



# People and Environment in Our Supply Chain

2022 Annual Progress Report



**“At Apple, we are constantly innovating in the technology we make and in how we make it — with respect for people’s rights, for their health, and for the planet we share.”**

**Tim Cook**  
*CEO*



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# A letter from Sabih Khan

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**At Apple, our North Star is creating great technology that empowers people and enriches their lives. That goal and our values have only proved more essential through periods of global challenge — as we've continued to innovate and deliver for our customers. And this year, I'm deeply proud of how teams across Apple worked together in service of that mission.**

We've always been a company that cares deeply about the details — of the products we create, and how we make them. Our annual People and Environment in Our Supply Chain Report is a testament to that. It's also an opportunity to pull back the lens, share our high standards for rights protections and health and safety, and lay out our roadmap for a supply chain that's even better for people and the planet.

This year, we continued to navigate the enduring challenges of a global pandemic, requiring us to adapt and find new ways to put people's health first. Working closely with our suppliers, we carried forward the lessons learned from last year — from regular health screenings, to encouraging our suppliers' employees to get vaccinated and boosted where available, to partnerships with NGOs in their work to limit the spread in local communities. And we shared the COVID-19 tools and resources we've developed over the past two years with more than 170 companies across industries.

Through every challenge, we've continued to push forward in our work to raise standards across industries and support people across our global supply chain. That begins with the high standards we set in our Supplier Code of Conduct — grounded in internationally-recognized principles, Apple's Human Rights Policy, and the values that have always guided our company. To uphold those standards, this year, our teams and independent auditors conducted 1,177 assessments of our supplier facilities in 52 countries. We engaged more than 350,000 supplier employees about their workplace experiences. And for new suppliers, we conducted extensive on-boarding to be sure they abide by our Supplier Code — in their respect for people's rights and for the planet.

This year, we also made progress toward our 2030 goal of becoming carbon neutral across our entire business, including our supply chain and product usage. More than 175 of our suppliers have committed to using 100% renewable energy for their Apple

production. We've diverted more than 2 million tons of waste from landfills since 2015, and saved more than 50 billion gallons of freshwater since 2013. And new innovations in recycling, robotics, and material technologies mean we are recovering more materials and using more recycled content in our products than ever.

Teams across Apple are carrying our environmental work forward, demonstrating that truly advanced manufacturing must be good for people and the planet. They are pushing the boundaries of what is possible, while bringing new clean energy online for companies and their communities. And we see enormous potential to continue ushering in the future of green manufacturing — one where industry-wide innovation spurs a wave of progress.

We're always looking for opportunities to keep pushing our progress forward. That's why this year, we're also announcing a new, \$50 million Supplier Employee Development Fund to form additional partnerships with universities, non-profits, and international human rights organizations to the benefit of people around the world who are part of our global supply chain.

That includes the launch of a number of new educational initiatives — including virtual and in-person courses in professional development, coding, robotics, and advanced manufacturing fundamentals. Since 2008, our education and training programs have already reached more than 5 million people, and we're excited to partner with educational leaders around the world to reach many more.

We're also building on partnerships with the International Organization for Migration and the International Labor Organization, supporting their work to drive improvements in workplace protections across industries. And we're working with non-profit partners to scale a best-in-class digital workers' rights training across our supply chain. To date, more than 23 million of our supplier employees have been trained on their rights — and this new partnership will bring even more consistency to the trainings our suppliers implement today.

As we continue to expand our work, we are pleased to be partnering with UN agencies, universities, non-governmental organizations, and our suppliers. To date, we've supported more than 60 organizations — including human rights and environmental defenders — in our work to empower local voices, support community leaders, and ensure people across our supply chain are treated with dignity and respect. Apple's work here is an exercise in collaboration and partnership, and will continue to be long into the future.

As we turn the page on another year, we're reminded of our urgent, collective responsibility to build a better world. We believe that progress can only happen when people's rights are respected and their voices are heard. Our focus on empowering our customers with the best technology in the world starts with our commitment to empowering the people making the products.

## – Sabih



Sabih leads Apple's global supply chain, which includes Environment and Supply Chain Innovation.

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Final Assembly, Ireland

2021

**in Review**

# 2021: By the numbers

Covering Apple's fiscal year 2021 (September 27, 2020- September 25, 2021) except where noted

<p><b>Labor and human rights</b></p>	<p><b>\$50M</b> committed to worker rights training and supplier employee education programs through our Supplier Employee Development Fund</p>	<p><b>\$33.2M</b> in recruitment fees paid back by suppliers to 37,322 of their employees since 2008</p>	<p><b>Health, safety, and education</b></p>	<p><b>2nd Year</b> receiving U.S. EPA Safer Choice Partner of the Year Award for safer chemistry leadership</p>	<p><b>2.95M+</b> supplier employees reached by our health and wellness program since 2017</p>
<p><b>23.6M+</b> supplier employees trained on their rights since 2008</p>	<p><b>1.5M</b> workers whose working hours are monitored on a weekly basis for compliance with our strict labor standards</p>	<p><b>60+</b> organizations supported by Apple, including human rights and environmental defenders</p>	<p><b>170+</b> companies across industries provided access to Apple's COVID-19 tools and resources, sharing Apple's key learnings from the pandemic</p>	<p><b>5M+</b> education, professional development, and enrichment course participants since 2008</p>	<p><b>15K+</b> participants in Swift coding program since 2017; 14 apps developed and launched by supplier employees in 2021</p>
<p><b>Environment</b></p>	<p><b>1st</b> in the industry to achieve a battery containing 100% responsibly sourced and recycled key minerals</p>	<p><b>2,000+</b> supplier energy efficiency projects in progress — a 39% increase year-over-year</p>	<p><b>Supplier performance</b></p>	<p><b>1,177</b> assessments conducted in 2021 reporting period, including 291 smelter and refiner assessments*</p>	<p><b>52</b> countries where assessments were conducted</p>
<p><b>175+</b> suppliers committed to transitioning to 100% renewable energy for Apple production, representing 9 gigawatts of clean energy to be brought online</p>	<p><b>50.3B</b> gallons of freshwater saved by suppliers in our Clean Water Program since 2013, with participants achieving a 41% reuse rate</p>	<p><b>2M+</b> metric tons of waste diverted from landfills by suppliers in our Zero Waste Program since 2015; 491K diverted in fiscal year 2021</p>	<p><b>352,589</b> supplier employees directly engaged about their workplace experiences</p>	<p><b>100%</b> of identified tin, tantalum, tungsten, gold, cobalt, and lithium smelters and refiners assessed through third-party audits</p>	<p><b>9%</b> of prospective suppliers evaluated for Code-related risks were prevented from entering our supply chain since fiscal year 2020</p>

\*Apple reports 3TG smelter and refiner assessment information on a calendar year per U.S. Securities and Exchange Commission (SEC) requirements. See our annual Conflict Minerals Report by visiting <https://www.apple.com/supplier-responsibility/>



# 2021: Highlights

**In 2021, the world continued to reflect, adapt, and take account of what is important, as the COVID-19 pandemic continued to impact every corner of the globe. For us, our focus remained unchanged: safeguarding the rights, health, and safety of our employees, customers, and the people in our supply chain.**

People are at the center of everything we do and every decision we make. While the pandemic has changed some of the ways we do our work, our underlying values are the same. The people and partnerships we have cultivated over the years throughout our supply chain have allowed us to continue to make significant progress — from labor and human rights, to worker health and safety, to unprecedented achievements in climate action and the stewardship of natural resources.

Yet, as proud as we are of our progress, we know each year and each achievement is just a stepping stone in our continuous pursuit of 'better.'

## Scaling labor rights and educational opportunities through our Supplier Employee Development Fund

We announced our Supplier Employee Development Fund, a \$50 million commitment to empower the people in our supply chain through the development of best-in-class labor programs — addressing worker rights training, grievance mechanisms, and responsible labor recruitment — as well as the establishment of a global Education Hub to scale the expansion of the skills necessary for the future of work in our supply chain and surrounding communities.

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## Responsible procurement

As a result of our responsible procurement process, 9 percent of prospective suppliers evaluated for Code-related risks have been prevented from entering our supply chain since fiscal year (FY) 2020 for being unable or unwilling to meet our Apple Supplier Code of Conduct ("the Code") and the Apple Supplier Responsibility Standards ("the Standards").

We continued to extend our support to help prospective suppliers correct compliance issues found during the supplier selection process. Since FY2020, 68 percent of companies who were not awarded our business opted in to receive this additional support, helping to protect people and the planet beyond the reach of our business and supply chain.

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## A responsibility that grows with our business

We continued to conduct independent, third-party assessments focused on non-manufacturing suppliers, and continued expanding the application of our Code and Standards to suppliers supporting our growing services business, including Apple TV+ and Apple Fitness+, as well as certain renewable energy project developers and service providers.

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## Amplifying worker voice

We interviewed 87,626 supplier employees (a 69 percent increase over 2020) about their workplace experiences as part of supplier assessments, and 42,230 follow-up phone calls were made in order to verify that those employees were not retaliated against. We also anonymously surveyed 264,963 supplier employees (a 90 percent increase over 2020) in 191 facilities about their workplace satisfaction. This resulted in 3,944 actions taken by suppliers to address their employees' feedback, including providing better commute options, increasing wages and bonuses, offering better food options, and improving the skills of entry-level managers.

We also launched a third-party grievance hotline awareness campaign to more than 220,000 supplier employees in China, with plans to expand to other countries. This resulted in an immediate increase in the utilization of these worker feedback channels by 22 percent.

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## Supporting local human rights and environmental defenders

In 2021, we supported more than 60 organizations, including human rights and environmental defenders working in their own communities around the world. This includes the Fund for Global Human Rights, which supports frontline activists working on a range of economic and social rights issues in mining communities, as well as the Thomson Reuters Foundation and their work to support journalists reporting on human rights issues, advancing media freedom, fostering more inclusive economies, and promoting human rights.

We also continued to support whistleblowing mechanisms in the Democratic Republic of the Congo (DRC), which enables people in and around mining communities to anonymously raise concerns related to mineral extraction, trade, handling, and exporting.

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## Protecting workers through greater rights awareness

Since 2008, more than 23.6 million people in our supply chain have received workplace rights training that covers international labor standards, local labor laws, environmental health and safety, and the labor and human rights protections required by our Code and Standards. In 2021, we launched a new digital platform to deliver enhanced training directly to supplier employees based on input we received from them through focus groups.

We also continued our partnership with the international development organization Pact to deliver rights awareness training to more than 77,000 miners, youth, and local officials in Democratic Republic of the Congo (DRC) mining communities.

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## Supporting workers throughout their labor recruitment journey

We conducted extensive mapping of labor agencies in our supply chain, identifying 1,182 labor agencies supporting 482 facilities in 32 countries. These labor agencies represent over 870,000 workers, with more than 427,000 of them working on Apple production lines. We also began requiring prospective suppliers in India, South Korea, Malaysia, Taiwan, Thailand, and Vietnam to undergo labor agency mapping and responsible recruitment training as part of our supplier selection process.

In collaboration with our strategic partner, the International Organization for Migration (IOM), we also expanded our Responsible Labor Recruitment Toolkit training to more than 39 additional supplier facilities in 10 countries, reaching nearly 77,000 workers globally.

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## Supporting supplier employees through better health and wellness

We consulted with 1,600 supplier employees to develop more tools, resources, and information about mental health, diet and exercise, relaxation, personal hygiene, and sleep. In Vietnam, 7,900 supplier employees received important reproductive health information and assistance as a result of our women's health program.

We also helped suppliers prioritize mental health by partnering with a top university and mental health experts to consult with supplier employees about their mental health needs. As part of this partnership, suppliers also worked with experts to use aggregated, anonymous findings to develop action plans for providing better resources facility-wide.

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## Building a culture of safety

In addition to beginning development of a new safety culture guide, we also rolled out comprehensive guidelines articulating our fire safety requirements on anodizing and plating processes to 122 key supplier facilities.

We continue to drive machine safety improvements across our supply chain by providing customized, expert-level support to 212 supplier sites in order to identify gaps and help them improve their safety performance.

We also collected chemical and safety data from more than 1,000 supplier sites, identifying the chemicals being used in those facilities, as well as data on their storage and handling processes, and the safety measures being implemented to keep workers safe.

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## Empowering supplier employees through educational opportunities

As part of our \$50 million Supplier Employee Development Fund, we have established the Apple Education Hub which will support suppliers in the U.S., China, India, and Vietnam as part of the initial rollout, with the goal of reaching more than 100,000 supplier employees with new learning opportunities by 2023. These expanded opportunities will include everything from leadership training and technical certifications to classes on coding, robotics, and advanced manufacturing fundamentals.

Our Swift coding program saw a significant increase in the number of advanced coding graduates in 2021 as a result of our new hybrid learning, which combined in-class lessons with online webinars. Since 2017, a total of 15,852 supplier employees have graduated from the program, and in 2021, participants used their coding skills to develop and launch 14 apps on Apple's App Store.

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## Protecting workers through safer chemistry

We received the U.S. Environmental Protection Agency's (EPA) Safer Choice Partner of the Year Award for the second year in a row, in recognition of our leadership in safer chemistry.

This includes partnering with a number of leading green chemistry organizations to scale safer chemistry in manufacturing around the world. This includes working with the IPC to develop a new standard to more clearly define what constitutes a "green" cleaner for electronics manufacturing, and partnering with Clean Production Action (CPA) to develop a new certification for assessing the safety of cleaners used in the electronics industry and beyond. We are also partnering with ChemFORWARD to maintain a public list of cleaners that meet the CPA standard, making it easier for suppliers to choose safer cleaners.

We are also a founding signatory of the Clean Electronics Production Network's (CEPN) Toward Zero Exposure program, a public platform for companies across the electronics industry to commit to and report on their efforts to eliminate workers' exposure to hazardous chemicals in manufacturing.

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## Closing the loop on materials

We made great strides in 2021 toward our goal of using only responsibly sourced, recycled and renewable materials for our products and packaging.

This includes 100 percent recycled rare earth elements in the magnets of key components across products, such as MacBook Pro, iMac, iPhone 13, iPad (9th generation), Apple Watch Series 7, HomePod mini, and AirPods (3rd generation).

iPhone 13 features 100 percent recycled gold for major components, including the plating of the main logic board and the wire in the front camera and rear cameras, and every model in the iPad lineup now features 100 percent recycled aluminum enclosures — bringing us closer towards our goal of ending our reliance on mined materials for our products.

We also achieved an industry first — a battery containing 100 percent responsibly sourced and recycled key minerals, including cobalt and lithium.

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## Responsibly sourcing materials and supporting local communities

As we make progress toward our goal to use only recycled and renewable materials in our products and packaging, we continue to source primary materials responsibly. 100 percent of the identified tin, tungsten, tantalum, and gold (3TG), cobalt and lithium smelters and refiners in our supply chain have participated in independent, third-party audits to assess and identify social, environmental, human rights, and governance risks.

Our Risk Readiness Assessment (RRA) continues to be utilized by downstream companies, upstream refiners, and mining companies across the industry via the Responsible Minerals Initiative (RMI), with 366 RRAs completed in 2021, compared with 341 completed in the previous year.

Through our partnership with Pact, we continued our support for mining communities in and around the regions where primary materials for our products are sourced. This includes support for Pact's WORTH program, bringing financial literacy and access to local mining communities in the DRC.

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## Eliminating waste from manufacturing and local communities

In FY2021, suppliers in our Zero Waste Program diverted 491K metric tons of waste from landfills, bringing the total to 2.01 million metric tons since 2015. This includes 100 percent of our final assembly sites for iPhone, iPad, Mac, Apple Watch, Apple TV, AirPods, HomePod mini, and Beats, which maintained their zero waste performance. Our Zero Waste Program has scaled from 55 supplier sites in FY2020 to 215 supplier sites across 12 countries in FY2021.

In partnership with the certification body UL, we pioneered the industry's first supply chain zero waste management system assurance program, which verifies a company's zero waste program at a systems level rather than an individual level, allowing for much faster adoption of zero waste practices across a supplier's business.

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## Accelerating our supply chain toward a carbon neutral future

As of FY2021, more than 175 of our suppliers have committed to using renewable energy for their Apple production, which will bring more than nine gigawatts of clean energy online.

At the same time, as we are increasing our suppliers' use of renewable energy, we are also reducing our Scope 3 carbon emissions — all indirect emissions that occur in our value chain, including upstream and downstream activities — by reducing their overall energy use. In FY2021, more than 100 supplier facilities participated in our energy efficiency program, actively tracking and reporting on more than 2,000 projects.

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## Stewarding water resources for the planet and communities

Access to clean, safe water is a human right, and a precious shared resource. Since 2013, suppliers in our Clean Water Program have collectively saved more than 50 billion gallons of water across 10 countries and regions, helping to better ensure availability of freshwater in communities where our products are manufactured.

We also continued to drive water stewardship across our supply chain, far beyond the walls of our supplier facilities. Since 2018, 17 supplier sites have achieved the rigorous Alliance for Water Stewardship (AWS) certification, including 4 facilities in FY2021. We also signed a Memorandum of Understanding (MOU) with Suzhou Industrial Park Administration Committee and TEDA Eco Center with the aim of helping to make Suzhou Industrial Park, in Suzhou, China, the world's first industrial park to achieve certification through the Alliance for Water Stewardship. Of the more than 1,700 manufacturers operating out of the industrial park, 11 of them are Apple suppliers, helping to further scale water stewardship across the industry.

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# Our Values in Action | Scaling labor rights and educational opportunities

**We announced a \$50 million Supplier Employee Development Fund to amplify worker voice, and expand access to learning and skill development opportunities to more people in our supply chain and surrounding communities.**

Part of this commitment will support new and expanded labor programs reaching more than 3.5 million supplier employees in over 40 countries, aided by our strategic partners, including the International Labour Organization (ILO) and the International Organization for Migration (IOM).

Building on our long history in the labor and human rights space, as part of this commitment, we will be working alongside these leading rights organizations to develop and scale best-in-class worker rights training and digital tools; expand worker voice and grievance channels to ensure more effective communication between management and employees; advance fundamental labor rights beyond Apple's supply chain, including our Responsible Labor Recruitment program; and invest in new strategic partnerships to further empower supplier employees and drive improvement in workplace protections across the industry.

And while Apple has offered in-person and virtual education, skill-building, and enrichment courses since 2008, this new commitment will mark a significant expansion in the scope of these offerings for people in our supply chain — and the surrounding communities — through the launch of a global Apple Education Hub. The initiative, which builds on the momentum of our current education programs, will bolster our existing supplier employee education programs, and add exciting new offerings, while providing a scalable platform to develop the skills necessary for the future of work in our supply chain and surrounding communities.

With initial programming launching in the U.S., China, India, and Vietnam, we expect more than 100,000 supplier employees to participate in new learning opportunities by 2023 — from leadership training and technical certifications, to classes on coding, robotics, and advanced manufacturing fundamentals.

# Our Values in Action | Update on our COVID-19 response

**While the world continues to adapt to the COVID-19 pandemic, we've continued to prioritize health and safety. As we help customers around the world stay connected by delivering new and innovative products and services, our ongoing partnerships with our suppliers remain as important as ever.**

We are working together with our suppliers to help them ensure that every necessary precaution is taken to keep people safe at work. These actions are also accompanied by permanent enhancements to our supplier requirements that are designed to put health and safety first, now and always.

## **Supplier Infectious Disease Preparedness and Response (IDPR) Standard**

In 2020, we introduced an enhancement to our Code and Standards — which outlines our requirements for suppliers in the areas of labor and human rights, health and safety, environment, management systems, and ethics — specifically addressing Infectious Disease Preparedness and Response (IDPR). IDPR contains a set of new requirements resulting from our learnings during the pandemic, which will help our suppliers better prepare for and be ready to respond to an infectious disease outbreak at their facility. As part of the rollout of IDPR in FY2021, we conducted more than 200 onsite and remote specialized assessments to verify suppliers' compliance with COVID-19 control protocols in order to drive improvement when necessary. We also regularly distribute COVID-19 health and safety guidance and best practices to suppliers across our supply chain.

## **Safeguarding worker rights during COVID-19**

In order to safeguard the rights, health, and safety of workers, we've partnered with the International

Organization for Migration (IOM) — the world's leading organization providing services to migrant workers — to provide support to migrant workers impacted by the pandemic.

This includes working with suppliers in circumstances where they are required to provide temporary housing to their employees. The IOM has assessed suppliers' temporary housing to ensure they meet both IOM and Apple's standards, as well as international standards and best practices, and ensure workers' freedom of movement is not impeded. Our suppliers also work closely with local authorities to provide regular COVID-19 tests for employees living onsite, and to work towards a plan that allows for the safe reopening of facilities, while always prioritizing the health and safety of employees and the community.

## **Supporting mining communities**

Throughout the COVID-19 pandemic, we have continued to help communities deeper in our supply chain through our long-time partnership with the international development organization, Pact.

With support from Apple, Pact has prepared and coordinated activities to prevent the spread of COVID-19 in several mining communities in the Democratic Republic of the Congo (DRC). This includes the purchase and distribution of personal hygiene supplies and masks made by graduates of Pact's apprenticeship program, as well as sharing

information about preventative measures like mask wearing, hand washing, and social distancing.

Pact, in partnership with local communities, also organized training workshops for community liaisons with the aim of raising awareness of symptoms, prevention strategies, and communication techniques for driving improved health outcomes. This initiative has reached more than 50,000 people through individual and group dialogues on COVID-19 prevention since the program began in December 2020.

## **Sharing our pandemic response strategy with the industry**

We continue to share our tools and best practices with others through our Apple COVID-19 Response Toolkit. This suite of resources, which includes planning tools, signage templates, and a podcast with Apple experts, has been shared through the Responsible Business Alliance (RBA) with more than 170 companies that directly employ more than 6 million people and operate supply chains spanning 120 countries.





Repair Center, United States



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# 01 Holding Ourselves and Our Suppliers to the Highest Standards

Upholding the highest standards

A global responsibility means a global opportunity

Apple's environmental strategy

Our approach to supplier engagement and accountability

Upholding our values from the start

A responsibility that grows with our business

Partnerships that accelerate progress

**Our commitment to people and the planet extends across our supply chain — from manufacturing to services, and to the many places where our suppliers operate. We work closely with our suppliers to uphold the highest standards so that the people in our supply chain are safe and treated with respect, and the environment is protected everywhere that Apple products are made.**

# The Apple Supply Chain

A global network of people and businesses working together to build the best products in the world.

**3 million+**  
people

**52**  
countries

**Thousands**  
of businesses and facilities





# Upholding the highest standards

**Our Human Rights Policy outlines how we treat everyone, including our customers, employees, business partners, and people at every level of our supply chain. We take a very broad view of our supply chain — and the responsibility that comes with it. We consider our supply chain to include everything that goes into designing, building, delivering, supporting, and recycling Apple products, as well as our Retail Stores and all of the services and operations that are part of our supply chain ecosystem.**

## Apple Human Rights Policy

We are deeply committed to respecting internationally-recognized human rights in our business operations, as set out in the United Nations (UN) International Bill of Human Rights, and the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work. Our approach to upholding human rights in our supply chain is based on the United Nations Guiding Principles on Business and Human Rights (UNGPs). We conduct human rights and environmental due diligence in our supply chain to identify risks and work to mitigate them. We also seek to remedy potential adverse impacts, track and measure our progress, and report our findings.

Our Board of Directors adopted the Apple Human Rights Policy and is responsible for overseeing and reviewing it. Apple's Senior Vice President and General Counsel is responsible for its implementation, and reports to the Board and its committees on our progress and significant issues.

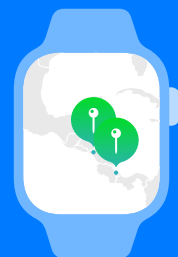
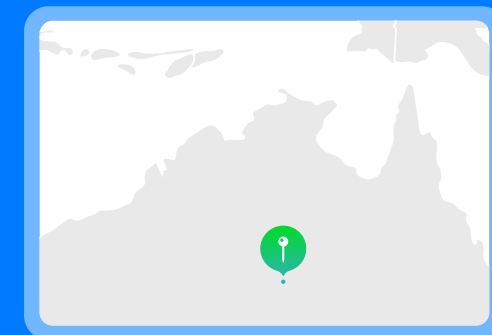
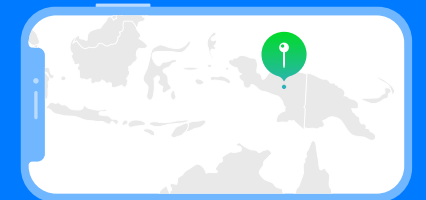
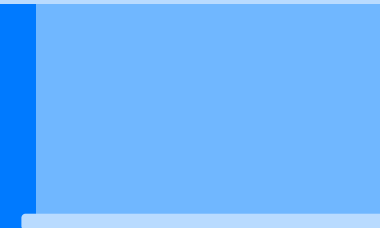
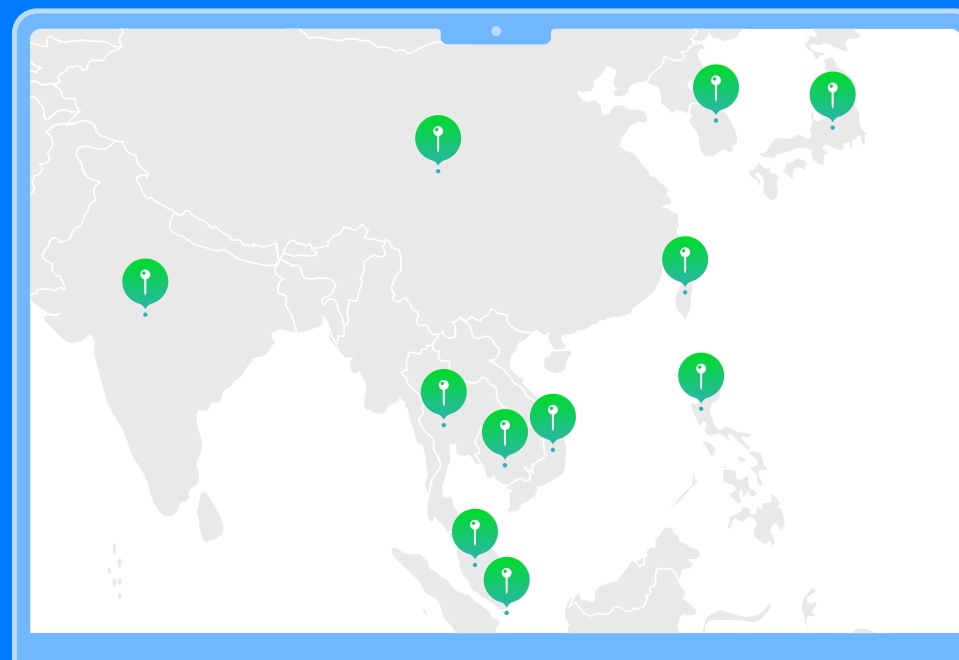
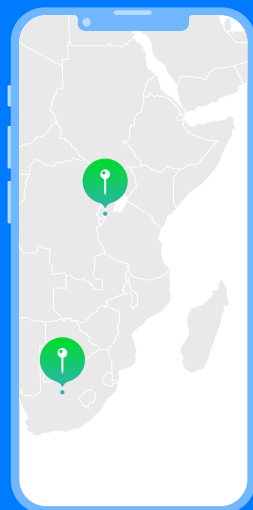
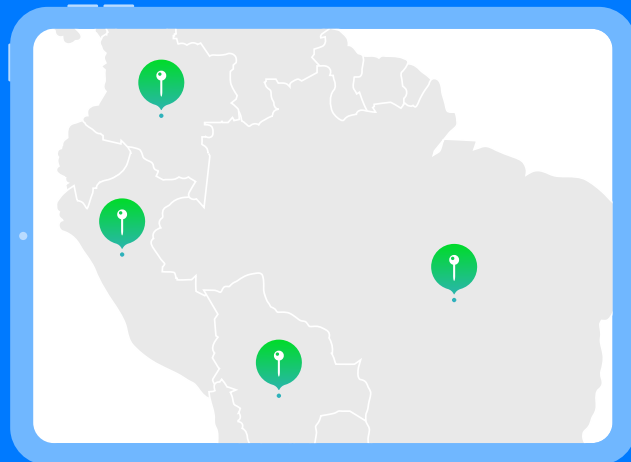
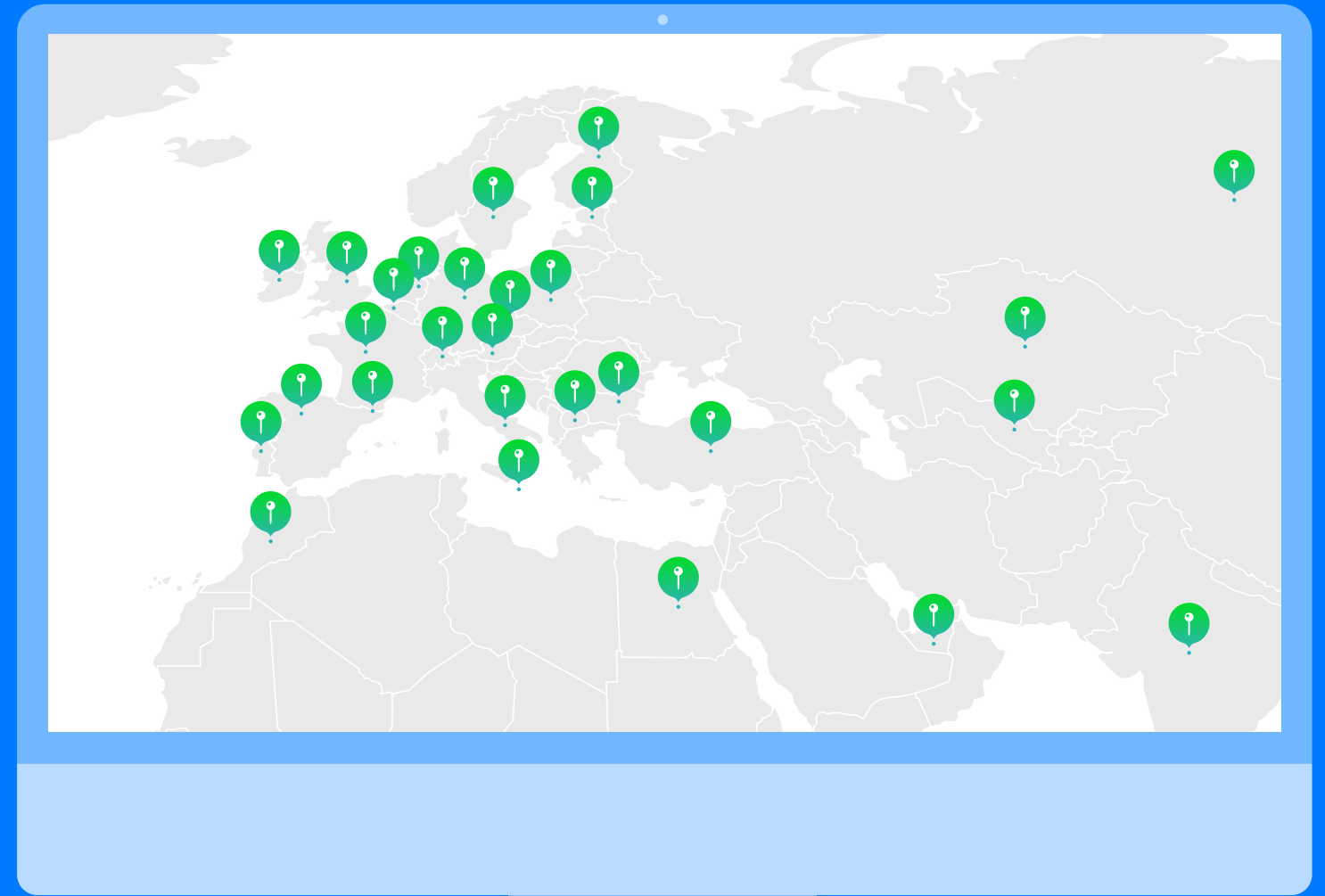
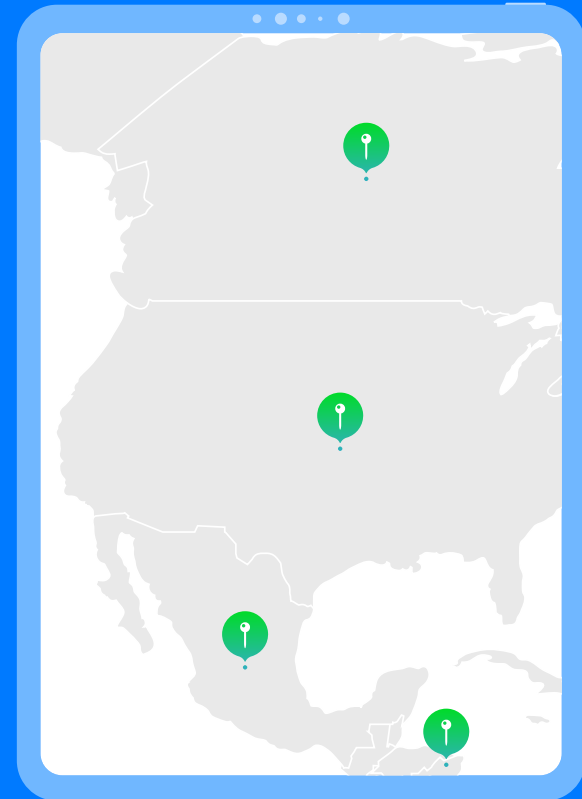
All Apple employees and interns are required to complete mandatory annual Business Conduct training, which educates them on key points of workplace behaviors, conflicts of interest, gifts, confidentiality, competition, privacy, and Apple's Human Rights Policy. Employees receive between two and five hours of training annually, depending

on their location and any potential risks, as well as the responsibilities, associated with their role. We offer additional resources for employees to address questions and concerns, including the Business Conduct Helpline and the Business Conduct website, which allow employees to report concerns anonymously.

In addition, Apple employees are provided with information annually on our Code and Standards, as well as Apple's reporting process for supply chain issues.

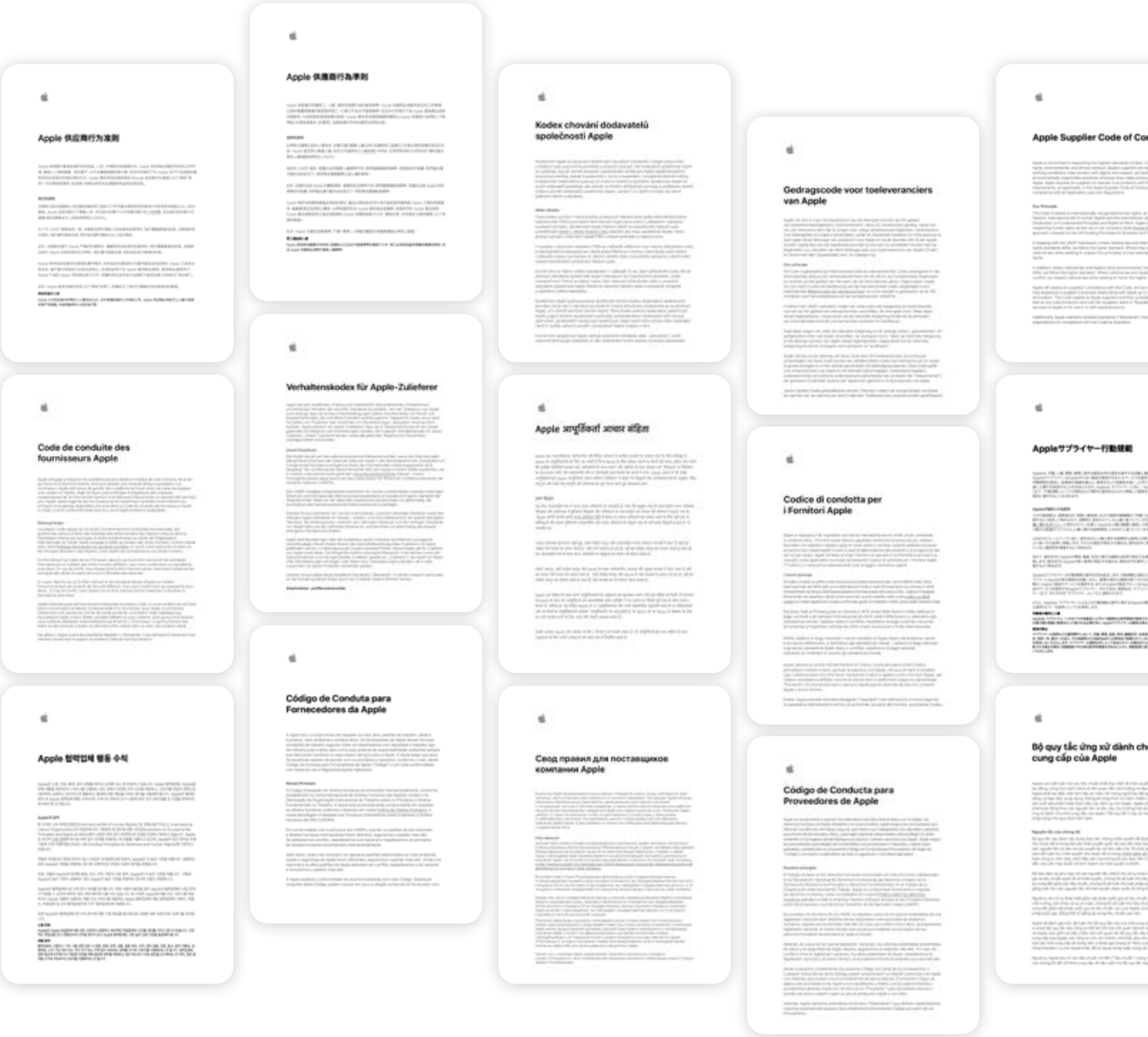
# The Best Products in (and of) the World

Building the best products requires collaboration with suppliers around the world. We design our products in California and work with a global network of suppliers to build them, each bringing their world-class expertise and services to the process. In FY2021, we conducted assessments in more than 50 countries and regions to ensure suppliers everywhere are upholding our high standards.



# The highest standards. Applied everywhere.

The Apple Supplier Code of Conduct and Supplier Responsibility Standards outline our requirements for our supply chain in the areas of labor and human rights, health and safety, environment, ethics, and management systems. Since 2005, the Code and Standards have been updated annually, published on our website in 15 languages, and communicated to our suppliers.





# A global responsibility means a global opportunity

**We are dedicated to creating a supply chain where people are safe at work, treated with dignity and respect, and where the planet is protected everywhere that our business reaches. This responsibility goes far beyond compliance — it is a shared responsibility between Apple and our suppliers to put people first by maintaining the highest standards, quickly addressing and remediating any issues when they do occur, and committing to continuous improvement so they do not happen again.**

Our **Apple Supplier Code of Conduct** (“the Code”) and the **Apple Supplier Responsibility Standards** (“the Standards”) draw upon our Human Rights Policy, and outline our requirements for suppliers in the areas of labor and human rights, health and safety, environment, management systems, and ethics. Our Code and Standards, which are available in 15 languages, are published on our website.

The Standards set our requirements and explain in explicit detail the actions our suppliers must take to be in compliance with our Code. They include broad coverage of human rights topics, including anti-discrimination and abuse, prevention of underage labor, protections for juveniles and students, working hours management, wages, benefits, contracts, freedom of association and collective bargaining, and the responsible sourcing of materials.

We work closely with many experts across Apple — from product and service designers to facility managers — to evaluate and update our Code and Standards annually to address emerging risks, incorporate new legal requirements and industry best practices, and to reflect the needs of supplier employees in a dynamic operating environment. We engage with a range of stakeholders, including rights-holders, civil society organizations, academic experts, and program partners to ensure that our

Code and Standards reflect current internationally accepted labor, human rights, health and safety, and environmental standards.

*See page 21 to learn more about 2021 updates to our Code and Standards.*



## **[How We Work With Suppliers](#)**

To learn more about our Code and Standards and how we implement them through our suppliers, we encourage you to read:

**[How We Work With Suppliers](#)**

### Continual improvement through ongoing stakeholder engagement

As part of our comprehensive approach to identifying and preventing risks, we engage with civil society organizations, governments, NGOs, UN agencies, and other expert stakeholders throughout the year in both structured and informal roundtables and dialogues to help us understand what we are doing well, where we could do more, and to identify emerging areas of risk and opportunity. The feedback we receive directly influences our strategy and programs, and has enabled us to make faster progress in our supply chain. We share the learnings from this process with other companies through industry associations and at relevant conferences to accelerate progress across the industry.

### The Apple Supplier Code of Conduct and the Apple Supplier Responsibility Standards

Developed in 2005 and made stronger each year since, the [Apple Supplier Code of Conduct](#) ("the Code") and the [Apple Supplier Responsibility Standards](#) ("the Standards") outline our requirements for suppliers in the areas of labor and human rights, health and safety, environment, management systems, and ethics. These requirements and the due diligence we conduct on our supply chain aligns with international labor and human rights standards, including those of the International Labour Organization (ILO), the United Nations Guiding Principles on Business and Human Rights (UNGPs), the Organisation for Economic Co-operation and Development (OECD), as well as industry-leading health and safety organizations.

## Below are key updates made to our Code and Standards in 2021. You can read the full document [here](#).

- **Machine Safety:** Enhanced health and safety requirements to explicitly state that suppliers shall evaluate all machinery for safety hazards, including a risk assessment of routine and non-routine work on the machines, as well as risk control/risk mitigation measures. Suppliers are also required to provide instructions and worker trainings to ensure safe operation of machines.
- **Contractor Management for Health and Safety:** New requirement that suppliers must establish and implement a procedure to manage and monitor onsite work by contractors in accordance with all applicable health and safety laws and regulations. This includes, but is not limited to environment, health and safety (EHS) training, performing a risk assessment, and reporting EHS incidents.
- **Chemical Management:** Enhanced standards that combine existing and new requirements to focus suppliers more clearly on chemical handling and storage.
- **Education Program Management:** Strengthened requirements to clarify that suppliers may only hire students in connection with an approved education or training program at an educational institution, and not to meet demand for workforce labor or to fill short-term gaps in their workforce. The approval process for hiring students was also strengthened.
- **Third-Party Employment Agencies (TPEAs):** Strengthened requirements for onboarding processes, bonus payments, and hiring advertisements for Foreign Contract Workers, as well as due diligence and accountability requirements for Third-Party Employment Agencies (TPEAs). Suppliers are also required to ensure that their employees have direct access to the TPEAs through which they were recruited, either through an onsite representative from the relevant TPEA, or an online service which provides prompt responses to worker communications.
- **Foreign Contract Workers (FCWs):** Building on our zero fees policy, we've updated requirements limiting the cost of repatriation FCWs must bear when voluntarily terminating their contracts early without reasonable notice to no more than 60 percent of their one-month net wage. In addition to all fees and expenses associated with recruitment, placement, processing, transportation, and management of FCWs, suppliers are also required to pay any expenses or fees for required testing and vaccinations, such as those needed for COVID-19, as well as accommodations and related expenses for FCWs who are required to quarantine upon arrival to their country of work and/or upon repatriation.
- **Privacy and Data Protection:** New Code provision requiring suppliers to comply with applicable privacy, data protection, and cybersecurity laws.
- **Information Security:** New Code provision requiring suppliers to maintain a security program in accordance with Apple's Information Security and Data Privacy requirements.





Supplier Solar Array, United States



# Apple's environmental strategy

**Environmental rights are human rights. Our environmental strategy touches every aspect of how we design, make, sell, and recycle our products — as well as the labor and human rights, health and safety, and environmental impacts of those actions and decisions.**



## Learn More

To learn more about this strategy and all of the actions we're taking to protect the environment, visit [apple.com/environment](https://apple.com/environment).

Our approach to environmental stewardship takes into consideration our entire business, including corporate operations and our supply chain. Throughout this report, we share the story of the progress we have achieved in our supply chain environmental programs in FY2021. For a more comprehensive look at Apple's broader environmental strategy and progress, see our [Environmental Progress Report](#).

**Three pillars comprise Apple's comprehensive environmental strategy across our entire business, including corporate operations and our supply chain.**



### Climate Change

We've set a goal to become fully carbon neutral across our entire footprint by 2030. We plan to get there by reducing emissions by 75 percent from their 2015 level, and then investing in carbon removal solutions to address the remaining emissions.

- Low-carbon design
- Energy efficiency
- Renewable electricity
- Direct emissions abatement
- Carbon removal



### Resources

We aim to make products and packaging using only recycled or renewable materials. At the same time, we're committed to stewarding water resources and sending zero waste to landfills.

- Materials
- Water stewardship
- Zero waste to landfills



### Smarter Chemistry

Through chemistry innovation and rigorous controls, we design our products to be safe for anyone who assembles, uses, or recycles them — and to be better for the environment.

- Mapping and engagement
- Assessment and management
- Innovation

# Our approach to supplier engagement and accountability

**Through independent, third-party assessments, we confirm our suppliers' compliance with our Code and Standards, and drive improvements. In the 2021 reporting period, 1,177 assessments were conducted in 52 countries. This included 886 Code of Conduct assessments and 291 smelter and refiner assessments.\* Since 2007, Apple-managed assessments have covered 94 percent of our direct manufacturing spend.**

Every year, these independent, third-party assessments also include unannounced assessments and unannounced visits in response to workers' grievances and allegations, or to verify risks at supplier facilities based on predictive analytics. In FY2021, 211 unannounced assessments and investigations were conducted where the supplier facility was provided no advance notice of our arrival.

Our goal is to work together with suppliers to help them improve their management systems, rather than to simply remove them from our supply chain without helping them correct the issues we have discovered. In the event that a supplier is unwilling or unable to improve their operations to meet our requirements, they risk removal from our supply chain. Since 2009, we have directed the removal of 24 manufacturing supplier facilities, and 170 smelters and refiners from our supply chain for being unwilling or unable to improve their operations in order to meet our requirements.



[Learn More](#)

To learn more about our approach to supplier assessments and engagement, see [How We Work With Suppliers](#)

\*Apple reports 3TG smelter and refiner assessment information on a calendar year per U.S. Securities and Exchange Commission (SEC) requirements. See our annual Conflict Minerals Report by visiting <https://www.apple.com/supplier-responsibility/>

Driving high performance and holding suppliers accountable requires strong processes, addressing violations when they are discovered, and validating that corrective actions have been completed. We call these processes Corrective Action Plans and Corrective Action Verifications.

## Addressing Core Violations

Core Violations are the most serious violation of Apple's Code. When a Core Violation is identified, the supplier's Chief Executive Officer (CEO) is notified, and the supplier is immediately placed on probation. Probation is the period beginning when a Core Violation is discovered by Apple, and ending when Apple determines the supplier has completed all corrective actions. Examples of consequences resulting from probation include receiving no new projects, no new business, and the termination of existing business with Apple.

Beyond immediately addressing the Core Violation, suppliers must also make changes in their management system that address the root causes of the violation, take and sustain preventive measures to ensure the violation does not reoccur, and provide remedies to affected workers in line with the UNGPs.

In the case of certain Code violations, such as debt-bonded labor, working hours infractions, and underage labor, we have additional prescribed remediation steps suppliers must take. These are noted in detail in our supplementary guide, [\*\*How We Work With Suppliers\*\*](#).

We consistently engage with, and utilize independent, third-parties to assess our suppliers to verify that they're meeting our high standards. In some cases, when Core Violations are discovered, in addition to our own third-party assessments and

capability-building efforts, we require the supplier to undergo a facility-wide assessment, such as the Responsible Business Alliance's Validated Assessment Program (VAP), which evaluates a facility's entire operations including, but also beyond, Apple production lines. This combined effort works to prevent violations of our Code and Standards.

### The most serious violations are called Core Violations, and can include:

- Abuse
- Underage labor
- Debt-bonded labor
- Forced labor
- Falsification
- Retaliation
- Obstruction of an assessment
- Bribery
- Unsafe or unhealthy environment provided to workers that may cause imminent, significant risk of serious injury, illness, property damage, or any form of loss
- Defeated safety devices or impaired loss control system without additional controls to prevent serious incident
- Inadequate maintenance or intentional circumvention that demonstrates the failure of an environmental abatement system
- Lack of required environmental approvals or controls
- Use of prohibited substances
- Illegal disposal of hazardous waste

## Increasing impact through deeper business engagement

We are always looking for opportunities to raise the bar for ourselves and our suppliers, and to support the development of our suppliers. One way we do this is by expanding the scope of our due diligence to identify emerging risks, drive business engagement internally on an operations level, and use data to better target our resources and support.

By leveraging predictive analytics, years of robust assessment data, and feedback received through third-party hotlines and interviews with supplier employees, we are able to better identify suppliers that require additional support and oversight.

In one instance, we received reports from supplier employees at a facility that the remuneration promised by labor recruiters at the time of hiring differed from what the supplier offered upon employment. Because similar complaints were lodged by several supplier employees around the same time, we suspected this was a larger problem at this facility. In response, we conducted a focused audit at the facility, interviewing hundreds of supplier employees, and found that the labor recruitment agencies had been inflating hiring bonuses to attract more employees, and the supplier had not conducted sufficient labor recruitment agency due diligence. We required immediate action from the supplier to correct the issue, including complete payment of the outstanding bonuses to the impacted supplier employees within 30 days, termination of their business relationship with the labor agencies involved, and requiring the supplier to establish additional due diligence procedures to monitor labor agency recruitment to prevent recurrence.



## How we drive our standards across our supply chain

### Early engagement

We embed our standards from the earliest stages of product design and development. This influences the selection of our suppliers, materials, and the processes and equipment we use to make our products.

### Code of Conduct assessments

These include worker and management interviews, site walkthroughs, and reviews of supplier documentation.

### Specialized assessments

Suppliers may receive additional specialized assessments based on the nature of their business or employee population.

### Investigations

We promptly investigate concerns, typically within 24-48 hours, whether reported by an employee, non-governmental organization (NGO), or news report. We then address any issues of non-compliance, work with suppliers to address the root causes of the issues, take and sustain preventive measures, and provide remedies to affected workers.

### Capability-building

We work with suppliers to help them immediately correct any non-compliance, and strengthen their management systems, which improves performance across the supplier's entire operation, benefiting people beyond Apple's business with the supplier.

### Ongoing training

We provide opportunities for learning and development by providing access to subject matter experts and online educational resources.



[Learn More](#)

To learn more about our suppliers' performance in 2021, see 'Supplier Performance and Development' on page 90.

# Our Values in Action | Strengthening Standards for Management of Education Programs

**Apprenticeships and internships can be enriching experiences for students looking to supplement their education and income with hands-on experience in their chosen field. In many countries, completing an apprenticeship, internship, or on the job training is a formal requirement for graduation from technical colleges and vocational training institutions. Many programs are supported through government policy and funding of educational institutions around the world to ensure access to training, the job market, and to address unemployment, particularly in the wake of COVID-19.**

At the same time, students seeking employment to satisfy vocational school or apprenticeship requirements can be vulnerable to recruitment by employers or labor agents that do not give due consideration to their educational goals and requirements. In FY2021, 10 instances were discovered of suppliers hiring students in violation of our Code and Standards to fulfill labor demand requirements, with little or no connection to the students' educational program of study or training needs, and failure to observe proper legal requirements regarding wages, working hours, and safe job placement. In every one of these cases, we immediately took action to address the issue with the suppliers.

These cases can be complicated to remedy, requiring tailored solutions and ongoing remediation, as it can

be difficult to engage school administrators and trace students after the fact. In cases where we have discovered non-compliance, we have worked closely with suppliers to help them develop plans that address the specific needs of the students, including repayment of missing wages, safe return to their school or home, re-assignment to job postings that fulfill the requirements of the educational or training program, and ensuring full academic credit is received for courses and work experience completed. We then engage with independent, third-parties to verify remediation, and interview teachers and students to verify there is no retaliation.

We have updated our Code and Standards to explicitly state that suppliers may only hire students in connection with an approved education or training program at an educational institution, and not to meet

demand for workforce labor or to fill short-term gaps in their workforce. We have also strengthened our approval process for such hires.

Suppliers must apply in advance before engaging with educational institutions to ensure the proper management of education programs for apprentices, interns, and other students — such as conducting proper due diligence on the educational institution, matching job placement directly with related fields of study, and ensuring compliance with legal requirements regarding contracts, wages, and working hours. We then confirm compliance with onsite visits and worker interviews.

We recognize that around the world, students of college age and older apply for summer and part-time employment that is not necessarily related to their

area of study. While there are relatively few such workers in our supply chain, students are permitted to apply for jobs at suppliers in their individual capacity, and they are protected by our strict Code and Standards, as are all workers.



# Upholding our values from the start

**We work across our business to implement our standards from the earliest stages of product design and development. From the suppliers we choose to work with, to the materials in our products, to the processes and equipment we use to make them, we embed our values into every detail.**



[Learn More](#)

Read more about how we implement our Code and Standards throughout our supply chain by reading [How We Work With Suppliers](#).

## Responsible procurement

We take a comprehensive approach to identifying and mitigating risks early in the procurement and product development cycles. This includes assessing prospective manufacturing suppliers and facilities to help make sure risks to people and the environment are mitigated prior to the beginning of production. Since FY2020, 9 percent of prospective suppliers evaluated for Code-related risks have been prevented from entering our supply chain for being unable or unwilling to meet our Code and Standards. During the screening process, we regularly conduct onsite independent, third-party assessments to review environment, health and safety (EHS), and labor and human rights risks to assess gaps with prospective suppliers before we award new business.

We also extend our support to help prospective suppliers correct compliance issues found during the procurement process — even if the supplier is not awarded business. This program extension is offered at no cost, and is voluntary. Since 2020, 68 percent of companies who were not awarded business elected to join this program, helping to protect people and the planet beyond the reach of our business and supply chain.

We also engage early in the selection of non-manufacturing suppliers, such as janitorial suppliers for our Retail Stores. In 2021, we updated our Request for Information (RFI) process for potential janitorial service providers in the U.S. and Canada to include criteria to help identify companies that better align with our requirements and standards.

## Identifying and mitigating risks prior to production

Leveraging the latest research, assessment data, and insights, we are continually looking for new opportunities to improve from early product and process design, to material selection, to final production, and logistics. Our approach aims to ensure readiness throughout the product development process:

- **Facility Readiness:** After suppliers are awarded Apple business, we continue to review new facilities entering Apple's chain for EHS risks — as well as opportunities — prior to mass production. This includes verifying Apple's Code and Standards are met during construction of new buildings, and environmental commitments are secured, such as enrollment in our Zero Waste Program, before we start production. In FY2021, we reviewed 97 new facilities as part of this process.

# 01

## Holding Ourselves and Our Suppliers to the Highest Standards

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- **Manufacturing Readiness:** We not only review new facilities, but also new manufacturing processes. In FY2021, we mitigated 216 health, safety, and environmental-related risks before operations started. This included ensuring adequate machine guarding, electrical safety precautions, and fire prevention systems were in place. We also reviewed 149 materials and mitigated their hazards, including chemical exposure to workers, before production began.

### Providing a foundation for success

Once new suppliers are awarded Apple business, we begin the process of helping them quickly get up to speed on our requirements through our supplier onboarding process. This also includes guiding suppliers in establishing comprehensive management systems. In 2021, we expanded our onboarding process to engage new suppliers at an even earlier stage in their working relationship with Apple. We worked with these suppliers — after they were selected for a project, but before they began production — to understand their labor planning and production schedules, analyze the gaps in their recruitment management systems, and monitor their hiring processes in order to help them mitigate issues before they could materialize.



### [Learn More](#)

Read more about how we select and responsibly source materials for our products in the Materials section on page 60.

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# 68%

of prospective suppliers who did not receive business awards opted to receive support in correcting compliance issues discovered during the procurement process

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# A responsibility that grows with our business

**Our values are embedded in every decision we make, from the products we create to the way we build them. Fundamental to this is respecting the rights of every person that is part of Apple's business, including the people who make our products and the broader community. This commitment extends anywhere we and our suppliers operate or source materials.**

## **Standards that go beyond manufacturing**

As Apple's business continues to grow and expand to new areas, we adapt our supplier engagement model accordingly. In 2012, we began extending assessments to suppliers providing services to our call centers, logistics, and repair centers, and we continue to expand our scope to conduct independent, third-party assessments of a growing number of suppliers that support our business outside of manufacturing. These can include suppliers that provide a number of different services, including staffing agencies that support teams across Apple.

Last year, we increased our engagement and expanded the application of our Code and Standards to suppliers supporting newer areas of Apple's business, including those that work with our content services like Apple TV+ and Apple Fitness+. This also includes renewable energy service providers. In 2021, we expanded application of our Code and Standards to the clean energy sector by including references to the Code in our agreements with key renewable energy project developers and service providers.

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# 1,177

assessments conducted in 52 countries

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Final Assembly, India



# Partnerships that accelerate progress

**Achieving meaningful progress requires working together, bringing together the best thinking from across sectors and geographies to design sustainable solutions that drive fundamental change at a systems level — creating a ripple effect for people and communities around the world. We are proud to lead in this space, collaborating with industry associations, civil society organizations, and multi-stakeholder initiatives around the world to promote best practices, to listen to and learn from others' perspectives and experiences, and to scale innovative solutions, helping everyone to achieve progress at a more rapid pace.**



## Alliance for Water Stewardship (AWS)

AWS is a global initiative that fosters collaboration between businesses, governments, and civil society, offering a framework and standard for demonstrating world-class water stewardship practices.

—  
Apple continues to raise awareness and drive the adoption of the AWS Standard among our suppliers and others in our industry in order to advance the sustainability of local water resources around the world.

Apple is the first electronics company to serve on the AWS board of trustees.

Apple participates in the AWS ICT sector working group.



## ChemFORWARD

ChemFORWARD is a value chain collaboration working to advance safer chemistry in product design and manufacturing by expanding access to verified, actionable chemical hazard data and safer alternatives.

—  
Apple is a Co-Design Partner at ChemFORWARD. Apple co-chairs ChemFORWARD's Technical Advisory Group.



## Clean Electronics Production Network (CEPN)

CEPN is a multi-stakeholder initiative working to improve chemical safety in the electronics supply chain.

—  
Apple is a founding member and serves on the Design team for CEPN.





## European Partnership for Responsible Minerals (EPRM)

EPRM is a partnership between civil society, industry, and government focused on responsible artisanal and small-scale mining and sourcing practices, and improving social and economic conditions for mining communities.

—  
Apple is a member of the EPRM.



## Fund for Global Human Rights

The Fund for Global Human Rights is a public foundation that works with local human rights organizations in more than 25 countries around the globe.

—  
Apple partners with the Fund to support grassroots activists, as well as human rights and environmental defenders.



## IMPACT

IMPACT is a non-profit organization that transforms how natural resources are managed in areas where security and human rights are at risk.

—  
Apple supported IMPACT's development of an interactive platform to measure and track human rights risks in mineral supply chains, as well as the impact of supply chain-related activities on social and environmental well-being in artisanal and small-scale mining communities in the Democratic Republic of the Congo (DRC).



## Institute of Public and Environmental Affairs (IPE)

IPE is a leading non-profit environmental research organization based in Beijing dedicated to collecting, collating, and analyzing government and corporate environmental data. Through its platforms and partnerships, IPE works to achieve environmental transformation, promote environmental information disclosure, and improve environmental governance mechanisms.

—  
As the first recipient of IPE's Corporate Information Transparency Index Master's Level Designation, Apple is committed to actively engaging our suppliers in China to help achieve our climate resource conservation goals, and to help others in the industry do the same.



## International Labour Organization (ILO)

The ILO is the United Nations agency for the world of work. The ILO brings together governments, employers, and workers to "drive a human-centered approach to the future of work through employment creation, rights at work, social protection, and social dialogue."

—  
Apple works with the ILO on a number of projects, including those related to rights training and advancing worker voice.

—  
Apple is a member of the ILO Global Business Network on Forced Labor, and serves on the steering committee.



## International Organization for Migration (IOM)

IOM is a United Nations agency and the leading global expert on migration. IOM works to help ensure the orderly and humane management of migration, to promote international cooperation on migration issues, to assist in the search for practical solutions to migration problems, and to provide humanitarian assistance to migrants in need, including refugees and internally displaced people.

—  
Apple partnered with IOM to develop our Responsible Labor Recruitment Toolkit. IOM also delivers training to our suppliers on the Toolkit.



## Pact

Pact is an international development organization that works on the ground in nearly 40 countries to end poverty and marginalization.

—  
Apple partners with Pact to deliver rights awareness training and vocational education programs to miners, youth, and community officials in communities around mining areas in the DRC.



## The Platform for Accelerating the Circular Economy (PACE)

PACE was created by the World Economic Forum, and has been hosted by the World Resources Institute since 2018. PACE brings leaders together to drive ambitious action along the Circular Economy Action Agenda, working together to accelerate the transition to a circular economy.

—  
Apple sits on the Board of PACE.

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## Holding Ourselves and Our Suppliers to the Highest Standards



### Public-Private Alliance for Responsible Minerals Trade (PPA)

The PPA is a multi-sector initiative supporting the ethical production, trade, and sourcing of minerals from the African Great Lakes region.

—  
Apple serves on the Governance Committee, and traveled with the PPA to the DRC and Rwanda in 2019.



### RE100

RE100 is a global initiative bringing together the world's most influential businesses driving the transition to 100 percent renewable electricity.

—  
Apple sits on the RE100 Advisory Committee.



### Responsible Business Alliance (RBA)

RBA is the world's largest industry coalition dedicated to corporate social responsibility in global 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. As a full member, Apple serves in several leadership capacities at the RBA, including:

- Serving on the RBA Board of Directors.
- Founding and steering committee members of the Responsible Labor Initiative (RLI).
- Serving on the steering committee of the Responsible Minerals Initiative (RMI).



### The Clean Energy Buyers Alliance (CEBA)

CEBA is a membership association for large-scale energy buyers, which seeks to democratize clean energy for all energy buyers, and create a resilient, zero-carbon energy future.

—  
Apple serves on the Supply Chain and International Collaboration working group.



### Responsible Labor Initiative (RLI)

Established by the Responsible Business Alliance, RLI is a multi-industry, multi-stakeholder initiative focused on ensuring that the rights of workers vulnerable to forced labor in global supply chains are consistently respected and promoted.

—  
Apple is a founding member and serves on the steering committee of RLI.



### RESOLVE

RESOLVE is a leading sustainability NGO driving sustainable solutions to critical social, health, and environmental challenges by creating innovative partnerships where they are least likely and most needed.

—  
Apple partners with RESOLVE and Tiffany & Co. on the Salmon Gold project, which works with small-scale gold miners and Indigenous peoples in remote regions of the Yukon, Alaska, and British Columbia to support a mining practice that helps restore rivers and streams so that salmon and other fish can thrive.



### Responsible Minerals Initiative (RMI)

Part of the Responsible Business Alliance, RMI is one of the most utilized resources for companies from a range of industries addressing responsible mineral sourcing issues in their supply chains.

—  
Apple sits on RMI's steering committee.

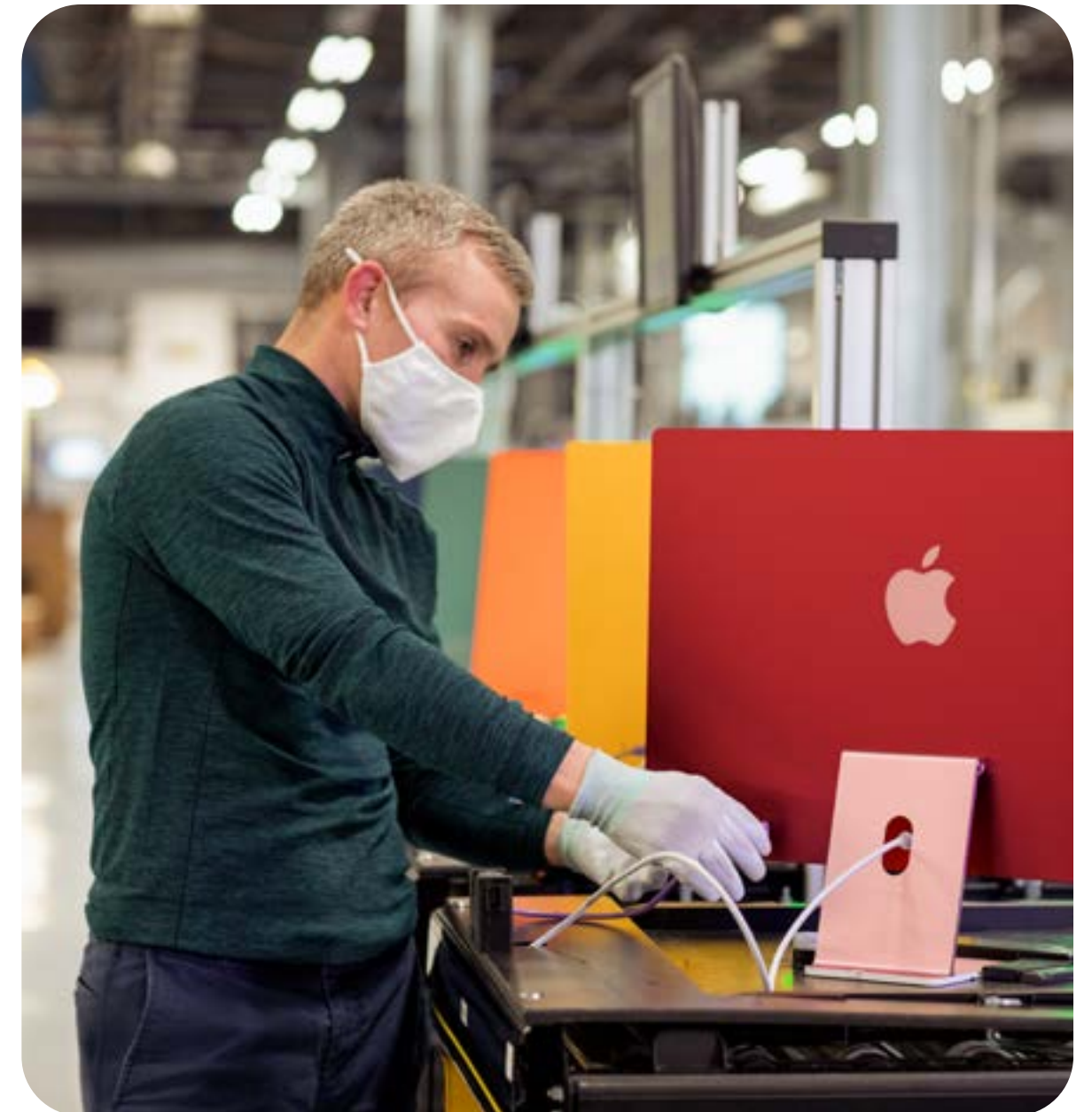
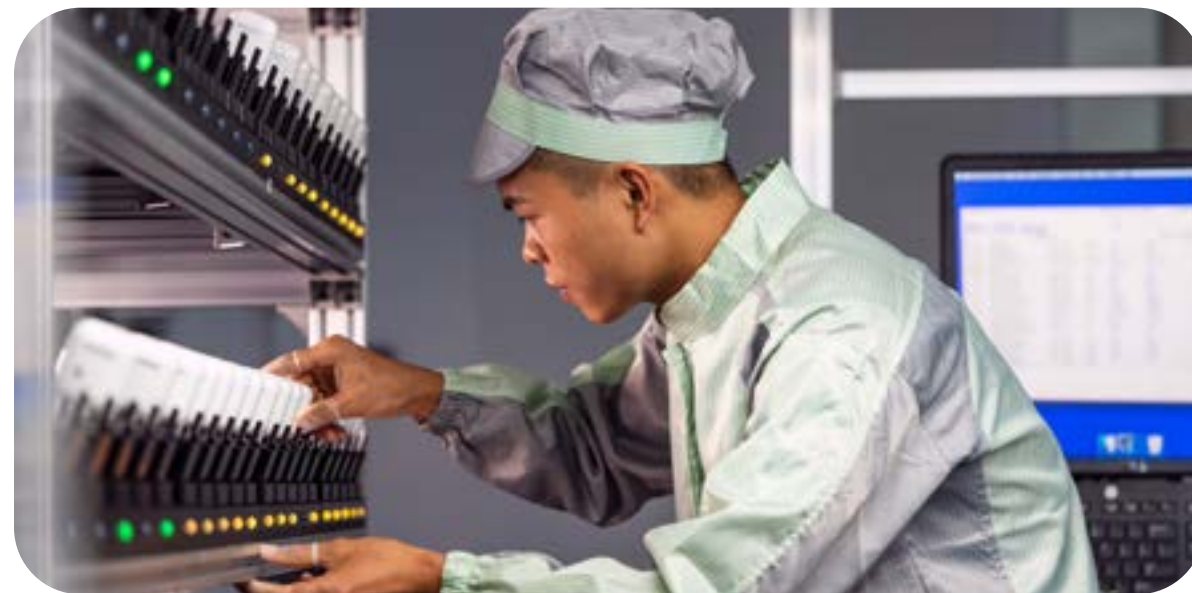


### Working Capital Innovation Fund (incubated by Humanity United)

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

—  
Apple is a founding member of the Working Capital Innovation Fund.





From top to bottom:

Recycling Operations, United States; Final Assembly, India; Final Assembly, China; Final Assembly, Vietnam; Final Assembly, United States; Final Assembly, Ireland



# 02 | Labor and Human Rights

Amplifying worker voice

Improving workplace satisfaction

Supporting human rights and environmental defenders

Responsible labor recruitment

**People come first in everything we do. This is as true and important today as ever, especially as the world continues to grapple with the impact of the global health crisis.**

**Through it all, our commitment to protecting the people in our supply chain has been unwavering, anchored by a simple set of beliefs:**

**People deserve to be treated with dignity and to know their rights. They should be able to speak up if those rights are not being respected — and to know and expect that when they do, we will listen and act.**

**Finally, addressing issues in our own supply chain is not enough. We are committed to working with others to share our lessons and tools, learning from their work, and partnering together to empower everyone to achieve progress more rapidly.**

# 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 hold suppliers accountable at every step.**



### Anti-discrimination

Suppliers 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. Suppliers 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.



### Prevention of underage labor

Suppliers 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. Suppliers 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.



### Working hours

Suppliers must restrict workweeks to 60 hours, including overtime, and workers 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.



### 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 employees. Suppliers shall not impose unreasonable restrictions on movement within the workplace or upon entering or exiting company-provided facilities. Workers shall not be required to pay employers' or their agents' recruitment fees or other similar fees to obtain their employment.



### Juvenile worker protections

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.



### Grievance mechanism

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



### Wages, benefits, and contracts

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.



### Anti-harassment and abuse

Suppliers must commit to a workplace free of harassment and abuse. Suppliers 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 workers' lawful rights to associate with others, form, join, or refrain from joining organizations of their choice, and bargain collectively without interference, discrimination, retaliation, or harassment.



### Educational Program Management

Supplier shall ensure proper management of student programs at supplier's facilities through proper maintenance of student records, rigorous due diligence of educational partners, and protection of students' rights in accordance with Applicable Laws and Regulations. Supplier shall provide appropriate support and training to all such students at supplier facilities.

# Amplifying worker voice

**Effective grievance channels, ongoing worker-management communications, and supplier employee feedback are essential to ensuring respect for, and the well-being of, those working in our supply chain. Whether through social dialogue and formal employee representation, workplace satisfaction surveys, anonymous hotlines, focus groups, or interviews during annual assessments, the feedback we receive directly from supplier employees helps us ensure labor and human rights are respected throughout our global supply chain. We also use this feedback to address emerging risks, improve rights training for supplier employees and management, and to continually strengthen our Code and Standards.**

## **Training supplier employees on their rights**

Respect for human rights begins with rights awareness. Under our Code and Standards, suppliers are required to provide employees training on their workplace rights. This training is generally conducted during new employee orientation, and covers international labor standards, local labor laws, environmental health and safety, and the labor and human rights protections required by our Code and Standards. During this training, supplier employees learn about wage rates, working hours and overtime policies; grievance mechanisms and anonymous hotlines; our zero tolerance for retaliation; and the occupational health and safety standards specific to their worksite and job function, among many other topics. To date, more than 23.6 million supplier employees have been trained by our suppliers on their workplace and human rights.

In 2021, we launched a new digital platform to deliver enhanced training directly to supplier employees in their native languages. The new platform helps to identify gaps in knowledge of labor laws and workplace requirements, and adapts the user experience accordingly to help ensure better comprehension of the material. We conducted focus groups with supplier employees in order to better tailor the content in ways that are most effective and

engaging. We will be expanding this training to additional supplier facilities in 2022.

## **Respecting rights to freedom of association and collective bargaining**

Our Code and Standards state our requirements for suppliers in relation to the right of employees to form or join, or refrain from joining, organizations of their choice, and to bargain collectively. These include requiring suppliers to have written policies on freedom of association, to have grievance mechanisms in place, and to bargain in good faith and honor the terms of any signed collective bargaining agreement. Even where the right to freedom of association and collective bargaining are restricted under local law, suppliers are prohibited from obstructing alternative legal means for supplier employees to associate and to individually and collectively engage with their employer without interference, discrimination, retaliation, or harassment. In 2021, 580 facilities in 22 countries employed unionized workers, and 442 sites had negotiated collective bargaining agreements with their employees.

In 2021, we continued our partnership with the ILO, including in Vietnam where we worked to help educate and raise awareness among our suppliers about new worker protections and labor reforms being implemented across the country, including



requirements related to freedom of association and collective bargaining.

## Listening to rights-holders

Supplier employee interviews are an important part of every assessment conducted. Each year, we interview tens of thousands of supplier employees in their local language and without their managers present, to

# 23.6M+

supplier employees trained on their rights since 2008

# 352,589

supplier employees directly engaged about their workplace experiences, through interviews and satisfaction surveys

# 220,000

supplier employees reached by grievance hotline awareness campaign

determine whether or not their experience on the job aligns with auditors' observations during assessments. In FY2021, despite the ongoing challenges presented by the COVID-19 pandemic, we increased the number of supplier employees interviewed as part of the assessment process to 87,626 — over 35,000 more than were interviewed in the previous fiscal year. We consider retaliation in any form to be a Core Violation of our Code, and last year, more than 42,230 follow-up phone calls were made in order to verify that those supplier employees participating in interviews were not retaliated against.

Our Code and Standards require feedback channels, including grievance mechanisms at supplier sites. In addition, we provide third-party anonymous hotlines and the ability to contact the Apple Environment and Supply Chain Innovation (ESCI) team directly at any time and in any language. When an issue is raised, supplier management is required to immediately investigate and to resolve the issue in a timely manner.

In 2021, we launched an awareness campaign to more than 220,000 supplier employees at key supplier facilities, aimed at increasing awareness of the third-party grievance hotlines. The campaign included the distribution of more than 10,000 information cards and flyers, as well as videos, onsite information booths, and posters displayed around participating facilities. While we will be expanding the campaign to more suppliers in FY2022, the initial rollout resulted in a 22 percent increase in utilization of the third-party hotlines.

## Responding to supplier employee concerns and providing remedy

Worker feedback is essential to cultivating greater transparency and protecting workers' rights. It is also an indication that workers are aware of their rights, and

have enough confidence in the feedback channels to speak freely without fear of retaliation. It also gives our suppliers the opportunity to address and remedy issues, and for us to find better ways to help suppliers improve their performance.

In 2021, the reports we received from supplier employees via hotlines included issues related to wages and benefits, employee relations, amenities at supplier facilities, workforce stability, and health and safety. After further investigation of the reports we received, approximately 40 percent of them uncovered violations of our Code. In each case, we investigated and worked directly with the suppliers to drive improvement and correct any compliance issues found. Suppliers implemented a number of actions as a result of supplier employee feedback through these channels, including improvements to working hours, resignation processes, timing of bonuses, and the use of personal protective equipment (PPE).

## Improving workplace satisfaction

In addition to interviews and grievance channels, which are requirements under our Code and Standards, we also engage with supplier employees in order to understand their overall workplace satisfaction. In 2021, we anonymously surveyed 264,963 supplier employees in 191 facilities across Greater China, India, Ireland, Malaysia, Philippines, Singapore, UK, U.S., and Vietnam about their workplace experiences — nearly double the number of supplier employees surveyed last fiscal year. In order to better identify the issues that matter most to supplier employees, we asked participants to provide feedback on different aspects of their workplaces, including working and living conditions, food,

## Program milestones

### 2021

- Expanded application of our Code and Standards to suppliers supporting content services like Apple TV+ and Apple Fitness+

### 2020

- Code of Conduct assessments expanded to additional services providers, such as those supporting Apple Retail, Apple Maps, and Artificial Intelligence and Machine Learning

### 2017

- Strengthened supplier labor and human rights requirements for wages and benefits, involuntary labor prevention, and student intern management

### 2012

- Code of Conduct assessments expanded to our call centers, logistics, and repair centers

### 2011

- Launched Working Hours program

### 2008

- Debt-bonded labor is defined as a Core Violation in the Code of Conduct
- Launched Worker Rights Training program

### 2007

- Extended Code of Conduct compliance deeper in our supply chain to component manufacturers

### 2005

- 2005 Apple's Code of Conduct created

and management. We then worked with suppliers to analyze the results, and develop action plans to address their employees' needs and concerns. As a result, suppliers took 3,944 actions, including better commute options, increasing wages and bonuses, offering better food variety, and skill development opportunities for entry-level managers.

### Facilitating ongoing engagement between management and workers

A lack of or breakdown in communication between employers and their employees can lead to labor issues and low workplace satisfaction. To foster an environment of greater dialogue and accountability between supplier employees and their managers, we continued our partnership with SCORE Academy, an organization supporting decent work in global supply chains, to successfully launch the SCORE Program, based on training curriculum developed by the ILO. The SCORE Program is aimed at supporting small- and medium-sized businesses in growing and creating better workplaces by engaging supplier employees directly in decision making. The program, which has been launched at supplier sites in China, provides opportunities for management and supplier employee representatives to collaborate on solutions for EHS risks, workplace dialogue, productivity, and issues such as the prevention of harassment in the workplace.

### Supporting human rights and environmental defenders

Empowering local, independent voices is critical to identifying and assessing risks and opportunities deeper in our supply chain. In 2021, we supported more than 60 organizations, including human rights and environmental defenders working around the

world on issues including social and economic rights in mining communities, the prevention of modern slavery, and media freedom.

We've supported many of these organizations through our continuing partnership with the Fund for Global Human Rights — a public foundation that works with local human rights organizations in more than 25 countries around the globe — to equip activists, mobilize movements, and improve lives by supporting groups and individuals working to create lasting change. We've provided financial support to the Fund's frontline activists and human rights defenders working on a range of issues, including economic and social rights of mining communities, inclusive economic growth, judicial advocacy, environmental justice, the rule of law, health and safety, and fair compensation for mining communities. In 2021, with the support of Apple, the Fund partnered with 11 grassroots organizations.

As a former recipient of the Stop Slavery Award, Apple has cultivated a strong partnership with the Thomson Reuters Foundation, supporting their work over the past two years to advance media freedom, foster more inclusive economies, and promote human rights. In 2021, with Apple's support, 14 young human rights defenders were able to participate in Thomson Reuters Foundation's Changemakers Programme. The Changemakers Programme brings together innovators from around the world committed to developing concrete solutions to pressing human rights issues, including climate change, socioeconomic inclusion, and media freedom, as well as data and digital rights.

As part of the program, Changemakers participate in a multi-week program aimed at connecting and building the capabilities of frontline advocates and local independent journalists who are bringing attention to these issues through media.

We also provide support to Thomson Reuters Foundation's TrustLaw, which provides pro-bono legal support, research, training, tools, and resources for human rights and environmental defenders around the world. With a presence in over 175 countries, TrustLaw works with hundreds of legal teams representing over 120,000 lawyers to support more than 4,000 organizations with free legal assistance.



### Learn More

Read more about how we implement our Code and Standards throughout our supply chain by reading [How We Work With Suppliers](#).

## Improving worker satisfaction through better supplier performance

In 2020, a key supplier in Dongguan, China was facing high attrition rates in its workforce, and the results of our survey showed a low level of supplier employee satisfaction.

This particular facility scored below average across multiple survey categories, putting their overall score at the bottom 10 percent of all facilities we surveyed. Our team collaborated with the supplier to further analyze the results and identify opportunities for improvement, which they then implemented, including improvements to food offerings, and increasing wages and bonuses. When the facility was surveyed again in 2021, workplace satisfaction increased across every category, resulting in a 25 percent improvement in the facility's overall worker satisfaction score, and a nearly 6 percent drop in attrition rates. We continue to work with them to drive further improvement.





Final Assembly, India



# Responsible labor recruitment

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**Our commitment to respecting the rights and dignity of those working across our supply chain begins even before a worker ever enters our supply chain.**

## **Protecting workers in our supply chain from forced labor**

Our Code and Standards, and the protections they provide, apply equally to all workers, regardless of a person's job, geographic location, or how they enter our supply chain. This includes zero tolerance for forced labor.

We implement strict policies and procedures with our suppliers to protect workers in our supply chain from forced labor. This includes selecting suppliers for assessments based on factors, such as their geographic location, which may put them at higher-risk of forced labor violations, as well as their previous performance and/or history of violations or allegations. Suppliers may also receive additional specialized assessments based on the nature of their business or employee population, such as those that employ Foreign Contract Workers, and those located in higher-risk migration corridors. Our Code and Standards also require that all supplier employees have an effective mechanism to report grievances. In addition, we provide third-party anonymous hotlines and the ability to contact the Apple Environment and Supply Chain Innovation (ESCI) team directly at any time and in any language. When an issue is raised, supplier management is required to immediately investigate and to resolve the issue in a timely manner.

We strictly prohibit any form of involuntary labor throughout our worldwide supply chain and look for evidence of it in every supplier assessment we conduct, including unannounced assessments. Last year, we conducted more than 1,100 assessments, and found no instances where anyone was forced to work in our supply chain. We did discover two cases in Taiwan where people paid recruitment fees to secure their job, which is a violation of our Code. We required the supplier to directly repay their employees in full, and verified repayment through a third-party auditor.

## **Preventing debt-bonded labor in our supply chain**

We have zero tolerance for debt-bonded labor, which is a Core Violation (the most serious level of violation) of our Code. The payment of recruitment fees, withholding an employee's passport or personal identity documents, or restricting an employee's freedom of movement all constitute salient risks in our supply chain and are violations of our Code and Standards. Since 2008, we have implemented industry leading programs to identify and remedy any such violations.

Suppliers are prohibited from charging workers any fees connected to their labor recruitment and/or

employment, even if those fees fall within the legal limits of the supplier’s operating country or the person’s home country. If we discover the collection of recruitment fees, we require our suppliers to take prompt action to provide remedy to those affected, and make direct repayment of any recruitment fees to their employees. We then verify this repayment via a third-party auditor. From 2008 through FY2021, \$33.2 million in recruitment fees have been repaid to 37,322 supplier employees by our suppliers.

To further strengthen the implementation of our Code and Standards, we conduct specialized debt-bonded labor audits in certain high-risk environments, including high-risk labor migration corridors and in areas where the employment of Foreign Contract Workers (FCWs) typically occurs. While FCWs — those who choose to leave their home countries and seek employment abroad — only make up a small percentage of our supply chain, these workers may be at higher-risk of paying recruitment fees, resulting in debt-bonded labor.

In 2021, specialized debt-bonded labor assessments were conducted in Japan, Malaysia, the Philippines, Singapore, Taiwan, Thailand, Vietnam, and the United Arab Emirates (UAE). The purpose of these assessments is to identify and verify that no

fees were paid by FCWs at any point during their labor recruitment process, and to identify gaps in procedures for recruiting, contracting, and managing FCWs. Each audit includes verification of documents from suppliers and labor agents, as well as interviews with labor agents and FCWs.

### Our approach to responsible labor recruitment

While labor agencies are not Apple suppliers, our Code and Standards apply, which is why we are working closely with suppliers and their labor agencies to ensure they have the training and tools to implement these requirements at the earliest stages of recruitment.

We start by identifying the labor agencies working with our suppliers. We then engage with these agencies and our suppliers to provide them with training on responsible recruitment practices. This is in addition to providing workers with training on their rights before they leave their home country, as well as upon their arrival to our supplier facilities.

In 2020, we conducted an extensive mapping of labor agencies to gain better visibility into the recruitment channels working deeper in our supply chain. In 2021, we expanded this work by identifying 1,182 labor agencies supporting 482 facilities in 32 countries.

These labor agencies represent over 870,000 workers, with more than 427,000 of them working on Apple production lines. We also began requiring prospective suppliers in India, Korea, Malaysia, Taiwan, Thailand, and Vietnam to undergo labor agency mapping and responsible labor recruitment training as part of our supplier selection due diligence process.

We continue to use this information to engage with the identified agencies in order to provide targeted training and capability-building, in order to improve their labor practices, not just for the benefit of those people working in Apple’s supply chain, but hundreds of thousands of people around the world.

### Strengthening due diligence for domestic labor recruitment

The initial focus of our Responsible Recruitment program was on FCWs. Since then, we’ve continued to expand and strengthen our due diligence for workers recruited domestically. In addition to our standard Code of Conduct assessments, we also conduct field visits and interviews with labor agencies to see their recruitment processes first-hand, and conduct focused investigations into supplier hiring processes. In FY2021, we conducted



**From 2008 through FY2021, \$33.2 million in recruitment fees have been repaid to 37,322 supplier employees by our suppliers.**

## Program milestones

### 2021

- Expanded mapping of labor agencies, nearly tripling the number of labor agencies identified across our supply chain

### 2020

- Scaled Responsible Recruitment Toolkit to the industry via RBA
- Conducted extensive mapping of labor agencies in our supply chain

### 2019

- Released Responsible Recruitment Due Diligence Toolkit
- Scaled employment opportunities program for human trafficking survivors across the U.K. and Europe

### 2018

- Received Stop Slavery Award from Thomson Reuters Foundation
- Launched partnership with IOM to create a path for trafficking survivors to obtain full-time employment with Apple suppliers
- Mapped higher-risk migration corridors for Foreign Contract Worker movement and employment in our supply chain
- Scaled efforts to conduct pre-departure orientation training in the supply chain with IOM

### 2017

- Released our first modern slavery statement

### 2015

- Enacted policy prohibiting recruitment fees

### 2014

- Established partnership with IOM

### 2008

- First Code requirement restricting workers’ payment of recruitment fees



146 focused audits and investigations, including monitoring job postings and hiring events on social media channels, to identify non-compliant practices, such as discriminatory job listings, the illegal hiring of students and interns, and the non-payment of sign-on bonuses.

### **Building capabilities across our janitorial supply chain**

We have worked steadily to build the capabilities of our janitorial suppliers as part of our efforts to drive responsible labor recruitment throughout every level of our supply chain.

Beginning in 2015, through our own due diligence, we found that many of the suppliers that provide janitorial services to our retail stores were engaging in layers of subcontracting, making it difficult to have visibility into things like wages, working hours, and their policies and practices around the treatment of their employees. To address this, we restricted subcontracting by janitorial services to one level down with prior permission, a policy which has been in place for many years and has been effective.

We also regularly assess janitorial suppliers through independent, third-party assessments to confirm their compliance with our Code and Standards. These

include one-on-one interviews with janitorial workers, conducted in their native language and without their managers present, covering a variety of topics, including the timing and payment of their wages, whether or not they understand their rights, and if they have access to grievance mechanisms. Through these assessments and ongoing engagement, we are able to identify gaps and opportunities to help suppliers improve — impacting not only those working in our stores, but all of the other people employed through these service providers.

### **Improving labor recruitment practices through tools and training**

We believe that protection starts with rights awareness, and since 2008, more than 23.6 million supplier employees have been trained on their workplace rights. But when it comes to supporting workers throughout their recruitment journey, we recognize that we need to empower every person that is part of this ecosystem — including labor agents and suppliers — to take an active role in ensuring their labor rights are respected at every step.

In collaboration with the International Organization for Migration (IOM) and the Responsible Business

Alliance (RBA), we rolled out our Responsible Labor Recruitment Toolkit to all of our manufacturing suppliers operating in five higher-risk migration corridors in Asia in 2020, as well as to all of our logistics and janitorial suppliers operating globally to help them improve their recruitment due diligence. We continued this work in 2021, expanding to more than 39 additional supplier facilities in 10 countries, reaching nearly 77,000 workers globally, with 66 percent of those working on Apple production lines. In 2021, we continued to add new tools to help suppliers identify and address risks associated with other groups, such as dispatch and sub-contracted workers, or students, interns, and apprentices. We rolled out additional tools for labor agencies to conduct risk assessments, and helped to standardize due diligence processes across our supply chain and industry for labor agency sub-contractors.

We also worked with the educational technology company, Quizrr, to develop digital worker rights training in our supply chain on our responsible recruitment requirements. This training is based on our Code and Standards as well as ILO Core Conventions, and is designed for workers, labor agents, as well as managers and those responsible for hiring at supplier facilities, with the aim of strengthening the knowledge and understanding of responsible labor recruitment

at all levels of the supply chain. The training includes modules on employment practices, workplace policies, workplace dialogue, as well as COVID-19 health and safety best practices.

In 2021, as part of our initial pilot, this training was rolled out to more than 4,600 supplier employees in Taiwan and Thailand, as well as labor agents in the Philippines, with plans to expand to all FCWs during pre-departure training in their countries of origin, as well as during their orientation upon arrival in their destination country.

### **Driving responsible labor recruitment standards across the industry**

While the progress we have made in our own supply chain is significant, we're sharing the lessons we've learned and the tools we've developed in order to help everyone achieve progress more quickly.

In 2020, we partnered with the RBA to customize and scale the Responsible Recruitment Due Diligence Toolkit. In 2021, an additional 20 RBA member companies rolled out the Toolkit across their respective supply chains, helping to build the capacity of workplaces across the industry.

# 1,182

labor agencies identified, supporting 482 facilities in 32 countries

# How We Work to Prevent Forced Labor In Our Supply Chain

Apple has zero tolerance for forced labor. In the more than 50 countries and regions where our suppliers operate, we have teams of experts, including independent third-parties, who monitor our suppliers and put in place industry leading procedures to help ensure that no one is forced to work. Our comprehensive policies start before we even sign a contract with suppliers, and we are consistently raising the bar.

1

## We set the highest standards.

Eliminating forced labor begins with setting and maintaining the highest standards. Our standards often go above and beyond legal requirements to protect people from forced labor risks.



### Aligning with international frameworks.

Apple policies and our supplier requirements align with international labor and human rights standards, including those of the International Labour Organization, the United Nations Guiding Principles on Business and Human Rights (UNGPs), and the Organisation for Economic Co-Operation and Development.



### The Apple Human Rights Policy

Our Human Rights Policy outlines how we treat everyone, including our customers, employees, business partners, and the people across every level of our supply chain.

[Read the Apple Human Rights Policy](#)



### The Apple Supplier Code of Conduct and Supplier Responsibility Standards

Our supplier requirements contain strict standards for responsible labor recruitment, and apply to all suppliers, protecting workers globally. We go above and beyond legal requirements in many places by strictly prohibiting labor recruitment in regions where we cannot conduct adequate due diligence and by maintaining a zero recruitment fees policy, because we believe no one should pay to secure a job.

[Read the Apple Supplier Code of Conduct and Supplier Responsibility Standards](#)

2

## We engage early.

To address forced labor risks at its roots, we know that our work has to begin before people enter our supply chain.



### Thorough mapping informs our strategy.

An effective strategy requires deep understanding of our supply chain. To date, we have mapped over 1,000 labor recruitment agencies that work with our suppliers across 32 countries.



### A leading strategy requires leading tools.

The Apple Responsible Labor Recruitment Toolkit, developed in partnership with the International Organization for Migration, provides suppliers and their labor agencies with easy-to-use tools that help them effectively manage and report data, mitigating forced labor risks before people even enter our supply chain. In addition to providing hands-on training, we are making these tools openly available for others to use.



### Awareness is power.

We require our suppliers to provide their employees with training on their workplace rights on their first day on the job. This helps to ensure that every person is aware of their rights and what to do if they're not being respected, which includes the ability to anonymously contact Apple directly. Foreign Contract Workers, who make up a very small percentage of people in our supply chain, also receive training prior to leaving their home country, as well as upon arriving in their destination country. To date, our suppliers have provided workplace rights training to over 23.6 million people. In addition, last year we directly engaged with over 350,000 people in our supply chain to learn more about their workplace experience.



### Investing in consistent improvement.

Through our new Supplier Employee Development Fund, we're investing \$50M to expand programs designed to continue to improve the rights training experience, worker voice platforms, and supplier employee education opportunities.

3

## We hold suppliers accountable.

Once we've implemented thorough preventative measures, independent, third-party assessments verify that our suppliers are meeting our standards. Looking for evidence of forced labor is part of every supplier assessment. If we find any violations of our Code and Standards, we take swift action to remedy the issue and improve their operations.



### A close look.

We regularly conduct independent, third-party assessments, including surprise assessments, of our suppliers, verifying compliance with over 500 points across our standards. This includes an extensive document review to be sure all hiring and personnel records are in place and accurate. In addition to specialized forced labor assessments for at-risk suppliers, we also require many suppliers to participate in facility-wide assessments, such as the Validated Assessment Program, to verify performance across the supplier's entire business. In the event that we find gaps in a supplier's compliance or capabilities, we require them to implement a Corrective Action Plan. To date, our assessments have covered 94 percent of our direct manufacturing spend.



### We investigate every report.

In addition to thoroughly assessing our suppliers' performance in upholding our standards, we also receive reports from the press, governments, civil society, people in our supply chain, and encourage the public to report concerns via [apple.com/supplier-responsibility](https://apple.com/supplier-responsibility). We investigate every report, and frequently have Apple teams onsite within 24 hours.



### Swift action and steep penalties.

Forced labor in any form is a Core Violation (the most serious violation level) of our requirements. If a Core Violation is discovered, the supplier's CEO is notified and the supplier is immediately placed on probation, pending the successful completion of a Corrective Action Plan. Probation can include no new projects, no new business, and termination of existing business. In addition to commercial penalties, if a supplier is unable or unwilling to meet our standards, they risk removal from our supply chain. Since 2009, we have directed the removal of 24 manufacturing supplier facilities, and 170 smelters and refiners for failure to meet our requirements.



### Action this year.

In FY21, across more than 1,100 assessments, we found no instances where anyone was forced to work in our supply chain. We did find two cases where employees of the same supplier in Taiwan paid recruitment fees. Per our requirements, the supplier directly repaid their employees for those fees. To date, our suppliers have directly repaid \$33.2M in recruitment fees to 37,322 of their employees.

4

## We track progress and report transparently.

Consistent improvement requires transparency and accountability. Since 2007, we have been publishing reports on our efforts across all of our work to transparently share our progress and challenges.



### People and Environment in Our Supply Chain Annual Progress Report

Published annually since 2007 (formerly known as the Supplier Responsibility Progress Report), this report contains a detailed accounting of our progress, challenges, and future plans across all areas of our supplier requirements.

[Read our Annual Progress Report](#)



### Efforts to Combat Human Trafficking and Slavery Disclosure

This disclosure is a specialized filing that focuses specifically on our efforts to prevent and address forced labor risks throughout our supply chain, and includes our due diligence process for our entire business, including manufacturing, materials and goods sourcing, and services. This report also demonstrates our alignment with the UNGPs and meets regulatory requirements in the UK, Australia, and California.

[Read our disclosure](#)



### Consistently raising the bar.

We revisit all of our supplier requirements every year, consistently raising the bar that suppliers must meet in order to continue doing business with us, and publish the updates publicly.

[Read the Apple Supplier Code of Conduct and Supplier Responsibility Standards](#)



### Take a closer look.

We publish additional reports that provide a transparent look at our supply chain. Our Conflict Minerals Report describes our work to responsibly source materials. Our Smelter and Refiner List publishes a list of all identified tin, tungsten, tantalum, gold (3TG), cobalt, and lithium smelters and refiners across our global supply chain, and the Apple Supplier List shares the companies and their locations that comprise at least 98 percent of our direct manufacturing spend.

[Read our disclosures](#)

5

## We regularly engage and partner with stakeholders.

Engagement with stakeholders and rights holders is critical to accountability, ensuring we're taking action where it's needed, and to achieving rapid progress.



### The International Labour Organization (ILO)

We work closely with the ILO on a number of projects, including those related to rights and advancing worker voice. Apple is a member of the ILO Global Business Network on Forced Labor, and serves on the steering committee.



### The International Organization for Migration (IOM)

Apple partners with the IOM on multiple initiatives, including the development of our Responsible Labor Recruitment Toolkit and training our suppliers on the Toolkit.



### Responsible Business Alliance (RBA)

Apple collaborates with the RBA and its member companies frequently throughout the year on initiatives spanning the entirety of our program. As a full member, we serve in several leadership capacities including serving on the board of directors, being a founding and steering committee member of the Responsible Labor Initiative, and serving on the steering committee of the Responsible Minerals Initiative.



### Responsible Labor Initiative (RLI)

Apple is a founding member and serves on the steering committee of RLI, which was established by the RBA as a multi-industry, multi-stakeholder initiative focused on ensuring that the rights of workers vulnerable to forced labor in global supply chains are consistently respected and promoted.



### Fund for Global Human Rights

Apple partners with the Fund to support grassroots activists, as well as human rights and environmental defenders, which empowers local voices.





Final Assembly, Ireland



# 03 | Health, Safety and Wellness

Building a culture of safety

Health and wellness

Safeguarding health  
through safer chemistry

**Everyone has the right to a safe and healthy workplace. We work from the earliest stages of product design to ensure that the materials, machines, and processes used in the manufacturing of our products prioritize the health and safety of the people working in our supply chain.**



# Health and safety Code highlights

**Requiring a safe and healthy workplace 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.



## Infectious disease preparedness and response

Suppliers shall implement a documented preparedness and response process to identify, evaluate, and control workplace infectious disease transmission and monitor guidance of relevant health agencies in order to figure out how best to incorporate their recommendations into the process and the plan. This program shall be based on a thorough risk assessment of the hazards that will be encountered in the workplace relating to the diseases.



## 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

Suppliers 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-parties shall be clean and safe and provide reasonable living space.



## Health and safety permits

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



## 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 (CAP) to mitigate risks, provide necessary medical treatment, and facilitate their employees' return to work.



## 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.

# Building a culture of safety

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**The health and safety of the people working in our supply chain has never been more important than in the face of an ongoing global health crisis. We work with our suppliers and those across the industry to uphold the highest standards designed to keep workers safe on the job. These standards cover the safe handling of chemicals, emergency preparedness, health and safety permits, living and working conditions, and incident management. Health and safety is also an important part of every assessment we conduct, as well as our capability-building with suppliers.**

## **COVID-19 response and risk mitigation**

Throughout the pandemic, we have frequently looked for opportunities to help, with our top priority being the health and safety of our employees, customers, and the people working throughout our supply chain. In 2021, we continued to provide critical support to suppliers globally in order to help protect the health and well-being of their employees. As part of this support, we conducted more than 200 onsite and remote assessments to verify suppliers' compliance with COVID-19 control protocols, and to drive improvement when necessary. We also regularly distributed COVID-19 health and safety guidance and best practices to our suppliers, as well as to other companies across the industry.

*Read more about our ongoing response to COVID-19 on page 13.*

## **Building a culture of safety**

Building a culture of safety requires setting the highest standards, and continually raising the bar for performance through clear, consistent guidance and ongoing engagement. We invest heavily in this area, because time and effort spent here has the potential for exponential impact — helping to protect people in our supply chain, and beyond.

In 2021, we began development of a safety culture guide to help suppliers cultivate a deeper, more sustainable culture of safety in their facilities. We also developed and rolled out comprehensive guidelines to 122 key suppliers, articulating our safety requirements on anodizing and plating processes — a common manufacturing process used to finish surfaces for metal components. These processes require adherence to strict safety protocols in order to keep people safe, including required safety functions and equipment, as well as safety requirements for maintenance and hot work procedures.

## **Raising the bar on health and safety through capability-building**

Health and safety are an important part of every assessment we conduct. Any instances of non-compliance with our Code and Standards during an assessment are addressed through customized Corrective Action Plans, online training materials, and capability-building with EHS experts in order to improve their future performance.

We have a team of subject matter experts that can provide suppliers with expert-level guidance on a variety of health and safety topics — including emergency preparedness and response, machine safety, industrial hygiene, and chemical management



— in order to help suppliers close performance gaps via one-on-one assistance, and online tools and training. In 2021, 175 supplier sites received customized support from experts, helping them take steps to improve their performance.

In addition to audits and ongoing capability-building, we consistently look for opportunities to engage earlier and prevent issues before they materialize. In 2020, we set out to proactively improve safety by mapping

risks related to machine safety across our supply chain, and identifying those high-priority suppliers that required additional support. In 2021, 212 supplier sites received customized support in order to improve capabilities related to assessing the safety of machinery during their procurement processes, conducting safety reviews before machine sign-off, and instruction on how to safely operate machines during production and maintenance.

## 175

supplier facilities received customized support from Apple experts on environment, health, and safety topics

## 212

high-priority supplier sites received customized, onsite support to help them improve machine safety in their facilities

## Program milestones

### 2021

- Developed supplier safety culture guide

### 2020

- Enhanced Code and Standards requirements on infectious disease management
- Developed Machine Safety Design Guideline for machine builders responsible for enclosure manufacturing
- Launched machine safety initiative

### 2019

- Launched EHS Leadership Workshop
- New Code requirements added on occupational health and safety, chemical identification and evaluation, process safety management, chemical hazard communication, and emergency preparedness and response
- Launched Environmental Permit Database

### 2017

- EHS Academy content was adapted for members of Responsible Business Alliance (RBA) and Institute for Sustainable Communities (ISC)

### 2015

- Established EHS Subject Matter Expert Capability-Building program

### 2013

- Launched EHS Academy

### 2012

- Published Combustible Dust Hazards Standard

# Health and wellness

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**Beyond keeping people in our supply chain safe, we are committed to creating workplaces where they can thrive. This means giving our supplier employees the tools and resources to improve their physical and mental health and well-being.**

## **Expanding health and wellness programs to meet the need of supplier employees**

Since 2017, we have helped make health education and resources available to more than 2.95 million supplier employees on topics such as reproductive health, disease prevention, and nutrition. This includes information and resources shared as part of suppliers' New Employee Orientation, as well as specialized health and wellness training opportunities. And through our new Supplier Employee Development Fund, we are continuing to deliver important health and wellness programs to a growing number of people working in our supply chain.

Building on our work over the past five years, in 2021, we conducted a needs assessment to give supplier employees an opportunity to share their feedback on what health knowledge and skills would be helpful for them, and what our program should look like moving forward. This needs assessment was conducted with over 1,600 supplier employees in six facilities, and included surveys and focus groups as well as individual interviews. Based on the results of this assessment, we are working with suppliers to provide their employees with more tools, resources and information about mental health, diet and exercise, relaxation, personal hygiene, and sleep.

The updated version of this training will begin initial rollout in 2022, with plans to expand to additional countries soon after.

## **Expanding health education**

In 2021, we continued to build on our women's health program in Vietnam, where up to 80 percent of employees at participating suppliers are women. In addition to addressing reproductive health, we worked with our local partner to distribute online videos to support the mental health of workers during the pandemic.

We also supported training for sexual and reproductive health service providers from two local community health centers in Vietnam. Service providers were trained on family planning counseling, cervical cancer screening, new approaches in the examination and treatment of sexually transmitted and reproductive infections, pregnancy care, as well as general sexual and reproductive health counseling. In total, 1,181 clients, including 891 employees from Apple supplier facilities, received services at these community health centers.

In addition, 50 peer educators and seven members of health staff at supplier facilities were trained on sexual and reproductive health counseling. As a result, 7,900 supplier employees received important health information and assistance in 2021.



## Taking a holistic approach to health and well-being

Access to mental health resources is very important to overall health and well-being, and has become even more important in the wake of the challenges presented by COVID-19. In 2021, we worked with Beijing Normal University and mental health experts to enhance our holistic approach to physical and mental health and wellness. This included consultations with supplier employees about their specific mental health needs, as well as the supplier-provided resources currently available to them, to identify any gaps and develop action plans.

Each person who participated in this assessment received a confidential report with individual recommendations, and the aggregated findings were used to develop new programs and resources which will be rolled out in 2022.

## Program milestones

### 2021

- Developed enhanced mental health program in partnership with experts and supplier employees
- Evolved new employee orientation to include more tools, resources, and information about mental health, diet and exercise, relaxation, personal hygiene, and sleep

### 2019

- Program expanded to Vietnam
- Introduced training to staff working at onsite clinics in Vietnam
- 1M supplier employees reached by health education program
- Nutrition training integrated into new supplier employee orientation

### 2018

- Program expanded to India
- Funded independent, anonymous health testing for a range of health and reproductive issues at key supplier sites

### 2017

- Health education program established in China
- Launched health awareness programming for female employees

### 2013

- Established Apple Supplier EHS Academy to expand expertise of local managers
- Analyzed ergonomic risks in supply chain

# Safer Chemistry

Safeguarding the health and safety of workers across Apple's supply chain and beyond



## Setting the Highest Safety Standards

Protection starts with setting and upholding strict material safety standards that often go beyond regulatory requirements in order to protect human health and the environment



Supplier requirements that align with, and often go beyond, international laws, regulations, and environmental standards



Designing products and manufacturing processes to use safer materials from the start



## Industry-Leading Transparency and Disclosure

Advancing safer chemistry requires first understanding how chemicals are being used, stored and handled, as well as the volumes used and the protection measures in place. This requires a deeper level of transparency that goes beyond industry norms



Data collected from 1,000+ facilities



17,000+ chemicals identified



## Adoption of Safer Alternatives Across Our Supply Chain

We're driving the use of safer chemistry by making it easier for suppliers to select preferred safer alternatives from the start



EPA Safer Choice Partner of the Year for work on safer alternatives



100% of our final assembly sites have used only safer alternative cleaners and degreasers since 2018



Partnering with ChemFORWARD to launch list of approved safe cleaners in 2022



## Accelerating Progress Across the Industry

We are driving industry standards and helping to create the right market conditions to scale smarter chemistry — for the benefit of those working in our supply chain and beyond



Partnered with CPA to develop a new certification for assessing the safety of cleaners used in the electronics industry and beyond



Helping to develop IPC-1402 standard for cleaners used in the manufacture of electronics, reducing complexity and enabling scalability



Founding signatory of CEPN's Toward Zero Exposure program to help eliminate electronics workers' exposure to hazardous chemicals



# Safeguarding health through safer chemistry

**Incorporating safer and more environmentally preferred materials into our products helps keep workers and customers safe. And when safe materials are recycled within circular supply chains, the impact extends far beyond our own supply chain, benefiting both the communities in which we operate and the planet.**

Our commitment starts with setting and upholding strict material safety standards that often go beyond regulatory requirements in order to protect human health and the environment. These are outlined in our Code and Standards and our Regulated Substances Specification (RSS), and are derived from international laws or directives, regulatory agencies, eco-label requirements, and environmental standards.

We then go further, by intentionally designing our products and manufacturing processes to use safer materials, as well as verifying the correct health and safety protocols are being used across our supply chain. And we're making an impact beyond our supply chain by working with others to help make the use of safer materials the industry norm.

## **Setting the bar for transparency and accountability**

Our Code and Standards require our suppliers to have measures in place to ensure the health and safety of all of their employees — this includes the safe use of chemicals. A strong chemical management program requires a comprehensive understanding of what chemicals are being used, and how workers are being protected. Full and transparent chemical reporting means going beyond providing a chemical inventory. It includes disclosing how a material is being used, stored, handled, volumes

consumed, and the protection measures that are in place for their employees.

In FY2021, as part of our Chemical Safety Disclosure (CSD), more than 1,000 supplier facilities shared their chemical inventories, as well as, their storage and safety protocols. Through this process, we identified more than 17,000 unique process chemicals and applications. This initiative represents the majority of Apple's direct spend, including over 95 percent of Apple-managed suppliers in China. This data informs how we prioritize both our ongoing effort to drive safer chemical substitutions, as well as where we focus safety oversight efforts to drive the most impact toward securing the health and safety of those working in our supply chain.

## **Making safer alternatives accessible to suppliers**

We are using the comprehensive chemical inventories disclosed by our suppliers to better understand the manufacturing process they are being used for, and how they are protecting their employees from exposure. Process chemicals used in the manufacturing process of our products — specifically cleaners and degreasers — account for some of the highest use materials within our supply chain, and the category of chemicals supplier employees use most frequently in our manufacturing facilities. We're driving

the use of safer alternatives for process chemicals in our supply chain by making it easier for suppliers to select preferred substitutes from the start.

While all our final assembly sites have used only safer alternative cleaners and degreasers since 2018, we have since built upon this effort to work with component manufacturers to help them use these preferred chemicals in their operations.

We are also using the data we've collected through our CSD, and the process we've established to drive the adoption of safer cleaners and degreasers, to look across a wider group of materials, including adhesives, dyes, and other high-volume materials used in our supply chain in order to drive the adoption of safer alternatives for more and more materials.

In 2021, we received the U.S. Environmental Protection Agency's (EPA) Safer Choice Partner of the Year Award for the second year in a row in recognition of our work to scale the use of safer process chemicals in our

supply chain. As the first and only company in our industry to receive this honor, the award recognizes Apple's commitment to drive progress within our supply chain, and our ongoing partnership with leading organizations to scale the adoption of safer process chemicals.

### Leading the industry toward greater worker protection

We are driving industry standards and helping to create the right market conditions to scale smarter chemistry by leveraging our relationships and expertise with stakeholders across the industry. This includes working with leading NGOs and trade associations to develop the tools, standards, and mechanisms necessary to identify and promote the use of safer chemicals in the electronics supply chain.

In 2021, Apple became a founding signatory of the Clean Electronics Production Network's (CEPN) Toward Zero Exposure program. CEPN, a multi-stakeholder initiative led by the NGO Green America, developed the Towards Zero Exposure platform to accelerate companies' efforts to eliminate workers' exposure to hazardous chemicals, and boost awareness of the need to improve chemical management practices across the global electronics manufacturing industry. Apple contributed to the development of CEPN's list of nine priority chemicals for substitution, and we have already eliminated the use of these chemicals in our supply chain. As part of our commitment to the Towards Zero Exposure platform, Apple will report annually on our progress.

In 2021, we partnered with Clean Production Action (CPA) — a globally-recognized NGO that designs and delivers strategic solutions for green chemicals, sustainable materials, and environmentally preferable products — to develop a new certification for assessing the safety of cleaners used in the electronics industry

and beyond. The GreenScreen Certified™ for Cleaners & Degreasers is free and publicly available in an effort to drive broader, industry-wide change by making information about safer alternatives readily available to companies globally. Apple has used the GreenScreen tool, as well as the EPA Safer Choice criteria, to assess and promote safer chemicals in our supply chain, leading to the transition of 100 percent of our supplier final assembly sites to safer alternatives for cleaners and degreasers. This latest development will allow other companies beyond Apple's supply chain to better protect the health and safety of workers making electronics products around the world.

Together with other companies and the global electronics trade association IPC, in 2021, we began development of a new standard which will more clearly define the criteria for what constitutes a "safe" cleaner for electronics manufacturing.

The IPC-1402 standard, which will roll out in 2022, will apply to cleaners used in the manufacture of electronic assemblies, components, and materials, including direct use of chemicals to clean components, casings, and materials or to clean manufacturing machines during operation and maintenance. This standard will allow suppliers to clearly and quickly determine if a chemical meets or does not meet the safety criteria, reducing the need for complex individual assessments, and providing a vehicle for greater scalability.

We are also partnering with ChemFORWARD — a value chain collaborative working to advance safer chemistry in product design and manufacturing — in 2022 to launch a publicly available list of cleaners that meet Clean Production Action's standard. This will help enable suppliers to confidently choose safer chemicals for their facilities.

## Program milestones

### 2021

- Received U.S. EPA Safer Choice Partner of the Year Award for 2nd consecutive year
- Expanded collection of data through Chemical Safety Disclosure (CSD)
- Founding signatory of Clean Electronics Production Network's (CEPN) Toward Zero Exposure program
- Developed GreenScreen Certified™ for Cleaners & Degreasers in partnership with Clean Production Action (CPA)
- Kicked off development of IPC-1402 standard for safer cleaners

### 2020

- Ranked #1 of 50 retailers on Mind the Store Retailer Report Card
- A+ rating from Mind the Store campaign for 3rd consecutive year
- First company in electronics industry to receive U.S. EPA Safer Choice Partner of the Year Award

### 2018

- All supplier final assembly sites use only safer alternatives for cleaners and degreasers

### 2017

- Began requiring final assembly suppliers to report full chemical inventory to Apple
- Replaced all GreenScreen Benchmark 1 and 2 cleaners with safer alternatives in all final assembly facilities

### 2016

- Expanded Chemical Management Program to critical component manufacturing sites

### 2002

- Released first Regulated Substances Specification list

# 1,000+

supplier facilities disclosed chemical use and safety data, representing the majority of Apple's direct spend

# 2nd Year

receiving U.S. EPA Safer Choice Partner of the Year Award

**04**

# Education and Professional Development

Scaling educational opportunities across our supply chain

Through our global supply chain, we have an opportunity to create opportunities for people around the world. This includes helping to close skills gaps in manufacturing, and helping to build supply chains that are more resilient and prepared for the jobs of today and tomorrow.



# Scaling educational opportunities across our supply chain

**Education is an Apple value, and we believe everyone should have access to the skills and knowledge they need to be successful. As a company, this value drives us to create the products and services that connect lifelong learners to the tools and resources that can help them open doors and shape the future. We extend this same commitment to those working in our supply chain.**



[Learn More](#)

Read more about our Supplier Employee Development Fund on page 12.

## Introducing the Apple Education Hub

Since 2008, more than 5 million supplier employees have taken advantage of our Supplier Employee Education and Development (SEED) program, which provides supplier employees access to higher education opportunities, coding courses, and vocational certification programs.

The lessons we have learned over the years from SEED have informed the next generation of supplier employee education programs with the 2022 launch of the Apple Education Hub, announced as part of our Supplier Employee Development Fund. In partnership with local educational institutions and NGOs, the Apple Education Hub will provide a scalable solution through virtual-first learning, to promote and develop the skills necessary for the future of work in our supply chain and surrounding communities.

With initial programming to begin in the U.S., China, India, and Vietnam, more than 100,000 supplier employees will participate in new learning opportunities by 2023 — from leadership training and technical certifications, to classes on coding, robotics, and advanced manufacturing fundamentals.

## Cultivating internal leadership and capability

We work consistently to provide meaningful educational opportunities that enrich supplier

employees' workplace experiences and provide opportunities to improve career paths. Over the past five years, more than 5,000 students have participated in our Line Leader, Automation Technician, and general apprenticeship programs. The Automation Technician Program prepares students to independently install, maintain, and repair automation machines in the production line. The Line Leader program helps students cultivate the skills they need to advance into roles as production line supervisors. These programs give participants the skills they need to pursue opportunities in highly technical roles.

Our Line Leader program, which provides production management training, has typically been geared towards vocational school students in order to create a talent pipeline for those who have already expressed an interest in advanced manufacturing roles. Recognizing the growing opportunity to cultivate talent and worker satisfaction at a grassroots level, in 2021, we began offering the program to employees already working in supplier facilities, providing the skills needed to be considered for internal promotions. In 2021, we piloted this new curriculum with 24 supplier employees, with plans to expand the program in 2022. This kind of internal investment in their employees will help suppliers fill critical skill gaps in their operations, as well as help improve labor retention, recruitment, and overall worker satisfaction.

### Measuring impact

In 2021, several Apple suppliers opted to participate in an independent study assessing the quality of vocational education programs in China.

The study, conducted by the Research Institute on Vocational and Adult Education at Beijing Normal University, found that graduates from the Apple program had higher competence indicators in all dimensions, particularly as they relate to business and work process orientation, social accountability, environmental compatibility, and creativity. Meaning, that not only did graduates of the Apple program demonstrate acute technical expertise, but they were also able to make the complex connections between their academic training and the application of that training within the broader business environment. This includes an understanding of the social aspects of their work, including health and safety, and the ability to take environmental considerations into their work, such as the use of environmentally-friendly materials and other considerations.

Over 50 percent of graduates from the Apple program were found to have reached the top two levels of

competence criteria — double the percentage of graduates from non-Apple programs. Around 15 percent — or more than triple the amount of the non-Apple graduates — were found to have achieved the highest level of competence — demonstrating organizational and social problem solving competences that reach beyond a basic understanding of business and work processes.

### Working with schools and colleges

We also work closely with educators to build the capabilities of teachers at local vocational schools in order to scale the impact of our programs. We continued to build on our strong relationships with technical schools to increase access to vocational skills training. More than 1,800 vocational school graduates have taken advantage of our unique, comprehensive apprenticeship programs, with many moving into management positions at supplier facilities soon after graduation.

In 2021, 372 teachers and supplier trainers participated in capability-building activities organized by Apple. Apple has organized 81 of these capability-building

activities, reaching 1,542 teachers and supplier trainers over the past three years.

### Making coding accessible to more supplier employees

As we do with every aspect of our business, we are continually looking for opportunities to evolve and scale our impact. This includes moving toward more virtual learning opportunities so more students can take advantage of development opportunities. This is particularly true of our Swift coding training.

Since 2017, we've offered training to supplier employees on Apple's Swift coding language — a skill that is in high demand. In 2021, we continued to build on feedback from students and suppliers to refine our curriculum by adding more opportunities for virtual learning while maintaining the quality and consistency of the programs. Most notably, for our basic coding modules, in addition to online courses, in 2021, we hosted a number of virtual group activities, including an introductory event, program examination, workshops, and even a graduation ceremony. Giving coding students the opportunity to connect with leaders and peers fosters better engagement and understanding of the curriculum. Our advanced coding students were invited to pilot a new model which delivered the same curriculum in a hybrid learning model, including five weeks of online webinars, and a two-week classroom curriculum. The response to this initial pilot was very positive, resulting in more than four times the number of advanced coding graduates in 2021, for a total of 15,852 supplier employees since 2017. We plan to offer this hybrid model more broadly to 13,000 supplier employees in 2022.

And students aren't just learning how to code — they're using their skills to build tools that are being used today. In 2021, 14 apps developed by

people in our supply chain went live on the App Store. These apps are being used by suppliers and their employees for activities such as machine maintenance and schedule management, as well as apps for personal development, such as memory training and word games for kids.

### The student becomes the teacher

Teaching others allows an instructor to more deeply understand the subject, and more teachers means more access for students to learn new skills. This is the basis of our "train the trainer" program. This program gives Swift coding students a chance to learn from employees at our Apple Retail Stores, giving them a better understanding of the products and Apple's developer systems as they continue to advance in their coding coursework. In 2021, 1,223

# 5M+

education, professional development, and enrichment course participants since 2008

# 100,000+

supplier employees who will access new learning opportunities through the Apple Education Hub by 2023

### Our Education Program Management Standard

In 2021, we updated our Code and Standards to explicitly state that suppliers may only hire students at their facilities in connection with an education or training program at an educational institution, and not as a means to meet demand for workforce labor or to fill short-term gaps in labor supply. This is to ensure apprentices and interns are provided an enriching experience that supports their continuing education and career development.

# 04

## Education and Professional Development

supplier employees took part in a series of training workshops on macOS apps, including Pages, Keynote, and iMovie.

Despite the challenges over the past two years and thanks to the dedication of our Retail teams, we were able to continue sending Apple Retail experts to develop the internal trainers at supplier facilities. Since the program's inception in 2017, we have trained 36 Retail Store employees from 18 stores to deliver the training.

### Personal development through life skills training

As part of our apprenticeship program, participants have received life skills training in addition to professional skills in order to cultivate a more well-rounded curriculum that will help them be successful as colleagues and managers. This typically includes training on topics such as time management and emotional intelligence. Last year, we made this training available to additional workers, even those who are not participants of the apprenticeship program, via our "train the trainer" model. In 2021, 163 volunteers from 18 factories were trained to deliver this content to over 8,400 supplier employees.

### Improving supplier capabilities and career opportunities through technical training

Providing opportunities for workers to gain valuable technical expertise benefits both suppliers and their employees. Making technical training available helps to improve suppliers' operational capabilities, while improving their employees' career opportunities.

In 2021, 5,883 supplier employees at 18 supplier sites participated in technical training including programs on robotics, Computer Numerical Control (CNC) machines, and mobile device repair.

We also continued to work with a number of key suppliers to set up practical robotics labs onsite at their facilities, giving supplier employees the opportunity to receive this valuable training.

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

Over the past five years, Apple has continued to build on its commitment to foster world-class technologies and high-skilled manufacturing jobs across the U.S. This includes our \$5 billion Advanced Manufacturing Fund, which, since 2017, has supported U.S. suppliers in their development of breakthrough innovations, from advanced laser technology, to accelerating the supply of COVID-19 sample collection kits for U.S. hospitals.

We have also made significant investments in developing skills among employees of our U.S. suppliers. In 2019, building on the success of our education programs in Asia, we launched a new education program for U.S.-based suppliers, utilizing innovative online coursework to equip their employees with transferable and promotable skills, such as design thinking, project management, and business writing.

In 2021, we expanded offerings to include Computing Technology Industry Association (COMP-TIA) courses, as well as courses on basic computer skills, professional software management (email management, spreadsheet and document creation), and data processing and management. These courses will prepare participants for advancement, making them eligible for promotion upon successful completion.

In addition to these opportunities, we also offered English language courses to 400 workers. Those who participated also had the opportunity to extend this offering to five of their family members, making this opportunity available to more than 2,400 people. As part of the Apple Education Hub, we will greatly accelerate the expansion of our skill-building programs for employees of U.S.-based suppliers.

## Program milestones

### 2021

- Updated our requirements to include a new Education Program Management Standard
- Supplier Employee Education and Development (SEED) program reached over 5M participants
- Expanded skill-building program for employees of U.S.-based suppliers

### 2020

- Third cohort joined Line Leader, Automation Technician, and general apprenticeship programs
- SEED program reached over 4.6M participants

### 2019

- Launched skill-building program for employees of U.S.-based suppliers
- Second Line Leader cohort graduated
- Co-developed curriculum for automation technicians

### 2018

- First Line Leader cohort graduated

### 2017

- Supplier Employee Education and Development (SEED) program expanded to include Swift and vocational certification program
- Launched Line Leader Program
- Apple Advanced Manufacturing Fund announced, providing investments and training to U.S.-based suppliers

### 2015

- SEED program reached 1.4M participants

### 2008

- Launched Supplier Employee Education and Development (SEED) Program



**The initial pilot of our hybrid learning coding courses has resulted in more than four times the number of advanced coding graduates in 2021.**



# Our Values in Action | Developing a New Mindset

**“I believe Apple when they say: ‘everyone can code,’”** remarks Plam J., a project planner at Foxconn in Chengdu, China. Plam is one of more than 15,000 supplier employees who have learned to code through Apple’s Swift coding program.

Since 2018, Apple has offered training to supplier employees on Apple’s Swift coding language, including iOS basics, Swift Playgrounds, and advanced app development. More than 50 percent of those that participate in this training come in with minimal or no coding experience, but leave with the skills needed to design and develop their own apps.

Plam and her colleague, Sophie C., were two such students. “I work primarily on production planning in our facility, but I have always been curious about how iOS apps work, and how they are developed,” says Sophie. “I had always thought about learning to code, but I never had the opportunity before.”

As part of their final advanced coding course, Plam and Sophie developed an app which works with the

facility’s existing machinery notification systems to send alerts to the line manager via the app when issues are detected.

In 2021 alone, supplier employees developed 14 apps that went live on Apple’s App Store. These apps must go through a rigorous approval process to ensure they meet Apple’s high standards for security and customer experience. Many of these apps, like Sophie and Plam’s, are already being utilized by suppliers to manage internal processes such as machine maintenance, schedule management, and production data visualization. Students also developed apps meant for personal growth and development, such as memory training and word games for kids, as well as health and wellness apps that track daily steps and water intake.

“This program has challenged me to think differently about life and work. Now, I approach problems with a developer mindset and ask myself ‘how can we use technology to solve this in a more systematic way,’” says Sophie.

After graduating from the program, many participants report gaining more advanced positions at work in IT-related roles. Whether it’s a more advanced job with their employer or an opportunity outside of Apple’s supply chain, we are committed to providing opportunities for personal and professional advancement. As a result of their experience in the Swift coding program, both Plam and Sophie have gone on to expand their roles at Foxconn to include software development.

“Going through this program has made me realize that I can conquer big challenges,” says Plam. “I feel more confident in the future, and I want to use my new skills to develop apps that make people’s lives better.”

**“ This program has challenged me to think differently about life and work. Now, I approach problems with a developer mindset and ask myself ‘how can we use technology to solve this in a more systematic way?’”**

Sophie C. | Apple Swift Coding Student

# 05 | Materials

Closing the loop on material sourcing

Making progress in our use of recycled and renewable materials

Packaging

Product end-of-life

Our approach to responsibly sourcing primary materials

**We're achieving progress toward our goal of using only recycled and renewable materials for our products and packaging. As we move forward, we remain committed to sourcing materials responsibly — whether primary sourced, recycled, or renewable — and safeguarding the well-being of people that are part of our supply chain at every stage of the product lifecycle.**

## Materials Code highlights

**Our Code supports our goal to one day use only recycled and renewable materials, as well as our ongoing commitment to source all materials responsibly.**



### Responsible Sourcing of Materials

Suppliers shall exercise due diligence on relevant materials in their supply chains. Suppliers shall develop particular due diligence policies and management systems in order to identify applicable risks and take appropriate steps to mitigate them. Due diligence shall be conducted at the material processing level in order to determine whether relevant materials originate from regions with high risks, which include areas associated with conflict, the worst forms of child labor (as defined by the ILO), forced labor and human trafficking, gross human rights violations such as widespread sexual violence, or other reasonably objective high risk activities, including severe health and safety risks, as well as negative environmental impacts.



### Resource Consumption Management

Suppliers shall regularly quantify, set targets, monitor progress, and reduce consumption of fossil fuel, water, hazardous substances, and natural resources through conservation, reuse, recycling, substitution, or other measures.



### Whistleblower Protection and Anonymous Complaints

Suppliers shall provide an anonymous complaint mechanism for managers and workers to report workplace grievances. Suppliers shall protect whistleblower confidentiality and prohibit retaliation.



# Closing the loop on material sourcing

**We make products using high-quality materials, and we're increasingly sourcing those materials from recycled and renewable resources. Our goal is to one day achieve independence from mined materials. As we progress toward this goal, we're doing so without sacrificing the quality and durability of our products. And we're working on innovations in recycling to enhance material recovery and support circular supply chains for ourselves and others.**

The scale of this challenge is significant. But so is our potential to have a positive impact. The changes that we push forward affect the people who interact with our products, influence the markets in which we operate, and create change for broader global communities. Our actions carry results that extend beyond our business.

We continue to focus our recycled and renewable efforts on 14 priority materials — aluminum, cobalt, copper, glass, gold, lithium, paper, plastics, rare earth elements, steel, tantalum, tin, tungsten, and zinc — which, as of FY2021, accounted for more than 90 percent of the total product mass shipped to our customers. We selected these materials based on their environmental, social, and supply chain impacts as outlined in their [Material Impact Profiles](#).

**We're using three different levers to reduce our impact and achieve circularity:**

- **Sourcing and efficiency:** Responsibly sourcing recycled and renewable materials for our products and packaging, using these materials more efficiently, and considering the communities involved.
- **Product longevity:** Making the most of the materials we use through designing long-lasting products. We design durable hardware, leverage software updates to extend functionality, provide convenient access to repair services, refurbish devices for their next user, and, where possible, reuse parts with more to give.
- **Product end-of-life:** Enhancing product collection and recycling innovation so we and others can use old devices as raw material sources for the future.



[Learn More](#)

To learn more about our comprehensive strategy on circularity, read our [Environmental Progress Report](#).

# Making progress in our use of recycled and renewable materials

**2021 was a significant year of progress in our move toward recycled materials. Apple is now using recycled gold, tungsten, rare earth elements, tin, cobalt, aluminum and plastics across our products. And in FY2021, even more of the material shipped in Apple products came from recycled sources.**

## Responsible sourcing of recycled materials

We are committed to sourcing materials responsibly, whether from primary, recycled, or renewable sources. This includes requiring third-party certification from suppliers to confirm a material has been recycled or comes from a renewable source, and evaluating new materials from new sources for chemical safety. Adherence to our strict standards goes beyond environmental impact. All refiners are assessed via OECD-aligned independent, third-party audits to confirm their compliance with our Code and Standards, including our requirements related to labor and human rights, and health and safety.



[Learn More](#)

The full details of our progress across materials and products can be found in our [Environmental Progress Report](#).

# Our progress on recycled and renewable materials

## AirTag

100% Recycled tin in the solder of the main logic board



## iPhone 13

100% Recycled tin in the solder of the main logic board and battery management unit

100% Recycled rare earth elements in magnets like those used in MagSafe

100% Recycled gold on the plating of the main logic board and wire in front camera and rear cameras

35% Or more recycled plastic in 13 components of iPhone 13 Pro Max



## AirPods 3rd generation

100% Recycled rare earth elements used in all magnets

100% Recycled tin used in the solder of case's main logic board

100% Recycled aluminum in case hinge



## Apple Watch Series 7

100% Recycled rare earth elements in all magnets

99% Recycled tungsten throughout the product

100% Recycled case on aluminum models



## iPad Pro 12.9" 5th generation

100% Recycled aluminum in the enclosure

35% Or more recycled plastic in 11 components

99% Recycled rare earth elements (100% in speaker and enclosure magnets)



## iMac 24"

99% Recycled rare earth elements (100% in all magnets)

100% Recycled tin in the solder of the main logic board

72% Less plastic in packaging than the previous generation

35% Or more recycled plastic in 11 components



## iPad mini 6th generation

100% Recycled aluminum in the enclosure\*\*

100% Recycled tin in the solder of the main logic board

100% Recycled rare earth elements in the speaker and enclosure magnets

35% Or more recycled plastic in 14 components



## MacBook Pro 16"

100% Recycled aluminum enclosure\*\*

100% Recycled tin in the solder of the main logic board

100% Recycled rare earth materials in all magnets

35% Or more recycled plastic used in 7 components



## iPad 9th generation

100% Recycled aluminum in the enclosure\*\*

100% Recycled tin in the solder of the main logic board

100% Recycled rare earth elements in the enclosure magnets

60% Or more recycled plastic in 4 components



## iPad Air 4th generation

100% Recycled aluminum in the enclosure

100% Recycled tin in the solder of the main logic board

100% Recycled rare earth elements in the magnets

25% Or more recycled plastic in 9 components



## HomePod mini

99% Recycled rare earth elements

90% Recycled plastic used in mesh fabric

## Apple TV 4K 2nd generation

100% Recycled aluminum in Siri Remote enclosure\*\*

20% Or more recycled plastic in 12 components

100% Recycled tin in the solder of the main logic board



## Packaging All Apple Products

100% Virgin wood fiber in our packaging comes from responsibly managed forests\*



Recycled content claims for materials used in our products have been verified by an independent third-party to a recycled content standard that conforms to ISO 14021.

\* Responsible sourcing of wood fiber is defined in Apple's Sustainable Fiber Specification. We consider wood fibers to include bamboo.

\*\* Recycled material claim applies to the enclosure and is based on auditing done by UL LLC.



# Packaging

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**Our goal of transitioning to only renewable and recycled materials also extends to our product packaging. We've committed to eliminating plastic in our packaging by 2025, a goal we will achieve through more efficient design and transitioning to fiber alternatives.**

We're expanding the number of parts that use fiber-based packaging and creating new fiber-based designs, including replacing large plastic trays, wraps, and foam cushioning with fiber alternatives. Another step we've taken to reduce the use of plastic is redesigning the packaging on iPhone 13 to use fiber-based seals to protect the product during shipping, allowing us to eliminate the plastic wrap from the outside of the box. These changes have helped us reduce plastic in our packaging by 65 percent since 2015. And since 2017, 100 percent of the wood fiber used in our packaging has come from responsible sources.

As we use more fiber, we continue to engage in circular supply chains that recycle and regenerate fiber sources. We're also upholding our commitment to protect or support the creation of responsibly managed forests sufficient to cover the amount of wood fiber we use in our packaging. And by raising awareness among our customers about the recyclability of our packaging, we aim to contribute back to the recycled material market as well.

As with other recycled or renewable materials, we require third-party certification from suppliers to confirm their sources, and assess their compliance with our Code and Standards, including requirements related to labor and human rights, health and safety, and ethics.

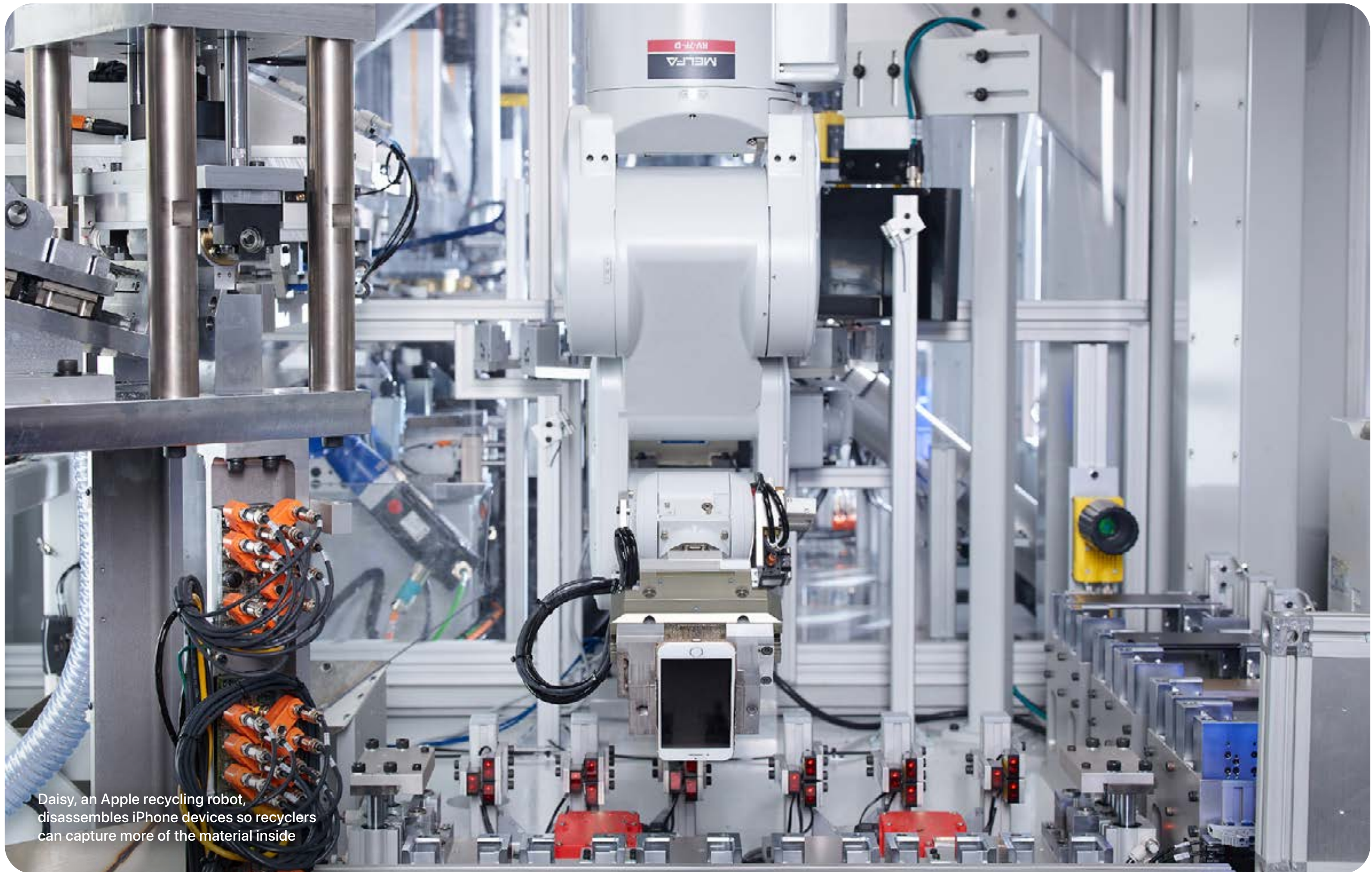
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**100%**

of wood fiber used in our packaging comes from responsible sources

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Daisy, an Apple recycling robot, disassembles iPhone devices so recyclers can capture more of the material inside



# Product End-of-Life

**Our responsibility for our products begins with the design process and carries through end-of-life. While we first look for opportunities for reuse, a product or part that no longer functions as intended can still be a source of valuable materials.**

Through recycling, we can realize the potential of these sources. And by keeping materials in the highest-quality form possible, we can reduce the energy needed to manufacture new products, driving down emissions. It is through this outlook on the end of our products' lifecycle that we can design and build the next generation of devices to be even better for people and the planet.

Making recycling options easy and accessible is key to these efforts. At our retail locations, our customers not only can experience and purchase our latest products, but can also trade in devices they're no longer using. Through both retail and online platforms like Trade In, we continue to provide product take-back and recycling collection programs in 99 percent of the countries where we sell products. These programs allowed us to direct more than 38,000 metric tons of e-waste to recycling globally in FY2021.

To do this, we seek out and partner with best-in-class recyclers, which are those who can show high recovery rates while upholding all of the requirements in our Code and Standards. To ensure the effectiveness of these partnerships, we audit our recyclers for compliance with labor and human rights, security, and EHS regulations, and encourage the use of best practices in their facilities. In FY2021, in addition to audits of smelters and refiners, we conducted 75 recycler audits globally. In addition, all of our recyclers in North America are either e-Stewards or R2 certified, the electronics industry's leading certifications.

We also partner with recyclers to make sure there is a recycling solution for each Apple product. Through training and ongoing support, we help our recycling partners develop the ability to disassemble our products, recovering as much material as possible

while limiting waste. In 2021, we launched new [Apple Recycler Guides](#) to provide guidance for professional electronics recyclers on how to safely disassemble Apple products — and maximize recovery of resources. The guides provide valuable insight on the steps for recycling, as well as the recommended downstream material recycler for the disassembled parts. Launched initially for our Pro Display XDR, this effort will continue to expand to other products.

Product by product, this work has a cumulative effect. As we continue to improve material recovery, we're making sure more high-quality recycled content is available on the market for us and others to use.

## Innovating and improving material recovery

Creating a circular supply chain hinges on our ability to minimize waste and maximize recovery of materials. Our Material Recovery Lab based in Austin, Texas is working at the cutting edge of material recovery by developing better, more efficient recycling technologies.

We've also continued to build upon our recycling innovations. This includes Dave, our newest recycling robot, which disassembles iPhone's Taptic Engine to enable the recovery of key materials such as rare earth magnets, tungsten, and steel. And, we're exploring new ways to expand these recovery capabilities to other products. We're also designing, developing,

and testing additional disassembly tools — including new methods for reclaiming materials from products such as the charging case for AirPods. Daisy, one of our disassembly robots, continues to disassemble iPhone devices so recyclers can capture more material inside. Just one metric ton of iPhone main logic boards, flexes, and camera modules disassembled by Daisy contain the same amount of gold and copper as more than 2,000 metric tons of mined rock. These materials make it back to the general market, so that we and others can use recycled materials for the next generation of products.

**Daisy, one of our disassembly robots, continues to disassemble iPhone devices so recyclers can recover more material inside.**



# Our approach to responsibly sourcing primary materials

**From mapping our supply chain and assessing risk, to conducting independent, third-party audits, engaging with civil society and industry, and investing heavily in innovation, upholding standards in the sourcing of materials is a responsibility that requires a strategic, comprehensive approach.**



## A responsibly-sourced battery

In 2021, all identified cobalt and lithium refiners — key materials used to make batteries for all Apple products — participated in OECD-aligned independent, third-party audits covering labor, human rights, and environmental policies, as well as management systems. We continue to conduct additional due diligence and carry out OECD-aligned independent, third-party audits on other battery materials such as graphite, nickel, and copper. Accomplishing this has required our teams to utilize many of the tools in our Responsible Sourcing Toolbox, which you can find on page 71.

As we make progress toward our goal to use only recycled and renewable minerals and materials in our products and packaging, we continue to source primary materials — including tin, tantalum, tungsten, and gold (3TG), and other minerals, such as cobalt — responsibly, while working to improve conditions in and around mining communities.

Our Responsible Sourcing of Materials Standard, part of our Code and Standards, covers all primary and recycled materials, including advanced and bio-based materials. Our standard 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 Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Due Diligence Guidance).

Every year, as part of our commitment to transparency, we publish a list of identified 3TG, cobalt, and — for the second year — lithium smelters and refiners in our supply chain. We were the first electronics company to publish a list of our cobalt refiners in 2016, and lithium refiners in our supply chain starting in 2020. While our standards apply universally, we prioritize materials based on the salient risks associated with their sourcing as outlined in Annex II of the OECD Due Diligence Guidance, such as conflict, human

rights abuses, money laundering, and illegal taxation. We also map other minerals in our products such as mica, copper, graphite, and nickel, and assess new materials for compliance with our requirements prior to production. This includes recycled and bio-based materials, including cotton which is sourced from the United States, Brazil, India, and Australia. In FY2021, we conducted due diligence on 26 recycled or bio-based materials to verify that their sourcing pathways met Apple’s standards and expectations.

100 percent of the identified 3TG, cobalt, and lithium smelters and refiners in our supply chain have participated in independent, third-party audits to assess and identify a broad range of risks, including social, environmental, human rights, and governance risks. This marks seven consecutive years of 100 percent compliance for 3TG, six consecutive years for cobalt, and two consecutive years for lithium.

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 directed the removal of 163 3TG and 7 cobalt smelters and refiners from our supply chain.

## Innovating responsible gold sourcing

We continue to address remaining challenges in the global gold supply chain through our due diligence program, which is aligned with the OECD

Due Diligence Guidance Supplement on Gold and other sources, as well as through innovation. Apple is pioneering industry-leading levels of traceability in recycled materials to build a supply chain of exclusively recycled gold.

As part of our risk assessment and due diligence efforts, we designed and implemented systems that focus specifically on the gold supply chain. In 2021, we reviewed gold refiners in our supply chain to identify potential risks and other sourcing challenges, and subsequently worked with suppliers to address such identified risks and challenges and to remove refiners as necessary.

In addition to conducting robust due diligence, we believe that innovative and data-driven solutions to sourcing help reduce risk and improve traceability. In 2021, we continued to fund and scale the Salmon Gold project with Tiffany & Co., led by RESOLVE, a sustainability non-profit. The Salmon Gold project works with small-scale miners and Indigenous Peoples in remote regions of the Yukon, Alaska, and British Columbia to support a mining practice that benefits local communities and helps restore rivers and streams so that salmon and other fish can thrive. Since RESOLVE first introduced the Salmon Gold project in 2017, the organization has connected local First Nations leaders, placer miners, environmentalists, and government agencies to course-correct the damage done by historic mining activities. The gold mined from this project is then traced from its origin to a refiner in Apple's supply chain using blockchain technology, and is eventually used in Apple products.

### Sharing tools and resources to accelerate progress

In addition to conducting our own supply chain due diligence, we work closely with third-party audit

programs — in particular, the RMI and the London Bullion Market Association (LBMA) — to identify risks at the smelter, refiner, and mining levels and to help strengthen industry auditing and certification bodies. The Risk Readiness Assessment (RRA) — developed by Apple in 2016 and widely adopted across industries via the RMI in 2018 — continues to be utilized by downstream companies and upstream refiners and mining companies with 366 RRAs completed in 2021, compared with 341 completed in the previous year. The Copper Mark, an assurance framework for responsible copper production, also applied the RRA as part of its criteria to assess copper producers at 31 sites — nearly twice as many in 2020 (16 sites). Apple continues to use the RRA on a targeted basis through these industry platforms to assess risks in our global supply chain, with a particular focus on new smelters and refiners that enter our supply chain.

### Amplifying local voices and raising rights awareness

We believe that empowering independent voices at the mining level is critical to identifying and assessing risks. For the sixth consecutive year, we provided funding to the International Tin Association's International Tin Supply Chain Initiative's (ITSCI) whistleblowing mechanism in the Democratic Republic of the Congo (DRC), which enables people in and around mining communities in seven provinces of the DRC to place anonymous voice calls, send SMS messages in local languages, and otherwise raise concerns related to mineral extraction, trade, handling, and exporting via local networks. In 2021, ITSCI and its partner organizations continued to increase awareness and utilization of the whistleblowing mechanism through radio campaigns in mining communities, distributing

promotional materials, and consulting with local civil society actors and other stakeholders.

We also continued to partner with Pact, an international development organization, to deliver rights awareness training to miners, youth, and community officials in artisanal and small-scale mining (ASM) communities in the DRC. In 2021, Pact organized 72 neighborhood committee meetings reaching over 31,987 community members — including more than 15,000 children — on a range of human rights issues, with a heavy focus on raising awareness about child labor.

### Supporting mining communities

Despite disruptions due to COVID-19, we continued our support of vocational education programs in mining communities in the DRC by contributing funding to a partnership between the RBA Foundation and Pact. Through this program, apprentices in and around mining communities in the Lualaba province of the DRC receive mentorship, literacy classes, and career training for trades such as hairdressing, auto mechanics, and welding.

As part of our rights awareness program, in 2021, Pact also began implementing a financial literacy and access component through an activity called WORTH. WORTH brings together small groups of local community members to save money, access credit, and expand their financial and business capabilities. Members are required to make small savings deposits at weekly meetings, and when a group's funds grow large enough, members may begin taking loans which they can use to start small businesses or make other investments. In 2021, 14 WORTH community-based savings and loan groups were formed with a total of 415 members. These groups collectively saved \$92,077 through

## Program milestones

### 2021

- 100% of identified 3TG, cobalt, and lithium smelters and refiners participated in independent, third-party audits
- 366 industry organizations completed our Risk Readiness Assessment through the Responsible Minerals Initiative (RMI)

### 2020

- Published lithium processor list for first time

### 2019

- Began mapping lithium processors in the supply chain
- Joined Salmon Gold project with Tiffany & Co. and RESOLVE

### 2016

- Established DRC vocational education and awareness raising program with Pact
- Published list of identified cobalt refiners in the supply chain
- Developed Risk Readiness Assessment tool

### 2014

- Began mapping cobalt refiners in our supply chain
- Published list of identified 3TG smelters and refiners in our supply chain

### 2010

- Began mapping the 3TG smelter and refiners in our supply chain

membership contributions and interest payments, and disbursed \$80,668 in loans. WORTH members were also provided with business and financial training tailored to their needs, enabling them to improve their capabilities and access the financial capital needed to start their own businesses or go to school.

We also continued to work with the Massachusetts Institute of Technology's (MIT) D-Lab Innovation Center in Colombia, which supports training of local gold miners and community leaders to develop sustainable solutions to ASM challenges. In 2021, due to COVID-19 restrictions, MIT adapted their Creative Capacity Building program to a mobile format, taking their Virtual Innovation Centers via iPads to local mining communities. The program, which reached 415 participants in 2021, included 12 training modules on a range of topics, including design, mining practices, and entrepreneurship. In addition, 296 micro-grants were awarded in support of the miners' new business ventures.

### Driving impact across industries

In addition to conducting independent assessments of our own supply chain programs, we continue to

support a range of multi-stakeholder-led research initiatives that contribute to broader learnings on the impact of due diligence programs and opportunities for future innovations.

In 2021, we continued to serve on RMI's Steering Committee. We also served on the Governance Committee of the Public Private Alliance for Responsible Minerals Trade — a multi-sector initiative supporting the ethical production, trade, and sourcing of minerals from the African Great Lakes region — and participate in wider PPA working groups to drive responsible sourcing innovations, and advising on initiatives aimed at effectively using data to understand and drive impact. We also supported research on technology used in responsible minerals production and sourcing in the DRC, and participated in consultations around the OECD's monitoring and evaluation framework, which was released in 2021. We are also a member of the European Partnership for Responsible Minerals and the Responsible Artisanal Gold Solutions Forum.

In 2021, we continued to provide funding to the independent non-profit organization IMPACT to digitize a framework based on the United Nations

Sustainable Development Goals (SDGs), which aims to harmonize how the impact of supply chain-related activities on socioeconomic and environmental well-being in ASM communities is measured. These harmonized metrics and the management of information will enable stakeholders to more readily uncover opportunities, areas of risk, and potential issues, and to address them proactively. Further, they will allow for interventions to be viewed more broadly, beyond particular mine sites or project areas, which will help ensure risks are mitigated rather than just displaced.

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# 100%

of identified 3TG, cobalt and lithium smelters and refiners participated in independent, third-party audits

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A placer miner holds gold sourced from Alaska and the Yukon as part of the Salmon Gold Project

# 06 | Environment

Our road to carbon neutrality

Addressing carbon emissions in our supply chain

Pioneering water stewardship

A zero waste mindset

**Human rights and environmental protection are inextricably linked. And we're taking action accordingly.**

**As we build products that enrich the lives of people around the world, we have a profound responsibility to do so in a way that minimizes our resource use while protecting the local environments and communities where we and our suppliers operate.**

**This report covers Apple's supply chain environmental programs. To learn more about Apple's comprehensive environmental initiatives, please visit [apple.com/environment](https://apple.com/environment).**



# 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.**



## Regulated substance management

Suppliers must comply with Apple’s Regulated Substances Specifications for all goods they manufacture and provide to Apple.



## Wastewater management

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



## Waste management

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



## 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.



## Resource Consumption Management

Suppliers shall regularly quantify, set targets, monitor progress, and reduce consumption of fossil fuel, water, hazardous substances, and natural resources through conservation, reuse, recycling, substitution, or other measures.



## 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.



## Boundary noise management

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



## 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 fuels, water, hazardous substances, and natural resources through conservation, reuse, and recycling.

**"Systemic racism and climate change are not separate issues, and they will not abide separate solutions."**

**Lisa Jackson**

Vice President, Environment, Policy,  
and Social Initiatives

# Our Values in Action | Championing Racial Equity and Supplier Diversity in the Environmental Sector

**Tackling the most pressing environmental challenges and systemic racism go hand-in-hand. That's why, in 2020, Apple launched an Impact Accelerator to help ensure that our investments in sectors like renewable energy, carbon removal, and recycling innovation also help fight systemic barriers impacting communities that are disproportionately affected by environmental issues.**

Part of our Racial Equity and Justice Initiative (REJI), the Impact Accelerator is focused on supporting equity and opportunity in the environmental sector by finding and cultivating the next generation of Black- and Brown-owned businesses working on the frontiers of green technology and clean energy.

In 2021, we introduced the first class of Impact Accelerator businesses. The selected companies from all across the U.S. participated in a three-month virtual program, which included e-learning resources on supply chain management, financial and legal topics, as well as other relevant knowledge areas to increase participants' business capabilities and help prepare them to be candidates for Apple business.

Each business was given the opportunity to develop an innovative solution related to one of Apple's key environmental goals, and pitch their idea to Apple experts from across the company at the end of the program.

In order to provide each business with individualized support, each participant was assigned an Apple mentor with expertise in their particular area of business to help guide them in their business development, as well as the development of their final pitch. In addition to the e-learning modules, participants also took part in virtual live sessions with a facilitator to discuss issues of race and environmental justice, and to build community with other entrepreneurs.

After successfully completing the program, every business was given the opportunity to attend an executive certification program through Stanford University or Dartmouth College to help them refine their leadership skills, and they will continue to have access to Apple experts and an alumni community. Several participants in the inaugural cohort have already secured contracts with Apple, and all alumni are eligible to submit request for proposals (RFPs) to become Apple suppliers as opportunities for collaboration in support of our environmental goals become available.



# Our road to carbon neutrality

**As the effects of climate change become more evident with every passing year, we all must accelerate our efforts to fight the greatest threat of our time.**

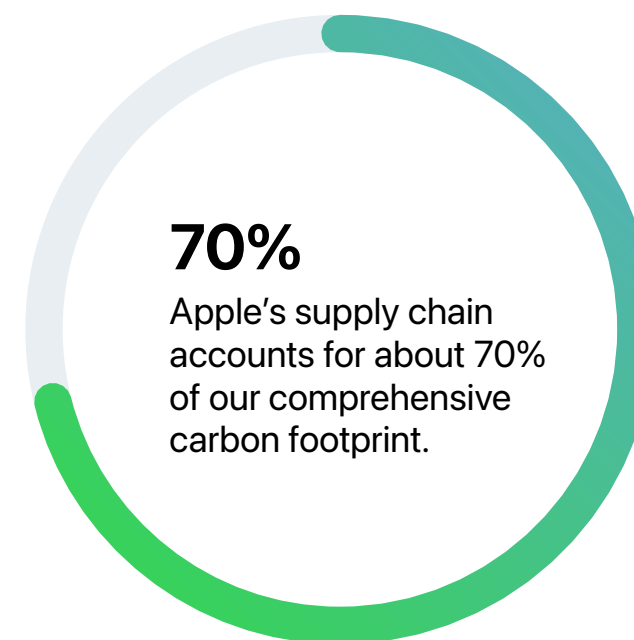
Apple is committed to addressing climate change and increasing the use of renewable energy around the world. This effort and these commitments are in support of our most ambitious environmental goal to date: to achieve carbon neutrality across our supply chain and in our product lifecycle by 2030.

We started by transitioning to renewable energy at our own facilities, and after a decade of work, we reached 100 percent renewable energy in 2018 across 44 countries. Apple’s supply chain represents approximately 70 percent of our comprehensive carbon footprint, and in 2015, we launched the Supplier Clean Energy Program and the Supplier Energy Efficiency Program to advance clean energy through our manufacturing supply chain.

In 2020, we reached our initial supply chain renewable energy goal: bringing online four gigawatts of clean energy into our supply chain. In October 2021, we announced that more than 175 of our suppliers have committed to using renewable energy for their Apple production, representing a commitment to bring more

than nine gigawatts of clean energy online. These actions will avoid over 18 million metric tons of CO2e annually — the equivalent of taking over 4 million cars off the road each year.

Our 2030 carbon neutrality goal places us 20 years ahead of the recommendations put forward by the Intergovernmental Panel on Climate Change calling for carbon neutrality as a planet by 2050. To reach this target, we are working with suppliers to transition our entire manufacturing supply chain — including material extraction, component manufacturing, and final product assembly — to 100 percent renewable electricity.



[Learn More](#)

To learn more about how we map and address our carbon footprint, read our [Environmental Progress Report](#).

## Program milestones

### 2021

- 175+ suppliers committed to using renewable energy for their Apple production, representing 9 gigawatts of renewable energy

### 2020

- More than 100 suppliers committed to 100% renewable electricity for Apple production

### 2019

- Key supplier commitments reached in major supply chain countries
- Launched partnership with Asia Green Fund to drive energy efficiency

### 2018

- iPhone final assembly sites in China set three-year target to reduce energy use by 20%
- Launched China Clean Energy Fund, enabling Apple and suppliers to invest in more than 1 gigawatt of renewable energy in China

### 2017

- Launched Supplier Clean Energy Portal
- Made initial investment in development of nearly 500 megawatts of solar and wind projects in China and Japan to address upstream emissions in our supply chain
- Supplier Code of Conduct requires suppliers to maintain inventory of air emissions, including greenhouse gases

### 2015

- Launched Supplier Clean Energy Program and Supplier Energy Efficiency Program



Solar array, United States



# Addressing carbon emissions in our supply chain

**Electricity usage in our supply chain is the single greatest contributor to our carbon emissions. While this is a global issue, the impact is also local. Bringing renewable energy online with our suppliers and displacing fossil fuels helps decarbonize power grids and improves local air quality for communities.**

While this work is complex, presenting challenges in the form of regulatory barriers, capital requirements, and a lack of access to high-quality, cost-effective solutions, our approach is simple: require suppliers to report their carbon emissions and measure their electricity use, and support their efforts to improve efficiency and shift to renewable energy.

## Measurement

Being able to take effective action toward reducing carbon impact begins with measuring and understanding the carbon footprint of your business. Since 2019, our Code and Standards have required suppliers to regularly identify sources of emissions, report on their carbon footprint, and make this information available to Apple. By understanding the sources and quantity of a supplier's carbon emissions, we are able to provide resources to support the supplier in creating an action plan with the goal of reducing their carbon footprint.

## Energy Efficiency

The goal of our Energy Efficiency program is to help suppliers find ways to optimize their facilities and operations to use as little energy as possible. Becoming energy efficient reduces the energy intensity of manufacturing, which translates to reduced direct carbon emissions.

Supplier energy efficiency projects most typically include items such as replacing outdated or inefficient HVAC or lighting systems, repairing leaky compressed air systems, and recovering waste heat. We support our suppliers' projects by helping to identify opportunities and design solutions, providing extensive education and training opportunities, and connecting them to funding for these projects, which is sometimes an obstacle to making these improvements. As suppliers become more knowledgeable in this space, they become more able to tackle deeper decarbonization challenges.

We prioritize our Energy Efficiency resources to address the largest opportunities for reductions. One example is our three-year initiative to improve the efficiency of iPhone manufacturing. Collectively, the six participating supplier facilities achieved their goal of 20 percent reductions by the end of 2020 compared to the established 2017 baseline. We're taking the best practices we've cultivated over the course of this initiative and scaling them across our supply chain. Final assembly sites for AirPods, iPad, and Apple Watch all launched multiyear energy reduction initiatives in 2020.

In FY2021, more than 100 supplier facilities participated in our energy efficiency program, actively tracking and reporting on more than 2,000 projects — a 39 percent



increase year-over-year. Combined, these projects resulted in 1.157 million CO2e savings in FY2021.

## Renewable energy

As we work with our suppliers to make their facilities and operations as energy efficient as possible, we also support them in making the shift to renewable energy. Our commitment to transition to 100 percent renewable energy for our entire supply chain enables resiliency in the face of challenges like climate change, offers clear competitive advantages in the form of reduced exposure to cost fluctuations, and moves us closer to becoming carbon neutral by 2030. These benefits support our belief that environmental initiatives, such as our energy programs, can be good for both business and the environment.

Our Supplier Clean Energy Program supports suppliers with the knowledge, resources, and access to funding required to make the shift to renewable energy. To date, more than 175 Apple suppliers have committed to using renewable energy for their Apple production, which will result in more than nine gigawatts of clean energy being brought online.

To help suppliers make the transition to renewable energy, we share the experience gained through our own transition to making Apple facilities and operations 100 percent carbon neutral. Through our Supplier Clean Energy portal, we introduce suppliers to resources and training materials with country-specific information to guide their transition, and provide education through customized training with leading experts. We also support the creation and growth of renewable energy industry associations that our suppliers can join to learn more about activities and opportunities in their local market.

Long-standing energy structures can make it difficult to bring new renewable energy online in some regions, prompting some of our suppliers to maximize existing renewable energy solutions, such as onsite solar installations. Others have pioneered new purchasing methods, created renewable energy businesses or even participated in some of the world's largest and most innovative renewable energy deals.

Government policies and rules can present some of the most significant barriers to transitioning to renewables. We lend our voice and work with other companies and NGOs to break down policy barriers to achieve thriving clean energy markets. Across regions, we engage with policymakers to support renewable energy that is cost-effective, accessible to companies, and sourced from high-quality projects that have a material impact on local markets.

In some cases, achieving progress requires innovation. One example of this was the development of the China Clean Energy Fund, which enables Apple and our suppliers to invest in clean energy projects. We've also invested in renewable energy solutions to cover upstream emissions in our supply chain, playing a pivotal role in developing nearly 500 megawatts of solar and wind projects in China and Japan.

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# 175+

suppliers have committed to using renewable energy for their Apple production

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# 9+

gigawatts of clean energy being brought online through supplier renewable energy commitments

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# 2,000+

energy efficiency projects in progress at more than 100 supplier facilities in FY2021

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# Our Values in Action | We're All In on Aluminum

**Aluminum is a key material used in many of our products, appearing most often in the enclosures that give Apple products their iconic shapes and finishes. Because of its prevalence in our products, aluminum is one of the 14 materials we have prioritized as part of our effort to move to recycled and renewable materials. This prevalence, and the fact that it is carbon-intensive to produce, has also made aluminum an important target of our low-carbon design efforts to reduce our comprehensive carbon footprint.**

For well over a century, aluminum has been produced through a carbon-intensive smelting process. But since 2015, we have been hard at work on reducing the carbon impact of our aluminum use by switching to aluminum smelted using hydroelectricity instead of fossil fuels, and by also moving swiftly to recycled aluminum, which has a smaller carbon footprint and also avoids carbon emissions that result from mining-related processes.

Another key factor in our progress on aluminum has been partnering with two aluminum manufacturers that founded a joint venture called Elysis, which aims

to commercialize patented technology that eliminates direct greenhouse gas emissions from the traditional smelting process. Apple joined with the founders of Elysis and the governments of Canada and Quebec to invest in research and development of this technology. Part of this investment was to build a new R&D facility in Quebec, focused on producing commercial-grade primary aluminum at scale.

Through our focused efforts and this partnership, we've been able to achieve significant progress. In 2021, we announced major updates to our use of recycled aluminum in our products. Enclosures across

iPad devices announced and released in 2021, Apple Watch Series 7, and the new MacBook Pro are all made using 100 percent recycled aluminum, joining a number of products that previously achieved this goal.

The results of our efforts to invest in less carbon-intensive aluminum technologies and the inclusion of more recycled aluminum in our products are clear. Since 2015, our carbon emissions associated with aluminum have decreased by 68 percent, marking significant progress toward our 2030 carbon neutrality goal.



[Learn More](#)

To learn more about our priority materials, read our [Material Impact Profiles](#).

To learn more about the materials used in all current Apple products see the Product Environmental Reports, available on [apple.com/environment](https://apple.com/environment).

# Pioneering water stewardship

**Access to clean, safe water is a human right, and a critical community resource shared by people and ecosystems around the world.**

Freshwater resources are increasingly scarce in many regions, so effective water stewardship requires a full and thorough understanding of our suppliers' water use. To gather this data, we surveyed our suppliers to understand their water use related to Apple production, and combined that information with our corporate water footprint to create a comprehensive view of our total water impact.

Our supply chain accounts for 99 percent of our total water use, which includes the sourcing of materials and manufacturing of our products. While many companies focus on their corporate water use and collect limited data on supplier water use, we believe we have a responsibility and opportunity to go even further in order to have a greater impact. That's why through our Clean Water Program, we actively engage with suppliers, considering the needs and activities within the walls of their facilities, as well as those in and around the communities where they operate.

## **Addressing availability and quality through our Clean Water Program**

Over the past decade, we have made significant progress in addressing water reuse and discharge quality across our network of global suppliers and the communities where they operate. Through our Clean Water Program, we support our suppliers in

reducing their reliance on freshwater sources, which in return reduces the impact they'll have on their local watersheds. One of the best ways to do this is to increase water reuse wherever possible, reducing the amount of freshwater that needs to be withdrawn and the amount of water that needs to be treated. In FY2021, suppliers in our Clean Water Program increased their average reuse rate to 41 percent and saved our suppliers 12.3 billion gallons of freshwater, bringing our collective savings to 50.3 billion gallons of water across 10 countries and regions since 2013 — helping to better ensure availability of freshwater in communities around the world.

In addition to reducing freshwater use, we are also committed to improving the quality of water discharged from our supplier facilities in order to protect the quality of shared water resources. Our Code and Standards outline strict requirements for water discharge, and suppliers must adhere to these, as well as all local requirements.

## **Leading the industry toward water stewardship**

Water conservation alone is not enough, which is why we have worked diligently to push the industry toward the concept of water stewardship. Protecting water resources requires going beyond conservation



by ensuring water use in our supply chain is environmentally sound, economically sustainable, and helps to make communities more resilient.

Through our partnership with the Alliance for Water Stewardship (AWS), which began in 2018, we are working to give both our suppliers and the broader industry the tools and resources needed to address water use more holistically, and make a broader impact. The AWS Standard is the first global framework to measure responsible water stewardship across social, cultural, environmental, and economic criteria.

As part of the AWS certification process, independent auditors evaluate a number of factors inside and outside of the facility, and gather input from relevant stakeholders, including local NGOs, public officials,

and community members. Collectively, the rigor and broad scope of the AWS certification ensure the facility's water stewardship actions consider the local water basin and are beneficial to local communities. More and more of our suppliers each year are championing this approach to water management, with 17 supplier facilities completing the rigorous process and achieving AWS certification since 2018.

We continue to introduce our suppliers to the AWS program and are strongly encouraging them to pursue certification, but because water resources are so widely shared, we believe that we have to do more by making water stewardship more accessible across the industry. To do this, we've taken a number of actions, including convening a water roundtable in China to increase awareness of the importance of water stewardship and the AWS certification. We have also taken active roles within AWS, becoming the first electronics company to serve on their board of trustees and participating in the AWS ICT sector working group to share our learnings with industry partners. To further this sharing of our knowledge and progress, we've hosted a number of community-focused workshops, published newsletters regularly, provided funding to translate the AWS standard and move it to an online platform, and provided a series of training videos on the AWS standard, which have been adapted for use across industries and published on the AWS Tool Hub.

### Scaling impact

As we pursue progress across our supply chain environmental programs, we are always looking for ways to multiply impact and rapidly accelerate progress. In 2021, we signed a Memorandum of Understanding (MOU) with Suzhou Industrial Park Administrative Committee and TEDA Eco Center

with the aim of making Suzhou Industrial Park the world's first industrial park to achieve AWS certification.

Of the more than 1,700 companies operating out of the industrial park, 11 of them are Apple suppliers. Through this innovative multi-stakeholder effort, Apple is helping to demonstrate the collective capacity to advance water stewardship on a larger scale. As part of the MOU, training and outreach are underway to drive improvement in water management capabilities at the industrial park, and Apple will support and facilitate their work toward AWS certification in FY2022.

Evolving our strategy to include certifying an entire industrial park versus solely pursuing individual supplier certifications represents a major step forward in the scaling of water stewardship as a strategy across the industry.

## 50+

billion gallons of water saved by suppliers across 10 countries and regions since 2013

## 17

supplier facilities have achieved Alliance for Water Stewardship certification since 2018

## Program milestones

### 2021

- Signed MOU to help Suzhou Industrial Park become world's first industrial park certified through Alliance for Water Stewardship (AWS)
- 17 supplier facilities have achieved AWS certification since 2018

### 2020

- Established ICT water stewardship working group with AWS and RBA
- Adopted new approach to estimate upstream water use in our supply chain

### 2019

- 3 supplier sites earned Platinum AWS certification
- 136 supplier sites in Clean Water Program
- Began requiring suppliers to provide water consumption data

### 2018

- Joined Alliance for Water Stewardship (AWS)
- 2 supplier sites earned AWS certification, including industry's first Gold certification
- Resource Consumption Management Standard published

### 2017

- Enhanced quality standards developed for wastewater discharge
- Stormwater management added to Code and Standards

### 2015

- First supplier graduated Clean Water Program

### 2013

- Clean Water Program established

# Our Values in Action | Creating Water Champions

**From the water we drink, to the food we eat, to the products we interact with each and every day, water is essential to every aspect of our daily lives. As critical as it is, for those who have access to clean, safe water, its importance can often be invisible, and easy to take for granted.**

As a shared natural resource, managing water is a shared responsibility — the positive actions of one stakeholder often cannot offset the negative of another, so forming a mutual understanding of individual impacts on a given watershed and engaging in collective action is critical to ensuring the long-term sustainability of water.

Local water basins act as watersheds, providing a natural catchment of water resources upon which plants, animals, and communities rely. In China, we have been working with local organizations and NGOs, including the Alliance for Water Stewardship, to foster collaboration at the basin level, particularly in areas of high water stress. Since 2018, in an effort to raise broader awareness of water challenges and opportunities in local communities in China, Apple has organized a series of hands-on field trips to provide learning experiences for a diverse group of stakeholders that we call Water Champions. This group includes Apple employees, suppliers, NGOs, and other technology companies operating in China. Since their inception, 52 participants representing 20 supplier sites have participated in Water Champions field trips.

## Qiandao Lake

Our first Water Champions field trip of the year took place in May 2021 at Qiandao Lake, located in Zhejiang province, China. In collaboration with AWS and The Nature Conservancy, 16 participants from Apple and six other companies participated in the two day field trip, which focused on pollution prevention and protection of water resources. Qiandao Lake is located in the Taihu basin, and is in close proximity to Apple suppliers in Shanghai and Zhejiang.

The trip's events focused on fundamentals of water stewardship, including education on the important role of water catchments in local water access and services, and the role of corporate water stewardship in pollution prevention.

## Wanlv Lake

In December 2021, we held our second Water Champions field trip of the year, specifically designed for Apple suppliers operating in the province of Guangdong, China. The 12 participants, representing six Apple suppliers, took part in the three-day, interactive experience.

Over the course of the field trip, participants visited Wanlv Lake, the main water resource for the region,

as well as communities in the surrounding area to gain a better understanding and appreciation of local water resources and the potential impact their factories can have on them.

We worked with AWS and local NGOs to design the experience for suppliers, and included activities that would connect them directly to the places and communities that are most impacted by water decisions their businesses make. This included a trip to local villages where they met with community members and NGOs living and working in the area

surrounding Wanlv Lake to hear their stories, concerns, and how they themselves are working to steward local resources.

Participants also visited a domestic wastewater treatment plant that is using naturally occurring solutions to showcase innovative ways of improving water quality, as well as a local factory producing bottled spring water to learn how other industries are managing water use and moving toward water stewardship.

**“[Gaining] an in-depth understanding of the sustainable protection of clean water sources not only requires a good ecosystem, but also joint participation of the government, enterprises, and social organizations. Apple promotes [the idea that businesses should] not only pay attention to their own water management inside their factories, but also focus on the sustainable water resource issues of the entire basin.”**

Xinran Zeng | The Nature Conservancy Qiandao Lake Waterfund





Final Assembly at a Zero Waste Verified Facility, United States



# A zero waste mindset

**For Apple, zero waste is more than a single goal, program, or certification — it's a mindset. And we see it as our responsibility to eliminate waste at every stage of a product's lifecycle - from design, to manufacturing, and all the way through recycling at the end of a product's life.**

We look at every part of our business to find opportunities to do more with less — and we remain focused on applying this zero waste mindset to making more efficient use of the materials that end up in our products, as well as those used to build them. Not only is this work good for the environment, but by ending our reliance on landfills, we also contribute to protecting the local communities where our suppliers operate.

100 percent of our final assembly sites globally producing iPhone, iPad, Mac, Apple Watch, Apple TV, AirPods, HomePod mini, and Beats maintained their zero waste to landfill performance last year. In FY2021, suppliers participating in our Zero Waste Program diverted 491K metric tons of waste from landfills, bringing the total to 2.01 million metric tons since 2015. The number of supplier sites participating in this work grew from 55 to 215 sites across 12 countries and regions in FY2021, driven by a significant expansion in commodity suppliers, including facilities that manufacture enclosures, printed circuit boards, cameras, and packaging.

## **Creating new markets for zero waste infrastructure**

The UL2799 Zero Waste to Landfill standard requires at least 90 percent diversion through methods other than waste-to-energy. Since 2015, 105 of our supplier

facilities have achieved this target, with more and more reaching this milestone every year.

As we've continued to expand the scope of this program, we've found the need to also help expand the availability of local zero waste and recycling infrastructure, which is critical to a supplier's ability to become a zero waste facility.

In Vietnam, for example, as much as 85 percent of all solid waste goes to landfill due to a lack of recycling and waste-to-energy infrastructure. In 2020, we worked with one of our suppliers in Vietnam to become the first Zero Waste certified site in the country. They were able to achieve this by considering the processes and resources that would be necessary early in preparing for production of Apple products. By closely working with the existing waste solution vendors and helping them to expand their businesses, we have been able to continue the expansion of our program, while simultaneously helping to expand the available infrastructure and support.

Across the supply chain, driving zero waste practices often requires creating innovative solutions to waste diversion and recycling challenges. In 2017, we began collaborating with a third-party recycler to collect used plastic trays from final assembly suppliers in China so they could be cleaned and shipped back to the suppliers for reuse. This process has

helped our suppliers reduce their use of plastic for component trays by 5,084 metric tons. Based on the success of this program, we helped our recycling partner in China expand their business into Vietnam, providing recycling infrastructure that was previously unavailable — supporting not only the zero waste

## 2M+

metric tons of waste diverted from landfills by suppliers since 2015

## 105

supplier sites have achieved UL Zero Waste certification

## 5,084

metric tons of plastic reduced by recycling plastic trays used during manufacturing

goals for our suppliers in the region, but creating a new market accessible to other manufacturers.

### Scaling zero waste through innovative assessment models

Since 2015, we have worked with UL to drive adoption of zero waste standards and certification across our supply chain. We selected UL2799 as our zero waste standard, because it is the most stringent standard for manufacturing, covering all waste streams in a given facility, including office and canteen waste, as well as hazardous waste.

Typically, to achieve certification, UL directly verifies the zero waste performance of each individual facility, which requires both a document review and an onsite validation. While this model has taught us a lot about how to best prepare suppliers for certification, the current process has also at times presented challenges to rapid expansion of the program.

In 2021, we worked with UL to develop the industry's first supply chain zero waste management system assurance program. The assurance program aims to verify a company's zero waste program at a systems level, rather than an individual level, allowing for much faster adoption of zero waste practices across a supplier's business.

While we will continue to work closely with and monitor individual facilities, this new assurance process has the potential to significantly accelerate the adoption of UL's most stringent zero waste standards across Apple's supply chain. It will also provide a new model for companies across industries as they accelerate their own zero waste programs.

## Program milestones

### 2021

- Partnered with UL to develop industry's first supply chain zero waste management system assurance program
- Diverted more than 2 million metric tons of waste from landfills since 2015

### 2020

- First Zero Waste certified site in Vietnam
- Beats final assembly sites achieved UL Zero Waste certification
- 100% of established final assembly sites UL Zero Waste certified

### 2019

- Apple TV final assembly sites achieved UL Zero Waste certification

### 2018

- All final assembly sites for iPhone, iPad, Mac, Apple Watch, AirPods, and HomePod achieved UL Zero Waste certification
- 1M metric tons of waste diverted from landfill
- Introduced industry first Recyclable Protective Film (RPF)

### 2017

- First UL Zero Waste certification in India

### 2016

- 100% UL Zero Waste certification achieved for final assembly sites in China

### 2015

- Launched Zero Waste Program
- First final assembly site to achieve UL Zero Waste certification in China





From top to bottom:

Final Assembly, Vietnam; Final Assembly, China; Repair Center, United States; Final Assembly, Ireland; Final Assembly, India



**07**

# Supplier Performance and Development

Supplier Performance in FY2021

**We hold our suppliers to the highest standards of labor and human rights, health and safety, and environmental stewardship, and we evaluate their compliance with these standards each year through rigorous, third-party assessments. Along with ongoing engagement, these assessments provide an important window into a supplier's performance, and help us provide the necessary support to drive continuous improvement across our supply chain.**

# Supplier Performance in FY2021

**Assessments, also known as audits, are one of several methods we use to measure compliance with our requirements. Assessments, which take place onsite at supplier facilities, provide a snapshot of a supplier's performance. However, when combined with regular engagement with supplier teams, mandated reporting, and listening directly to hundreds of thousands of supplier employees about their workplace experiences, our rigorous supplier assessments provide a clear measure of their performance in upholding our Code and Standards.**



[Learn More](#)

You can learn more about our assessment process and capability-building programs by reading:

[How We Work With Suppliers.](#)

\*Apple reports 3TG smelter and refiner assessment information on a calendar year per U.S. Securities and Exchange Commission (SEC) requirements. See our annual Conflict Minerals Report by visiting <https://www.apple.com/supplier-responsibility/>

In reporting year 2021, 1,117 independent, third-party assessments were conducted in 52 countries, including 886 Code of Conduct assessments and 291 smelter and refiner assessments.\* Since 2007, Apple-managed assessments have covered 94 percent of Apple's direct manufacturing spend. Every year, we also conduct unannounced assessments and unannounced visits in response to workers' grievances and allegations, or to verify risks at supplier facilities based on predictive analytics. In FY2021, 211 unannounced assessments and investigations were conducted where the supplier facility was provided no advance notice of our arrival.

Over the course of the assessment process, we 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 (labor and human rights, health and safety, and environment), with the average of those scores comprising the facility's composite score for the year.

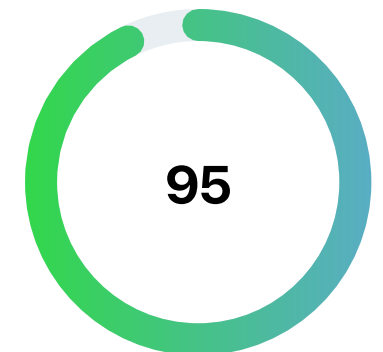
In addition to third-party Code of Conduct assessments, we require many of our suppliers to also undergo the Responsible Business Alliance's (RBA) Validated Assessment Program (VAP), a facility-wide, third-party assessment widely used by the industry. A total of 99 RBA VAP assessments were completed in FY2021 at Apple supplier sites.

## Our supply chain's assessment performance, by evaluation category

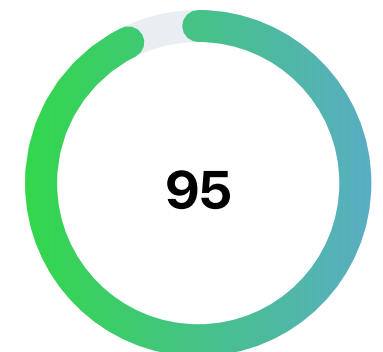
Labor and Human Rights



Health and Safety



Environment



# Holding suppliers accountable to our high standards

**In addition to having teams from Apple in our suppliers' facilities regularly, we work with independent, third-party auditors to perform rigorous assessments of our suppliers' performance in upholding our strict standards.**

## Taking corrective action

If we uncover non-compliance, we take prompt action to ensure suppliers not only correct the issue, but make meaningful, long-term changes. We do this through a **Corrective Action Plan (CAP)**, during which 30-, 60-, and 90-day check-ins with Apple are required.

We then conduct our **Corrective Action Verification (CAV)** process to verify that all corrective actions have been successfully implemented, and necessary steps have been taken to prevent a reoccurrence.

## Non-Retaliation

We prohibit retaliation of any kind against supplier employees who participate in our assessments. We partner with a third-party organization to contact supplier employees interviewed during assessments to confirm that they were not subjected to retaliation.

## Activities included in our Code of Conduct assessments



### Management interviews

We interview supplier management to confirm that proper management practices and systems are in place as required by our Code and Standards.



### Extensive document review

We thoroughly review employee records, payroll information, contracts, and policy documentation.



### Employee interviews

We interview supplier employees, in their native language and without management present, to confirm that our observations match their experience.



### Site walk-throughs

Our detailed inspections look at chemical safety, fire safety, indoor air quality, machine safety, environmental controls, and personal protective equipment, among many other requirements.



### Core Violations

While suppliers are required to correct and validate any instances of non-compliance, a Core Violation is the most serious violation of Apple’s Supplier Code of Conduct. In FY2021, 11 Core Violations were found, including two debt-bonded labor violations, and nine instances of working hours or labor data falsification.\*

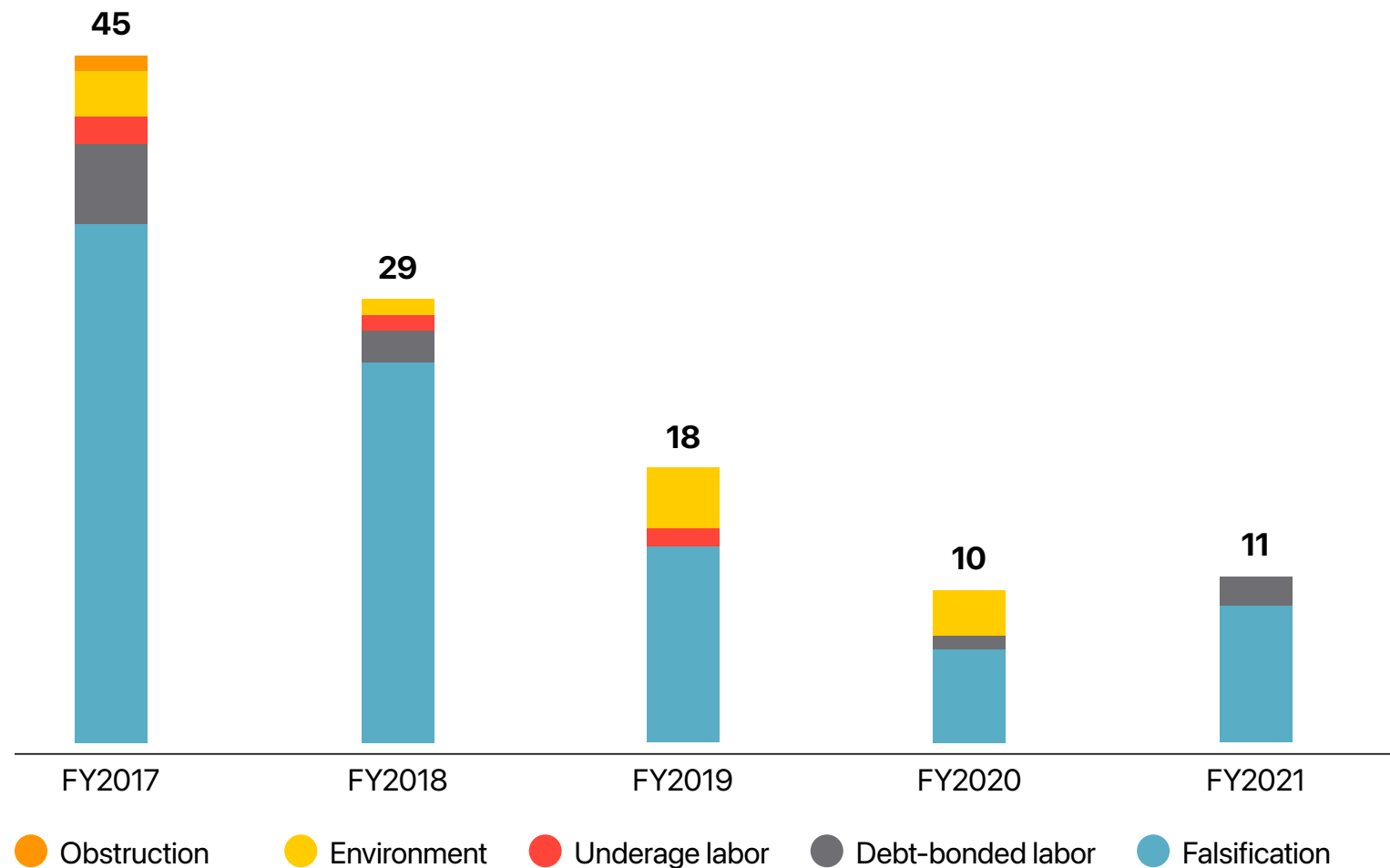
The two debt-bonded labor Core Violations occurred at two separate facilities owned by the same supplier in

Taiwan. Auditors found that Foreign Contract Workers had paid recruitment fees, a practice that is strictly prohibited by Apple everywhere we operate, and even if local laws allow it. Any time we find Foreign Contract Workers have paid any recruitment fee we require the supplier to immediately repay the employees in full and we verify this repayment through a third-party auditor. As always, we also worked with the supplier to enhance their management systems and practices to prevent a reoccurrence.

In the nine instances of working hours or labor data falsification, suppliers were found to have provided falsified records to Apple that showed full compliance with our working hours requirements — which includes limiting working hours to no more than 60 hours per week, and 6 consecutive workdays — in order to hide excessive overtime and/or lack of weekly rest days. There were also two instances in which suppliers falsified records in order to hide non-compliance with our working requirements for students and interns.

For each instance, the supplier involved was placed on immediate probation and their CEO was notified. The supplier’s ethics policy and management systems underwent a thorough review to identify the root causes of the issues, and the supplier was required to undergo additional assessments to ensure that policy changes are implemented to prevent future violations. The suppliers were also required to revise all records to reflect an accurate accounting of hours worked.

### Core Violations over time



\*In previous progress reports, Apple supplier performance was reported based on calendar year data.



### Learn More

You can learn more about Core Violations and our corrective actions process by reading:

[\*\*How We Work With Suppliers.\*\*](#)

**Improving supplier performance through capability-building**

We are continually raising the bar for ourselves and our suppliers. This includes working with our suppliers to ensure they have the tools and resources they need to continuously improve their performance. Through capability-building, Apple experts support supplier teams to help them improve their management

systems to resolve immediate issues and to prevent them from reoccurring.

We divide suppliers into three performance categories (low-, medium-, and high-performers) based on their composite assessment score. These categories are a measure of the frequency and severity of a supplier’s assessment findings.

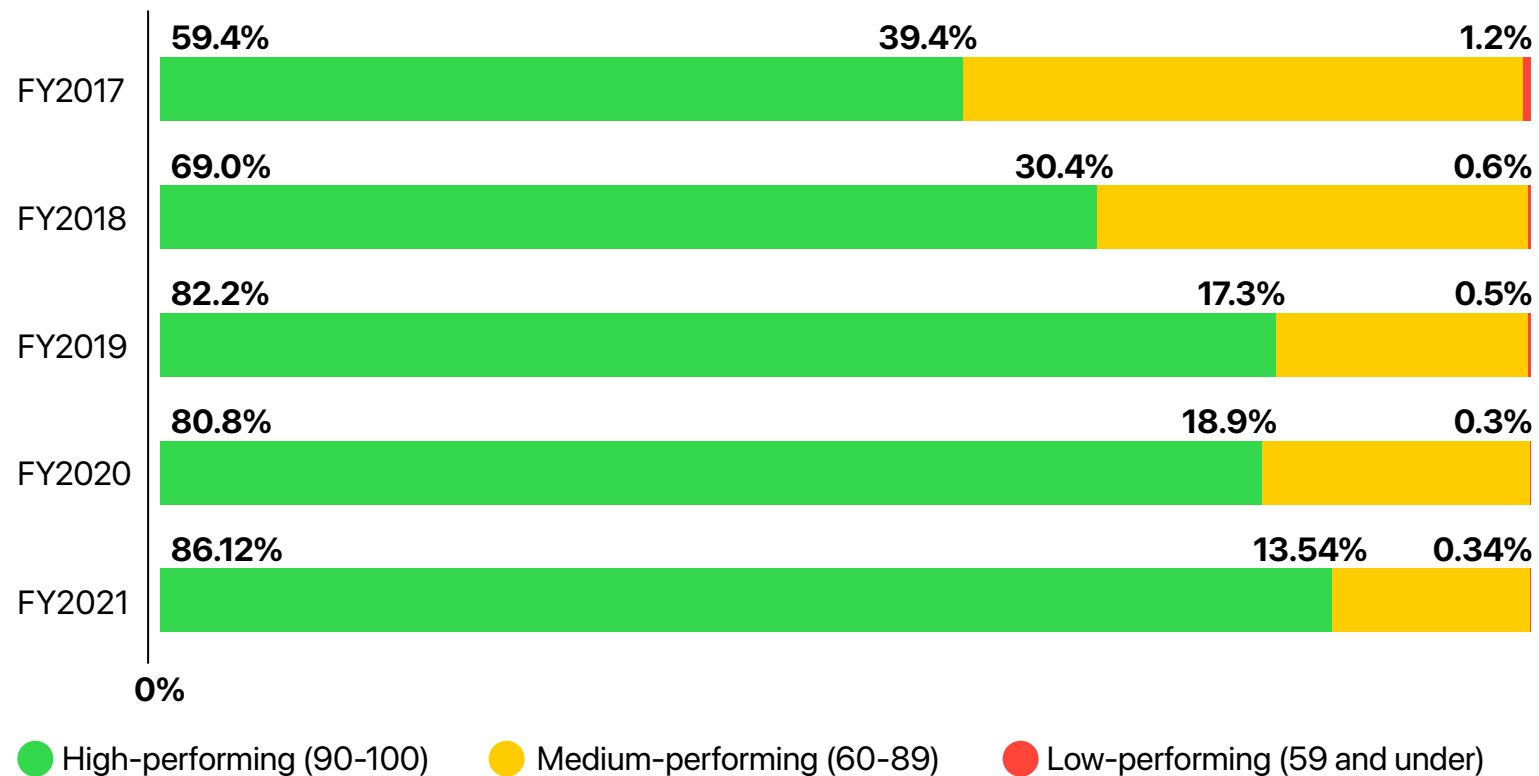
Through consistent engagement and capability-building, we are continually driving improvement

among our suppliers. In FY2021, approximately 86 percent of our suppliers were assessed as high-performers, 14 percent as medium-performers, and less than 1 percent as low-performers.\*

One example of how we’ve driven improvements in supplier capability and performance is in compliance with our working hours standard. We review working hours as part of our assessments and implement Corrective Action Plans as needed. In addition, for

nearly 10 years, we have monitored the working hours of more than 1.5 million workers on a weekly basis, and validated the reporting of working hours through focused audits. In FY2021, our suppliers achieved 95 percent compliance with our working hours requirements, a 2 percent increase from the previous year.

**Year-over-year supplier performance**



\*In previous progress reports, Apple supplier performance was reported based on calendar year data.



[Learn More](#)

Learn more about how these categories are defined by reading [How We Work With Suppliers](#).





Final Assembly, Vietnam



# 08 | Additional Resources

Additional resources

Aligning with the UN Guiding Principles  
on Business and Human Rights

**In addition to this report, Apple publishes annual disclosures and reports designed to provide transparency into our work across our business and our global supply chain.**

# Additional resources

**In addition to this annual progress report, Apple releases annual policy updates, public reports, and disclosures. Below is a guide to these publications.**

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

Our Supplier Code of Conduct outlines Apple's requirements for its suppliers regarding 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.

### **Supplier Code and Standards**

## **Apple Human Rights Policy**

Our Human Rights Policy is based on internationally-recognized standards, including the United Nations International Bill of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, and the United Nations Guiding Principles on Business and Human Rights, and governs how we treat everyone from our customers and teams, to our business partners, and people at every level of our supply chain.

### **Human Rights Policy**

## **How We Work With Suppliers**

How We Work With Suppliers is a guide to our comprehensive approach to supplier engagement and ensuring compliance with our Code and Standards.

### **How We Work With Suppliers**

## **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](https://apple.com/environment)

## **Apple Environment, Social and Governance (ESG) Report**

Our ESG Report discloses our progress in upholding our long-standing commitment to advancing initiatives across Environmental, Social, and Governance (ESG) efforts.

Apple's ESG Report is available at [investor.apple.com](https://investor.apple.com)

## **Environmental Progress Report**

Every year, we release a report with detailed information about our environmental efforts, how we measure our overall environmental footprint, and the progress we've made over the past year.

Apple's Environmental Progress Report is available at [apple.com/environment](https://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 life cycle impact of that product.

Product Environmental Reports are available at [apple.com/environment](https://apple.com/environment)

## **Material Impact Profiles**

This paper details how we've prioritized the materials in our products based on their environmental, social, and supply impacts. The prioritized list of materials represents those which we will first transition to recycled or renewable content, driving toward our goal of using 100 percent recycled or renewable materials in our products.

### **Material Impact Profiles**

## **Supplier List**

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

### **Supplier List**

## **Conflict Minerals Report**

The Conflict Minerals Report serves as our filing to the United States Securities and Exchange Commission in compliance with Dodd-Frank Section 1502 reporting related to the sourcing of tin, tungsten, tantalum, lithium, and gold from the DRC and adjoining countries.

### **Conflict Minerals Report**

## **Smelter and Refiner List**

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

### **Smelter and Refiner List**

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

This report meets disclosure requirements for the California Transparency in Supply Chains Act of 2010, the UK Modern Slavery Act 2015, and The Australian Commonwealth Modern Slavery Act 2018.

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

# Aligning with the United Nations Guiding Principles on Business and Human Rights

**Our efforts to identify, mitigate, prevent, and remedy human rights risks align with the Business and Human Rights Due Diligence process set forth in the United Nations Guiding Principles on Business and Human Rights (UNGPs).**

## Policy commitment

We are deeply committed to respecting internationally-recognized human rights in our business operations as set out in the United Nations International Bill of Human Rights and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. Our approach is based on the UN Guiding Principles on Business and Human Rights, which means we conduct human rights due diligence to identify risks and work to mitigate them. We also seek to remedy adverse impacts, track and measure our progress, and report our findings. In keeping with the UNGPs, where national law and international human rights standards differ, we follow the higher standard, and where they are in conflict, we respect national law while seeking to respect the principles of internationally-recognized human rights. Our Apple Human Rights Policy outlines how we treat everyone, including our customers, Apple employees, business partners, and people at every level of our supply chain. Our Board of Directors has adopted this policy on behalf of Apple and is responsible for overseeing and periodically reviewing the policy. Apple's Senior Vice President and General Counsel oversees the implementation of Apple's policy and reports to the Board and its committees on our progress and

significant issues identified during the due diligence process.

## Embedding respect for human rights

Apple's Board of Directors oversees its Chief Executive Officer and other senior management in the competent and ethical operation of Apple on a day-to-day basis. A number of cross-functional teams are responsible for carrying out human rights due diligence, including, but not limited to, Legal and Global Security, Business Conduct, and Environment and Supply Chain Innovation (ESCI). Apple's ESCI team sits in Apple's World Wide Operations organization and coordinates activities related to human rights across Apple's supply chain.

In 2005, the Apple Supplier Code of Conduct and the Supplier Responsibility Standards (Code and Standards, respectively) were developed to clearly set out, in detail, our requirements for suppliers relating to human rights. Every year since then, we have incorporated feedback from stakeholders, together with evolving legal norms and best practices, to ensure that our Code and Standards reflect current internationally-accepted human rights standards.

One of the ways we measure our ability to uphold human rights standards is by assessing our



suppliers against our Code and Standards to drive improvements in the areas of labor and human rights, health and safety, environment, ethics, and management systems. 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 their rights. 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 and Standards. 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. Deeper in our supply chain, we work with partners to raise rights awareness through our Responsible Sourcing program.

## Identifying salient human rights risks

Identifying risks in our global supply chain is the first step to eliminating those risks through improvements to our policies and strategies, and through collaborative capability-building with our suppliers. Our efforts to identify, mitigate, prevent, and remedy human rights risks align with the Business and Human Rights Due Diligence process set forth in the UNGPs. First, we identify salient human rights risks through our robust assessment processes, as well as by participating in industry-level, third-party audits. Apple selects suppliers for assessment based on a number of factors, including previous audit performance, manufacturing process risks, and planned spending.

We also identify salient human rights risks through our own risk analysis and through the channels we maintain with key rights-holders, stakeholders, and partners. These include supplier employee interviews

and surveys, consultations with human rights, labor, and environmental experts, expert groups we convene on specialized or emerging human rights topics, UN and government labor and human rights reporting and consultations, media reports, the results of our supplier assessments, discussions with supplier management teams, and reports received through our partners around the world.

In addition to our own internal monitoring, reports identifying possible risks come to us from civil society organizations, news outlets, people in the supply chain or supply chain communities, local whistleblower mechanisms, and third-party hotlines. They also come 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.

The following are examples of "salient human rights risks" in our supply chain that relate to the ILO Core Conventions, which are based on supplier assessments, due diligence deeper in our supply chain, work within our industry, and public reporting. Each of these is addressed in our Code and Standards:

- Discrimination
- Freedom of Association and Collective Bargaining
- Involuntary Labor and Human Trafficking
- Underage Labor

## Managing salient human rights issues

Suppliers are required to operate in accordance with our Code of Conduct and in full compliance with all applicable laws and regulations. Our Code is supplemented by our Standards, which provide additional clarity regarding Apple's requirements. Our suppliers must meet these Standards to be in compliance with the Code.

We require all suppliers to train their employees on their rights. The ability for supplier employees to speak up without fear of retaliation is fundamental to labor and human rights. Apple's Code and Standards align with the ILO's fundamental conventions, including standards relating to the right to freedom of association and collective bargaining. Even where the right to freedom of association and collective bargaining is restricted under local law, suppliers are prohibited from obstructing alternative legal means of workers to associate and to individually and collectively engage with their employer without interference, discrimination, retaliation, or harassment.

## Assessing impacts, integrating findings, and taking action

Supplier performance is assessed against our Code and Standards to drive improvements in the areas of labor and human rights, health and safety, environment, ethics, and management systems. Assessments are a comprehensive process that can require multiple days at a supplier in order to conduct site inspections, review documents, and complete worker and management interviews. We evaluate suppliers on 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 (labor and human rights, health and safety, and environment), with the average of those scores comprising the facility's composite score for the year. Achieving progress requires strong processes to hold suppliers accountable, verifying that suppliers address violations when they are discovered, and validating that corrective actions have been completed. We call these processes Corrective Action Plans and Corrective Action Verifications.

If non-compliances are identified during an assessment, we create a Corrective Action Plan for the supplier, requiring 30-, 60-, and 90-day check-ins. As part of the process, our capability-building team provides suppliers with training on industry best practices and guidance in resolving identified issues, as well as support in strengthening management systems and practices to prevent any issues from reoccurring.

We identify and mitigate risks in our supply chain through improvements to our policies and strategies, and through collaborative capability-building with our suppliers. We report on Core Violations of our requirements and integrate findings and learnings into the annual updates to our Code and Standards.

## Tracking progress

We track and measure our performance across a range of areas, and we apply the lessons we learn to continually improve. We report our performance publicly in several ways, including in our annual progress report, our Statement on Efforts to Combat Human Trafficking and Slavery in Our Business and Supply Chains, and our Conflict Minerals Disclosure. In addition, we report Code Violation metrics in this annual progress report.

## Stakeholder engagement

Apple is committed to working in collaboration with stakeholders beyond its own supply chain to achieve industry-wide change. To do this, we engage with industry associations, civil society organizations, academics, UN agencies, and governments to share our progress and promote best practices. We also convene regular stakeholder roundtables and expert groups to learn from others' perspectives and seek critical feedback on our programs.

In 2021, we launched a digital platform to deliver enhanced training directly to supplier employees in their native language. The new platform helps to identify gaps in knowledge of labor laws and workplace requirements, and adapts the user experience accordingly to help ensure better comprehension of the material. We conducted focus groups with supplier employees in order to better tailor the content in ways that are most effective and engaging. We will be expanding this training to additional supplier facilities in 2022.

We also continued our partnership with SCORE Academy, an organization supporting decent work in global supply chains, to successfully launch the SCORE Program, based on training curriculum developed by the ILO. The program, which has been launched at supplier sites in China, provides opportunities for management and supplier employee representatives to collaborate on solutions for EHS risks, workplace dialogue, productivity, and issues such as the prevention of harassment in the workplace.

## Examples of remediation processes

The following are descriptions of the types of Code of Conduct violations we are working to identify and address, including debt-bonded labor, working hour infractions, and underage labor:

- **Prevention and remediation of debt-bonded labor**

Apple has zero tolerance for debt-bonded labor. That's why in 2015, we mandated our zero-fee policy across our supply chain, going above and beyond internationally-recognized labor standards.

Our remediation process for labor recruitment fees requires direct remedy, with suppliers repaying

employees for any fees paid in the process of obtaining a job. If any fees are discovered, the supplier's Chief Executive Officer is notified, and the supplier is placed on probation, requiring them to submit a worker 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. Since 2008, \$33.2 million in recruitment fees have been repaid to 37,322 workers by our suppliers.

- **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 work with suppliers to implement Corrective Action Plans as needed. If falsification of employee working hours is discovered, the supplier is placed on probation and its Chief Executive Officer 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 assessments to confirm that policy changes have been implemented in order 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.

- **Prevention and remediation of underage labor**

The use of underage labor is a Core Violation of our Code. If underage labor is discovered through our supplier assessments, specialized third-party assessors are brought in for an in-depth review, and the supplier is required to immediately and safely return the underage individual to his or her home. Educational opportunities are presented to the underage individual and his or her guardians. The supplier is required to pay all tuition and educational fees, and to continue to pay the individual's wages

that would have been earned at the supplier facility until the individual reaches legal working age. Follow-up is conducted to verify the individual's overall well-being both at school and at home. Once the individual 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 decade, our efforts have driven significant progress in this area.



Component Manufacturing, United States



# A relentless focus on better.

Continuous improvement is in Apple's DNA, and our work to uphold the highest standards across our global supply chain is no exception.

We believe that business can and should be an innovative force for good.

By upholding our values everywhere that our business reaches, we can prove this to be true, and share what we've learned with others, so that everyone moves forward, faster.

Our work continues.



All photography showing supplier employees without masks was taken prior to the COVID-19 pandemic.

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