Sustainable Labeling Solutions







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Welcome to our sustainability guide

Navigating the evolving landscape of sustainable packaging can be a complex challenge, but it's no longer an option—it's a necessity. Brand owners across the globe are integrating sustainability into their core business strategies, moving beyond a simple choice to a fundamental consideration. With ambitious goals to achieve 100% recyclable and reusable packaging, many are seeking practical ways to meet these targets.

This shift is partly driven by a growing focus on regulation. In ASEAN, the introduction of Extended Producer Responsibility (EPR) laws in countries like Vietnam and the Philippines is impacting all stakeholders in the packaging value chain. Understanding these new regulations and adapting packaging designs to mitigate their impact is crucial for avoiding additional fees and staying ahead of the curve.

At Avery Dennison, we believe sustainable solutions shouldn't come at the cost of aesthetics or performance. We work with industry partners to develop pressuresensitive labels that help our customers create more circular and eco-friendly packaging without compromising design or quality. This brochure is structured to provide you with insights into the recycling landscape in ASEAN and offer guidance on choosing labels that meet evolving regulatory demands.

Our commitment extends beyond the product to a truly circular business model. Our AD Circular program helps converters and brands recycle label waste, while our carbon footprinting tool provides a clear, data-driven way to measure the environmental impact of your packaging choices.

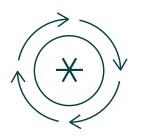
Embracing sustainable packaging demands a thoughtful, holistic approach. We're here to help you understand the latest regulations, choose the right materials, and utilize tools to reduce waste and carbon footprints. By making informed decisions, you can confidently reach your sustainability goals and be a leader in building a greener future. We invite you to explore this guide to learn how you can lead the way in creating a greener tomorrow.



Kejin Zhang Sustainability Manager, AMEA

2030 Sustainability Goals

Avery Dennison's commitment towards a circular economy



Goal 1

Deliver innovations that advance the circular economy

We implement and advance technologies to enable recyclability, extend the lifespan of materials, reduce waste, increase recycled content, and integrate opportunities for circular processes across our industries. By collaborating with our customers and suppliers, we can deliver a more sustainable future.

Aligning to UN Sustainable Development Goals (SDG)









Goal 2

Reduce the environmental impact in our operations and supply chain

We reduce our environmental footprint by decreasing our greenhouse gas (GHG) emissions, increasing our water efficiency and protecting the forests from which our products are derived. As a leader in our industries, we engage with our suppliers, customers and value chain partners to drive change that protects our climate and ecosystems.

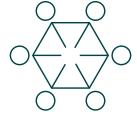












Goal 3

Make a positive impact by enhancing the livelihoods of our employees and communities

We champion transparency, collaboration, equality, diversity and inclusion. Our business contributes to the economic livelihoods of people and communities across our value chain. We serve as a force for good in our operations by promoting safety and enhancing the employee experience, as well as in our communities by investing in programs that advance women's empowerment, sustainability and education.













Our Climate Ambition

Explaining the GHG Protocol

What is the Greenhouse Gas Protocol (GHG Protocol)?

The GHG Protocol establishes comprehensive global standardization framework 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.

are affected by the company's

business decisions.

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

Our goals for reducing Scope 1 and Scope 2 emissions

Our ambition is to have a 70% reduction in Scope 1 and 2 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 54% reduction at the end of 2024.

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 12 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?

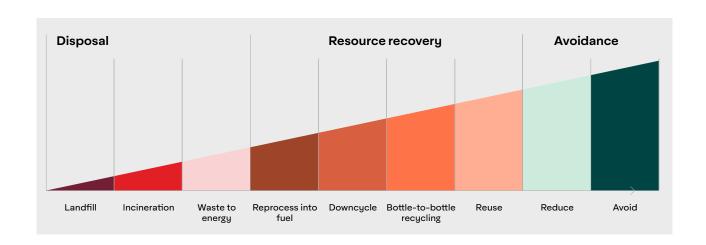
Although businesses sometimes lack direct control over Scope 3 emissions, they can still influence the activities that cause them. Collaboration with various stakeholders across the value chain is crucial in addressing these emissions.

Selecting 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.

The Waste Hierarchy

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 is a set of priorities for the efficient use of resources that advance 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 is recycled into industrial grade materials

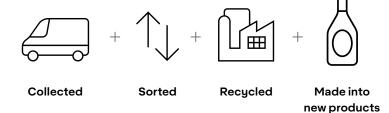
Bottle-to-bottle recycling

Packaging is recycled back into the same applications

Food grade packaging is recycled into food grade packaging

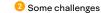
What does it mean to be recyclable?

Having a clear, universal definition of 'recyclability' for plastic packaging is key to creating consistency across the industry. To achieve true recyclability, a product has to meet four main criteria: it needs to be collected and considered valuable for recycling, sorted into the right processing stream, reclaimed using established recycling methods, and turned into raw material for new products.



Ease of recycling various material types

	Paper and Cardboard	Glass	Metal Cans	Z 1 PET	Z 2 HDPE	Z 3 PVC	LDPE	5 PP	PS/EPS
Organised collection	3	3	3	3	3	1	0	2	0
Sorting availability	3	3	3	3	3	0	0	2	0
Availability of recyclers	3	3	3	3	2	1	2	2	1
Outlet for recycled materials	3	3	3	3	3	0	2	2	0
Food grade options for recyclates	2	3	3	3	2*	0	0	0	0
Availability of labeling solutions that enable recycling	2	3	3	3	3	0	2	2	0
Overall Recycling Potential	Recyclable into non-food applications	Fully recyclable into food applications	Fully recyclable into food applications	Fully recyclable into food applications	Commonly recycled into non-food grade applications (e.g., HPC, lubricants)	Limited recycling options	Waste isn't recycled due to poor collection infrastructure. Chemical recycling is the only way to produce food-grade recyclate.	Commonly recycled into non-food grade applications (e.g., HPC, caps, closures)	Limited recycling options
Common applications	Corrugated Boxes for shipping and transport Secondary packaging for food, cosmetics and pharmaceutical packaging	Beer Wine & spirits Sauces Condiments Deodorant High-end cosmetics Perfumes	Beer Soda Energy drinks Juices Coffee/tea metal cans Canned goods	Bottled water Soft drinks Salad domes Biscuit trays	Milk bottles/ jugs Dip tubs Shampoo Detergent Lubricant Chemicals	Cosmetics Food: Cling wrap	Squeeze bottles Cling wrap Shrink wrap Trash bags	Ready-to-eat microwavable meals Ice cream tubs Dip tubs	Plastic cutlery Foam cups and trays Take-away clamshells Cases for compact discs and video tapes Protective packaging for forcills it per



fragile items

Design for Recycling

Changing regulations worldwide are pushing brands to rethink packaging design. A proactive approach ensures compliance, controls costs, and provides a competitive edge.

EPR Framework

Producers (brand owners)
pay EPR fees based on the
amount of packaging they use

Design for Recycling

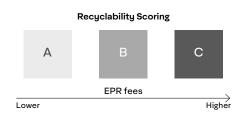
Encourages brand owners to create more recyclable packaging through eco-modulation incentives Many countries are adopting Extended Producer Responsibility (EPR) laws, making producers financially responsible for packaging waste. In ASEAN, Vietnam and the Philippines have launched EPR programs, with Thailand following in 2027.

Increasing recycling rates requires effective incentives, and Design for Recycling (DfR) offers a powerful solution. This policy encourages brands to design packaging that is easier to recycle. Central to this approach is Eco-modulation, a system that adjusts Extended Producer Responsibility (EPR) fees, rewarding companies that adopt eco-friendly designs and incorporate recycled materials.

What is Design for Recycling?

Design for Recycling guidelines help packaging designers create packaging that can be efficiently recycled at the end of their life. This approach supports the circular economy by keeping materials valuable for as long as possible.

The recyclability score of packaging design determines EPR fees. Packaging with a high score, meaning it's easy and cost-effective to recycle, incurs lower fees. In contrast, difficult-to-recycle packaging faces higher fees, encouraging brands to choose more sustainable options.



Key Guidelines of Design for Recycling

The guidelines focus on the main packaging and its components, including decorations and attachments, ensuring compatibility with recycling systems.

Material Selection (main body):

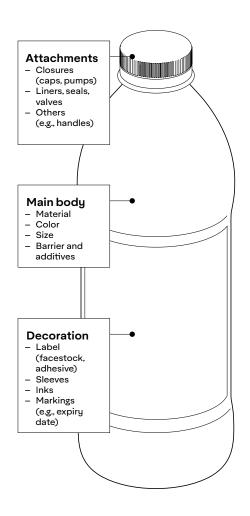
The key is to use widely recycled materials compatible with existing systems. Single-material designs are preferred over multi-layered materials, which are harder to process. For example, a single-layer PET bottle is much easier to recycle than one with mixed plastics and foils.

Component Compatibility:

All parts of the packaging—containers, lids, labels, adhesives, and inks—should work with the recycling process. Labels should either be made of the same recyclable material or be easy to remove. Additives, colors, and coatings that contaminate recycling streams and degrade the quality of the recyclate should be minimized or avoided.

Design Simplicity:

Packaging should be simple and easy for sorting facilities to handle. Avoid complex shapes that can jam machinery or colors that sorting sensors cannot detect (e.g., dark or multi-colored plastics).. Packaging should also be easy for consumers to empty, as product residue can disrupt recycling.



The Benefits of Designing for Recycling

Although DfR isn't mandatory in all ASEAN countries yet, taking action now offers significant advantages.



Be Future Ready

Regulations are getting stricter and more aligned. Adopting DfR now helps you stay ahead, avoid costly redesigns, and prevent fines for non-compliance.



First-Mover Advantage

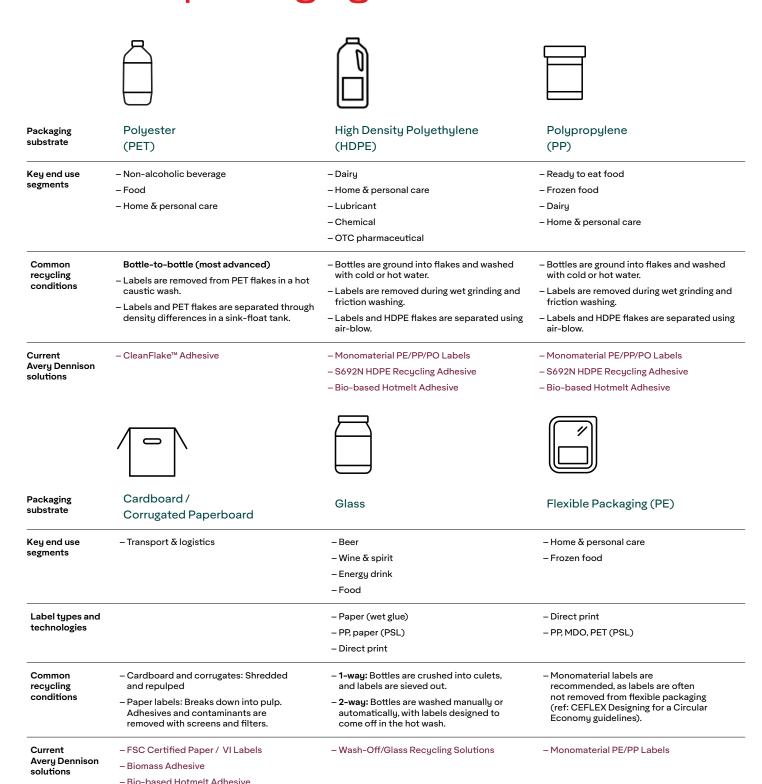
Brands leading in DfR can set industry standards and gain a first-mover advantage with sustainable packaging that appeals to consumers and regulators.



Cost Defence

DfR helps lower your EPR fees. Eco-modulation rewards packaging that's easier and cheaper to recycle, reducing your costs.

Our sustainable solutions for each packaging substrate



Sustainable Labeling Solutions

Sustainability covers a broad spectrum of priorities, from responsible sourcing and reducing greenhouse gas emissions to fostering a circular economy through recyclable packaging at the end of its lifecycle. Our labeling solutions are thoughtfully designed to tackle these key aspects of sustainability, providing options that meet the different needs of users.

The solutions in our sustainability portfolio meet one or more of these criteria:

Aligning to UN Sustainable Development Goals (SDG)



Reduction in the use of materials

Use only what is necessary

Thinner facestock, adhesive, or liner that uses less raw materials to be manufactured





Contains recycled or renewable content

Give a second life to what has already been used

Facestocks and liners that include post-industrial waste or post-consumer recycled content





Enables recycling, reuse or compostability

What we use can be used again

Solutions that enable the reuse and recycling of packaging as well as the recycling and composting of label waste





Responsibly sourced

Products sourced from a supply chain that shows care for people and the environment

Film made from renewable alternatives and paper certified by FSC® or other organizations



Reduction in the use of materials

Facestock



PE75

- A thinner label, made using less raw materials—carries more labels per roll¹
- Conformable film for squeeze bottles, small diameter containers and tubes
- Same operational performance² as industry standard PE85



AD Flex+

- 30% thinner than the industry standard PE85, made using less raw materials—carries more labels per roll'
- AD-exclusive semi-conformable film for semisqueeze and slightly curved bottles
- Better operational performance² than PE labels
- High clarity and low caliper enhance packaging aesthetic by delivering a 'no-label' look



PP40

- The thinnest PP label in the industry, made using less raw materials—carries more labels per roll
- Non-conformable film for rigid containers and flat surfaces
- Same operational performance² as PP50
- High clarity and low caliper enhance packaging aesthetic by delivering a 'no-label' look



MC Elite FSC

- 70 GSM semi-gloss paper (the lightest in the ASEAN industry), made using 14% less materials—carries more labels per roll'
- Same operational performance² and shelf appeal as 80 GSM paper



Direct Thermal 200LL FSC

- The thinnest non-topcoated DT label in the industry—carries more labels per roll¹
- Suitable for dry logistics and non-food retail

Reduction in the use of materials

Facestock



Direct Thermal 200GPL FSC

- The thinnest topcoated DT label in the industry—carries more labels per roll¹
- Suitable for shipping applications where some resistance to water is required



AD XeroLinr DT™ - Linerless

- A complete elimination of liners reduces label waste and carbon emissions compared to traditional DT labels
- A thinner construction, made using less raw materials—carries more labels per roll¹

Liner



BG33

- The thinnest glassine liner in the industry carries more labels per roll¹
- Minimal or no adjustments needed on the die tool to achieve performance comparable to BG40
- Maintains strength for smooth dispensing

Contains recycled or renewable content

Facestock



AD rFlex+

- Contains up to 30% recycled resin
- AD-exclusive semi-conformable film for semisqueeze and slightly curved bottles
- Similar operational performance², appearance and cost to virgin AD Flex+



rPP

- Contains 30% recycled PP resin
- Non-conformable film for rigid containers and flat surfaces
- Same operational performance², appearance and cost as virgin PP60



PCW rPET

- Made with 100% recycled PET resin, fully sourced from Global Recycle Standard v4.0 certified suppliers, a sustainable alternative for industrial labelling
- Non-conformable film for flat surfaces
- Topcoated for conventional and thermal transfer printing



rMC Primecoat FSC

- Contains 50% recycled materials
- Similar operational performance² to virgin semi-gloss paper
- Quality control ensures minimum batch-to-batch colour variation, giving consistent label appearance (however, slight visible impurities can add a natural sustainable look)



rDT

- Contains 15% recycled materials
- A non-topcoated direct thermal label
- Specially engineered for e-commerce dry logistics and non-food retail

Contains recycled or renewable content

Adhesive



Bio-based Hotmelt

- Contains at least 30% materials derived from renewable sources
- Designed to mimic low ooze properties of emulsion adhesives in the tropical ASEAN conditions
- Accredited by the Association of Plastic Recyclers
 (APR) for complying with its critical guidance on HDPE recycling when paired with PE, PO or PP facestocks
- Can be paired with all paper and some filmic facestocks



Biomass Emulsion

- Contains 30% renewable materials
- APEO-free
- Similar operational performance to incumbent emulsion adhesives
- Available on demand through Mix & Match services with any paper or filmic facestock

Liner



rPET Liner

- Contains 30% recycled PET resin
- The thinnest (23 microns) PET liner in the industry—carries more labels per roll¹
- Ideal for high-speed converting and dispensing more than 600 bottles per minute
- Enables the 'no label look' when paired with a clear film face material



rBG40 White Glassine Liner

- Contains 10% recycled content
- Same converting and dispensing performance as conventional BG40WH liner

Enables recycling, reuse or compostability

Adhesive



Wash-off - Glass recycling solution

- Enables glass bottle reuse through a clean removal of the label when washed in an alkali solution
- Suitable for all returnable glass bottles
- Available with paper and filmic facestocks



AD CleanFlake™ - PET recycling solution

- Enables food grade bottle-to-bottle recycling through a clean removal of the label
- Accredited by the Association of Plastic Recyclers (APR) for complying with its critical guidance on PET recycling
- APEO-free, complying with EU REACH Regulation
- Specially engineered for strong, long-lasting adhesion on PET substrates including punnets and trays
- Repositionable label available on demand (enables mislabeled containers to be reworked within 8 hours)



S692N - HDPE recycling solution

- Labels are fully releasable in the recycling process when paired with filmic facestock, preventing them from entering recycling stream (recognized by Recyclass as fully compatible with HDPE recycling)
- Accredited by the Association of Plastic Recyclers (APR)
 for complying with its critical guidance on HDPE recycling
- Low ooze for improved converting performance and keeping labels dust-free
- High clarity and wet-out feature enhance packaging aesthetic by delivering a "no-label" look when paired with clear filmic facestock

Responsibly sourced

Facestock



FSC Certified Papers

 The industry's widest selection of paper facestocks certified by the Forest Stewardship Council®, with more than 95% of products manufactured from FSC certified wood fiber

Completing your end-to-end sustainability story.

Yes, our label materials are designed with sustainability in mind. But what you see is only a fragment of the entire story. We also tackle what's not always clearly visible in the value chain.



Managing label waste through AD Circular

Liners and matrix waste are essential for label production but are often discarded after use, creating unnecessary waste. Avery Dennison addresses this issue with AD Circular, a recycling program designed to repurpose liner and matrix waste into valuable resources.

Key benefits of AD Circular:

- Simple, low-cost way to support a circular economy
- Recycling of liners from any supplier
- Certifications to track recycled volume
- Affordable, often comparable or cheaper than traditional waste disposal
- Available in 5 countries (Malaysia, Thailand, Indonesia, Vietnam, Philippines)

Learn more about AD Circular.



Carbon transparency

We know that you are looking to better understand the environmental effects of the products you use. That's why we use the Avery Dennison Carbon Footprint Tool to offer a thorough measurement of the impact of our products using primary data for raw materials and operations. This allows us to quantify carbon impacts on a product level with more certainty for customer product selection, new product development and greenhouse gas (GHG) accounting.

Learn more about AD Carbon Footprinting Tool.

Who we are

As the pioneer in the pressure-sensitive industry, we bring one-of-a-kind capabilities to sustainable labelling. We combine decades of innovation with deep knowledge of both regulatory and legal requirements. We know about the real-world conditions in which our labels must perform and the technical challenges they have to meet. Whatever your product, wherever it's going, we can help you develop a sustainable label that performs.

What we stand for

Sustainability. Innovation. Quality. Service.

In 1935, we invented the first self-adhesive label, and we've never looked back. With each passing decade, our innovations have further shaped our industry by lifting the limits on what labels can do. The world's most successful brands know that innovation and evolution are the lifeblood of longevity and success. We're proud to help our clients continually expand the boundaries of what's possible.

Discover more possibilities

What else do you need? Let us know and we'll help you find or develop your desired labelling solution.

Find more label solutions at

label.averydennison.com







#MakingPossible

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