Sustainable Packaging for a Green Industry

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Functions of Packaging

**Functional**
- Protection from external factors, Containment
- Prolongs shelf life
- Quality preservation & Food safety
- Facilitate Transportation & storage & Handling

**Marketing Tool**
- Sales Potential (Catch Browser Attention)
- Product Differentiation: eye catching, colorful and unique shape
- Brand Recognition (quality, customer loyalty, higher price)
- Defining product identity
- Product information
- Image (Quality, Elegance)

**Legal**
- Packaging & labeling law
But Packaging has also an important role for the Environment
Packaging waste represent more than 50% of total household waste
Packaging waste ends up on our nature!
Composition of Packaging Waste

- Plastic: 33%
  - Plastic film: 16%
  - Plastic bottles: 9%
- Glass bottles and jars: 32%
- Paper and Cardboard: 19%
- Metal cans and foil: 14%
- Mixed beverage containers

Sources: UK Department for Environment
Some Facts on Plastics

• about 50% goods are wrapped in plastic
• Too many types of plastic packaging: plastic bottles PET, yoghurt pots are (PP), wrapping film, and flexible...that is why recycling rates for plastic is too low
• One plastic bag takes 1 second to manufacture, is 30 minutes in use, and takes 100-400 years to degrade naturally.
Plastic Bags in the Oceans
Solution: Sustainable Packaging
Packaging should address the 3 Dimensions Of Sustainability

An economically sound package also preserves the product, preventing expiration on-shelf and costly product waste.

Finally, a package is only as good as its performance. Whether packaging is recyclable, renewable, or made with reduced material content, it must satisfy the social needs of consumers and their latest trends.
✓ Designed holistically with the product in order to optimize overall environmental performance
✓ Made from responsibly sourced materials
✓ Able to meet market criteria for performance and cost
✓ Manufactured using clean production technologies
✓ Efficiently recoverable after use
✓ Sourced, manufactured, transported and recycled using renewable energy.
Adopting the 3 Rs
There is NO such thing of Bad Packaging Material

**Glass** produced from sand bottles & other glass containers are either returned to be refilled or are recycled at a high rate.

**Plastics**, made from oil or biomass, come in a number of specialized varieties. Plastic packaging can be reused, recycled or used for energy recovery.

**Metal** is used to make containers, foils and closures. Tinned steel is used for food cans & beverage cans. Both types of cans are recycled at high levels with significant environmental benefits.

**Paper & board** is based on organic fibers from wood and other biomass sources. Paper is readily recycled and high recycling levels are achieved.

**Wood**, used mostly for pallets and crates. The wood generally comes from managed forests and is frequently reused for a number of transport cycles.
New Technologies

- **Bioplastics** are a form of plastics derived from renewable biomass sources, such as vegetable oils & fats and starch, rather than petroleum.

- **Oxo Biodegradable** plastic is plastic to which has been added amounts of metal salts. which will speed up the natural degradation process from hundreds of years to years and/or months for.
Communication is key!

There are many ways to communicate through a package with shape, design, materials
Recently launched Odwalla single-serve bottles are now made from 100% plant based materials, using high-density polythene plastic (HDPE).

Bottle is made from bio-based raw materials, including switch grass, pine bark and corn husks. PepsiCo is working to expand sources for the raw materials to organic waste from its food businesses, including orange peels, potato peels, oat hulls and other agricultural byproducts.
But we have to avoid Green washing
JUNGLE OF ECO-Labels!
LibanPack, The Lebanese Packaging Center

- A nonprofit private association.

- Founded in November 2008 through the joint support of the UNIDO MACLE Project (Market Access and Compliance for Lebanese Export) and funded by Switzerland (SECO)

- The Association of Lebanese Industrialists (ALI), and the Syndicate of Packaging Industries in Lebanon (SOPIL)
LibanPack Services

- Packaging Design
- Branding / Product Identity
- Structural Design
- Technical Label Review
- Consultancies
- Trainings / Courses
- Packaging Testing

Label and Packaging Solutions
Package Design

before

after

BEFORE

AFTER

BEFORE

AFTER
Technical Labeling Review
LibanPack’s commitment to Sustainable Packaging

• LibanPack supports companies to adopt the latest technologies related to the concept of the 3 Rs: Reduce, Reuse, and Recycling packaging material

  • Recycle: The package was made out of recycled corrugated fiber board
  • Reduce: The outer package combined 2 different products with 2 different packaging volumes (Calendar & gift box) in one package. It was designed in this way to reduce at source the use of packaging material by almost 25%.
  • Reuse: The inner package, the plastic box was designed by converting part of used package namely PET plastic bottle of soda drink into a new reusable package.
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