

Cisco Closed-loop Plastic Label

June 2nd, 2020

In an important step toward our circular economy goals, Cisco is launching select models of the IP phone 8800 series and the Webex Room Kit Plus using 100% Post-Consumer Recycled (PCR) plastic resin. These products will be the first to carry a new closed-loop plastic label Cisco has created to differentiate products made with recycled plastic sourced from our own industrial recycling.

Like many companies, Cisco uses plastic in both our products and packaging. Plastic has a lot of benefits, from its technical properties to its low cost and light weight, which helps to reduce logistics emissions. However, it also comes with many well documented challenges, such as being derived from fossil fuels and low recycling rates.

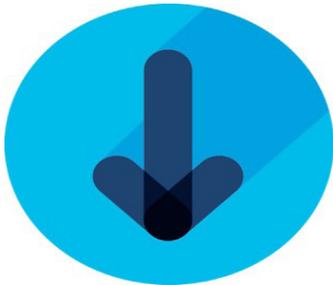
According to the Ellen MacArthur Foundation, [less than a fifth of all plastic](#) is recycled globally. And in the United States, that statistic is only [nine percent](#) as of 2018. Plastic that is not recycled ends up as waste, either in a controlled environment (e.g. landfill, waste-to-energy) or in an uncontrolled environment that may potentially enter our waterways and oceans.

These statistics are very different for Cisco products – we consistently reuse or recycle more than 99% of the equipment we take back. Reuse is prioritized (e.g. through remanufacture and repair) and remaining products that have reached the end of their useful life are recycled. Increasing the use of recycled plastics sourced from our own recycling stream is one example of how we can give new life to products at their end of life.

Closing the loop with recycled plastic



Using recycled plastic will reduce the carbon footprint of these plastic components by as much as 95%



Avoiding millions of pounds of virgin plastic usage annually



Displacing the demand for thousands of barrel each year

PCR plastic used in select models within Cisco's IP phone 8800 Series and the Webex Room Kit Plus will avoid millions of pounds of virgin plastic usage annually. The plastic components in these products account for more than 15% of Cisco's total direct plastic procurement. Using PCR resin will reduce the carbon footprint of these plastic components by as much as 95%. This change will displace the demand for thousands of barrels of oil each year.

Closed Loop Recycled Plastic Definition

- The plastic resin used in the closed loop plastic phones and Webex Roomkits is made from old, post-consumer recycled (PCR) plastic products, and combined with non-recycled additives that must be added for strength and color. Thus, while the resin is 100% PCR, the plastic contains minimum 85% recycled content. (In other words, 100 pounds of PCR plastic contains more than 85 pounds of 100% PCR resin and up to 15lbs of additives.)
- In addition to being PCR material, the resin in these products is considered "closed-loop" because the plastic resin supplier obtains its PCR plastic feedstock from Cisco's recyclers that process our take back programs. Our resin supplier's source includes (but is not limited to) the recycled plastic from old, recycled Cisco products. Since old Cisco products are part of the feedstock for new Cisco products, the process is "closing the loop" for our plastics.
- This closed loop process drives both financial and environmental benefits by ensuring a stable supply of plastic and reducing the need to create new plastic to build our products.

Questions and Answers

Q. What is the main purpose of this label?

A. Cisco is committed to embedding social and environmental sustainability into the core of how we do business. This includes using the lens of the circular economy to transform our business in a number of ways, including being more deliberate about how and when to use plastic. This informational label is intended to differentiate Cisco's closed loop plastic products. These are the first products to launch with closed loop materials and the label will be used across Cisco's product portfolio as more products incorporate circular design principles.

Q. Why create a new label instead of using an existing certification?

A. While many certifications exist for environmental standards, closed loop plastics are a relatively new concept that do not yet have a widely accepted certification standard. Some newer standards such as UL Environmental Claim Validation Procedure for recycled content validates the PCR certification but does not specifically certify to closed loop. Other established standards bodies such as TÜV Rheinland and Cradle-to-Cradle include a wide range of environmental sustainability requirements, but also do not specify closed loop.

Q. Is this the first time Cisco has launched a circular product?

A. This is Cisco's first time launching a closed-loop plastic product. Our 7800 series phones have been using 35% post-consumer recycled plastic since FY17 (avoiding the consumption of 456 metric tons of virgin plastic in FY19), but that resin is not sourced from recycled Cisco products, so it is not considered "closed-loop."

Q. Is a closed-loop alternative available for all existing products?

A. We are launching the closed loop initiative with the IP phone 8800 series and Webex Room Kit Plus. We have plans to expand to other products in the future.

Q. What is post-consumer recycled (PCR) resin?

A. PCR is made from plastic that has already been molded, incorporated into a product, and used. When the used product is no longer wanted, it is collected by recyclers, sorted, purified, and pelletized to produce plastic resin pellets. These new plastic resin pellets are considered post-consumer recycled (PCR). These PCR resin pellets can then be mixed with additives and used by manufacturers to mold into new plastic parts. Using PCR resin has a variety of environmental benefits, such as significantly reducing the plastic material's carbon footprint, lowering demand for virgin plastic and thus petroleum, and diverting plastic from becoming a waste product.

Q. Why use PCR instead of post-industrial recycled (PIR) resin?

A. PIR content is made from manufacturing waste that has been reclaimed at the point of manufacture. This may also be referred to as pre-consumer recycled content or regrind. Many manufacturers already use a small amount PIR in their processes, but the amount of PIR a product line can use is limited as it is primarily sourced from the line's rejected parts and excess injection molding material. PCR resin, on the other hand, is more complex to use but is plentiful and growing in availability, due to the increasing amount of plastics in global products. We are pursuing PCR resin instead of PIR resin since it represents more of a pressing need, is more widely available, and provides an impactful method to find new uses for electronic waste.

Questions and Answers

Q. How does Cisco define its closed-loop plastics?

A. For the IP Phone 8800 Series and Webex Room Kit Plus, the plastic components are made from resin sourced from industrial recyclers, including Cisco's. This means that the plastic from old Cisco products (including old IP phones) is recycled and turned into PCR pellets, which become new raw material molded into new Cisco plastic components used in these products. We have established a material chain of custody so that our plastic e-waste is separately received, processed, and tracked by Cisco Reverse Logistics partners, our recycling partners, closed loop resin suppliers, and manufacturers.

Q. Can the recycled plastic be recycled again?

A. Before PCR resin can be used in our products, Cisco works with our closed loop resin supplier to go through an extensive verification testing process for quality, durability, and color. Each batch of recycled resin undergoes testing and – depending on the quality – a specific proportion of additives is included to bring the recycled resin back to virgin quality. Because of this process, even recycled plastics can potentially be turned into new products again.

Q. Why were the IP Phones and Webex Room Kit Plus selected as the pilot for circular products at Cisco?

A. The collaboration business unit, specifically the IP Phones, represent the largest use (by mass) of virgin plastic at Cisco. As a result, starting with these products was a way to drive early, significant progress toward our goal to reduce our use of virgin plastic by 20% by 2025, and accelerate the positive environmental impacts of the change.

Q. Where can I find more information on this topic?

A. More information is available on the [Cisco Circular Economy website](#), as well as on the product spec sheets for the [Webex Room Kit](#) and [IP Phone 8800 Series](#).

How to Get in Touch

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