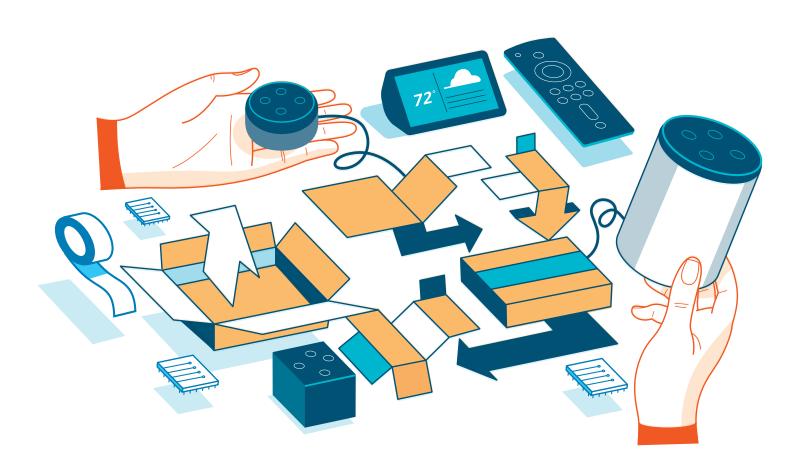
### **Packaging and Products**

We are redesigning packaging to reduce waste and making our private-label products and devices in responsible ways.



# **Reducing Packaging Waste**

Our customers want right-sized, recyclable packaging that minimizes waste and ensures damage-free delivery. We work to reinvent and simplify our sustainable packaging options using a science-based approach that combines lab testing, machine learning, materials science, and manufacturing partnerships to scale sustainable change across the packaging supply chain.

#### **Sustainable Packaging Initiatives**

Our sustainable packaging initiatives reduce waste and make it easier for customers to remove products from packaging. Unlike traditional retail stores, products bought online don't need the elaborate packaging used for displaying products on store shelves. Instead, customers use star ratings and reviews to guide their online shopping decisions.

Our Frustration-Free Packaging (FFP) program encourages manufacturers to package their products in easy-to-open packaging that is 100% recyclable and ready to ship to customers without additional Amazon boxes. Since 2015, we have reduced the weight of outbound packaging by 33% and eliminated more than 880,000 tons of packaging material, the equivalent of 1.5 billion shipping boxes.

To certify products under Amazon's FFP program, we help manufacturers innovate and improve their packaging functionality. By testing products in a dedicated, state-of-the-art lab in Seattle and in our fulfillment centers across the globe, we identify specific steps that manufacturers can take to improve their packaging and ensure products are protected all the way to the customer's doorstep.

Today, more than 2 million products qualify under our FFP program. Philips, for example, was inspired by our FFP program to reinvent their packaging. The new Norelco OneBlade razor design now has 80% less packaging volume, is fully recyclable, and delights customers with print on the inside of the box which enhances the opening experience

#### **Machine Learning**

How big of a box is needed for a given product? Is an Amazon box needed at all? To find out, we use machine learning algorithms to arrive at the best possible packaging choices for deliveries. That means identifying which products don't need packaging at all, and which smaller products are suitable for envelopes or mailers. In cases where the protection of a box is needed, algorithms help us continuously optimize box choices to fit our ever-changing catalog. Computer-aided engineering also helps us redesign boxes to use less material while making sure customer orders are protected. These improvements



reduce volume per shipment, which means less unnecessary packaging and more efficient use of all forms of transportation, reducing carbon in small amounts to create a larger impact across our network.

We also use machine learning to help target products where even small packaging improvements can have significant impacts on reducing waste. We developed a machine learning model to identify liquid products with the highest average rates of customer reported damages. We then subjected those products to extensive additional testing at our Amazon Packaging Lab, where we simulate a package's journey from the manufacturer to the customer.

Through this process, we've teamed up with companies like Rieke—a packaging solutions firm that makes dispensing systems for personal care, food, and healthcare products—to provide data and packaging insights on many of the conventional dispensing systems that are used in millions of products on Amazon. By strengthening materials, creating new locking mechanisms to prevent pumps from twisting open, and sealing potential leak points, Rieke's team has created dispensers specially designed to withstand the journey to the customer. These new and improved designs include trigger sprayers common on household cleaners and personal care products, pumps for lotions, and pumps for foams.

#### **Engaging with Vendors and Industry**

We work with top brands and vendors to reinvent their packaging for waste reduction in e-commerce, including optimized packaging that allow products to be shipped in their own container. The toy maker Hasbro, for example, redesigned the packaging for its popular toy, Baby Alive, reducing both the amount of material used and the overall package size by more than 50%. The pet food company Hill's Pet Nutrition reworked its packaging to make bags of kibble less likely to break and spill during shipment; testing at Amazon validated the redesigned packaging.

We are working across the packaging industry, using new analytics and test methods, new materials, and new ways to build enclosures that protect customer products. With packaging suppliers, for example, we have developed solutions for liquid dispensing systems on hard-to-ship items, such as household cleaners and personal care products, preventing spills and the need for extra packaging to contain spills if they happen.

Amazon is a member of the Sustainable Packaging Coalition (SPC), an industry working group dedicated to a more robust environmental vision for packaging. SPC uses strong member support, an informed and science-based approach, supply chain collaborations, and continuous outreach to design packaging that encourages a sustainable flow of materials. Amazon has also joined the International Safe Transit Association (ISTA), an organization focused on the specific concerns of transport packaging. ISTA is a nonprofit, member-driven association that sets the standards for optimizing the resources in packages that are designed to be survivable, sustainable, and successful.

## **Sustainable Products and Materials**

Amazon aims to be Earth's most customer-centric company, which means giving our customers access to the sustainable products they want. From thousands of Amazon-branded products to millions of retail and third-party items sold on Amazon, we are working to reduce the environmental impact of the products we manufacture and provide customers more information about the sustainability attributes associated with the items we sell.



Sustainable products cover a range of attributes intended to preserve the natural world, and we strive to help Amazon customers easily discover and shop products that exceed the environmental benefits of comparable products.

For Amazon-owned Private Brand products and Amazon Devices, we work with many of the manufacturers and suppliers that produce our private-label selection to drive sustainability improvements through materials and ingredients, design, sourcing, and manufacturing technology. Our global teams also work closely with suppliers to communicate our human rights standards, and help suppliers build their capacity to provide safe and respectful working environments.



#### **Household Goods**

Many Amazon customers prioritize safety and sustainability when it comes to household goods like cleaning supplies and personal care products. Customers want to be sure the products they buy are safe for their families and help preserve the planet, without compromising on quality or price.

We are working to increase the sustainable attributes of many of our Private Brand selections, from bio-based laundry and dish soaps that offer an effective, alternative choice to conventional formulas, to beauty products that are formulated without harmful chemicals. As part of that commitment, we implemented a Chemicals Policy and Restricted Substance List (RSL), both of which apply to Amazon-owned baby, household cleaning, personal care, and beauty brands. To support the broader retail sector's collaborative effort to use safer formulations and produce more sustainable products, Amazon joined the Retail Leadership Council of the Green Chemistry and Commerce Council (GC3).

We also take an active role in promoting sustainability with our selling partners. For example, we teamed up with Procter & Gamble to develop the Tide Eco-Box, a concentrated version of Tide's traditional laundry detergent compressed into a fully recyclable, shipping-safe package, which is produced using 60% less plastic and 30% less water than a conventional plastic jug. Countless other Amazon selling partners offer biodegradable and plant-based options for staples like dish detergent and multi-purpose cleaners.

#### **Food and Grocery**

Sustainable food selection means something different to each customer. Across our Amazon food and grocery businesses, we make it easy for customers to find a range of options like free range, pasture-fed, organic, and fair trade groceries.



As sellers of animal-derived products, we recognize our responsibility to uphold animal welfare within our supply chain. We expect our suppliers to uphold the Five Freedoms framework for animal welfare, including freedom from hunger and thirst; freedom from discomfort; freedom from pain, injury, or disease; freedom to express normal behavior; and freedom from fear and distress. We expect our suppliers to comply with all applicable laws and to take a zero-tolerance approach to animal cruelty, abuse, and neglect. We encourage suppliers to continuously improve their animal welfare standards and practices, and to work towards recognized animal welfare certifications or industry quidelines that include welfare provisions.

At Whole Foods Market in the U.S., we sell high quality natural and organic foods. We research ingredients and audit sourcing practices for Whole Foods Private Brand products to make shopping easier for customers. In our meat department, products are free of added hormones or antibiotics, and no cages or tethers are permitted during the animal's daily life. Our seafood department sources only from responsibly managed fish farms and fisheries. The Whole Trade Guarantee found on produce and other items signifies that a product meets criteria that support both workers and the environment.

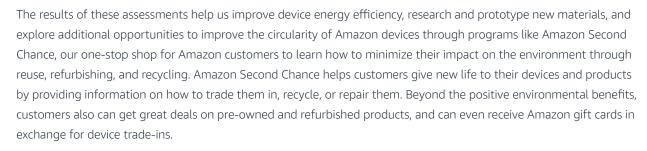


#### Palm Oil

Palm oil is used extensively as an ingredient in consumer products. However, its cultivation has contributed to deforestation, biodiversity loss, and negative social impacts in some of the regions where it is grown. Our approach is to promote the use of sustainably-certified palm oil in our Private Brand food products and ask our Private Brand suppliers to source palm oil that is sustainably-certified. We are starting with Amazon-owned Private Brand food products in North America and across Europe, where our goal is to source 100% sustainable palm oil by the end of 2020.

#### **Amazon Devices**

Amazon Devices make every day easier by helping customers watch, read, listen, and control their smart homes. Our most popular devices include Echo and Alexa devices, Fire Tablets, Fire TVs, Kindle e-readers, and home security products. We take a scientific approach to understanding the environmental impact of these devices, completing detailed life-cycle assessments (LCA) for many of them. An LCA is an internationally-accepted methodology for assessing the environmental, human health, and natural resource impacts of products and services.





#### **Fashion and Apparel**

At Amazon, we're committed to making it easier for our customers to choose high-quality, sustainable apparel products. We are working to lower the environmental impact of our Amazon-owned Private Brand apparel products and we partner directly with suppliers of these products to find solutions that promote the use of sustainably-produced fabrics and recycled materials. We are starting our work in the U.S. and Europe, and will expand to additional geographies over time. To incorporate industry best practices and support collective action, we are proud to collaborate with leading apparel partners, including the Better Cotton Initiative, Textile Exchange, Sustainable Apparel Coalition, and Leather Working Group.

**Cotton:** We are working to ensure that all cotton used in Amazon-owned Private Brand apparel products is sourced sustainably by the end of 2022. This includes cotton sourced from recycled materials, or from farms certified as organic or licensed by the Better Cotton Initiative, a global nonprofit that aims to transform the cotton supply chain by developing Better Cotton as a sustainable mainstream commodity.



In 2019, Amazon signed the Responsible Sourcing Network's public Cotton Pledge, committing to not source cotton from Turkmenistan and Uzbekistan until the pervasive use of government-mandated forced labor is stopped. Amazon prohibits forced labor within our supply chains, and we have internal controls and external engagements to address forced labor within global supply chains. This pledge represents an additional step in that direction and lends Amazon's voice in demanding an end to forced labor in these two countries.

**Cellulosic fibers:** By 2022, we will ensure that none of the man-made cellulosic fibers—including rayon/viscose, lyocell, and modal—sourced for Amazon-owned Private Brand apparel products are derived from ancient and endangered forests, or from endangered species' habitats or other controversial sources, as defined by the nonprofit organization Canopy's tools and reports. Our approach to cellulosics includes using fabrics that provide assurance on traceability and use best available processing technology, as well as supporting the use of innovative lower impact alternative fiber sources, such as recycled fiber from used clothing.

**Recycled fabrics:** We will increase the use of recycled fabrics in Amazon-owned Private Brand apparel products, including moving from conventional to recycled polyester, and launching products made from innovative recycled fibers. In 2020, we joined the Textile Exchange, a global nonprofit that works with its members to drive industry transformation in preferred fibers, including recycled materials.

**Leather:** In 2020, we joined the Leather Working Group, a nonprofit membership organization that works to improve environmental stewardship within the global leather industry. By the end of 2023, we will source all leather used in Amazon-owned Private Brand apparel and shoe products from tanneries that meet the Leather Working Group's bronze level award or higher.

**Product labels:** As of 2020, all new woven labels in Amazon-owned Private Brand apparel products are made from recycled fabric and all new swing tags are made from FSC-certified paper.



#### **Chemicals**

We are committed to developing high-quality and affordable Amazon-owned Private Brand products that customers love. Part of our commitment to quality is avoiding chemicals of concern in our products that can affect human health and/or the environment. We define chemicals of concern as those chemicals that: (1) meet the criteria for classification as a carcinogen, mutagen, or reproductive or other systemic toxicant; or (2) are persistent, bioaccumulative, and toxic. We strategically prioritize which chemicals of concern to focus on based on product type, customer concerns, and the availability of safer alternatives.

The baseline list of chemicals of concern included on our first Restricted Substance List (RSL) identifies the chemicals that we seek to avoid in Amazon-owned Private Brand baby, household cleaning, personal care, and beauty products in the U.S. and Europe. This policy is in addition to applicable local legal requirements and associated compliance plans. It will be expanded to additional brands, product categories, and geographies over time. Read more about our chemicals policy. > amzn.to/materials