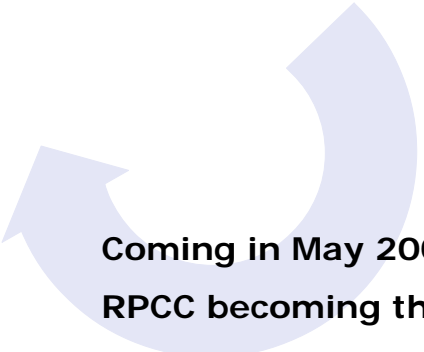




Achieving Sustainability in the Organic Produce Industry with Reusable Packaging



Coming in May 2008:
RPCC becoming the
Reusable Packaging
Association (RPA)!



REUSABLE PACKAGING
ASSOCIATION
Formerly the RPCC

Responsible Packaging Solutions

March 13, 2008
Anaheim Convention Center
Room 304A

Hosted by:
Resource Innovations and the University of Oregon Institute for a
Sustainable Environment

Presented By:
David Rieser, Reusable Pallet & Container Coalition



Reusable Packaging Defined

Reusable pallets, hand-held containers and bulk containers used for the efficient storage, handling and distribution of products throughout the supply chain.



Bulk Containers

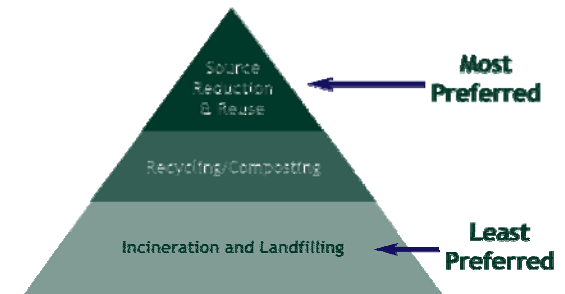
Reusable Pallets



Hand-Held Containers

Reusable Packaging Advantages

- Replaces single-use or limited-use pallets and containers
- Safe, cost effective and sustainable
- Unitized, stable loads = less product damage and better transportation efficiency
- Easily cleanable
- Can be purchased or used in a pool
- Usage:
 - Closed loop systems - Harvesting, work-in-process, cold-room and storage
 - Open loop/high velocity systems - Pooling, movement of produce throughout the supply chain (grower>retailer DC>retail outlet)

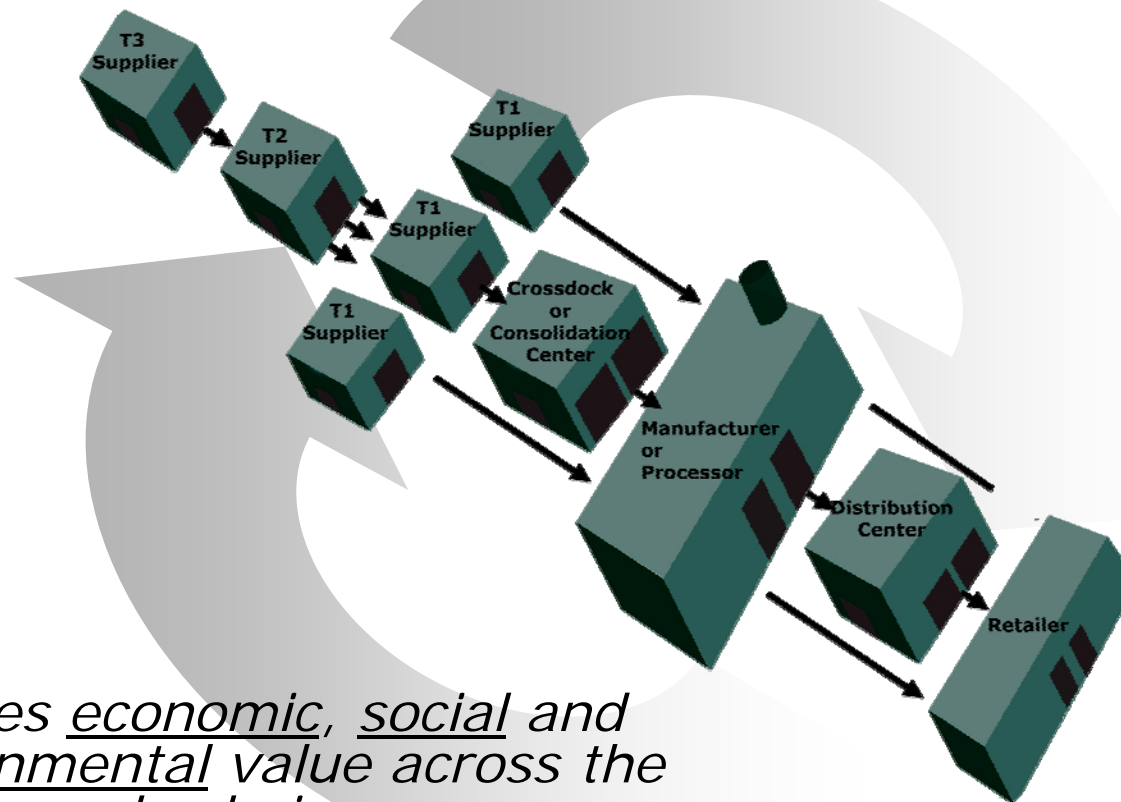


When Should Reusable Packaging Be Considered?

A systematic, well-planned reusable packaging program makes sense for many types of applications, particularly those with the following:

- High volumes of solid waste
- High value products (\$)
- High Shrinkage/product damage
- Established distribution system with determined distribution points
- Higher velocity distribution system
- Expensive expendable packaging or recurring single-use packaging costs
- Under-utilized trailer space in transportation, need for unitization or inefficient storage/warehouse space
- Worker safety or ergonomic issues
- Need for sustainable processes

The Power of Reusable Packaging Supply Chain Sustainability



Provides economic, social and environmental value across the entire supply chain.

Typical Applications:

- Inbound shipments
- Outbound shipments
- Work-in-process
- Assembly/fabrication
- Filling
- Processing
- Re-Packing
- Picking
- Storage
- Distribution

What other industries use reusable packaging?

- Automotive
- Food/Grocery
- Pharmaceutical
- Electronics
- Aerospace
- Chemicals
- Textile
- Beverage
- Produce

Reusable Packaging Benefits for the Organic Produce Industry

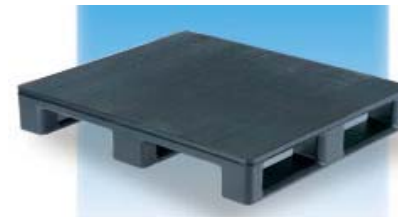
Economic:

- Reduces overall packaging costs
- Rapid Return on Investment (ROI)
- Reduces costly product damage
- Reduces labor costs
- Reduces inventory, requires less space
- Reduced cost-per-trip



Social:

- Recyclable
- Improves workplace safety
- Improves workplace efficiency



Environmental:

- Prevents waste from entering the solid waste stream
- Reduces greenhouse gas emissions
- Improves transportation efficiency, resulting in fewer trips and reduced fuel costs
- Supports source reduction
- Requires less energy

Life Cycle Inventory study results:

Of the applications tested, it was found that reusables:

- Require 39% less total energy
- Produce 95% less total solid waste
- Generate 29% less total greenhouse gas emissions

SOURCE: "Life cycle inventory of Reusable Plastic Container and Display-ready Corrugated Containers used for Fresh PRODUCE APPLICATIONS", Franklin Associates for the Reusable Pallet and Container Coalition, October 2004.

Reusable Packaging Considerations for Organic Produce Growers

- o Established network of participating supply chain partners/customers
- o Reverse logistics - How do you get the containers/pallets back?
- o Product rejections by customers
- o Asset tracking
 - o Standard Sizes from 6411-6428
- o Pool management
 - o 3 Primary Poolers – Georgia-Pacific, Orbis, IFCO
 - o Inventory turns
 - o Pool accountability
 - o Cooperating network
- o Freight cost implications, especially on asset collection
- o Seasonality of industry (e.g. Produce)
- o Cleaning

***Begins with System Analysis
to understand how it will
travel throughout the supply
chain!***

How to get Started: Implementation Best Practices

1. **Assess your supply chain**
 - Review current handling and logistics systems (define suppliers, daily shipments, handling practices, product damage occurrences, labor inefficiencies, etc.)
2. **Conduct cost/benefit analysis**
 - Cost-justify different solutions (pooling, etc.)
 - Select a solution
 - Gain approval from stakeholders
3. **Design the optimal system**
 - Get all stakeholders involved in the planning
 - Assess equipment interface (conveyors, etc.)
 - Identify transportation patterns/loops
 - Define reverse logistics procedure and tracking needs
 - Conduct a small-scale pilot prior to implementation
 - Define cleaning needs
4. **Implement the system**
 - Integrate
5. **Monitor for continuous improvement**
 - Proactively seek new and updated solutions to maximize value of your packaging investment

In Summary

- Significant economic, social and environmental benefits
- Careful system analysis will ensure successful implementation
- Resources are available for you

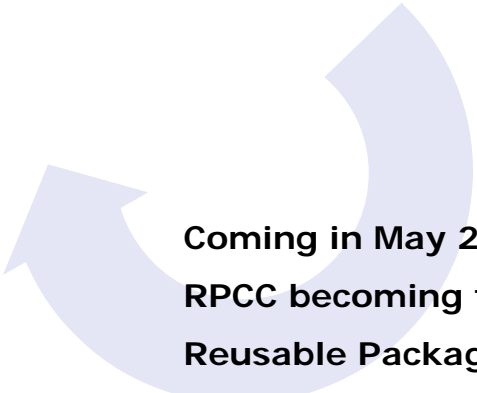
"We believe the sustainable development agenda is probably the biggest opportunity for the business community since the industrial revolution."

David Middleton, CEO of BCSD – United Kingdom

For more information contact:

Reusable Pallet and Container Coalition
Jeanie Johnson, Executive Director
PO Box 42248
Washington, DC 20015-0248

Phone 1-202-625-4899
Fax 1-202-318-2289
e-mail headquarters@rpccreusable.org
Web www.rpcc.us



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