procure raw minerals. Our program aligns with leading international standards, including the United Nations Guiding Principles on Business and Human Rights and the Organisation for Economic Co-operation and Development's (OECD) due diligence guidance.

Every year, we publish a list of identified tin, tantalum, tungsten, and gold (3TG) and cobalt smelters and refiners in our supply chain. For the fifth straight year for 3TG minerals and fourth straight year for cobalt, 100 percent of identified smelters and refiners in Apple's supply chain participated in independent third-party audits to assess and identify a broad range of risks, including social, environmental, human rights, and governance risks. Additional third-party audits are conducted to verify the reported data and to ensure corrective actions are taken where required. We also map and conduct due diligence on other materials such as mica, titanium, and lithium. Based on the findings of audits, smelters and refiners are required to assess, report, and mitigate risks in their business practices.

In the event that a smelter or refiner is unable or unwilling to meet our requirements, we remove them from our supply chain. Since 2009, we have removed 123 smelters and refiners from our chain.



## Working together

We work to strengthen industry due diligence systems and third-party audit systems such as the Responsible Minerals Initiative (RMI), a leading certification and audit program where we sit on the steering committee, and the London Bullion Market Association, a leading gold refiner certification program. We also help lead the Public-Private Alliance for Responsible Minerals Trade, a partnership with government, industry, and civil society. We openly share our tools and best practices — Apple's Risk Readiness Assessment is now being used by more than 280 companies across industries including technology, transportation, entertainment, and apparel, allowing us to scale our efforts far beyond our supply chain.

"If we are to make truly sustainable progress in the advancement of responsible sourcing practices throughout the minerals trade, companies must commit to integrating smelter and refiner audits and supply chain due diligence into their sourcing decisions in a meaningful way. Apple has been a leader in exactly these efforts, eliminating minerals processors from their supply chain who are unwilling to participate in audits or meet their standards. We need to see many more companies in the industry adopt these practices."

John Prendergast  
Founding Director of Enough  
and Co-Founder of The Sentry

# Accountability deeper in the supply chain

Listening to voices at all levels of our supply chain is critical to identifying and assessing human rights risks. We take allegations in our supply chain very seriously. We support whistleblowing and grassroots initiatives that empower independent, local voices to raise issues and report concerns at the mine-site level where materials are sourced.

In 2019, we continued to support the whistleblowing mechanism of the International Tin Association’s International Tin Supply Chain Initiative (ITSCI). The grievance mechanism allows for the safe reporting of abuses related to the extraction, trade, handling, and export of minerals. The reporting is conducted in local language to support the accurate reporting and identification of allegations.

We also integrate impact measurements in our minerals due diligence program to better understand the human rights impact of industry traceability systems on the lives of people working and living in mining communities, and we share this information with leading experts in the field. In 2019, we organized an experts meeting at the Organisation for Economic Co-operation and Development (OECD) that led to refining the standards of measurement.

---

## Partners in our minerals due diligence program



### Harvard University Humanitarian Initiative

Measuring impact of due diligence programs on the lives of women working and living in mining communities in the DRC



### International Peace and Information Service in partnership with Ulula

Measuring the social, economic, and human rights impact of due diligence programs in the DRC



### University of California Los Angeles

Examining whether mining due diligence programs lead to measurable changes in long-term health and development indicators

# Achieving progress through innovation

In 2019, we continued implementing new traceability techniques, utilizing blockchain technology on a portion of our gold supply chain. Through this program, digital ledgers can be applied at the mine level to capture when and where minerals are extracted, and can then be traced in a highly accurate manner through the entire chain. We are developing blockchain standards for traceability with the RMI and the OECD, to accelerate the adoption of this technology in a manner that also takes into consideration those working at mine sites and in the surrounding communities.

In 2019, we also supported MIT's D-Lab Innovation Centers in Colombia, which use a unique methodology called Creative Capacity Building to blend problem-solving techniques with concrete, hands-on skills for small-scale gold miners in order to develop inclusive market systems and promote environmentally responsible gold mining.



Allen Edzerza, a Tahltan Nation Elder and Advisor to the British Columbia First Nations Energy and Mining Council, Yukon River, British Columbia

## A golden opportunity

Gold is an important conductive metal used in very small quantities in Apple products. As we continue to increase our use of recycled materials, including gold, and work to end our reliance on mining altogether, we continue to seek out innovative ways to source gold and other minerals responsibly. The Salmon Gold partnership between Apple; RESOLVE, a leading sustainability NGO; local small-scale mining operators; and indigenous peoples kicked off in 2017 to introduce an innovative approach to sourcing gold responsibly, while also helping to restore native fish habitats.

In the remote regions of Alaska and the Yukon, hundreds of placer mining operations, some dating back to the Klondike gold rush of



the 1890s, were already actively producing gold. Placer mines are typically situated along creeks and streams, where miners look for gold left from the original operations. These mines often leave streams cloudy with sediment, making it difficult for native fish species, including salmon and grayling, to thrive, threatening the traditions of indigenous communities.

“Salmon, to our people, is absolutely the most important aspect of the whole environment,” said Allen Edzerza, a Tahltan Nation elder and advisor to the British Columbia First Nations Energy and Mining Council. “In the pursuit of the metals, you see big scars on the landscape.”

RESOLVE worked with miners and local indigenous groups to develop a new way to source gold without use of processing chemicals while simultaneously restoring the streams where the mining is taking place. Repairs to these stream beds and banks are restoring the biodiversity of the region, enabling salmon to navigate the waters and spawn once again.

“There’s been a lot of tension between mining and salmon, and Salmon Gold is like a peace treaty,” said Stephen D’Esposito, president and CEO of RESOLVE. “It’s a place where we can work together: the restoration community, First Nations, and the mining industry.”

Peter Wright, Edzerza’s nephew, has been mining in the area since he was 18. “When I first started in the industry, there wasn’t a lot of environmental awareness. We’re trying to reclaim the land and help nature reintroduce itself. Everything that we do with our reclamation is to help the Earth recover. Not only from our mining activities, but from a hundred years before.”

For Apple, the innovation in Salmon Gold does not end with the mining process. It is challenging to trace gold between

mines — the source of the gold — and the companies that purchase the refined gold. The Salmon Gold that enters Apple’s supply chain is tracked using blockchain technology, enabling the gold to be traced from the mine all the way to the refiner, providing precise knowledge of the people and places involved in sourcing and processing it. The knowledge gained from this effort will have broader applications to other minerals’ supply chains.

The Salmon Gold project is growing quickly and has already gained recognition, with mining partners Dean and Chris Race receiving a Sustainable Development Award from the United States Bureau of Land Management. “We have a sacred responsibility to stewardship of the environment that we call our ancestral land,” says Edzerza, “so that future generations can experience it the way our ancestors did.”



Chris and Dean Race, father and son owners of a placer mining operation Jack Wade Creek, Alaska

# 21

Human rights and environmental organizations working to solve supply chain challenges that received support from Apple in 2019

## Partnering to support mining communities

Innovations, like blockchain, in minerals traceability are tools to accelerate progress, but do not replace robust due diligence. To make a lasting impact on the ground, investments in communities are needed. In 2019, we expanded our efforts with the Pact Institute (“Pact”), an international development organization with almost 50 years of experience. In 2016, we helped fund research by the Center of Effective Global Action at the University of California, Berkeley, which determined that 60 percent of households in certain parts of the DRC rely on mining as a source of livelihood. In addition to our partnership with Pact on vocational education, we also support Pact’s work with local community leaders to raise awareness of the risks of certain types of mining. Through this partnership, Pact has reached more than 60,000 people with rights awareness training based on the internationally recognized training curriculum developed by the United Nations Children’s Fund (UNICEF).

In 2017, we began our partnership with the Fund for Global Human Rights (“the Fund”), a leading human rights organization that supports work with grassroots human rights defenders. In 2019, we expanded our partnership with the Fund in DRC to work with Congolese organizations fighting discrimination and working toward equality for women, addressing child protection issues, and advocating for safe mining practices.

As we continue to increase our use of recycled materials we continue to seek innovative ways to source primary minerals responsibly.

# Planet

**As we design, build, and recycle our products, we have a profound responsibility to fight climate change and to protect the planet we all call home.**

---

Water stewardship	61
Zero waste	67
Clean energy	71
Green factories	73





Kunshan District, China



# Environmental protection

## Code highlights

Our Code requires our suppliers to understand and take active steps to reduce their environmental impact, while also becoming better stewards of the resources we all share and the communities in which we operate.



### Hazardous Substance Management

Suppliers must comply with Apple's Regulated Substances Specifications for all goods it manufactures for, and provides to Apple. Suppliers must also implement systematic approaches to identify, manage, reduce, and responsibly dispose of hazardous waste.



### Environmental Permits

Suppliers must obtain, keep current, and comply with all required environmental permits. Suppliers must comply with the reporting requirements of applicable permits and regulations.



### Stormwater Management

Suppliers must implement a systematic approach to prevent contamination of stormwater runoff. Suppliers shall prevent illegal discharges and spills from entering storm drains, public water supply, or public bodies of water.



### Wastewater Management

Suppliers must implement a systematic approach to identify, control, and reduce wastewater produced by its operations. Suppliers must conduct routine monitoring of the performance of their wastewater treatment systems.



### Air Emissions Management

Suppliers must identify, manage, reduce, and responsibly control air emissions emanating from their operations that pose a hazard to the environment. Suppliers must conduct routine monitoring of the performance of their air emission control systems. Suppliers must regularly quantify, set targets, monitor progress, and reduce emissions of greenhouse gases through conservation, use of clean energy, or other measures.



### Boundary Noise Management

Suppliers must identify, control, monitor, and reduce noise generated by the facility that affects boundary noise levels.



### Non-Hazardous Waste Management

Suppliers must implement a systematic approach to identify, manage, reduce, and responsibly dispose of or recycle non-hazardous waste.



### Pollution Prevention and Resource Reduction

Suppliers must develop, implement, and maintain environmentally responsible business practices. Suppliers must regularly quantify, set targets, monitor progress, and reduce consumption of fossil fuel, water, hazardous substances, and natural resources through conservation, reuse, and recycling.

# Protecting the environment through innovation

Smart manufacturing means driving improvement in green manufacturing practices, and we continue to develop innovative solutions designed to protect the environment while simultaneously improving the performance and efficiency of our suppliers' facilities.

Protecting the environment requires collaboration, both to develop expertise within the supply chain and to share our learnings and innovations, accelerating progress broadly across industries.





Operator inspecting flex circuit cleaning tanks that utilize reused water, China

# Water conservation alone is not enough

Water is a precious resource — and, in many parts of the world, a scarce one. Our Clean Water program, established in 2013, began by helping suppliers to focus on water conservation. While water conservation is critical and is evaluated in every supplier assessment we conduct, we need to do more. The Clean Water program is evolving toward water stewardship, which means using water even more responsibly, in a socially beneficial, environmentally sound, and economically sustainable manner.

Because water usage is higher in component manufacturing than in final assembly of our products, we focus deeper in our supply chain, specifically on processes like silicon wafer and printed circuit board manufacturing and the finishing of glass and metals. Our aim is to use as little freshwater as possible, reuse wastewater wherever feasible, and ensure that any wastewater returned is treated and safe for discharge, helping to protect communities and others in the region.

We adapt our strategy to meet local conditions and focus on the water basins where our suppliers operate. In 2019, we continued to deepen our understanding of the water-related risks in the geographical areas where our suppliers operate. By requiring suppliers in the Clean Water program to provide water consumption data and utilizing water foot-printing and scarcity modeling tools like the World Wildlife Fund’s Water Risk Filter and the World Resources Institute’s Aqueduct tool, we developed a more thorough understanding of where water consumption and water-related risks exist, allowing us to better prioritize needs and deploy resources.

The 136 supplier sites now in our Clean Water program achieved a collective savings of 9.3 billion gallons of freshwater in 2019, bringing the program’s total cumulative savings since 2013 to 30.5 billion gallons. Participating sites also increased their process water reuse rate, where water can be used multiple times across processes, to 40 percent.

## 9.3B

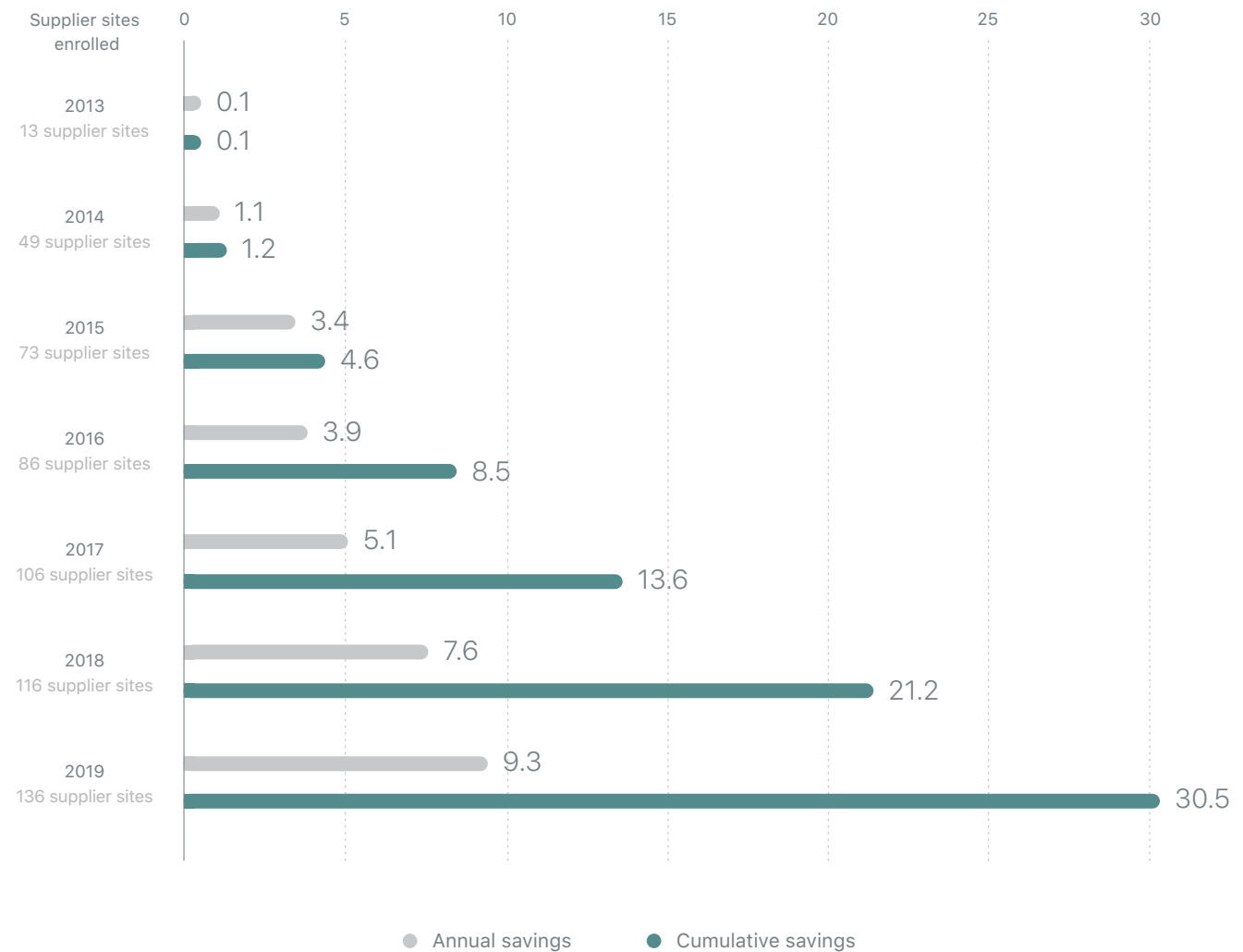
Gallons of freshwater saved in 2019, enough to provide drinking water to over 48 million people for one year

## 30.5B

Gallons of freshwater saved since 2013

To continue the evolution of the Clean Water program from conservation toward stewardship, we expanded our partnership with the Alliance for Water Stewardship (AWS) in 2019. AWS is a global program that fosters collaboration between businesses, governments, and civil society, offering a framework and standard for water stewardship. Through this partnership and the AWS certification process, our suppliers have the opportunity to champion a new level of water performance. In 2019, three supplier sites earned platinum certification from AWS, the first to do so in the electronics industry. These three sites bring the total number of Apple supplier sites having received AWS certification to five.

### Clean Water program enrollees and freshwater savings since 2013







Zhenzhen Xu, AWS Regional  
Manager, with her team, China

## Our partnership with the Alliance for Water Stewardship

Water plays a central role in the lives of the people and industries that make Kunshan their home in the Lake Tai Hu basin. Located an hour's drive from Shanghai, the Kunshan landscape is dotted with lakes and crossed with rivers, and is still home to rich agricultural production.



Kunshan has also become known for its developing economy and concentrated industrial area. For over five years, we have been working to enroll suppliers in the area in our Clean Water program, integrating water conservation practices into their operations. But when it comes to water in Kunshan and many other places in the world, it is quickly becoming apparent that conservation alone is not enough.

In 2018, we launched a partnership with the Alliance for Water Stewardship (AWS) to elevate our supply chain to a new level of environmental sustainability. AWS is a global program that fosters collaboration between businesses, governments, and civil society, offering a framework and standard for water stewardship. Water stewardship requires companies to take a broader view, working transparently and collaboratively with a broad range of stakeholders to take better care of precious water resources in their basin.



Cao Bo, environmental compliance manager, China

"I explain water stewardship to companies as responsible management of something they don't own," said AWS Regional Manager Zhenzhen Xu, who trains companies to apply stewardship concepts to their operations in preparation for earning the AWS certification. "Without understanding where your water comes from, you can't understand the dynamics. We're talking about upstream and downstream, your impact on others, and how you are going to be affected by water quality or scarcity issues," she explained.

The AWS certification process requires companies to collect information about the water quantity and quality in their basin, and to understand source water security and risks. It also requires them to understand how their wastewater discharge impacts local water quality and habitats. Xu coaches companies on how stewardship is not just about environmental protection, but also good business, helping to improve relationships with neighbors and local government.

Flexium, an Apple supplier of flexible circuit boards located in Kunshan, was the first company in the electronics industry to earn the AWS gold certification. "After Xu introduced the AWS certification to us, we decided to pursue it. We felt we had to make that extra effort," says Cao Bo, Flexium's environmental compliance manager. Flexium had been working with Apple as part of the Clean Water program, but the AWS certification process required them to go further. "It was hard at first," says project leader Jason Zhang. "We hadn't collected information from outside of our own company before, but we were advised every step of the way."

In 2019, three Apple supplier sites earned the AWS platinum certification. Among the platinum certified sites are two facilities owned by TSMC and one Avary Holding facility. "We would encourage all manufacturing businesses to pursue AWS certification," said Charles C.F. Shen, chairman of Avary Holding. "Pursuing the platinum certification provided a framework for us to collaborate with the communities and other businesses in the area, and has helped us to integrate water stewardship into our daily operations."

In addition to partnering with AWS to certify Apple suppliers, we are supporting the development of AWS online training and digital tools

that will significantly lower the barrier to entry for other businesses interested in adopting water stewardship and earning certification, regardless of industry or scale. The ultimate goal of our partnership is to make water stewardship a standard business practice, ensuring the sustainability of shared water resources globally.

---

#### Five areas covered by AWS certification



Water governance



Sustainable water balance



Water quality status



Important water-related areas



Safe water, sanitation, and hygiene for all

# Our journey to zero waste

In 2015, we introduced the Zero Waste Program with the goal of completely eliminating waste in our manufacturing processes, sending nothing to landfills in the communities where our products are manufactured and assembled.

In 2019, suppliers in the Zero Waste Program diverted over 322,000 metric tons of waste headed for landfills, bringing the total to 1.3 million metric tons since 2015. Significant expansion of the program was driven by increasing the number of component manufacturing sites working toward Zero Waste. In 2019, the total number of participating sites increased by 53 percent year over year to 155.

We continued to maintain 100 percent certification across all final assembly sites worldwide for iPhone, iPad, Mac, Apple Watch, AirPods, and HomePod. In 2019, we expanded the program's reach by adding Apple TV final assembly sites. Zero Waste certifications are performed by UL, a leading testing and standard-setting organization. Since the program's inception in 2015, 50 Apple supplier sites have received Zero Waste certification. Of those, 48 have been certified as UL Platinum, and two have earned UL Gold certification.

We continued to expand the program's reach deeper into our supply chain by creating a set of online learning and program management tools and virtual coaching that equip suppliers with the knowledge to independently develop their own programs and work toward Zero Waste certification.



# Earning Zero Waste certification

Once suppliers have completed our process for moving to zero waste, the site is assessed and certified by UL under their 2799 standard, the most rigorous and comprehensive standard for manufacturing waste streams.

---

## The supplier journey to Zero Waste certification

1

### Phase 1

Identify, educate, target

We prioritize Zero Waste sites based on the environmental impact of their waste volume and process complexity. Selected sites receive education for program readiness, and we assess availability of recycling solutions for targeted materials.

2

### Phase 2

Calculate, recycle, innovate

We remove barriers to Zero Waste certification by calculating the baseline diversion rate, determining which waste streams can be recycled, and developing innovative solutions for those that initially cannot be recycled.

3

### Phase 3

Measure, assess, certify

We require monthly accounting of all material waste streams as suppliers work toward 100% landfill diversion while minimizing incineration. Suppliers are also required to build strong waste management systems, including vendor supervision. In order to earn certification, independent UL auditors verify six consecutive months of data. After earning certification, supplier sites must be re-certified every three years by UL.

# Removing barriers to zero waste through innovation

Recyclable Protective Film (“RPF”) was created as an innovative approach to protecting products during manufacturing, replacing a previous version of the film that was not recyclable. In 2019, use of the film became a requirement for new iPhone final assembly.

RPF was just the first step. We also engaged a partner to recycle the protective film into pallets and transportation trays, which are used to transport components during assembly. By ensuring that the film is recycled, we were able to divert more than 2,000 metric tons of waste from incineration, avoiding the 4,300 metric tons of carbon emissions, that would have resulted from the incineration of the non-recyclable material.

The RPF product that we developed with one of our suppliers is available on the open market, and we are actively sharing our experience with the industry to accelerate its adoption, creating a ripple effect well beyond our own supply chain.

---

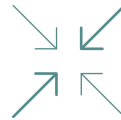
## Driving change in waste reduction



We foster the invention of new, more environmentally friendly materials like recyclable protective film (RPF).



We promote the use of reusable materials in manufacturing. Working together with 10 supplier sites we developed a program to reuse protective trays to transport components to final assembly sites. Since 2015, 66 million components trays have been reused, saving more than \$20 million dollars and avoiding more than 65,000 metric tons of carbon emissions.



We use less material whenever possible. In 2019, we began using a 25 percent thinner shrink wrap for pallet wrapping at a key final assembly site. This effort reduced the site’s shrink wrap use for the year by 375 metric tons.



We work to eliminate hazardous waste streams. Over the past two years, we have collaborated with 26 key supplier sites to reduce or eliminate hazardous waste streams.





Recyclable protective film application,  
iPhone production, China



# Addressing emissions in our supply chain

1M+ MT

Combined annualized metric tons of carbon avoided in 2019 through supply chain energy efficiency and direct process greenhouse gas emissions prevented, equivalent to taking 220,876 cars off the road for one year

Emissions from the manufacturing of products represents about three-quarters of Apple's comprehensive carbon footprint, so we support suppliers in becoming more energy efficient and then moving to clean, renewable energy sources. These efforts are critical to decarbonizing our supply chain — the process of reducing the amount of carbon emitted from the manufacturing of our products through electricity usage and direct emissions.

Understanding supplier greenhouse gas emissions in our operations and supply chain was the first step in identifying and pursuing energy reduction opportunities and transitioning to renewable energy wherever possible. In 2018, additional rigorous energy management requirements were added to our Code, focused on data collection and reporting of greenhouse gas emissions attributable to the manufacturing of Apple products.

The number of facilities participating in our Energy Efficiency program grew to 92 in 2019, an eight percent increase over the previous year. In 2019, we prevented more than one million annualized metric tons of supply chain greenhouse gas emissions, a 119 percent year over year improvement from 2018. This was realized through our combined efforts to avoid 779,605 metric tons of supplier energy-related emissions and 242,761 metric tons of supplier direct process greenhouse gas emissions. Additional information about our suppliers' adoption of clean energy can be found in Apple's Environmental Progress Report, available at [apple.com/environment](https://apple.com/environment).



## A product-focused strategy for energy efficiency

The production of iPhone accounts for a significant percentage of Apple's manufacturing capacity. In 2018, the six facilities in China that perform final assembly of iPhone committed to a 20 percent energy reduction by the end of 2020.

In 2019, 21 percent of Apple's annual supply chain energy-efficiency-related carbon savings resulted from this commitment alone. This three-year initiative is ahead of schedule, having already saved 16 percent compared to the 2017 baseline year. We are continuing to expand this product-driven strategy, with the addition of final assembly sites for AirPods.

## Promoting clean energy

Clean energy solutions are also central to our decarbonization strategy. We engage directly with suppliers to support their transition to renewable forms of electricity to power their operations by providing education and by connecting them with high-quality providers of clean energy solutions.

The latest data on progress achieved by our suppliers in adopting clean energy solutions can be found in Apple's Environmental Progress Report, available at [apple.com/environment](https://apple.com/environment).



Apple supplier facilities awarded China's Green Factory designation as of 2019

## More green factories

In 2019, nine additional Apple supplier facilities received the Chinese government's Green Factory designation, bringing the total number of Apple supplier facilities awarded this designation to 28. The Green Factory designation is part of China's "Green by 2025" manufacturing plan. Apple is supporting the China Electronic Standardization Institute by helping to develop green standards for electronics manufacturing in China.

## Funding that powers progress

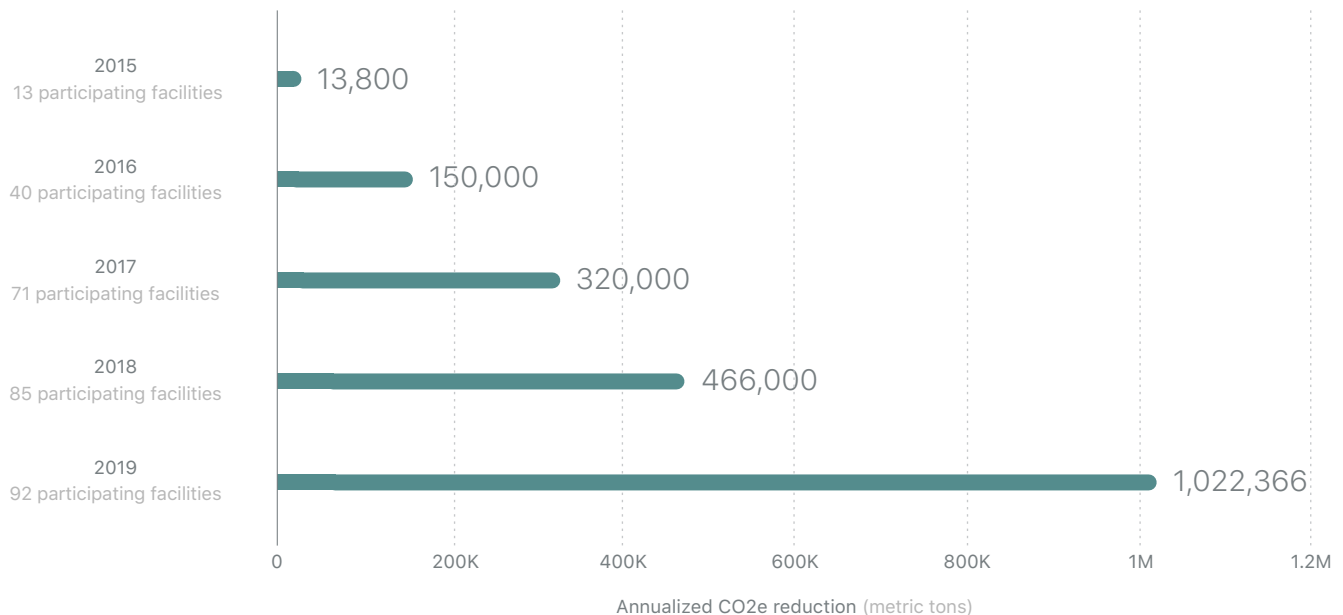
As part of our Energy Efficiency program, suppliers perform audits of their energy use and then implement projects to reduce their footprint. These projects realize both energy and cost savings but can also be a challenge to implement, sometimes requiring significant financial investment.

\$100M

Committed investment for energy efficiency projects

In 2019, we collaborated with the US-China Green Fund to accelerate engagement with the manufacturing sector through the creation of a special fund to invest \$100 million in supplier projects. The fund employs an innovative approach that provides energy management as a service, including both solution design and upfront capital investment for efficiency upgrade projects. As energy savings are realized, the investment is recouped. This reduces barriers for suppliers while allowing them to realize energy savings achieved through upgraded equipment and management systems.

### Supplier progress in energy efficiency and direct emissions abatement



# Honored to be recognized

In October 2019, the Institute of Public and Environmental Affairs (IPE), China's leading environmental advocacy organization, recognized Apple as its first Master's level designation on its Corporate Information Transparency Index (CITI) for our commitment to environmental responsibility throughout our supply chain in China. Apple is the first company to be awarded this designation, which came after earning a #1 ranking on the index for the previous five consecutive years.

"Over the past five years, Apple has continuously extended management to the upstream supply chain in an innovative way, pushing hundreds of suppliers to save energy and reduce emissions, and improving environmental performance," said Ma Jun, director of IPE. "Sometimes the work isn't just within factories — rivers, lakes, and canals have been cleaned up, giving local communities a safer and cleaner environment."

As the first company to receive the Master's level designation, Apple will continue to meet the high standards set by IPE, while also sharing best practices learned from our innovative water, energy, and zero waste programs, to continue to accelerate progress in our own supply chain and across the broader industry.

# Progress

**Every year, we measure the progress our suppliers have made in meeting and exceeding the standards in our Code.**

**As we drive improvement, we collaborate across the industry and share our learnings and tools to maximize our impact.**

---

Supplier selection and capability-building	77
Leading and listening	93





Packaging assembly,  
zero waste iPad  
production facility, China

# A comprehensive approach to progress

We achieve progress by holding ourselves and our suppliers accountable every step of the way, from product design through recycling and everything in between. We uphold our requirements which protect people and the planet through rigorous assessments — and when we find issues, we work with suppliers to improve their operations and make long-lasting changes.

Our requirements apply to suppliers across our chain, including those that provide services to Apple. We assess suppliers that support our Retail operations, logistics providers that ship our products around the world, and suppliers that support AppleCare, implementing learnings from the assessments.

In addition to assessments, we also seek input from experts across the industry and civil society, asking for feedback on what we are doing well and where we could be doing more. This feedback is critical for us to move forward in the ways that are most meaningful.

---

## Our approach to progress



Product design



Responsible procurement/  
supplier selection



Early engagement/  
on-boarding review



Assessments



Capability-building

# Engaging earlier to accelerate progress

## Making the cut

For Apple, protecting people and the planet starts with responsible procurement practices. In 2016, we began to engage even earlier in the product development process to assess new materials, technologies, and suppliers in order to address Code-related risks as early as possible. Our work begins far in advance of any production activity and includes a series of Facility Readiness Assessments and Process Safety Risk Assessments.

These assessments are designed to ensure that critical risks to people and the environment are mitigated prior to production beginning. Beyond manufacturing, we also engage early in the process of selecting janitorial suppliers when we open our first Retail store in a country, and, with all new logistics suppliers.

By engaging earlier, we are able to prevent suppliers that are unwilling or unable to meet the requirements of our Code and Standards from entering our supply chain. In 2019, nine percent of prospective suppliers evaluated for Code-related risks were prevented from entering our supply chain because of preemptive Code violation discoveries.

## On-boarding new suppliers

We launched the On-Boarding Review (OBR) in 2016 to help new suppliers quickly get up to speed on our Code, Standards, and assessment process. We also provide expert guidance in establishing comprehensive management systems to improve the supplier's capability to perform self-assessments and sustain compliance with our Code and Standards.

In 2019, 65 supplier sites participated in the OBR process. For suppliers that participated in OBR, the average assessment performance score increased by 56 percent.





iPhone testing and repair,  
repair center, United States



# A deeper look at our assessment process

Supplier performance is assessed against our Code and Standards to drive improvements in the areas of labor and human rights, health and safety, and environment. Assessments are a comprehensive process that can require multiple days, evaluate more than 500 criteria, verify compliance, and identify areas for improvement. Each assessed facility is ranked on a 100-point scale in each of the three assessment categories, with the average of those scores comprising the facility's composite score for the year.

In 2019, a total of 1,142 assessments across 49 countries were completed. Of these, 801 took place at manufacturing facilities, logistics and repair centers, and AppleCare call centers; 291 were conducted at smelter and refiner sites; and 50 were carried out in other areas of our services supply chain. Apple-managed assessments covered a cumulative total of 94 percent of Apple's direct manufacturing spend, based on assessments conducted since 2007. Of the 801 assessments completed at manufacturing, logistics and repair centers, and AppleCare call centers, 17 percent were initial assessments where we visited facilities for the first time.

Every year we conduct unannounced assessments as well as surprise visits in response to supplier employee allegations, or to verify that remediation of violations has been completed. In 2019, we conducted 70 unannounced assessments and investigations where the supplier facility was provided no advance notice.

In 2019, we further supplemented our own assessment protocol with the Responsible Business Alliance's (RBA) Validated Assessment Program (VAP), a third-party assessment widely used by the industry. A total of 104 RBA VAP assessments were completed in 2019.

---

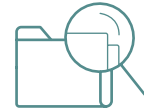
High-level factors contributing to assessment selection



Is this a new supplier?



What is the supplier's previous assessment performance?



What is the supplier's previous record of Core Violations or allegations?



What is the suppliers geographic location?



What is the amount of business done with Apple?



Are foreign contract workers employed?

## Addressing assessment findings

Achieving progress requires strong processes to hold suppliers accountable, address violations when they are discovered, and validate that corrective actions have been completed. We call these processes Corrective Action Plans and Corrective Action Verifications.

Following an assessment, we discuss findings with the supplier at their facility. The supplier is provided with feedback, identification of issues and their root causes, and required corrective actions. The supplier then enters a 90-day corrective action period where they are required to resolve the issues and improve their management systems to ensure that the violations do not reoccur.

During this period, 30-, 60-, and 90-day required check-ins with Apple ensure that supplier questions are addressed and that clarification, awareness, and training are provided where needed as part of our capability-building efforts.

Our goal is to work hand in hand with suppliers to improve their management systems, rather than to simply remove them from our supply chain without correcting the issues we discovered. In the event that a supplier is unwilling or unable to improve operations to meet our requirements, they risk removal from our supply chain. Since 2009 we have removed 145 suppliers, including 22 manufacturing supplier facilities and 123 smelters and refiners.

# 145

Suppliers, smelters, and refiners removed from our supply chain since 2009 for inability or unwillingness to meet our requirements

# Capability-building through expert guidance

A key component of every Corrective Action Plan is capability-building, where Apple experts support supplier teams in improving their management systems to resolve immediate issues and to prevent them from reoccurring.

In 2016, the Subject Matter Expert (SME) program was introduced to send Apple experts on-site at supplier facilities to guide and define customized capability-building plans. The SME team is comprised of more than 30 experts with robust industry experience and knowledge to solve both management and technical issues. Our experts connect directly with suppliers to work through improvements and Corrective Action Plans using a variety of capability-building tools, including one-on-one assistance and online learning through illustrated, self-paced learning manuals that provide instruction and requirements for areas of our Code commonly encountered in daily operations. We continue to expand the topic areas covered by these tools. Knowledge areas currently included in capability-building and the associated tools and training include:

<b>Labor &amp; Human Rights</b>	Recruitment process Protected class management Discipline management TPEA/school management	Wage & benefit management Grievance management Exit process Foreign contract worker management
<b>Health &amp; Safety Management</b>	Risk assessment Emergency Preparedness & response Machine Guarding safety Industrial hygiene High-risk tasks (work at height, hot work, confined space entry)	Lock-out tag-out Chemical management Ergonomics Incident management
<b>Environmental management</b>	Environmental permit management Waste management Waste water management Storm water management Air emission management	



The SME team has worked with suppliers in China, Taiwan, Vietnam, India, Thailand, Indonesia, the Philippines, Korea, Malaysia, Japan, and Cambodia.

In 2019, 86 supplier facilities were engaged in capability-building. Since the inception of the SME program, we have seen dramatic improvements in supplier performance scores as well as a reduction in reoccurrences of previously discovered issues.

### Capability improves assessment performance

Suppliers that are engaged in capability improvement show significant improvement in assessment performance, as demonstrated by the average year-over-year score improvement for 86 supplier sites engaged in capability-building efforts in 2019





Parts assembly, Mac Pro production, United States

## Enabling strong performance with a powerful platform

SupplierCare is an Apple platform that enables us to capture the most up-to-date information on our dynamic supply chain, as well as to communicate and provide training to suppliers.

Beyond facilitating direct access to Apple experts, SupplierCare provides online tools for suppliers to improve their operations and refine new processes. Through the platform, suppliers are able to collaborate with us to track assessment results, develop Corrective Action Plans for assessment findings, reference best-practice resources, and monitor the progress of improvements.

# 950+

Suppliers engaged through SupplierCare training opportunities in 2019

SupplierCare extends capability-building by providing on-demand educational content to increase understanding of our Code and best practices to maintain compliance with our Standards.

In 2019, we engaged more than 950 suppliers with digital training content, and expanded our training offerings to include new topics such as permits and greenhouse gas management. New content is being developed and launched on a regular basis, as new areas of opportunity emerge.

# Apple services and logistics suppliers

In 2012, we extended our Code further into the service domain by partnering with Apple's services and logistics suppliers. Services suppliers are required to uphold all of our requirements, including providing fair working hours, conducting proper health and safety training, and maintaining a fair workplace. In 2019, we assessed 30 AppleCare Contact Centers and 8 logistics centers in 19 countries.

In 2016, we extended our Code to include employees working for Apple Retail store suppliers and began conducting assessments to identify opportunities to improve and strengthen both their management systems and their employee training. In order to increase transparency and ensure that people in our janitorial supply chain are protected, we restrict subcontracting of our janitorial services to one level down with prior permission from Apple. In 2019, we conducted 50 janitorial supplier assessments at 50 Retail stores. We also conducted training to strengthen management systems, working hours compliance, employment contracts, and grievance channels. The training was attended by 81 percent of Retail janitorial service providers in the United States, and 94 percent in Europe.

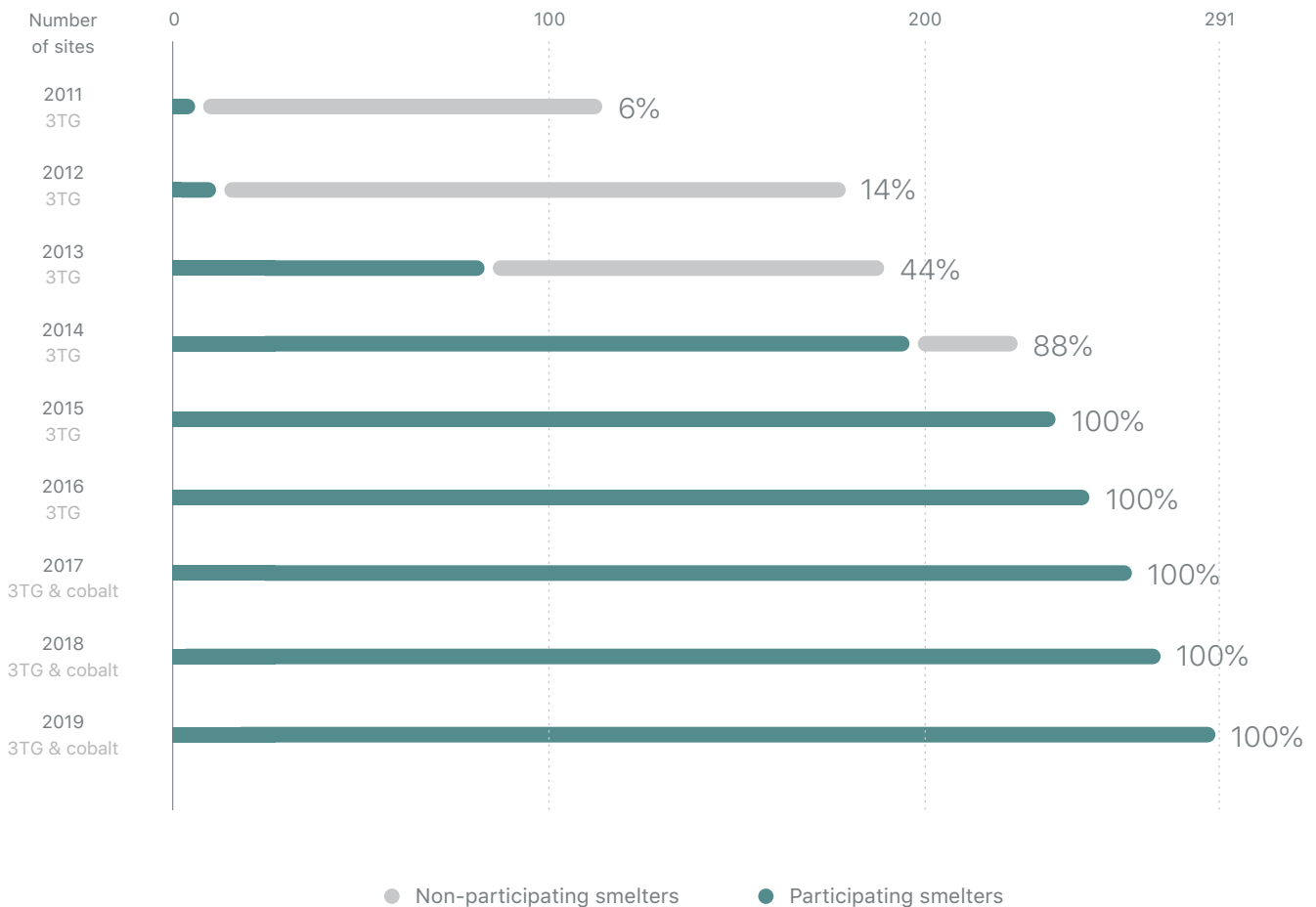


# Assessments deeper in the supply chain

Deeper in our supply chain, we utilize independent, third-party auditors to assess the smelters and refiners that process minerals required to build Apple products. Smelters and refiners for key minerals are required to report, assess, and mitigate risks in their business practices based on the findings of annual assessments.

If a smelter or refiner is unable or unwilling to meet our requirements, they are removed from our supply chain. Since 2009, 123 smelters or refiners have been removed from our supply chain, including 18 in 2019.

Smelter and refiner third-party audit participation (3TG & cobalt)



# Accountability

## Addressing allegations

We take allegations concerning our suppliers very seriously. Allegations can come from different sources, including civil society organizations, news outlets, people in the supply chain, and anonymous reports through the channels we make available to supplier employees and the public. Thorough investigations are conducted. If a violation is discovered, a Corrective Action Plan is immediately put in place, requiring issues to be remedied within 90 days. We also investigate allegations deeper in our supply chain through our Responsible Minerals Sourcing program.

## Tested processes for remediating Core Violations

After 15 years of engagement and capability-building with our suppliers, Core Violations of our Code have become much less common. When a Core Violation does occur, we immediately enact our strict remediation processes to resolve the violation.

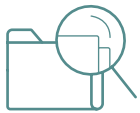
Our Code outlines certain remediation processes for debt-bonded labor, working hours violations, and underage labor. We continue to report transparently on these Core Violations each year.

# Prevention of debt-bonded labor

Apple has zero tolerance for debt-bonded labor. Our remediation process for debt-bonded labor focuses on direct remedy, where suppliers repay employees for any fees paid in the process of obtaining a job.

If debt-bonded labor is discovered, the supplier's CEO is notified, and the supplier is placed on immediate probation, requiring them to submit a repayment plan for approval by Apple. Once approved, the supplier directly repays their employees for all fees paid, and repayment is verified by a third-party auditor. In 2019, we discovered one instance of debt-bonded labor.

## Debt-bonded labor remediation process



**Violation identification**  
Apple assessor and third-party auditor identify debt-bonded labor violation



**Violation communication**  
Apple communicates violation to supplier senior management



**Signs terms**  
Supplier signs probation terms and repayment terms



**Repayment plan**  
Supplier submits repayment plan for Apple approval



**Employee payment**  
Supplier repays their employee



**Payment verification**  
Third-party auditor verified repayment to employees at supplier site

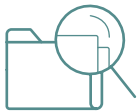
# Monitoring working hours

Proper time for rest and leisure is fundamental to a safe and healthy work environment. We review working hours as part of our assessments and implement corrective action plans as needed.

If falsification of employee working hours is discovered, the supplier is placed on immediate probation and its CEO is notified. The supplier's ethics policy and management systems are then thoroughly reviewed to identify root causes. The supplier is also required to undergo additional audits to ensure that policy changes are implemented to prevent future violations. In addition, if employee hours were misrepresented, the supplier must revise all records to reflect an accurate accounting of hours worked.

In 2019, of the 12 Core Violations found in the labor and human rights category, 10 were related to working hours violations. Overall supplier working hours compliance for the year was 95 percent.

## Working hours falsification corrective action process



**Violation identification**  
Apple assessor and third-party auditor identify Records Falsification Violation



**Violation communication**  
Apple communicates violation to supplier CEO and notifies supplier of immediate probation; supplier signs probation terms



**Root cause identification**  
Apple and supplier review supplier's ethics policy and management systems to identify root cause



**Regular audits**  
Supplier is required to undergo regular audits to ensure the reviewed policy is implemented to prevent future violations



**Correct all records**  
Supplier must revise all records to reflect accurate accounting of hours worked by their employees

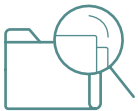


# Prevention and remediation of underage labor

The use of underage labor is a Core Violation of our Code, and our Standards provide clear guidelines for the employment of student labor. If underage labor is discovered, specialized third-party assessors are brought in for an in-depth review, and the supplier is required to immediately prevent the employee from continuing to work and to return the underage individual to his or her home safely. Educational opportunities are presented to the underage employee and his or her guardians. While the underage employee is attending school, the supplier is required to pay tuition and other associated fees, and must continue to pay his or her wages. Follow-up is conducted to verify the individual's overall well-being, both at school and at home. Once the student reaches legal working age, the supplier is also required to offer the individual employment.

Based on the reduction in age-related violations over the last seven years, our efforts to educate suppliers and to work closely with them on Code requirements have driven significant progress in this area. In 2019, we discovered one violation related to this area of our Code and Standards.

## Underage labor corrective action process



**Violation identification**  
Apple assessor and third-party auditor identify underage labor violation



**Return home**  
Supplier is required to immediately provide safe passage home to underage employee



**Wages paid**  
Supplier is required to continue to pay wages to supplier employee until he or she reaches legal working age



**Education**  
Supplier is required to provide educational opportunity for supplier employee



**Employment guarantee**  
Supplier is required to provide employment opportunity when the individual reaches legal age

# Leading and listening

Driving the highest standards, implemented at Apple's scale, has enabled us to create significant change. But no single company or organization can do this work on its own. We have a responsibility to share our experience and learnings with partners across industries to accelerate the protection of people and the environment globally.

To do this, we collaborate with industry associations, civil society, and governments to share our progress and to promote best practices, but also to listen and learn from others' perspectives and experiences. The innovative, large-scale solutions forged from working together create meaningful change and the strength of our partnerships allows for broader, faster adoption across industries, which enables everyone to achieve progress more rapidly.

Here are just a few examples of how Apple leads beyond our supply chain:

## **The Responsible Business Alliance**

The Responsible Business Alliance (RBA) is the world's largest industry coalition dedicated to corporate social responsibility in supply chains. Apple collaborates with the RBA and its member companies frequently throughout the year on initiatives spanning the entirety of our Supplier Responsibility program. Apple also serves in several leadership capacities at the RBA, including:

- Chairing the board
- Founding and steering committee members of the RLI (Responsible Labor Initiative), focused on ensuring that the rights of workers vulnerable to forced labor in global supply chains are consistently respected and promoted
- Serving on the steering committee of the RMI (Responsible Minerals Initiative), focused on minerals supply chain due diligence; the RMI currently has over 380 member companies

**Working Capital Fund, incubated by Humanity United**

Working Capital Fund is an early-stage venture fund that invests in scalable innovations to meet the growing demand for more transparent and ethical supply chains, addressing the urgent need to protect vulnerable workers and to source responsibly.

**The Public-Private Alliance for Responsible Minerals Trade**

The Public-Private Alliance for Responsible Minerals Trade (PPA) is a partnership between civil society, industry, and government supporting projects in the Democratic Republic of the Congo and surrounding region that improves the due diligence and government systems for ethical supply chains. Apple serves on the governance committee of the PPA.

**The European Partnership for Responsible Minerals**

The European Partnership for Responsible Minerals (EPRM) is a partnership between civil society, industry, and government focused on responsible mining and sourcing practices, and improving social and economic conditions for mining communities. Apple is a member of the EPRM.

To be a leader, you have to be a great listener. We look for opportunities to listen and learn from others in leading forums around the world, including:

### **The International Labour Conference**

2019's International Labour Conference, hosted by the International Labour Organization (ILO), brought together over 6,000 participants from trade unions, NGOs, business, and labor ministries. At the conference, a landmark labor treaty was established that for the first time set international standards to eradicate violence and harassment at work. Beyond the conference, we also consult with the ILO regularly, and participated in their inaugural Global Business Network on Forced Labor to support collective action and innovative approaches to eliminate forced labor and promote fair labor recruitment in global supply chains.

### **The United Nations Business and Human Rights Forum**

The United Nations (UN) forum is the world's largest annual gathering on business and human rights. Over three days, Apple participated in panel discussions on implementing the UN Guiding Principles on Business and Human Rights and consulted with the world's leading human rights experts on current and emerging business-related human rights issues.

### **The Organisation for Economic Co-operation and Development Responsible Minerals Forum**

The Organisation for Economic Co-operation and Development (OECD) is the world's leading body on responsible mineral sourcing, bringing together stakeholders from government, civil society, and the private sector to focus on measuring impact, driving change, and participating in discussion of regulatory updates related to minerals sourcing. At the forum, we share our progress and challenges in panel discussions and consult with NGO experts, gathering innovative approaches to continually improving responsible sourcing in our own supply chain. In 2019, we convened an expert group to discuss the human rights impacts of responsible sourcing programs.



### **World Water Week**

World Water Week, hosted annually by the Stockholm International Water Institute, is the largest gathering of governments, civil society organizations, and business leaders focused on addressing global water challenges. At 2019's World Water Week, we shared practical steps we have taken to apply the Alliance for Water Stewardship standard in our supply chain and to more broadly raise awareness of water-related issues in the microelectronics manufacturing supply chain.

### **Marking the United Kingdom's Anti-Slavery Day with the Thomson Reuters Foundation**

In October 2019 we co-hosted an event in London with the Thomson Reuters Foundation — an international organization focused on bringing awareness to human rights issues — to mark the United Kingdom's Anti-Slavery Day. This event created and strengthened relationships between organizations dedicated to the eradication of modern slavery across the United Kingdom and beyond. Apple was the 2018 recipient of the Thomson Reuters Foundation's Stop Slavery award.

**“Apple’s participation in the fund helped us to accelerate innovation in supply chain traceability, worker voice, and responsible recruitment. We’ve established a dialogue that leverages Apple’s unique perspective and experience — what the company has seen that works, and what gaps need filling — to inform the investments we’ve made to build tools that can have impact, at scale, on working conditions and respect for labor rights.”**

Dan Viederman  
Managing Director, Humanity United, Working Capital Fund

# Measurement

**From assessment results to supply chain mapping, data allows us to make informed decisions to accelerate our work to protect people and the planet.**

---

2019 assessment results	99
Additional resources	109
Aligning with the United Nations Guiding Principles	111





Quality Assurance,  
iMac production, Ireland



# 2019 assessment results

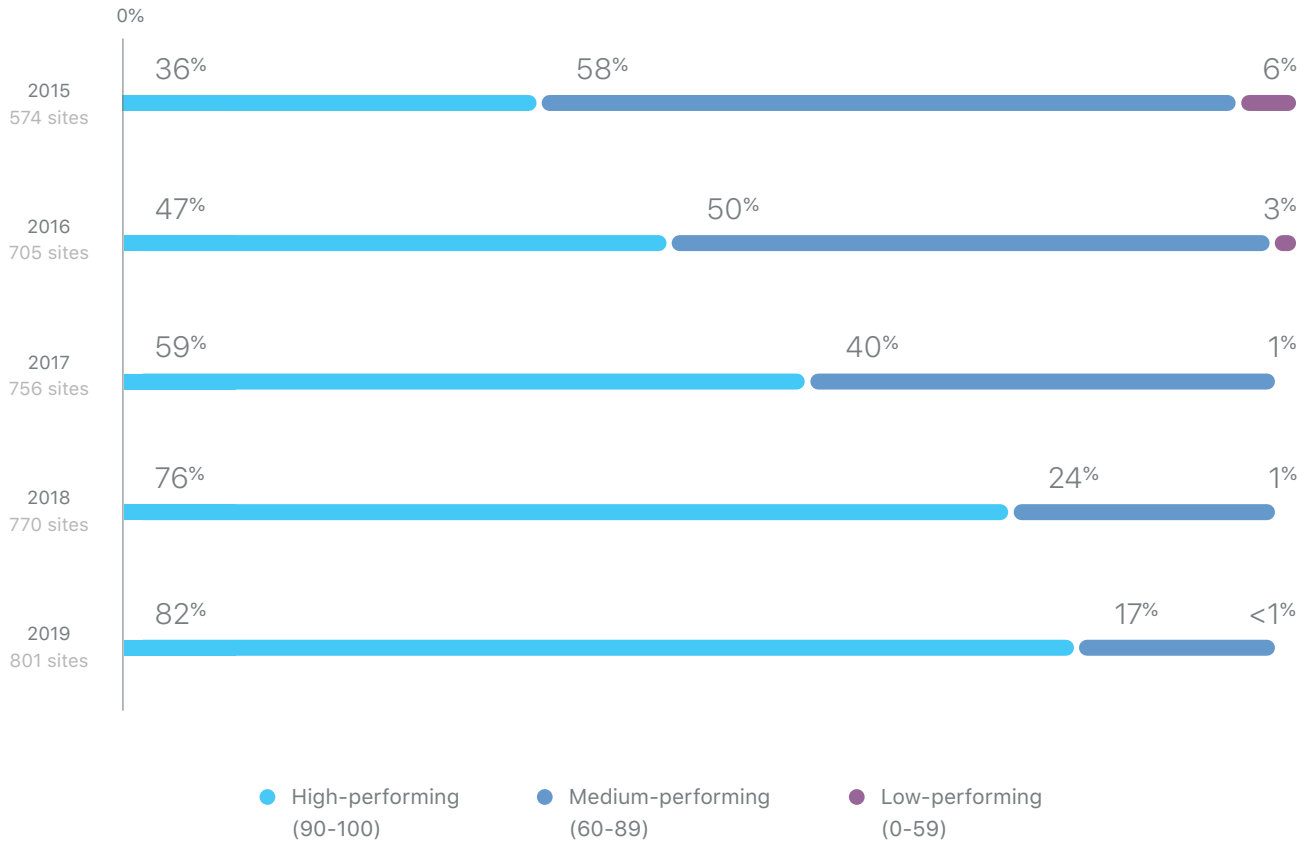
Each supplier facility selected for assessment is ranked on a 100-point scale based on its performance relative to our Supplier Code of Conduct. Our assessment protocol measures over 500 unique criteria, which enables us to pinpoint areas of opportunity and create customized Corrective Action Plans accordingly.

Average 100-point scale score across Apple-managed assessments



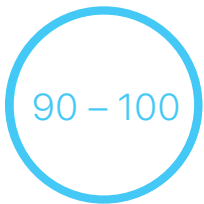


### Year-over-year Supplier Code of Conduct performance



# Understanding our Apple-managed assessment results

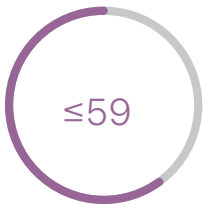
100-point scale score



representative of a high-performer



representative of a medium-performer



representative of a low-performer

## Scoring and deductions

Findings in our assessments are categorized by level of severity:

### Administrative non-compliance

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

Examples of administrative non-compliance include:

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

### Violation

Denotes non-compliance with our Standards

Examples of violations include:

- Insufficient provision of benefits
- Inadequate pre-placement/on-job/post-employment occupational health exams
- Inadequate environmental permits

### Core Violation

The most serious violation of Apple's Supplier Code of Conduct

Examples of Core Violations include:

- Underage or involuntary labor
- Document falsification
- Intimidation or retaliation against an employee
- Immediate environmental and safety threats

Suppliers are required to immediately remediate any Core Violation. Beyond immediately addressing the violation, suppliers must also make changes in their management system that address the root cause of the violation. To retain our business, they must also take and sustain preventive measures to ensure the violation does not reoccur.

# Labor and human rights assessment results



91 out of 100 average labor and human rights assessment score

In 2019, the average labor and human rights score across 801 assessments was 91.

During an assessment, suppliers are evaluated on all labor and human rights protections outlined in the Supplier Code of Conduct. Areas assessed include anti-discrimination, anti-harassment and abuse, prevention of involuntary labor, human trafficking and underage labor, juvenile and student worker protections, working hours, wages, and benefits.

Apple's Freedom of Association and Collective Bargaining Standard requires that all suppliers have policies protecting freedom of association and workers' right to bargain collectively, which must be clearly communicated to supplier employees. This requirement is checked during every Apple-managed assessment. Supplier employee interviews, facilitated by unions or work council representatives whenever requested, help validate freedom of association compliance.

In order to score suppliers, we take an investigative approach during an assessment. Our assessment protocols typically require a thorough review of supplier facilities, human resources records, and interviews with supplier employees to ensure adherence to the Code.

## 2019 Labor and human rights updates to our Code of Conduct

In 2019, we continued to raise the bar on labor and human rights requirements for our supply chain. New Code requirements and clarifications were added to topics including prevention of involuntary labor, specifically unacceptable labor practices and guidelines on how suppliers and labor agencies must deal with workers' identity documents; protection of foreign contract workers, specifically focused on education, fees, pay and working hours; the juvenile worker protections standard, focusing on night-time work and acceptable hours; and working hours management and wages, benefits, and contracts standards.

## Assessment findings

In 2019, the majority of labor and human rights violations found in assessments were related to working hours violations and improper provision of wages and benefits.

One example of improper provision of wages found in our 2019 assessments included a mandatory pre-shift meeting being held before the employees' shift had started. When a violation like this is discovered, the supplier must take immediate action to investigate the issue and repay wages to their employees. The supplier is also required to strengthen their internal communication practices to prevent the issue from reoccurring.



# Core Violations

In 2019, 12 Core Violations were found related to the labor and human rights section of our assessment protocol; these included 10 working hours violations, 1 debt-bonded labor violation, and 1 underage labor violation

## Labor and human rights assessment deductions

	Core Violations	Violations	Administrative Non-Compliance	Total Deductions
Working Hours	- <0.1	- 3.1	- 0.3	- 3.5
Wage, Benefits and Contract	- <0.1	- 2.7	- 0.2	- 2.9
Prevention of Involuntary Labor	- <0.1	- 0.6	- 0.5	- 1.1
Protected Class	- <0.1	- 0.3	- <0.1	- 0.3
Anti-Discrimination	-	- 0.1	- 0.2	- 0.3
Grievance Mechanism	-	- 0.3	- 0.1	- 0.4
Anti-Harassment and Abuse	-	- <0.1	- 0.2	- 0.2
Prevention of Underage Labor	- <0.1	- <0.1	- <0.1	- 0.1
Freedom of Association and Collective Bargaining	-	- <0.1	- <0.1	- 0.1

Average Total Score:

91

# Health and safety assessment results



94 out of 100 average health and safety assessment score

In 2019, the average health and safety score across 801 assessments was 94.

During an assessment, suppliers are measured on all health and safety protections outlined in our Code and Standards. Areas reviewed include occupational health and safety practices and management systems, emergency preparedness and response, and working and living conditions.

## 2019 health and safety updates to our Code of Conduct

In 2019, we continued to raise the bar on health and safety Standards for our supply chain. New Code requirements and clarifications were added on topics including occupational health and safety, focused on chemical identification and evaluation; process safety management; chemical hazard communication; and emergency preparedness and response, focused on emergency exits and exit signs.

## Assessment findings

In 2019, the majority of health and safety violations found in assessments were related to occupational health and safety hazard prevention.

# Core Violations

In 2019, zero Core Violations were found related to health and safety.

## Health and safety assessment deductions

	Core Violations	Violations	Administrative Non-Compliance	Total Deductions
Occupational Health and Safety Hazard Prevention	-	- 3.1	- 0.1	- 3.2
Emergency Prevention, Preparedness, and Response	-	- 1.7	- 0.5	- 2.2
Health and Safety Permits	-	- 0.7	- <0.1	- 0.7
Working and Living Conditions	-	- 0.2	- <0.1	- 0.2
Incident Management	-	- 0.1	- <0.1	- 0.1

Average Total Score:

94

# Environment assessment results



94 out of 100  
average environment  
assessment score

In 2019, the average environment score across 801 assessments was 94.

During an assessment, a supplier is evaluated on all of the environmental Standards outlined in our Code and Standards. Areas reviewed include environmental permits and reporting, hazardous waste management, wastewater management, stormwater management, air emissions management, and resource consumption management.

## 2019 updates to our Code of Conduct

In 2019, we continued to raise the bar on environmental Standards across our supply chain. New Code requirements and clarifications were added to topics including air emissions management, focused on emissions reduction targets and monitoring progress; and management systems, focusing on employee communications and training, workers' rights, and internal policies.

## Assessment findings

In 2019, the majority of environment violations found in assessments were related to hazardous substance management.

An example of a hazardous substance management violation found in 2019 assessments included failing to have a secondary containment system in place for hazardous material storage. When a violation of this kind is identified, the supplier must take immediate action to install the required secondary containment system. The supplier is also required to set up an inspection process to ensure that all hazardous materials on site are equipped with properly functioning secondary containment systems.



# Core Violations

In 2019, five Core Violations were found in environment assessments; these included four related to air emissions and one related to water management.

## Environment assessment deductions

	Core Violations	Violations	Administrative Non-Compliance	Total Deductions
Hazardous Substance Management	-	- 1.1	- 0.4	- 1.5
Environmental Permits	-	- 1.4	-	- 1.4
Stormwater Management	-	- 0.8	- 0.3	- 1.1
Wastewater Management	- <0.1	- 0.4	- 0.2	- 0.6
Air Emissions Management	- <0.1	- 0.5	- 0.1	- 0.7
Boundary Noise Management	-	- 0.2	- <0.1	- 0.3
Non-Hazardous Waste Management	-	- 0.2	- <0.1	- 0.2
Pollution Prevention and Resource Reduction	-	-	- <0.1	- <0.1

Average Total Score:

94

# Additional resources

In addition to our annual progress report, Apple also releases information via additional annual policies, public reports, and disclosures. Below is a brief guide to these publications, all of which can be read in full on the Apple Supplier Responsibility website ([apple.com/supplier-responsibility](http://apple.com/supplier-responsibility)), except where noted.

## **Supplier Code of Conduct and Supplier Responsibility Standards**

Our Supplier Code of Conduct outlines Apple's expectations of its suppliers for conduct related to labor and human rights, health and safety, environmental protection, ethics, and management practices. Apple's Supplier Responsibility Standards provide additional clarity regarding Apple's requirements. Apple suppliers must meet these Standards to be in compliance with our Supplier Code of Conduct

## **Regulated Substances Specification**

The Regulated Substances Specification is a list of substances that Apple restricts from being included in Apple products or used in their manufacturing.

## **Corporate Environmental Health and Safety Policy**

Apple is committed to protecting the environment, health, and safety of our employees, customers, and the global communities where we operate. This policy is contained in the Environmental Progress Report available at [apple.com/environment](http://apple.com/environment).

## **Environmental Progress Report**

Every year, we release a report on Apple's overall environmental performance, detailing our impact and our efforts to reduce that impact. Apple's Environmental Progress Report is available at [apple.com/environment](http://apple.com/environment).

## **Product Environmental Reports**

Key Apple product releases are accompanied by a Product Environmental Report, which provides environmental information relevant to the entire lifecycle impact of that product. Product Environmental Reports are available at [apple.com/environment](http://apple.com/environment).

### **Material Impact Profiles**

This paper details how we prioritized the materials in our products based on their environmental, social, and supply impacts. The prioritized list of materials represent those we will first transition to recycled or renewable content, driving toward our goal of using 100 percent recycled or renewable materials in our products. The Material Impact Profiles are available at [apple.com/environment/pdf/Apple\\_Material\\_Impact\\_Profiles\\_April2019.pdf](https://apple.com/environment/pdf/Apple_Material_Impact_Profiles_April2019.pdf).

### **Supplier List**

The Supplier List contains Apple's suppliers involved in the manufacturing of products, covering 98 percent or more of Apple's spend for 2019.

### **Conflict Minerals Report**

The Conflict Minerals Report serves as our filing to the United States Securities and Exchange Commission for Dodd-Frank Section 1502 related to the sourcing of tin, tungsten, tantalum, and gold from certain countries.

### **Smelter and Refiner List**

The Smelter and Refiner List includes smelters and refiners of tin, tungsten, tantalum, gold, and cobalt in our supply chain.

### **Efforts to Combat Human Trafficking and Slavery Report**

This report meets disclosure requirements for the California Transparency in Supply Chains Act of 2010 and the U.K. Modern Slavery Act 2015.

# Aligning with the United Nations Guiding Principles

Apple's work on Supplier Responsibility aligns closely to the United Nations Guiding Principles on Business and Human Rights (UNGPs). This guide outlines this alignment with content throughout this report, as well as in our additional reports and disclosures.

## A systematic approach to identifying risk

Identifying risks in our supply chain is the first step to eliminating them through improvements to our policies and strategies and through collaborative capability-building with our suppliers. Our efforts to identify and eliminate risks align with the Business and Human Rights Due Diligence process set forth in the UNGPs.

## Identifying, prioritizing, and integrating salient risks

We identify salient human rights risks through the channels we maintain with key stakeholders and partners. These include supplier employee interviews and surveys; quarterly consultations with human rights, labor, and environmental industry experts; expert groups we convene on specialized emerging human rights topics; United Nations and U.S. government labor and human rights reporting and consultations; media reports; results of our supplier assessments; discussions with supplier management teams; and incident reports received through our partners around the world.

Risk reports come to us from civil society organizations, news outlets, people in the supply chain or their communities, local whistleblower mechanisms, and third-party hotlines as well as through the reporting mechanisms we make available directly to all supplier employees, Apple employees, and the general public. These reports can come to us in any language and can be anonymous.



When we receive a report, we conduct a thorough investigation and, if necessary, dispatch a team of investigators to be on site. If a violation is discovered, a Corrective Action Plan is immediately put in place, requiring violations to be remediated within 90 days.

Our approach to prioritizing salient risks draws from the UNGP's key concepts of scale (gravity of the impact on human rights), scope (the number of people impacted), and remediability (the resources and partnerships required to remediate an identified risk).

As we identify and work to eliminate salient risks, we integrate the findings and learnings into the annual updates to our Code and Standards.

### **Policy commitment**

What does the company say publicly about its commitment to respect human rights?

See the letter at the beginning of this report from Sabih Khan, Apple's Senior Vice President of Operations, that outlines Apple's commitment to respect for human rights.

### **Embedding respect for human rights**

How does the company demonstrate the importance it attaches to the implementation of its human rights commitment?

Does the company have any specific policies that address its salient human rights issues and, if so, what are they?

For information on embedding respect for human rights, please reference the following resources:

- Apple's 2020 Supplier Responsibility Progress Report (this document)
- Apple's 2020 Conflict Minerals Report
- Apple's 2020 Efforts to Combat Human Trafficking and Slavery Report

## Assessing impacts

- Statement of salient issues
- Determination of salient issues
- Choice of focal geographies
- Additional severe impacts

How does the company identify any changes in the nature of each salient human rights issue over time?

For information on how Apple assesses impacts, please reference the following resource:

- Apple's 2020 Supplier Responsibility Progress Report, specifically the sections titled "A systematic approach to identifying risk" and "Identifying, prioritizing, and integrating salient risks"

## Integrating findings and taking action

How does the company integrate its findings about each salient human rights issue into its decision-making processes and actions?

For information on how Apple integrates findings and takes action, please reference the following resources:

- Apple's 2020 Supplier Responsibility Progress Report, specifically the sections titled "Identifying, prioritizing, and integrating salient risks," "No one should have to pay to work," and the entirety of the report's Measurement section
- Apple's 2020 Conflict Minerals Report
- Apple's 2020 Efforts to Combat Human Trafficking and Slavery Report

## Tracking performance, communicating performance, remediation

Tracking performance: How does the company know if its efforts to address each salient human rights issue are effective in practice?

Communicating performance: Application of the UN Guiding Principles Reporting Framework

Remediation: How does the company enable effective remedy if people are harmed by its actions or decisions in relation to a salient human rights issue?

What is the company's approach to engagement with stakeholders in relation to each salient human rights issue?

For information on how Apple tracks and communicates performance and carries out remediation, please reference the following resources:

- Apple's 2020 Supplier Responsibility Progress Report, specifically the sections titled "Identifying, prioritizing, and integrating salient risks," "No one should have to pay to work," and the entirety of the report's Measurement section
- Apple's 2020 Conflict Minerals Report
- Apple's 2020 Efforts to Combat Human Trafficking and Slavery Report



Final product inspection,  
Vietnam

## A continuous pursuit of better

We know our work will never be done. We believe that if we aren't finding ways to improve, we aren't looking hard enough. We're always listening, learning, and challenging ourselves to do better and we share our best thinking with leading organizations, industry associations, and governments. By forging solutions together, everyone can achieve progress more rapidly.

