WHAT IS PACKAGING SUSTAINABILITY?

Key Associations

- Sustainable Packaging Coalition (SPC)
- International Safe Transit Association (ISTA)
- International Standards Organization (ISO)/TC 122/SC4 Packaging and the Environment
- Consumer Goods Forum (CGF) - Global Packaging Project (GPP)
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  - New North American (NA) - AMERIPEN
- Retailers – NA – Walmart, Target, Global – Tesco,
- Government – EPA, Local – Expanded Producer Responsibility (EPR)

Summary of Existing Resources

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<th>Material Neutral</th>
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<th>Packaging Exposed</th>
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Sustainable Packaging Coalition (SPC)

- Karen Proctor – Executive Board Member

What is COMPASS?

COMPASS (Comparative Packaging Assessment) is online design software that allows packaging designers and engineers to assess the human and environmental impacts of their package designs using a life cycle approach. COMPASS helps packaging designers make more informed material selections and design decisions by providing quick visual guidance on a common set of environmental indicators.

COMPASS provides consistently modeled datasets for USA, Canada and Europe to aid in materials and processes used for packaging to allow reliable apples to apples comparisons of multiple scenarios. In addition, regionalized cold-waste modeling provides a waste profile of each scenario to help understand the end of life (EOL) indicators of packaging designs.
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Benefits

- Aligns with existing standards
- Common reference for all stakeholders debating the environmental impact of packaging
  - Prevent ad-hoc regional requirements
  - Platform for communications with regulatory authorities
- Global approach for global market
- Harmonized packaging requirements
- Supports free trade
Complexity of sustainability needs a Common Language

The Global Protocol on Sustainable Packaging 2.0

Environmental Attributes (13)
- Packaging weight and minimization
- Packaging to product weight ratio
- Water balance
- Recycled content
- Renewable content
- Oils and solvents
- Packaging reuse rate
- Packaging recovery
- Cube utilization
- Environmental management system
- Energy audit

Life Cycle Indicators (14)
- Cumulative energy demand
- Fresh water consumption
- Land use
- Global warming potential
- Ozone depletion
- Toxicity, cancer
- Toxicity, non-cancer
- Particulate respiratory effects
- Ionizing radiation (human)
- Photochemical ozone creation potential
- Acidification potential
- Aquatic eutrophication potential
- Non-renewable resource depletion

Economic Indicators (2)
- Total cost of packaging
- Package product wastage

Social Indicators (13)
- Package product shelf life
- Community investment
- Child labor
- Excessive working hours
- Responsible workplace practices
- Forced or compulsory labor
- Remuneration
- Freedom of association
- Occupational health
- Discrimination
- Safety performance
- On-pack end of life communication

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... is a strategy designed to promote the integration of environmental costs associated with goods throughout their life cycles into the market price of the products.

Christian Brother’s University

- Keynote speaker
- Presentation

Teaching Foci

Enhance the educational environment of sustainable packaging innovation through the use of applied tools.

Activities

- End Use – Collaboration of CAST and CIAS, Industrial Design and Graphic Design
- Packaging for Marketing
- Utilization of the Student Center for Innovation
WHAT IS PACKAGING SUSTAINABILITY?

Thank You

Karen L. Proctor
Professor, Rochester Institute of Technology
Karen.proctor@rit.edu