



Cisco's Green Supply Chain

Vision

Cisco approaches the green supply chain holistically, from initial design to end-of-life recycling. Cisco is developing the strategy and leading cross-divisional programs to reduce the environmental impact associated with Cisco products throughout their lifecycle, including supply chain practices that:

- Increase natural resource conservation and efficiency while reducing raw material, fabrication, packaging and transport costs
- Reduce waste while improving product design, packaging, and delivery costs
- Decrease or eliminate the use of potentially hazardous substances

Cisco's Green Supply Chain in Action

Cisco is committed to comprehensive global supply chain practices that assure social responsibility in human health and safety, supplier operations, natural resources utilization, and waste mitigation and minimization. Green supply chain initiatives underway at Cisco include:

- **Product Compliance Assurance Process (PCAP)** is a risk-based compliance assurance process across the supply chain to demonstrate due diligence in preventing the use of restricted substances in Cisco products. A process-based approach to compliance enables Cisco to assess the risk of supplier non-compliance and is a critical part of the mission to diligently ensure standards of quality and care.
- **Supply Chain RoHS Validation Program** is applied across the supply chain to monitor and document the supply chain's use of controlled chemical substances identified by [RoHS](#), the Restriction of Hazardous Substances Directives issued by China and the European Union. Cisco is in full compliance with both Directives and is working to meet the requirements of new, additional RoHS-like legislation in other countries.
- Cisco kicked off its **lead-free program** in January 2007 to monitor regulatory trends and work to balance customer quality perceptions and supplier activity. The implementation of the lead-free program will transition Cisco, Linksys, and Scientific Atlanta product lines to use lead-free solder and address the technology issues surrounding the quality and robustness of lead-free solder. Cisco's goal is to remove lead in solder from the supply chain for all Cisco, Scientific Atlanta, and Linksys products by 2011.
- Developed in partnership with an enterprise customer to help it realize its environmental goals, a recent **green packaging** pilot program reduced packaging materials by 77%, , saving over 3.7 million pounds from going into landfill.
- Cisco continues to focus on eliminating all classes of [Ozone Depleting Substances \(ODS\)](#) from the supply chain.

The green supply chain and product design

Cisco's commitment to reducing the environmental impact of its products includes environmental considerations in the design phase of product development, such as:



- **Energy Efficiency** - continually searching for ways to improve product performance while maintaining or reducing energy demands. For example, one product design incorporated a thermo-management circuit to the board design. The circuit operates the cooling sub-system more efficiently by activating controls only as needed, reducing power demand.
- **Product Packaging** - commitment to value engineering in packaging materials innovation to reduce product cost and environmental impact. Cisco product packaging can also be used for product returns and trade-ins, is environmentally sound, and recyclable.
- **Design for Upgradeability** - employing a modular approach to system design, allowing for the easy upgrade of network interface and processor boards and continued use of the existing system chassis and back-planes. This means that chassis built and shipped 10 years ago are still in use today. Upgradeability features extend product life, generating less waste over time, and facilitate environmentally sound disposal.
- **Design for Recyclability** - considering Cisco's products at the material level, how they are assembled in the manufacturing process and how they are ultimately disposed of. Considerations include material diversity, ease of disassembly, and end of life/disposal concerns. An example of design for recyclability is the use of screws in place of fasteners in component assembly, which makes products easier to disassemble for reuse or recycling.
- **Materials Innovation** - identifying opportunities to incorporate materials and components that will reduce the overall environmental impact of Cisco products and packaging. Cisco is committed to eliminating banned substances and reducing other materials of concern from its products. This practice improves quality and reliability, increases product performance, extends product life, and allows for recycling of Cisco products and packaging at the end-of-life.

Industry Associations

Cisco has long had a supplier code of conduct, and its active membership in both the [Electronic Industry Code of Conduct \(EICC\)](#) and the [Supply Chain Working Group of the Global eSustainability Initiative \(GeSI\)](#) allows it to continually adjust its code to assure robustness and leverage industry alignment for the benefit of its supply chain partners and customers.

For More Information

To learn more about Cisco's green supply chain initiatives, go to <http://www.cisco.com/web/about/ac227/ac333/the-environment/supply-chain.html>