



## KEY STEPS

### CONVERTING TO REUSABLE TRANSPORT PACKAGING

Your company has the power to make a positive impact on the environment. Companies that convert to reusable transport packaging, made of sturdy virgin or recycled-content plastic, durable wood, or metal, are not only reducing their waste and conserving energy and natural resources, but are also lowering labor and material costs over time, ensuring better product protection, and improving worker safety with ergonomically designed handles and access doors.



By following these key steps, you can find out if reusable transport packaging will work for your company:

#### Step 1: Determine if Reusable Transport Packaging Will Work for Your Company



Reusable transport packaging works the best for companies that ship in closed loop distribution systems, meaning the container and/or pallet always goes back to the same point of origin. Although companies that ship products in a managed open-loop system can use rental companies to manage the return of empty packaging, as well as ensuring that the packaging is inspected, cleaned, and repaired as needed.

The following list of conditions, developed by INFORM, Inc. and the Reusable Packaging Association (RPA), can be used to determine if reusable transport packaging is a good choice for your company:

- **Short distribution distances.** Shorter distances mean lower freight costs are incurred in hauling back containers. Shorter distances also expedite the return of containers to suppliers.
- **Frequent deliveries of consistent products in large volumes.** Frequent deliveries of consistent products in large volumes usually mean that inventory turns over rapidly, which makes it possible to collect empty containers with each delivery. This minimizes the number of containers in storage and transport and minimizes the supply of containers that a company must purchase.
- **Company-owned or “dedicated” vehicles.** If companies involved in shipping and receiving use company-owned vehicles, there is typically no charge for return shipping. Producers may also work with trucking companies that have dedicated part or all of their fleet to making deliveries to or from a single customer.

- **Small number of parties.** Controlling the return of empty containers is easier when the number of parties handling containers is small; for example, when a bakery delivers directly to a grocery store without intermediate storage in a warehouse.
- **Large or bulky products or those easily damaged.** Large or bulky products, or those that are easily damaged, require bigger, more expensive one-time or limited-use containers, so the potential for long-term cost savings is greater.

## Step 2: Compare Costs of One-Time vs. Reusable Transport Packaging

Follow these tips from the Reusable Packaging Association to compare the costs for one-time or limited-use packaging with the total costs of reusable transport packaging, including any costs for reverse logistics (transporting empty containers back to your facility):

1. **Identify potential products.** Develop a list of products that are similar in size, shape, and weight that are frequently shipped in large volumes.
2. **Estimate one-time and limited-use transport packaging costs.** Estimate current costs of using one-time and limited-use packaging. Include costs to purchase, store, handle, and dispose of the packaging.
3. **Develop a geographical report.** Develop a geographical report by identifying shipping and delivery points. Evaluate the possibility of working with suppliers to make a switch to reusable transport packaging.
4. **Review reusable shipping container options and costs.** Reusable transport packaging is available with various features that facilitate shipping, handling, and storage, including:
  - **Collapsibility:** The walls of the container are designed to fold down when not in use.
  - **Nestability:** Empty containers can be placed inside each other easily.
  - **Stackability:** Tops and bottoms are designed to lock into one another to allow for greater stacking heights.

Visit the Container Exchange website for examples of the various types of Gaylord boxes, totes, and pallets that are available. Compare the prices of both new and used products.

5. **Develop a preliminary cost comparison.** Based on the information gathered in the previous steps, develop a cost comparison between one-time or limited-use packaging and reusable transport packaging. Consider using the Reusable Packaging Association's model to compare the basic cost differences between one-time and reusable transport packaging. The model uses basic assumptions and requires you to input various cost components, such as: the purchase price of the containers, dwell time in days that a container will be held at various stages in the distribution chain, number of containers shipped in a given year, internal rate of return, and the number of miles that an empty container will travel to return to your facility (return logistics).

### Step 3: Review Case Studies

Before making a decision to convert to reusable transport packaging, check out the case studies on the UseReusable website—a partnership between the StopWaste Partnership and the Reusable Packaging Association—to learn more about the savings and benefits realized by companies that have converted to reusable transport packaging. The testimonies from other companies may help streamline efforts for making the switch to reusable transport packaging.

The following case study features a Utah company that has made the switch to reusable transport packaging:

#### Case Study for Autoliv

Autoliv, a worldwide leader in automotive safety, specializes in the manufacture of airbags at its Ogden facility. The company wanted to eliminate waste, decrease the risk of product damage, and significantly reduce other costs associated with the use of wood pallets and cardboard boxes. In 1994, Autoliv made the switch to reusable containers using collapsible and nestable containers of all sizes. The collapsible or stackable containers take up less space—as much as 5 to 1 density—on the return trip to the factory. To improve efficiency, Autoliv also color codes its reusable containers, which helps conveyance personnel identify containers.

Due to the frequent reuse of the containers, Autoliv's return on investment (ROI) occurred within three months. As an added benefit, with reusable containers, workers are less likely to suffer from repetitive stress injuries associated with opening and taping cardboard boxes.

### List of Website Links

#### Case Studies on Use Reusables Website:

[www.usereusables.com/casestudies/index.html](http://www.usereusables.com/casestudies/index.html)

**Container Exchange:** [www.containerexchanger.com](http://www.containerexchanger.com)

**INFORM, Inc.:** [www.informinc.org/xsum\\_deliver.php](http://www.informinc.org/xsum_deliver.php)

**StopWaste Partnership:** [www.stopwaste.org](http://www.stopwaste.org)



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#### Comments and Questions

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