PLASTICS DESIGN FOR RECYCLABILITY WEBINAR SERIES

Part 1: An Overview of Plastic Packaging

Hosted by:

Walmart

The Association of Plastic Recyclers
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TODAY’S PRESENTERS

Curt Cozart
President,
Common Sense Solutions, Inc

Ashley C. Hall
Senior Manager - Sustainability,
Walmart

Kara Pochiro
VP of Communications & Public Affairs,
Association of Plastic Recyclers
AGENDA

1. What Is This Series?
2. Walmart Goals & Expectations
3. Who Is APR?
4. Types of Plastic Packaging
5. What Makes Something Recyclable?
6. Labeling
7. Using Recycled Material
8. Available Resources
9. Questions
WHAT IS THIS SERIES?

A series of webinars hosted by Walmart, and presented by The Association of Plastic Recyclers, discussing design for plastics recyclability and communicating the common messages within the Walmart Recyclability Playbook and the APR Design® Guide for Plastics Recyclability.

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All webinars begin at 2:30 PM EST.
Registration links, presentation slides and recordings will be available on the APR Website and the Walmart Sustainability Hub.
OUR SUSTAINABILITY PRIORITIES

Key Focus Areas for Walmart Sustainability in FY20

PROJECT GIGATON

Working with suppliers to reduce 1 billion metric tons of GHGs by 2030

PACKAGING & PLASTICS

Use less plastic. Make it recyclable. Label it for the customer.

SUSTAINABLE PRODUCTS

Identify sustainability priorities based on your product category

JOIN US!
WALMARTSUSTAINABILITYHUB.COM

USE SUSTAINABLE MATERIAL SPECS AND LABEL PACKAGING

ADVANCING EDLTC ACROSS ALL PRODUCT CATEGORIES
OUR SUSTAINABLE PACKAGING COMMITMENTS
For Private Brands, Encouraged for National Brands

USE LESS PLASTIC
Reduce the use of plastic when possible
Remove unnecessary packaging

MAKE IT RECYCLABLE
20% Recycled content in plastic packaging
Increased recycled content
Make packaging recyclable

LABEL IT
100% Recyclable, reusable, or industrially compostable
100% Packaging labeled for recyclability
Apply the How2Recycle label

INNOVATE TOGETHER
Project Gigaton is designed so that every supplier can participate in at least one pillar.
The Sustainability Hub, a one-stop shop

- Learn how to design for recyclability
- Download the recycling playbook
- Find webinar recordings
- Link to other resources

walmartsustainabilityhub.com
WHO IS APR?

International trade association

The Voice of Plastics Recycling®

Companies committed to the success of plastics recycling
Increase Supply

Enhance Quality

Expand Demand

Communicate Value

**APR Primary Goals**
WHO IS APR? APR MEMBER SAMPLING
WHO IS APR? ENSURING PACKAGE DESIGN FITS WITH RECYCLING INFRASTRUCTURE

- APR Design® Guide for Plastics Recyclability
- Test Methods
- Training
- Communication
- Advocacy
WHO IS APR? APR’S INTERFACE WITH OTHERS

- Walmart
- Sustainable Packaging Playbook
- Improve Sustainability Index Score
- Reduce Cost of Goods

- ELLEN MACARTHUR FOUNDATION
- Rethink the future

- NEW PLASTICS ECONOMY

- APR
- The Association of Plastic Recyclers
- The APR Design Guide for Plastics Recyclability

- SPCE
- Sustainable Plastics Circular Economy

- PLASTICS RECYCLERS EUROPE
TYPES OF PLASTIC PACKAGING: PET

Most recycled plastic if designed correctly!

- Stiff, strong, heat resistant
- Clear
- Good chemical resistance
- Good oxygen and CO₂ gas barrier
- Excellent food and beverage safety credentials
TYPES OF PLASTIC PACKAGING: HDPE

*Widely recycled if designed correctly!*

- Strong
- Light
- Versatile
- Good moisture barrier
TYPES OF PLASTIC PACKAGING: PVC

No postconsumer recycling programs

Walmart US, Walmart Canada, and Sam’s Club endeavors to eliminate all PVC packaging in Walmart’s own Private Brands by 2025

- Stiff
- Clear
- Excellent chemical resistance
- Processed at low temperatures
TYPES OF PLASTIC PACKAGING: LDPE

Recycled in Store Drop off programs if designed correctly!

- Flexible
- Thin
- Stretchable
TYPES OF PLASTIC PACKAGING: PP

Widely recycled if designed correctly!

- Stiff, impact and heat resistant.
- Can be used in hot filling and retort
- Good moisture barrier
- Light weight
- Good for hinged closure

The Association of Plastic Recyclers
TYPES OF PLASTIC PACKAGING: PS

Extremely limited postconsumer recycling programs

Walmart US, Walmart Canada, and Sam’s Club endeavors to eliminate all expanded PS packaging in Walmart’s own Private Brands by 2025

• Easily foamed for insulated applications
WHAT MAKES SOMETHING RECYCLABLE?

60% consumer access

Processed by existing infrastructure
- sort
- clean

Can be manufactured into identifiable product
WHAT MAKES SOMETHING RECYCLABLE?

60% consumer access

- PET
- HDPE
- PP
- PE film

Processed by existing infrastructure

- sort
- clean

Can be manufactured into identifiable product
LABELING: RESIN IDENTIFICATION CODES

- Only Identify the Material
- They **DO NOT** mean it’s recyclable
LABELING: HOW2RECYCLE LABELS

- Program operated by The Sustainable Packaging Coalition
- Printed on the package label
- Encouraged by Walmart
- Plastic decisions made by referring to APR Design® Guide
- Instructs the consumer how to handle each component of a package
USING RECYCLED MATERIAL

Using recycled content

RECYCLING INFRASTRUCTURE

Design for recyclability

BRAND
USING RECYCLED MATERIAL

• Source recycled material to make your package (Walmart has a goal to achieve 20% recycled content in Private Brands plastic packaging by 2025)

• High quality material is available (many high quality items currently use large amounts of recycled material: water bottles, micro-fiber garments, detergent bottles, etc.)

• Identify, qualify and proof vendors

• Some machinery modifications may be required – speak to your production engineers
RESOURCES AVAILABLE

APR Design® Guide: How to design a recyclable package

Sustainable Packaging Playbook:
An overview of sustainable packaging priorities

Recycling Playbook: A deep dive on best practices for recycling

Walmart sustainable packaging playbook deep dive: Supporting Recycling

PET Bottles

Application Notes

- PET bottle is often used with the following:
  - Water and beverages
  - Dairy (e.g., condiments, sauces)
  - Health & Wellness (e.g., supplements)
  - Personal care 
  - Cleaning products

Recyclable Materials: LLDPE, LDPE, PP, PET

Manufacturer: SABIC

PET bottle market size (2020): 25Q million metric tons

PET bottle capacity (2020): 200 billion bottles
QUESTIONS
**SUMMARY**

*Functional, attractive, and economical* plastic products can be designed that are also *fully compatible* with the recycling infrastructure if:

- An appropriate material is used
- Design features are considered when designing the package such as:
  - Labels
  - Inks
  - Adhesives
  - Colors
  - Size
  - Shape

Refer to:
- The APR Design® Guide for Plastics Recyclability
- Walmart Recyclability Playbook
Check out the following webinars for more information:

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