# Reusable Transport Packaging What it Can Do for Your Business

A 30-minute presentation Facilitated by:

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Offered in conjunction with:
Norcal Sustainable Healthcare Group

## What we'll cover:



- 1. Reusable Transport Packaging
- 2. Benefits of Reusable Transport Packaging
- 3. What Makes a Good Candidate for Reusables?
- 4. Technical Assistance Available

# Top 5 Materials Businesses throw away...

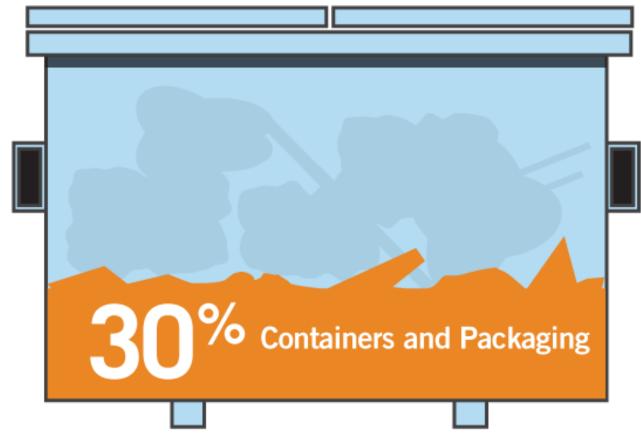
- Food waste
- 2. Other paper
- 3. Cardboard boxes
- 4. Wood pallets
- 5. Film plastics, e.g. stretch wrap

...and they're paying for each piece.



# Packaging in U.S. Solid Waste

Disposable containers & packaging are 30% of North America's Municipal Solid Waste (MSW)



Total MSW Generation (by category), 2008 250 million tons (before recycling)

# Transport Packaging is used to move components, finished products or raw materials

### Traditional pallets & boxes





### Reusable alternatives





# Transport Packaging is used to move components, finished products or raw materials



# Transport Packaging is used to move components, finished products or raw materials

### Other transport packaging





### Reusable alternatives







# Reusable Transport Packaging

- Durable construction
- Typically never disposed of by the recipient
- Repeated use lifetime is measured in years
- Can include special features



# Benefits of Reusables



- Cost savings
- ✓ Better efficiency
- ✓ Better worker safety/ergonomics
- ✓ Better product protection
- Improved environmental performance
   & corporate responsibility

### Mills-Peninsula Health Services

### **Industry**:

**Health Services** 

### Location:

Burlingame, CA

### **Reusables Used:**

Steel hard cases

### **Company Snapshot:**

Mills-Peninsula Health Services is a general medical and surgical hospital in Burlingame, CA. This location has 393 beds. Staff performed 3,444 annual inpatient and 7,235 outpatient surgeries and its emergency room had 46,911 visits.





## Mills-Peninsula Health Services

**Before:** Recurring purchase of 14,475 pounds/year of Blue Wrap. The Wrap was only used once then disposed of.

**After:** One time purchase of reusable steel hard cases. Reduced Blue Wrap purchase use by 70%.

Before



After

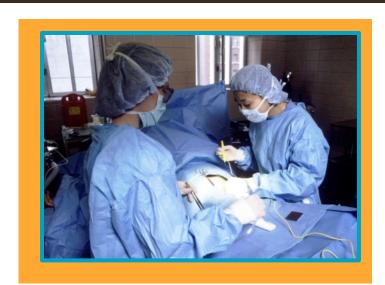


### Mills-Peninsula Health Services

Blue wrap is responsible for 19% of the waste generated from surgical services nation-wide.

### Results:

- √ \$25,173 annual savings from avoided Blue Wrap purchases
- ✓ Reduced waste (and associated waste bills) by 5.07 tons/year
- ✓ No damaged wrapped equipment and supplies requiring re-wrapping and resterilization
- ✓ Return on Investment (ROI) of 8.2 months



### Kaiser Permanente



### **Industry**:

Healthcare

### Location:

Livermore, CA

### **Reusables Used:**

Plastic totes



### **Company Snapshot:**

Distributes medical supplies, documents, and pharmaceuticals to facilities within Northern California. It is one of three supply warehouses operated by Kaiser in the USA.

### Kaiser Permanente

**Before:** Recurring purchase of 591,000 cardboard boxes, plus tape and packaging filler. Cost of labor to put boxes together and later flatten for recycling.

After: Purchased reusable, durable plastic totes, no assembly required. Four different color coded sizes are used depending on volume to be distributed.



### Kaiser Permanente

### Results:

- √ \$530,000 annual savings from avoided packaging purchases
- √ 500 hours annual labor savings
- √ 591,000 boxes saved/year
- Color coded totes improve distribution system



# Stanford University Medical Center and Owens & Minor, Inc.

### **Industry**:

Healthcare/Hospital

### Location:

Palo Alto, CA

### **Reusables Used:**

Reusable plastic totes

### **Company Snapshot:**

Stanford medical complex that spreads over 3.0 million square feet and employs over 10,000 staff.

O&M is a national distributor of medical and surgical supplies.





Stanford University Medical Center



# Stanford University Medical Center and Owens & Minor, Inc.

### Before:

Use of one-time use cardboard boxes shipped directly to the hospital.

### After:

Just in time delivery in reusable totes from O&M's Distribution Center in Tracy, CA.







After

# Stanford University Medical Center and Owens & Minor, Inc.

### Results:

- √ 70% of supplies are delivered in reusable totes
- ✓ Cardboard is virtually eliminated from clinical areas, decreasing risk of infection
- ✓ Deliveries are limited to two trucks per day, reducing traffic and emissions throughout the medical complex
- Clinicians spend less time on handling supplies and more on patient care



# Washington Hospital



### **Industry**:

Healthcare

### Location:

Fremont, CA

### **Reusables Used:**

Sharps containers



### **Company Snapshot:**

For more than 50 years, we've been serving Alameda County with some of the area's finest medical care.

# Washington Hospital



### After:

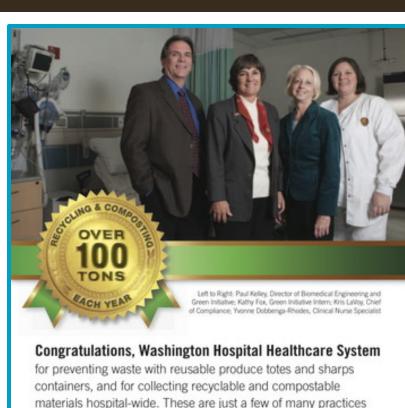


# Washington Hospital

### Results:

✓ 33.7 tons of waste diverted from the landfill over 15 months





materials hospital-wide. These are just a few of many practices your team has put in place to cut costs, reduce waste, and protect the environment.





2010 BUSINESS EFFICIENCY AWARD WINNER

Presented by the StopWaste Partnership

www.StopWastePartnership.Org Partnership@StopWaste.Org

EIGHT COMPANIES BECAME CHAMPIONS THIS YEAR. WILL YOURS BE NEXT?

# Are reusables right for your organization?







# Healthcare Reusables Opportunities



- ✓ Distribution
- ✓ Low Unit of Measure
- ✓ Hardcase Replacement of Blue Wrap
- Reusable Sharps Containers
- ✓ Office Moves
- ✓ Incoming Supplies

# The Use Reusables Campaign



- Helping businesses convert to reusable packaging.
- Reducing GHG emissions and solid waste from limiteduse transport packaging materials.

Brought to you by:







# "Use Reusables" Resources



- √ Technical Assistance
- ✓ Cost Benefit Analysis
- ✓ Vendor Facilitation & Referral
- ✓ Implementation Support

# Financial Analysis Tools

Net	Present Value (	NPV)		NPV = sum of the discounted net cash flows			
	pany: ABC Roasting						
	Assumptions			Enter Values			
	Equipment purchased:			66 straight wall plastic containers, 2 hoppers			
	Included in financial analysis:						
	Purchases avoided:			\$85/week of cardboard boxes or \$4,250/year			
	Labor savings:			\$15/hour * 8 hours/week or \$6,000/year			
	Not included in financial analysis:						
	Large customer's purchases avoided:			\$160/week on po	oly bags or	\$8,000/year	
	Large customer's labor savings:			\$15/hour * 8 hours/week or \$6,000/year			1 .
	Benefits			Costs	Costs		
Year	Description	Ben	efits Value	Description	Value	Net Cash Flow	
0				Equipment costs	\$ 4,135	(\$4,134)	<u> </u>
1	Purchases avoided	\$	4,250				
	Labor savings	\$	6,000				
	Year 1 Total	\$	10,250	10% replacement	\$ 413	\$9,837	
2	Purchases avoided	\$	4,250				
	Labor savings	\$	6,000				
	Year 2 Total	\$	10,250	10% replacement	\$ 413	\$9,837	
3	Purchases avoided	\$	4,250				
	Labor savings	\$	6,000				
	Year 3 Total	\$	10,250	10% replacement	\$ 413	\$9,837	
4	Purchases avoided	\$	4,250				

 $NPV = \sum_{t=0}^{n} \frac{(Benefits - Costs)_{t}}{(1 + r)^{t}}$ 

where:

r = discount rate

t = year

n = analytic horizon (in years)

#### Input | Charts |

Enter your actual cost for a corrugated carto and the cost of a comparably sized reusable container. Default values are provided.

#### Reusables Cost Comparison Tool

This model compares basic cost differences of one way corrugated packaging and reusable plastic packaging. The model uses basic assumptions and requires you to input various cost components. While the model uses factual inputs from prospective users it is intended to offer guidance and not an absolute indication of exact cost benefits. More specific models are available to determine specific cost benefits once an overall feel for expected costs are understood.

Corrugat	ed	Reusable Handheld Container		
		* average values, your cost will vary		
n,				
Corrugated carton	1.00	Container price	7.50	
d Tape per carton	0.02			
Total purchase cost	\$1.02			

#### **Dwell Time**

Enter the cost of tape or other materials use to seal each carton.

"Dwell time" is the amount of time in days that a reusable packaging container will be held at various stages in your supply or distribution chain. In addition to time at your facility, be sure to also enter time at any distribution centers, transit time, time at the destination, and time for preparing and returning the container for reuse. All times are in full days. (Leave lines blank for rows that do not apply to your situation).

# Analyzing GHG impact

- EPA's WARM model is used to determine GHG reductions
- Biggest factors affecting GHG reduction potential are:
   Project size, material replaced, and how materials were discarded

	GHG Reductions
Material	(MTCO <sup>2</sup> E/ton)
Cardboard (boxes, drums)	5.5 (2.5 if recycled)
Plastic Wrap (pallet wrap)	1.8 (0.84 if recycled)
Wood (pallets)	1.3

# Join a community of industry leaders!





















### Interested?

Use Reusables representatives are available to help:

- Assess opportunities at your company & identify potential projects
- Estimate the cost savings
- ✓ Conduct an on-site assessment if needed (SF Bay area)
- ✓ Provide implementation support

## Website: UseReusables.org

- Reusables Basics
- Cost Analysis Tools
- Equipment & Service
   Providers
- Case Studies/Videos





#### Reusable Transport Packaging

What it is and how it can help you. « Watch the 3 minute intro video.

#### Featured Case Study: Tesla Motors & Veritable Vegetable



Boosting efficiency in manufacturing and distribution with reusable transport packaging (5:57)

View All Case Studies »

#### Are Reusables Right For You?

Find out if Reusables make sense for your company with our Assessment Checklist and Cost Calculator Tool.

# News & Events Grant funding now available! Applications due 8/15. More information Join a free 30-minute webinar to learn about reusables and available grants Two dates available: 7/15 & 7/24 Register Here

# Be the first to learn about relevant news and events!

### Questions?

Visit our website <a href="www.UseReusables.Org">www.UseReusables.Org</a> or contact us:

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