

REFERENCE TOOLS

Examples of great designs and improved sustainability:

Love Beauty and Planet by Unilever uses recyclable, lightweight, clear PET (with recycled content). The branding is enhanced by bottle transparency that creates an emotional connection with the product.



The Harmony pack is mono-material making it recyclable and acceptable curbside and for drop off collection. The package does not use metallized materials or other harder to recycle components.



Danone Activia Probiotics - The overwrap is made of recycled fibres and is FSC certified. The individual bottles are also recyclable.



The Tide ecommerce ECO Box contains 30% less water, uses 60% less plastic and conveys the iconic Tide branding.



Lush Fresh handmade cosmetics –created a bring back program to help in recycling their iconic black pots and closing the loop by adding it back into new production.



Taste of Nature - The concept is all about organic and natural. The corrugate display is 100% recyclable and FSC and SFI certified. Foils and laminates that could hurt recycling were avoided.



Loop - a new system of high quality branded consumer product packages that can be returned and refilled many times over.



P&G Head & Shoulders bottle needed to be grey to mask the off-colored recycled beach plastic used. The graphic design integrates recycled bottle images into the branding.



USEFUL RESOURCES

Useful websites and literature for Sustainable Printing and Design:

- www.sgpppartnership.org - Sustainable Green Printing Partnership is a non-profit accreditation organization in US that promotes sustainability in printing practices and operations
- <https://gdc.design/sustainable-design> - Society of Graphic Designers of Canada sustainable design guidelines and case studies.
- www.aiga.org - Professional Association for Design – see “Living Principles Roadmap for Sustainable Design”
- www.flexography.org - Flexographic Technical Association
- www.napim.org - National Association of Printing Ink Manufacturers
- www.gaa.org - Gravure Association of the Americas
- Sustainable Graphic Design – Tools, systems and Strategies for Innovative Print Design by Wendy Jedlicka – John Wiley & Sons 2010
- Green Graphic Design by Brian Dougherty with Celery Design Collaborative - Allworth Press 2008

TerraCycle Recycling Search Platform:

PAC has partnered with TerraCycle to use their recycling search platform to provide information on where different types of packaging can be recycled.
<http://www.pac.ca/Programs/TerraCycle/>



For information on Environmental & Recycling Claims:

Canadian Competition Bureau’s Environmental Claims: A Guide for Industry & Advertisers
http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/en_g/02701.html

Federal Trade Commission’s Guides for the Use of Environmental Marketing Claims (“Green Guides”)
https://www.ftc.gov/sites/default/files/documents/federal_register_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfrn.pdf

Environmental definitions Bio-based, Bio-Degradable, Compostable:

http://www.observatorioplastico.com/ficheros/noticias/291002090802_plastics101.pdf

And visit the Bio-Degradable Products Institute (BPI) website
<https://www.bpiworld.org/>

For more information on ecommerce packaging:

Amazon’s “Frustration Free Packaging” Guidelines
https://images-na.ssl-images-amazon.com/images/G/01/fp/3p/ffp_guidelines.pdf

PAC’s Ecommerce Packaging Optimization Guidelines
<http://pac.ca/Programs/Next/Documents/ecommerce-optimization-report.pdf>

PAC Recycling Resources

PAC NEXT Report: Top Packaging Challenges
<http://www.pac.ca/Programs/Next/Documents/factsheet-primer.pdf>

GRAPHIC

PACKAGING SUSTAINABILITY CHECKLIST



The Packaging Design Community

The graphics packaging checklist target audience is the package graphic design and printing community and the marketers/brand managers who have key decision rights for 2D design. It’s a tool to help the Creative Team develop product and packaging design executions that help clients achieve their sustainability objectives.

Sustainable Design - A Compelling Business Case

Today, sustainability is top of mind for customers, consumers and governments with an urgent focus on reducing plastics packaging waste in our communities and oceans. This urgency is creating momentum for packaging decision makers/brand owners to positively integrate sustainability into their product/brand stories as a means to drive sales and enhance brand equity.

A Collaborative Approach

The **PAC SEESCAPE MODEL** represents a collaborative team of stakeholders throughout the value chain who play a key role in developing sustainable packaging and packaging graphics designs. Everyone has equal status. Success requires close collaboration with the creative design team and the client’s packaging management team so that the product’s brand is successfully reflected in the attributes of the packaging. And, the team’s objective is to keep packaging as a valuable resource in a continuous closed loop system rather than have it disposed in landfill, become litter or marine debris.



The Checklist

The six checklist areas provide a quick reference guide to help you make more informed sustainable design decisions for packaging, packaging graphics, and printing.

- 1 DESIGN BRIEF**
Are sustainability requirements included?
- 2 PACKAGING SYSTEMS**
- 3 PRINTING PRACTICES**
- 4 PACKAGE COLOUR SELECTION & MATERIAL IDENTIFICATION**
- 5 ECOMMERCE GUIDELINES**
- 6 COMMUNICATION COMPLIANCE**

1

DESIGN BRIEF

1. Are sustainability requirements included in the Design Brief?
2. What are the client's sustainability goals? How can the packaging and graphics contribute to these goals?
3. Can sustainability be balanced with important graphic design considerations e.g., shelf impact, consumer communication?
4. Is the packaging suitable for the intended retail experience (on-shelf, display, on-line)?

- ✓ **Ensure** that the Design Brief includes sustainability requirements for both structural and graphic design elements.
- ✓ **Understand** client sustainability goals and vision and how the brand design can enhance the package / product sustainability credentials.
- ✓ **Consider** sustainable design and printing approaches that can help maintain a brand's 'eco-friendly' image e.g. minimizing pack design, using recyclable materials, recycled content or chlorine-free paper products, etc.
- ✓ **Adapt** designs for best retail experience e.g. safe shipping and transportation, easy shelf stocking, great product display and access.

2

PACKAGING SYSTEMS

1. How can the package be Reduced, Reused or Recycled?
2. Is the packaging unnecessarily complex – multiple materials and components?
3. Are the packaging dimensions conducive to ensuring proper recovery and disposal?

- ✓ **Refer** to the PAC Structural Packaging Sustainability Checklist. <http://www.pac.ca/Programs/Next/Documents/pac-packaging-sustainability-checklist-structural.pdf>
- ✓ **Use** a holistic design approach for the packaging system (primary, secondary, tertiary packaging) to maximize cube utilization and reduce packaging. Where feasible choose recyclable materials, recycled content and reduce or eliminate use of foils / metallized materials. Where applicable design for reuse and durability.
- ✓ **Avoid** multiple material combinations or components that are difficult to separate e.g., plastic windows in paper packages, plastic coated paper, multi-material injection molded parts. Consider mono material options where feasible.
- ! *Design for disassembly for packaging with multiple components e.g. retail displays and other promotional materials, to increase chances of successful recovery.*
- ✓ **Consider** redesigning small-format packaging and lightweight 2D items (e.g. lids, tear-offs, caps, sachets, promotional add-ons, and items smaller than 40-70mm) as they are difficult to capture in MRFs and often end up in landfill.

3

PRINTING PRACTICES

1. Is the printing process certified as an environmentally sustainable operation?
2. Do selected inks, varnishes or adhesives come with unfavourable impacts?
3. Are printing materials sourced responsibly and used efficiently?
4. Are chosen printing technologies suitable for small, medium and/or large print runs?

- ✓ **Consult** with print partners and other vendors to explore environment friendly & resource efficient printing practices and manufacturing operations (materials, transportation, utilities).
- ✓ **Specify** inks with low volatile organic compounds (VOCs) or made from renewable sources e.g. soy. Avoid using metallic inks wherever possible. Choose easy to break down VOC free adhesives and recyclable varnishes. Where feasible consider adhesive free creative structural solutions.
- ✓ **Verify** environmental sourcing and recycled content claims with third-party certification labels (e.g. "FSC Certified" from Forest Stewardship Council).
- ✓ **Use** chlorine-free paper with recycled content, optimize paper weight and reduce ink coverage.
- ✓ **Avoid** print wastage through print-on-demand operational planning. Consider benefits of digital printing vs off-set litho vs roto-gravure to achieve eco-efficient print runs for desired number of impressions.
- ✓ **Save** ink by using typefaces that are naturally perforated.

4

COLOUR SELECTION and MATERIAL IDENTIFICATION

1. Can the colour selection of the packaging design help increase its chances of being recycled and/or permit use of recycled content?
2. Does the packaging clearly identify the material(s) used? Is it marked with the revised plastic resin identification code, where applicable?
3. Does the packaging design include use of inks, adhesives, and/or labels that may compromise the value of recycled materials?

- ✓ **Limit** need for pure white for paper and carton packaging as this may require the use of virgin material due to the grey / brown shades of recycled materials.
- ✓ **Avoid** colored or opaque PET as this degrades highly recyclable clear PET. Clear plastic is easier to capture, retains higher value, and increases options for end use applications.
- ✓ **Mitigate** use of black plastics by ensuring that they can be identified and recovered in a MRF (material recovery facility) see [Unilever info](#).
- ✓ **Refer** to ASTM D7611 International standard for correct use of the Resin Identification Code Also refer to the Bio-degradable Products Institute (BPI) certification label that identifies compostable packaging.
- ✓ **Avoid** full sleeve labels or use perforation. Partial labels are preferred in order for recycling equipment to correctly identify and sort the body material.
- ✓ **Ensure** selected inks do not bleed in water and the label adhesives are recycling-friendly (refer to the Association of Plastic Recyclers' Design® Guide for Plastics Recyclability)

5

ECOMMERCE GUIDELINES

1. Has the package been designed to reflect that marketing and consumer purchase decisions are made on-line?

- ✓ **Protect** the product and prevent damage and theft
- ✓ **Optimize** outer packaging size for the product or products shipped – avoid excessive packaging
- ✓ **Design** for renewable or recycled content, recyclability and re-use where feasible, including any internal protective packaging or padding
- ✓ **Be easy**, convenient and safe to handle and open for consumers that also allows for potential return of goods
- ✓ **Meet** courier specific requirements
- ✓ **Avoid** repetitive information on-pack if it can be accessed online or by Smart mobile app.

6

COMMUNICATION COMPLIANCE

1. Are sustainability claims verifiable?
2. Have you made appropriate considerations to avoid greenwashing?
3. Is it obvious how to recycle the package?
4. Is there excessive information on pack?

- ✓ **Comply** with federal green marketing guidelines for environmental benefit claims such as "Recyclable" and "Compostable".
- ✓ **Qualify** claims and exercise caution when using terms "Bio-based", "Biodegradable" and "Compostable". These terms are confusing to consumers and may encourage littering or incorrect placement into the community green / blue bins due to the mis-conception that the product will readily decompose in the natural environment.
- ✓ **Label** appropriately. Ensure label placement does not cause confusion with other eco-labels (e.g., fair trade, organic).
- ✓ **Avoid** deceptive labels or graphics that could be considered to be deceptive.
- ✓ **Provide** simple instructions on how to correctly dispose of the used packaging and to discourage littering (e.g., empty and replace cap, remove lid before recycling). Consider providing additional information online or by mobile app (scans NFC Smart tag on package).