Sustainable Labels & Packaging

AVERY DENNISON

Our sustainability journey

A more sustainable world needs to begin somewhere. That's why we're taking big steps to help make a more circular economy possible.

At Avery Dennison, sustainability isn't just a goal—it's woven into everything we do. We're dedicated to creating a regenerative future, working alongside our customers to minimize environmental impact and maximize positive change. We're driving innovation, aiming for all standard products to contain recycled or renewable materials by 2030, and empowering our partners to achieve their own sustainability targets. Through our Sustainable ADvantage portfolio, we offer clear pathways to circularity, enhanced environmental performance, and transparent supply chains. Our 2030 goals are helping us accelerate our progress and contribute to a more sustainable future.

1 Deliver innovations that advance the circular economy

We're investing to develop new products that meet the recycling, composting or reuse requirements of all single-use consumer packaging of our products and solutions.

2 Reduce the environmental impact in our operations & supply chain

Reducing our carbon footprint is a central part of our sustainability efforts. This is a complex effort that requires navigating new regulations, managing our operations, as well as those of our suppliers, partners, customers and many other companies across the globe. So, how are we reducing our emissions, and why?

3 Make a positive social impact by enhancing the livelihood of our people & communities

At Avery Dennison, we believe that our sustainability goals should also include our people. That's why we've implemented several initiatives to foster an engaged team, create an inclusive workplace where health and safety are paramount and give back to the communities that we serve.

Our inclusion efforts to date:

40% of our management and leadership team are women

0.2 RIR We keep our workplaces safe, with a Reportable Incident Rate (RIR) of 0.2

82% Our inclusion index is at an impressive 82%

82%+ employee engagement rate according to our employee satisfaction survey

Scan here to learn more about our goals and our progress by reading the full Avery Dennison 2024 sustainability report.

Explaining the GHG Protocol

What is the Greenhouse Gas Protocol (GHG Protocol)?
The GHG Protocol establishes comprehensive global standardization frameworks to measure and manage greenhouse gas (GHG) emissions. This protocol covers everything from private and public sector operations, value chains and mitigation actions.

The GHG protocol established three scopes of emissions: Scope 1, Scope 2 and Scope 3.

What are Scope 1, Scope 2 and Scope 3 emissions?
These different scopes categorize the emissions a company creates through its operations and wider chain of action. Here is how the scopes break down.

Our goals for reducing Scope 1 and Scope 2 emissions
Our ambition is to have a 70% reduction in Scope 1 and 2 Global Greenhouse Gas (GHG) emissions by 2030. We are committed to reducing our reliance on fossil fuels by ongoing implementation of renewable energy solutions in our plants. Our Scope 1 and 2 emissions were reported at 63% reduction at the end of 2023.

Our goals for reducing Scope 3 GHG emissions
Scope 3 emissions are created through our value chain. These emissions are greatly influenced by what we do, whether or not we own or control these assets. Our goal is to reduce our category 1 and category 2 emissions by 30% by 2030. We aim to make each product more sustainable than the last. We are working to reduce the use of virgin materials, incorporate more recycled and renewable content, reduce material use in our products and drive sustainability innovations across our portfolio.

How can organizations effectively manage and reduce their own Scope 3 emissions?
Although businesses sometimes lack direct control over Scope 3 emissions, they can still influence the activities that cause them. Collaboration with various stakeholders across the value chain is crucial in addressing these emissions. Selecting eco-friendly suppliers and vendors is one way organizations can incorporate emission reduction strategies into their operations. For example, companies can choose labels from our Sustainable Advantage portfolio that can help reduce waste throughout their supply chain.

Scope type	Emission type	Definition	Example
Scope 1	Direct emissions	Direct GHG emissions that come from company activities that they directly control or carry out.	The emissions from company-owned vehicles or fossil fuel needed to run machines for the company's own use.
Scope 2	Indirect emissions	GHG emissions associated with the generation of purchased electricity, steam, heat or cooling by the company.	When electricity is generated by a utility, it's often from fossil fuel sources such as natural gas.
Scope 3	Indirect emissions	All other indirect emissions associated with a company's activities.	Upstream and downstream transportation, purchased goods and services that are not under a company's direct control but are affected by the company's business decisions.

Trends in Sustainable Packaging

Circularity

Circular packaging is composed of materials that can be repurposed, recycled or composted instead of being taken to landfill. Avoiding a linear route – materials ending up as trash in landfills or polluting our oceans or environment – is a primary focus in circular packaging, which means that we need to consider what happens to materials at the last stage of life – whether that packaging is composed of mono-material, which eases recyclability, or multiple materials and is designed to be disassembled. Designing for reusability has become essential.

Biodegradable & Compostable

Biodegradable and compostable packaging options are in high demand and for a good reason: both have the ability to disintegrate, cutting down on material waste.

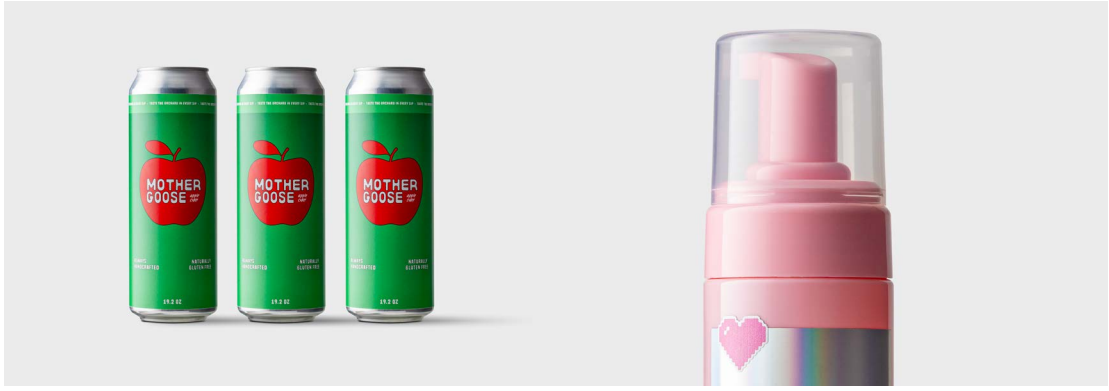
While biodegradable materials decompose in the environment, compostable materials go a step further, providing nutrients and fertilizing soil once it has deteriorated. Biodegradable materials can break down anywhere in nature, but composting can only happen in specific settings, and the process is typically faster.

Mono-material

Mono-material refers to packaging that is composed of a single material as opposed to packaging made from different materials. Single-material packaging makes the recycling process easier because it reduces the amount of energy required to split or separate various materials. Increased innovation around mono-material packaging is allowing designers more opportunities to create elaborate packaging without sacrificing recyclability.

Recycled & PCW Materials

If your packaging contains recycled materials, then it was created using either postindustrial or post-consumer content. Post-consumer waste (PCW) refers to the everyday recyclable materials, such as plastics, cans and papers, that we toss in our recycling bins. These recyclable materials are compounded into bails, which are then melted or ground into small pellets and later used to form new bottles, cans and papers.



North American Legislation

Plastic use & waste reduction

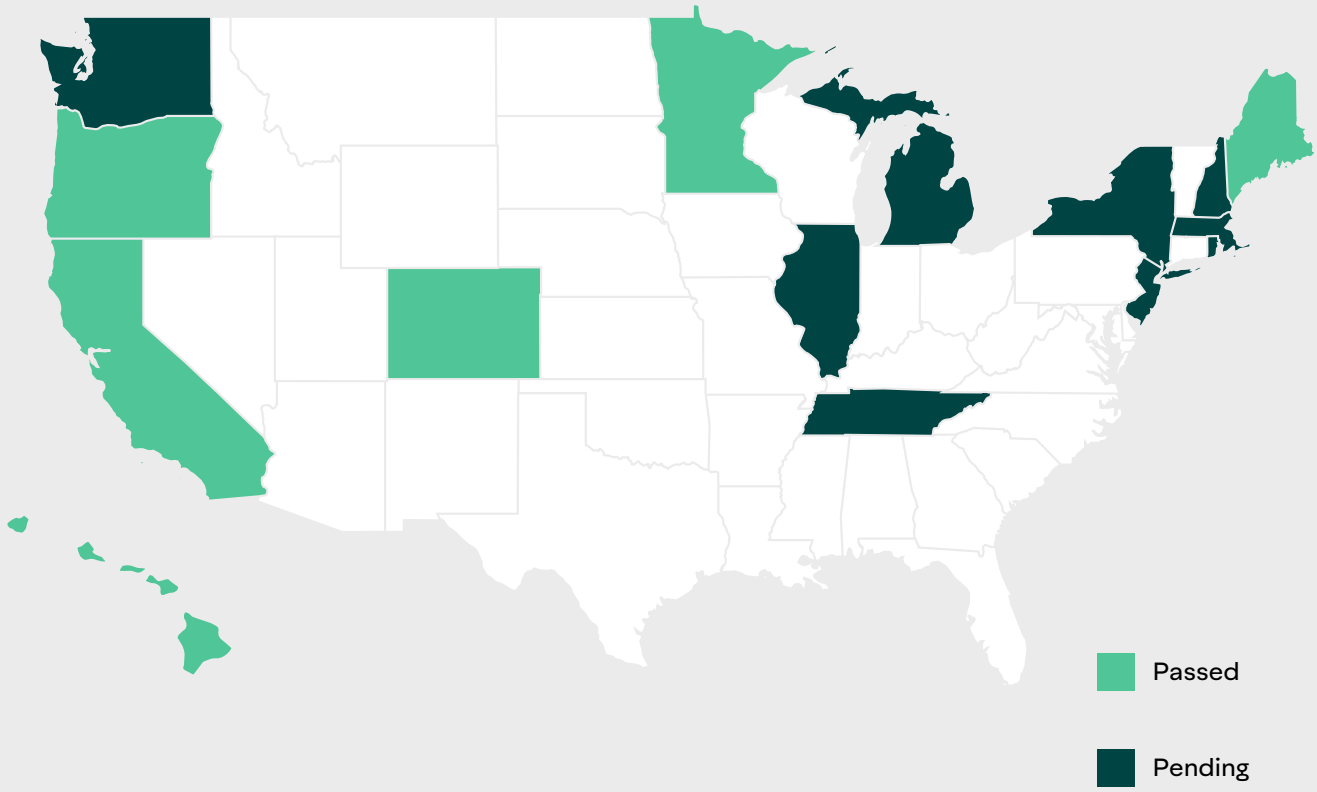
As plastic continues to dominate the packaging market, with the production of more than 30 billion plastic packaging units in 2024, North America has a strong focus on enabling circularity, improving recyclability and reducing plastic waste.

1 As part of the Canada-wide Strategy on Zero Plastic Waste initiated in 2018, the Government of Canada announced the creation of the Federal Plastics Registry in 2024. The Registry is a tool to compel plastic producers and other companies across the plastics value chain to help monitor and track plastic from the time it is produced up to its end of life. Canada is following the EU's bans on harmful single-use plastics, as well as setting standards and targets for companies that manufacture plastic products or sell items with plastic packaging so they become responsible for their plastic waste.

2 To help increase recycling and circularity, several U.S. states have variations of extended producer responsibility (EPR) and producer responsibility organization (PRO) schemes, minimum recycled content requirements, and various other bans and mandates. In June 2021, Maine became the first state to sign an EPR law for consumer packaging, and since then. Oregon, California, Colorado and Minnesota have all passed EPR laws, with several other states considering similar legislation.

3 In September 2020, California became the first state to require recycled content use in plastic beverage containers, aiming to reach a 15% requirement by 2022 and a 50% requirement by 2030, and Washington, New Jersey and Maine have since also passed similar requirements.

4 Sustainability efforts at the state level help governments pay for collection and recycling by obliging producers of packaging materials (manufacturers, sellers, distributors, etc.) to pay for the costs of recycling their materials. Avery Dennison continues to monitor the evolving regulatory and legislative environments across North America to understand the impacts to the pressure-sensitive label industry.



Extended Producer Responsibility (EPR) Bills

Time for change in the U.S.

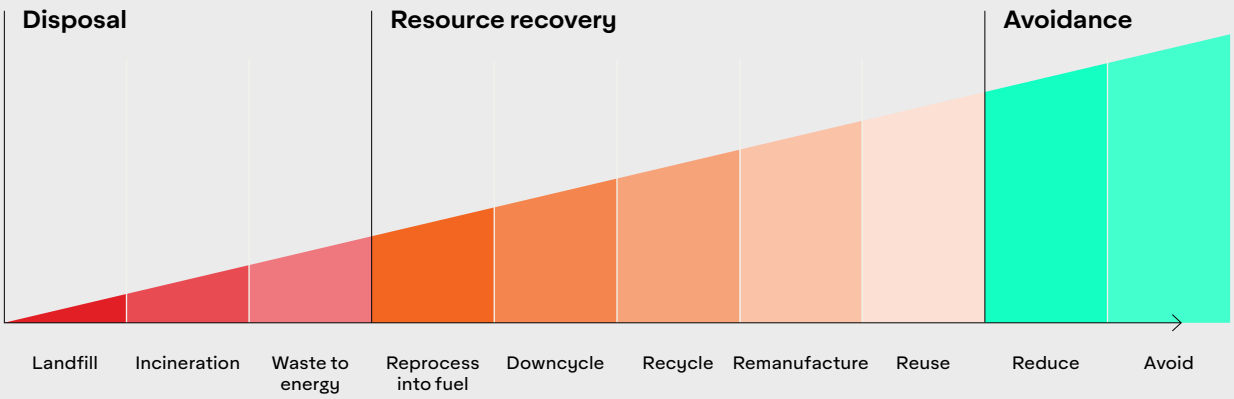
Presently, action on legislation targeting circularity has been at the state level. At the federal level, the U.S. Senate Committee on Environment and Public Works conducted the first national hearing on Extended Producer Responsibility in 2024, but it is expected that the states will continue to drive action in this space. Several bills have been proposed, both federally and state-wide, that would dramatically alter the way packaging materials are designed and manufactured.

Packaging Recyclability

To create sustainable packaging, we must adopt label technologies that reflect a whole systems approach—from materials design to end-use—and work in harmony with the existing recycling stream.

The waste hierarchy

The waste hierarchy is a set of priorities for the efficient use of resources that advances the circular economy. In place of the traditional waste management approach consisting of three Rs (reduce, reuse, recycle), it shows a more elaborate waste management hierarchy – listing actions in order of priority, from least to most favourable from an environmental perspective.



Downcycling
Packaging is recycled for lower grade applications

Example:
Food-grade packaging fibers are recycled into industrial-grade fibers

Recycling
Packaging is recycled for alternate applications

Example:
Food-grade packaging fibers are recycled into non-food-grade fibers

Remanufacturing
Packaging is recycled back into the same applications

Example:
Food-grade packaging is remade into food-grade packaging

North American State of Waste Management

The U.S. produces more than 12% of the planet's waste, though it is home to only 4% of the world's population.

In 2022, 5 Billion Pounds of Plastic Was Recycled in North America

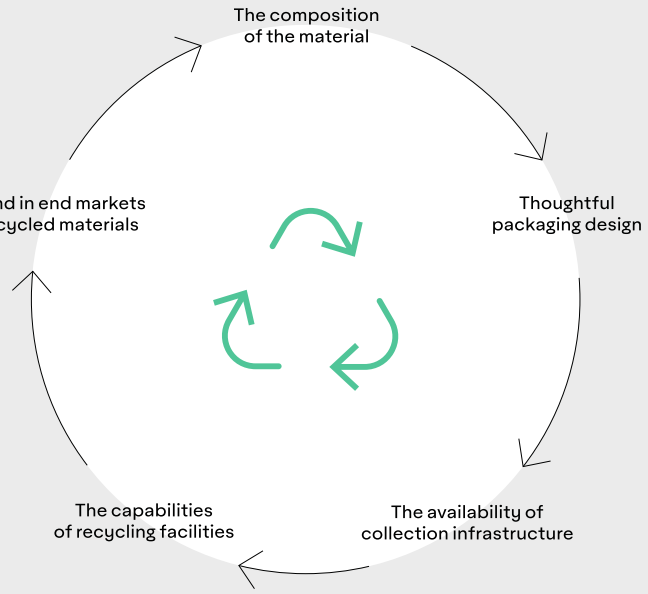
The average amount of post-consumer recycled (PCR) PET, also known as recycled PET (rPET), used in US bottles and jars was 16.2 percent in 2023.

In the United States, only about 5% to 6% of plastics are recycled each year

Only 24% of America's trash actually gets recycled, and only 9% gets composted

What does it mean to be recyclable?

The APR and the U.S. Plastics Pact stress that true recyclability depends not only on the material, but also on the systems designed to collect, sort, and process it effectively. The term "recyclable" is multifaceted and hinges on several key factors:



Pressure-sensitive labels will play a huge role in circular economy requirements for the recycling of various materials.

EcoDesign

At Avery Dennison, we've adopted EcoDesign practices throughout our organization to create packaging that contributes to a cleaner future. By doing this, we help brands, retailers, designers and converters develop products with more sustainable packaging, stay on top of the latest labeling trends, meet regulatory requirements and make more conscious choices in their designs.

What is EcoDesign?
Did you know that 80% of a product's final environmental impact is determined during the design phase? EcoDesign was created to be an approach to product design that actively seeks to reduce the environmental impact of a product over its lifespan, right from the beginning

Designing for Recyclability

Product

Consider how the label material's appearance will communicate the sustainability of your brand, product and packaging. The combination of container, adhesive and label can affect sustainability, consumer use, and legibility of the label, which can also affect compliance.

Use

Ensuring the durability of a label and its adhesive is incredibly important for packaging. A label must be readable and stay adhered throughout the lifecycle of the product. A member of our team can help you choose materials and adhesives that work best for your application and helps meet your sustainability goals.

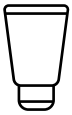
End of life

When a product comes to the end of its life, a label shouldn't hinder the recyclability or reusability of the container. Consider how your label will affect the recyclability of your product. For example, choosing a recyclable or compostable material can make a meaningful waste reduction, or choosing an adhesive technology like CleanFlake™ that enables recyclability.

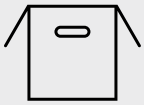
APR Design® Guide Summary

	Surface Area Coverage	Substrate	Metal Decoration	Ink	Adhesive
PET	Main body volume ≤ 550mL, ≤ 55% label surface area coverage Main body volume > 550mL, ≤ 75% label surface area coverage	Filmic labels that float in water (density ≤ 1.00g/cm3)	Label with metal decoration where surface area ≤ Preferred Surface Area per RES-SORT-03b	Hot caustic resistant Ink used on film label substrates that float in water Wash off inks used on film label substrates that sink in water	Adhesive should release during the caustic washing of the PET recycling process
HPDE Rigid Colored	Main body volume ≤ 550mL, ≤ 55% label surface area coverage Main body volume > 550mL, ≤ 75% label surface area coverage	Polymer film labels (Can float or sink)	Label with metal decoration where surface area ≤ Preferred Surface Area per RES-SORT-03b	Inks that do not contain metal	Non-releasing adhesive used on a polyolefin film label substrate that do not interfere with flake floating per O-S-01 Releasing adhesives used on polymer film label substrates
HPDE Rigid Natural	Main body volume ≤ 550mL, ≤ 55% label surface area coverage Main body volume > 550mL, ≤ 75% label surface area coverage	Filmic labels that sink in water (density > 1.00g/cm3)	Label with metal decoration where surface area ≤ Preferred Surface Area per RES-SORT-03b	Inks that do not discolor the HDPE flake	Releasing adhesives used on polymer film label substrates
PP Rigid	Main body volume ≤ 550mL, ≤ 55% label surface area coverage Main body volume > 550mL, ≤ 75% label surface area coverage	Polymer film labels (Can float or sink)	Label with metal decoration where surface area ≤ Preferred Surface Area per RES-SORT-03b	Inks that do not contain metal	Non-releasing adhesive used on a polyolefin film label substrate that do not interfere with flake floating per O-S-01 Releasing adhesives used on polymer film label substrates
PE Flexible	Label viability is determined by end use and %weight of label	Polymer film labels made with PP materials	Label with metal decoration where surface area ≤ Preferred Surface Area per RES-SORT-03b	Coming Soon	Coming Soon

APR Design® for Recyclability Recognized Products

	Packaging Substrate	Recycling Solutions	APR Recognition Letter
	**PET/HDPE (Colored)**		
		CleanFlake™ Technology that can be used with a variety of facestocks	AD CleanFlake™ Technology for PET & HDPE Packaging PE, PE/PP polyolefin blend, and BOPP substrates w/ GPP acrylic adhesive CleanFlake™ Technology that enables recycling for General Purpose & Beverage applications on PET & HDPE
		Metallized film labels with CleanFlake™ adhesive technology	Metallized decoration films w/ AD CleanFlake™ Technology
		Direct thermal films with CleanFlake™ adhesive technology	Direct Thermal Film + CleanFlake™ Adhesive Technology
	**HDPE (Colored)**		
		BOPP and MDO films with Hot Melt adhesives	Avery Dennison's BOPP & PP/PE Blend Filmic Facestocks with Hot Melt Adhesives for HDPE Recycling
	**PE Flexible**		
		Clear and white BOPPs in the reclosure portfolio	Clear and White BOPP Films with Pressure Sensitive Adhesives
		DT films with acrylic adhesives for use with bubble mailer/packaging	Direct thermal printed white PE/PP and white BOPP substrate w/ GPP acrylic adhesive

Our sustainable solutions for each packaging substrate

	PET	HDPE	PE	Cardboard	Flexible Packaging
Packaging Substrate					
Key end use segments	– Beverage – Food – HPC	– Beverage – Food – HPC	– Dairy – HPC – E-Commerce	– Food – Transport – Logistics	– Food – Pet Food/Treat – HPC
Label types & technologies	– PP (wrap around) – PP Paper – Sleeves – Resealable PET lidding film	– Paper (wet glue) – PE, MDO, BOPP, Paper (PSL) – Sleeves	– Direct print – Paper (wet glue) – PP (PSL)	– Paper DT (PSL) – Compostable papers and films	– Bio-based films – PP, PET, PE Or – A combination of PP, PET and PE layers
Avery Dennison Solutions	CL/WH/MET BOPP and Global MDO fillms with AD CleanFlake™ Technology Recyclable Shrink	CL/WH/MET BOPP, MDO & PE films, AD CleanFlake™ Technology Pharmaceutical BOPPs with S692NP	DT BOPP for PE Flexibles (Poly Mailers) Reclosure Labels	TTC & DT Eco TrueCut AT2550 DT Linerless Industrial compostable labels	Sustainable Cosmetic Web Stickpak Surlyn

Our Commitment to Reducing Carbon Emissions

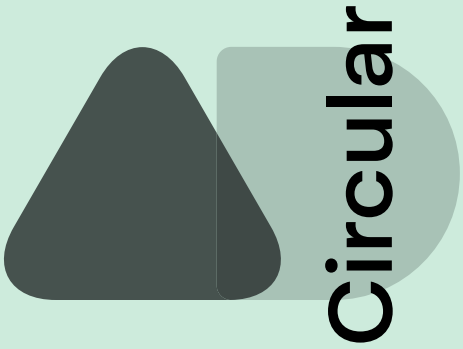
The Avery Dennison Carbon Footprinting Tool provides detailed insights into the carbon and water footprints of our products, helping customers understand their environmental impact.

By measuring footprints across the entire product lifecycle, it enables smarter, more sustainable label choices through comparative analysis, showing how small decisions can make a big difference.

Water
The amount of process water that is treated and discharged to receiving waters. This measure does not include water used for the generation of electricity via hydro power or water used for process cooling.

Carbon
A measure of greenhouse gas emissions, such as carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O).

AD Circular connects you with sustainable solutions for liner recycling or matrix landfill diversion. Through the program, you'll be connected with a recycler or waste provider who is best suited to support your site's needs. Together, we'll track key metrics, including the volume of matrix diverted, liner recycled, and the CO2 emissions avoided—ensuring measurable progress towards sustainability.



Collecting Liner for Recycling

Through our Distribution Centers in Fairfield, CA*, and Quakertown, PA, we are actively collecting paper and PET liners from label printers and brands to enhance recycling efforts and boost recycling rates.

*PET liner only

How it works

1

Register for AD Circular
Visit label.averydennison.com/adcircular to learn more and sign up.

2

Complete the Form
Fill out the form on our website, and our team will connect you with a recycling provider suited to your needs.

3

Get Your Custom Plan
Our team will develop a personalized approach to help you start recycling and diverting waste.

4

Make an Impact
Begin diverting and recycling waste and share your progress!

5

Celebrate your efforts with the AD Circular certificate and spread the good news across your platforms.

Sustainable Advantage

With sustainability as one of our eight company values, we are dedicated to enabling circularity and improving the environment and industries we serve. To help customers find the right solution that aligns with their sustainability goals, we've designed a new portfolio: Sustainable Advantage.

Sustainable Advantage enables our customers to reduce their environmental footprint, satisfy consumer demand, increase recyclability, and respond effectively to government regulations. As a showcase of our mission to build towards regeneration, Sustainable Advantage enables circularity, improves environmental performance and facilitates transparency across the entire supply chain. Sustainable Advantage products enable you to do one or more of the following:

Reduction in the use of materials.
Use what is necessary.

Contains Recycled/ Renewable Content.
Give a second life to what we have already used.

Enables Recycling, Reuse or Compostability.
What we use can be used again.

Responsibly Sourced.
Forest Stewardship Council certified paper

Avery Dennison: Making Possible

We're constantly innovating to reduce a product's climate impact through our labeling solutions. From sourcing materials to recycling and end-of-life disposal, our solutions are advancing sustainability through innovation and collaboration to reduce resource consumption and make possible a circular economy.

Who we are

Avery Dennison is a global materials science and digital identification solutions company. We are Making Possible™ products and solutions that help advance the industries we serve, providing branding and information solutions that optimize labor and supply chain efficiency, reduce waste, advance sustainability, circularity and transparency, and better connect brands and consumers. We design and develop labeling and functional materials, radio-frequency identification (RFID) inlays and tags, software applications that connect the physical and digital, and offerings that enhance branded packaging and carry or display information that improves the customer experience.

Materials Group
Label and Packaging Materials

Sustainable Labels
& Packaging

Contact your business development manager or your Avery Dennison sales representative today to find out more about our sustainable label solutions.

label.averydennison.com 04/2025

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MAKING POSSIBLE™