



Rapid Response

Pacific Northwest Pollution Prevention Resource Center

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Rapid Response Question: What are some sustainable packaging opportunities that manufacturers can evaluate and/or implement?

Request by: anonymous

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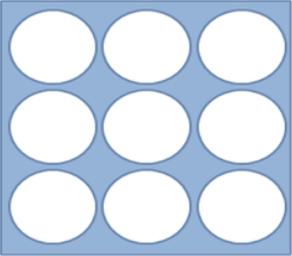
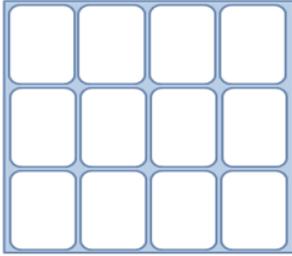
Procurement (Production and Non-Production)	
☞	?
<ul style="list-style-type: none"> ☐ Review specifications for purchased packaging materials (looking for recycled content, recyclable, reusable, non-toxic, or other environmental attributes) ☐ Look at packaging stock for any labeling or marking indicating recycling instructions or recycled content 	<ul style="list-style-type: none"> • What is your annual spend on protective packaging for in-house usage and outbound shipments to customers? • What portion of purchased packaging material contains recycled content? • What percentage of purchased package material is reusable or returnable? • What percentage of purchased packaging material is recyclable? • Are you aware of any toxic or hazardous materials in inks/labels or packaging you purchase? • Can your packaging supplier provide design expertise? • Do any customers require returnable packaging? • Do you require suppliers of your components to detail supplier packaging design and costs when quoting?

Packaging Design / Selection

	?
<ul style="list-style-type: none"> ❑ Inefficient final packing for outbound product and transport (excessive air space in boxes, packets, when stacked on pallets, waste space in trailers) 	<ul style="list-style-type: none"> • Do you specify percent recycled content and recyclability? • Do you specify non-toxic materials and inks? • Can I see your packaging specifications? • Is your packaging designed for ease of recycling by the end customer? • Have you worked to lightweight or otherwise optimize your packaging? • Have you minimized or eliminated use of loose fill packing (i.e. peanuts, etc. that can contribute to added housekeeping and management?)

Receiving Areas

	
<ul style="list-style-type: none"> ❑ Recyclable packaging materials from inbound inventory in nearby waste dumpsters (inside and outside) ❑ Excessive amount of recyclable package materials in nearby recycling receptacles - including overuse of packaging ❑ Potential physical and ergonomic hazards during unpacking (box cutters, repetitive motion injury, spills/leaks, chemical releases, etc.) ❑ Seemingly detailed, cumbersome, or time consuming unpacking ❑ Receipt of damaged product due to failures in packaging ❑ Look for durable and reusable packaging or totes 	<ul style="list-style-type: none"> • Do you recycle inbound packaging materials? • Are there any materials you cannot recycle due to contamination, or lack of access to end markets? • Do you track the amount of packaging waste? • Do any suppliers take packaging back? • Do you recycle or reuse wood pallets? At cost or refund? • Do you have ideas for reuse of packaging materials provided by your suppliers? Have you inquired with or communicated this to suppliers? • Do you have a standard procedure for unpacking? • Can you think of ways to improve the packaging to make unpacking and recycling easier? • Does your inbound packaging allow for optimal inbound freight efficiency? (e.g. full truck loads, timely delivery, efficient stacking and packing, etc.) • Do you receive damaged goods due to packaging failure? • Do you track the amount and cost of damage?

Manufacturing / Operations	
	?
<ul style="list-style-type: none"> <input type="checkbox"/> Packaging waste (not removed in receiving) that is not recycled or reused <input type="checkbox"/> Potential physical and ergonomic hazards seen during unpacking activities <input type="checkbox"/> Seemingly detailed, cumbersome, or time consuming unpacking of materials from suppliers <input type="checkbox"/> Operators dealing with packaging waste when they should be focused on manufacturing 	<ul style="list-style-type: none"> • Do you spend time in manufacturing operations removing packaging from subcomponents? • If unpacking occurs during manufacturing, could it be eliminated, be made more ergonomic, be better presented to the operator, be more stackable, other? • Does any packaging used in manufacturing hinder material flow and handling, or the operators' task at hand? • Does the supplier packaging support Just-In-Time (JIT) or Lean initiatives in your manufacturing operations? • Do you track the amount of packaging waste generated internally in manufacturing? • Can you think of non-expirable materials you could buy in concentrate or bulk to reduce packaging?
Packaging / Logistics / Shipment to Customer	
	?
<ul style="list-style-type: none"> <input type="checkbox"/> Inefficient use of trailer floor space and height inside trailer for shipments to customers <input type="checkbox"/> Low percentage of pallet or container utilization <p style="text-align: center;"> <i>Pallet footprint ~ 90% utilized</i> <i>Pallet footprint ~ 70% utilized</i> </p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>	<ul style="list-style-type: none"> • Does your packaging provide part protection from your dock to the customer? • Might your packaging be cumbersome for customers to unpack and recycle? • Have you asked customers for feedback on your packaging methods? • Do you, or have you considered use of reusable packaging? • Do you track your non-hazardous solid waste including refused, wood, and cardboard? How much packaging waste is generated by your operations, compared to other waste streams?

This document was published by Pacific Northwest Pollution Prevention Resource Center (PPRC) in collaboration with Cascadia Packaging Group. Please contact Michelle Gaither, PPRC, or Doug Hehn, Cascadia Packaging Group, with additional questions, suggestions, or request for assistance.



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