



How we source materials responsibly

Apple is committed to responsibly sourcing all materials — whether from primary or recycled sources — used in Apple products.


Apple Responsible Sourcing Toolbox




Innovate in materials sourcing



Map the supply chain and establish strict requirements




Understand risks by using supply chain tools such as the Risk Readiness Assessment




Conduct independent, third-party audits of primary and recycled materials



Address risks that are found



Publish smelter and refiner list annually




Increase recycled and renewable content



Support local communities




Engage with civil society and support local human rights and environmental defenders



Strengthen industry traceability systems to increase transparency



Develop and drive common industry standards



Provide training to supply chain actors to strengthen due diligence



We set high standards

Our requirements and due diligence practices are aligned with international standards, including the United Nations Guiding Principles on Business and Human Rights, the International Labour Organization’s International Labour Standards, and the Organisation for Economic Co-operation and Development (“OECD”) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

- Identifying risks

We require our suppliers to identify and assess a broad range of risks, including social, environmental, and human rights risks for materials used in Apple products. We support this work by training suppliers, and working with others to develop and scale tools to support risk management across their supply chains.

- Strengthening industry standards

In addition to setting our own rigorous standards, we support the development of industry-wide standards. We participate and serve in leadership capacities on multiple industry associations and initiatives, such as the Responsible Business Alliance and the Responsible Minerals Initiative (“RMI”).



We map and prioritize materials

Our goal is to one day use only recycled or renewable materials for our products and packaging. We use data to understand the environmental, social, and supply chain impacts of materials used in our supply chain, as well as where those materials are coming from, to drive our strategy.

- Identifying priority materials

Looking across commonly used mined elements and raw materials, and weighting against the amount of each Apple uses, we’ve identified 15 priority materials that represent the biggest opportunities for impact across environmental, social, and supply chain criteria: aluminum, cobalt, copper, glass, gold, lithium, paper, plastics, rare earth elements, steel, tantalum, tin, titanium, tungsten, and zinc. These materials accounted for 87 percent of the total product weight shipped to our customers in 2024.

- Mapping materials used in our products

We map our supply chain to the smelter and refiner level and, to the extent available, to the mining level. We map smelters and refiners that provide tin, tantalum, tungsten, gold (“3TG”), cobalt, and lithium to our suppliers. We also map other materials in our products — such as mica, copper, graphite, and nickel. For biologically grown materials, this can be a farm, or a point of collection for recycled materials.

- Primary materials

Although Apple does not source primary material directly from mine sites, our responsible minerals sourcing program includes requirements that apply to all levels of Apple’s supply chain.



We hold suppliers accountable

Every year, we publish a list of all identified 3TG, cobalt, and lithium smelters and refiners in our supply chain. In 2016, we became the first electronics company to publish a list of cobalt refiners in our supply chain, and in 2020, we were the first to publish a list of lithium refiners.

- Third-party assessments

Suppliers are only permitted to use or source key materials for Apple products from smelters, refiners, and recyclers who have completed, or demonstrated progress towards completion of, responsible sourcing audits. We also work closely with third-party audit programs, such as those operated by the RMI and the London Bullion Market Association.

In 2024, 100 percent of the identified 3TG, cobalt, and lithium smelters and refiners in our supply chain participated in third-party audits. If smelters or refiners are unable or unwilling to meet our standards, we take necessary actions, through our suppliers, to terminate the applicable business relationships. Since 2009, Apple has directed the removal of 203 3TG, 17 cobalt, and nine lithium smelters and refiners from our supply chain.*

- Addressing allegations

We take allegations related to our supply chain very seriously — and we expect our suppliers to do the same. We require our suppliers to review and address any incidents reported to them involving their materials supply chains. We provide support to help suppliers complete corrective actions in line with OECD Due Diligence Guidance.



We empower independent voices and local communities

We support industry platforms, such as the RMI Grievance Mechanism, and grassroots organizations that enable people living and working in and around mining communities to voice concerns. We also partner with international development organizations to deliver rights-awareness training to miners, youth, and community officials in mining communities in the Democratic Republic of the Congo (“DRC”).

- Vocational education

For the past eight years, we’ve supported Pact’s vocational education programming that provides mentorship, literacy classes, and career training for mining communities in the DRC.

- Supporting human rights and environmental defenders

Since 2017, we’ve partnered with the Fund for Global Human Rights to support human rights and environmental defenders working in the DRC.

- Creating access to reliable and renewable energy

Through the Public-Private Alliance for Responsible Minerals Trade, we support the Congo Power initiative, which deploys renewable electricity systems to organizations providing services to mining communities in the Great Lakes Region of Africa.

- Environmental restoration and community investment

Since 2017, we’ve worked with the nonprofit RESOLVE on projects aimed at restoring and rehabilitating ecosystems that have been affected by legacy mining operations. This includes Regeneration, a project focused on re-mining and processing waste material from legacy mines to further restore natural environments and promote biodiversity.

* The total number of 3TG smelters and refiners directed to be removed from Apple’s supply chain since 2009 represents a cumulative count with smelters and refiners only counted once, when first removed from Apple’s supply chain. 3TG Smelters and refiners may subsequently re-enter the supply chain if they meet Apple’s Code and Responsible Sourcing Standard and other 3TG mineral requirements.