

Welcome & Introductions



Moderator: **Michael Levans**
Group Editorial Director

Peerless
MEDIA, LLC



Speaker: **Robert Trebilcock**
Executive Editor

MODERN
MATERIALS HANDLING



Speaker: **Dr. Marshall "Mark" White**
Professor Emeritus, Virginia Tech

The Department of
Wood Science & Forest Products
at Virginia Tech



Introduction and Methodology

- This study was conducted on behalf of **Modern Materials Handling** magazine to better understand current and future usage of pallets as well as any trends that may be occurring in the pallet market.
- Specifically, the study examines:
 - The process for acquiring pallets
 - The types of pallets (wood, plastic, wood composite, corrugated, metal, etc.) in use/planned for future use
 - Usage of new vs. used wood pallets
 - Level of usage for pallets over the past two years and estimated during the next two years
 - Features considered important when considering to acquire wood pallets
 - Features considered important when considering to acquire plastic pallets
 - Usage of pallets outside the US
 - Resources used to maintain pallets
 - Usage of pallet retrieval programs
- The method for each wave of this study was identical. Slight changes were made to the questionnaire and are noted in this report.
 - The questionnaire was broadcast via email to subscribers of **Modern Materials Handling** magazine as well as to a sample of **MMH** e-newsletter recipients asking for their participation in this study. The email invitation included a URL linked to a dedicated website which contained the questionnaire.
 - In order to participate in this study respondents were qualified for being employed at a location that uses pallets.

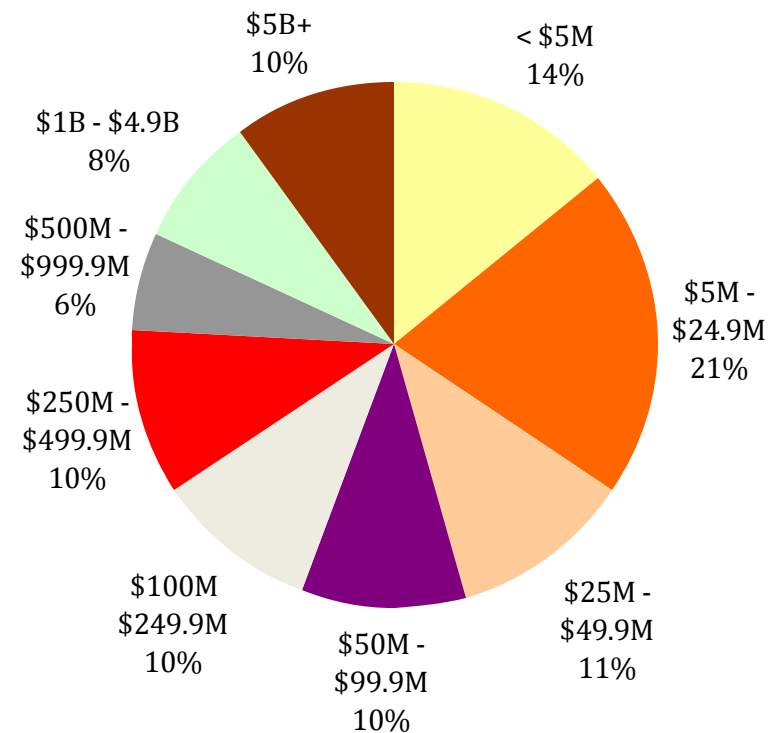
Field and response disposition follow:

	2010	2011
Field dates	July/August	August
Base: Qualified respondent	673	594
Margin of error needed for significance @ 95% confidence level when comparing the 2 waves	5.6%	

Which of the following best describe the business at this location?

	2010	2011
Food & kindred	15%	16%
Consumer goods	10%	12%
Wholesale trade - durables	7%	10%
Transportation/Warehousing	9%	8%
Metals	9%	7%
Paper & allied products	6%	7%
Automotives	5%	6%
Electronics & electrical equipment	6%	6%
Industrial, commercial machinery	7%	5%
Chemicals & allied products	6%	5%
Medical/Healthcare products	5%	4%
Wholesale trade - non durables	4%	4%
Building materials/Construction	3%	1%
Aerospace	1%	1%
Other	7%	8%

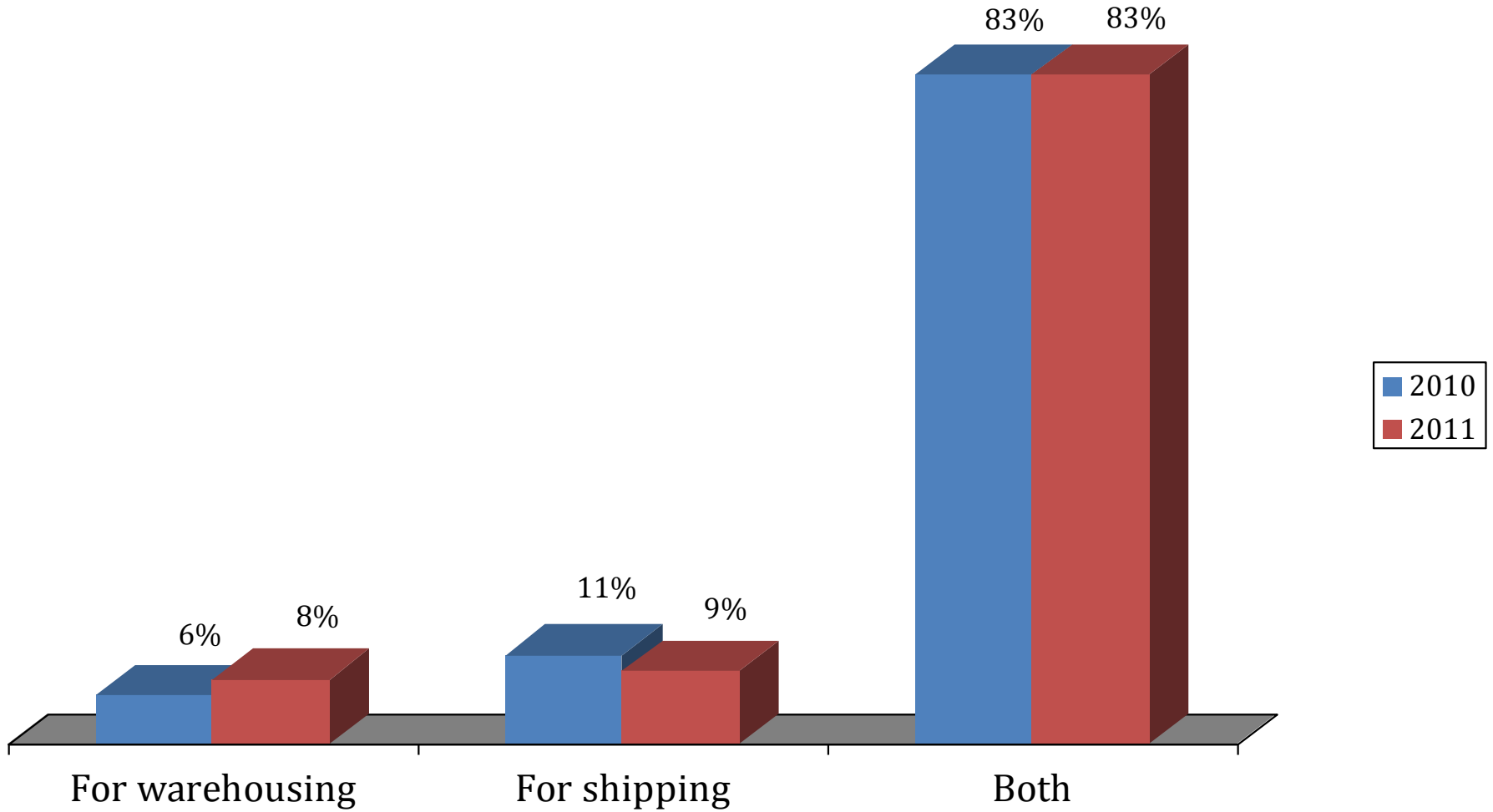
Which of the following best estimates your company's annual revenues for 2011?



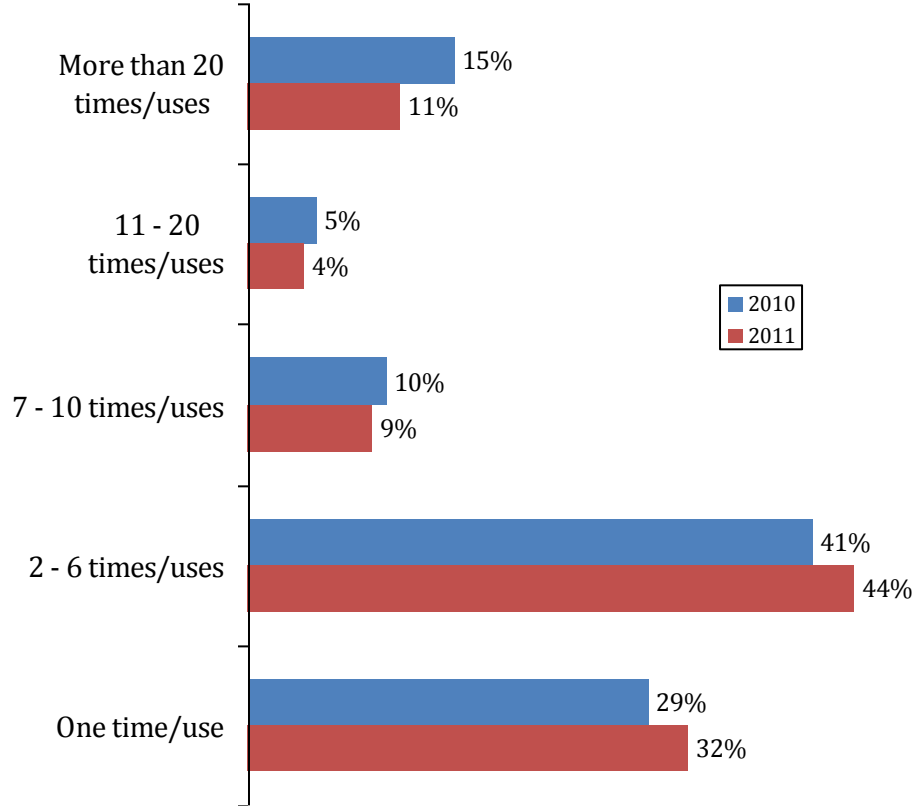
	2011
Average revenues	\$844M
Median revenues	\$75M

Question not asked in 2010

How are pallets at this location primarily used?

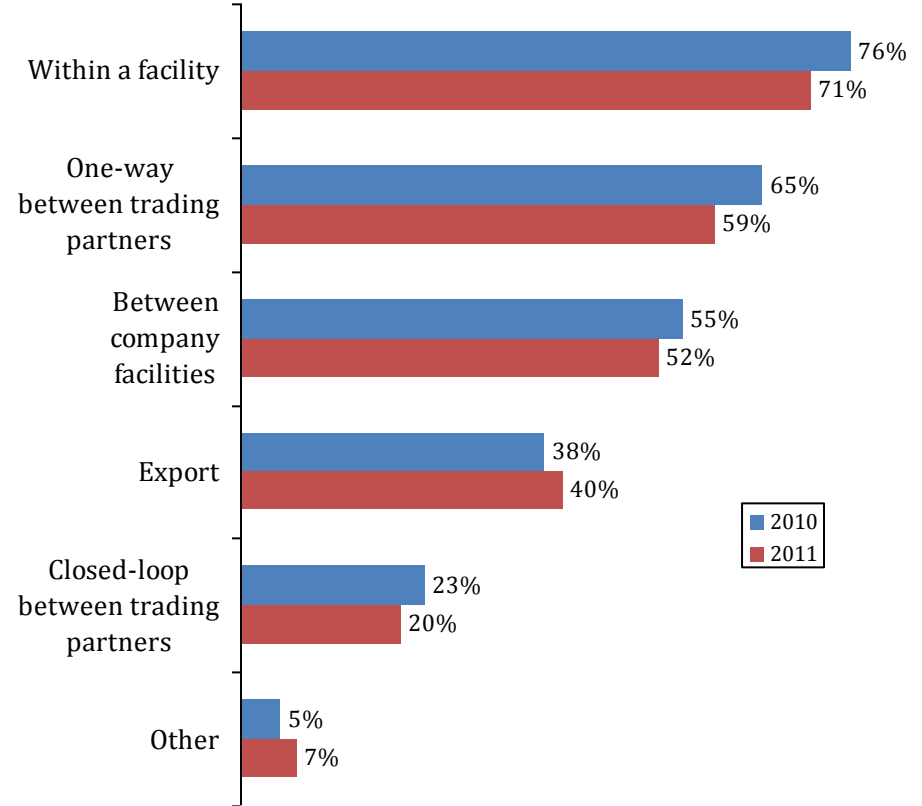


In general, how many times do you use a pallet?

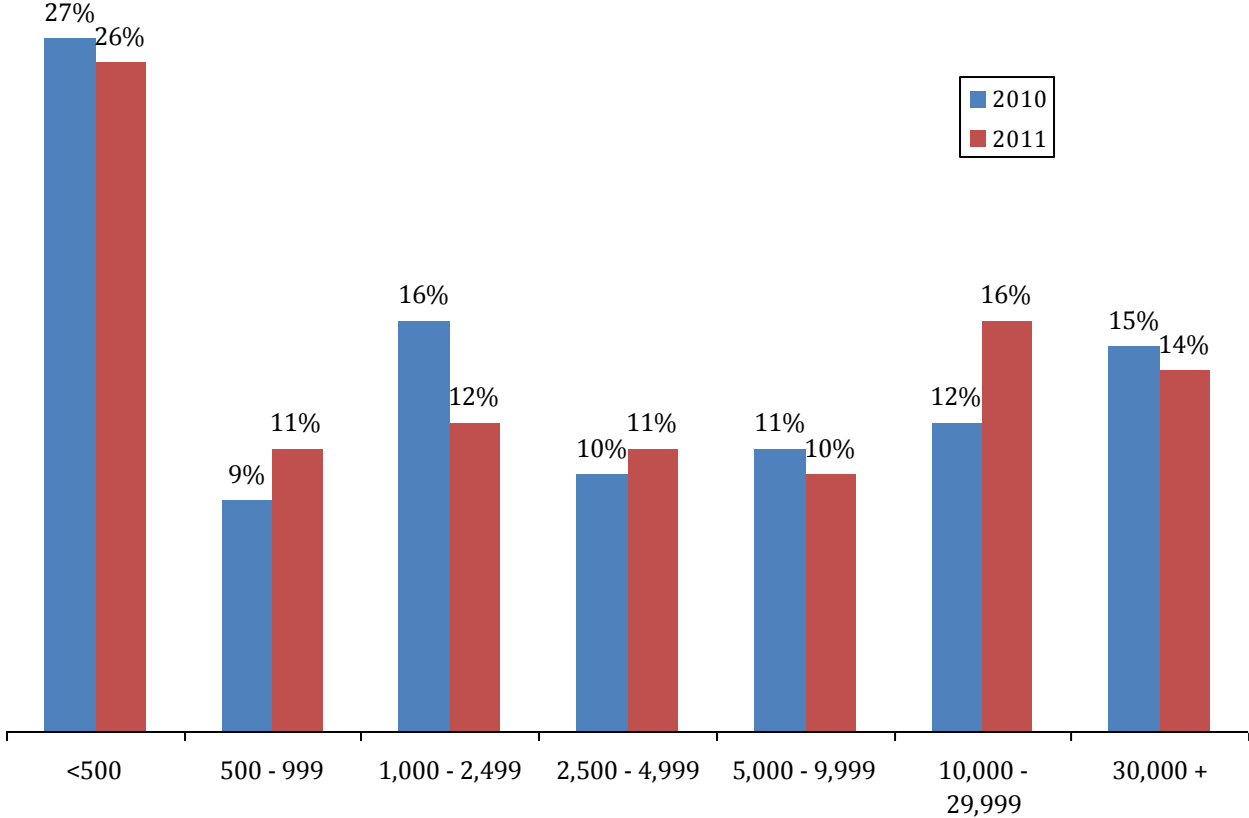


	2010	2011
Average # of times	7.5	5.6

How are you using pallets?

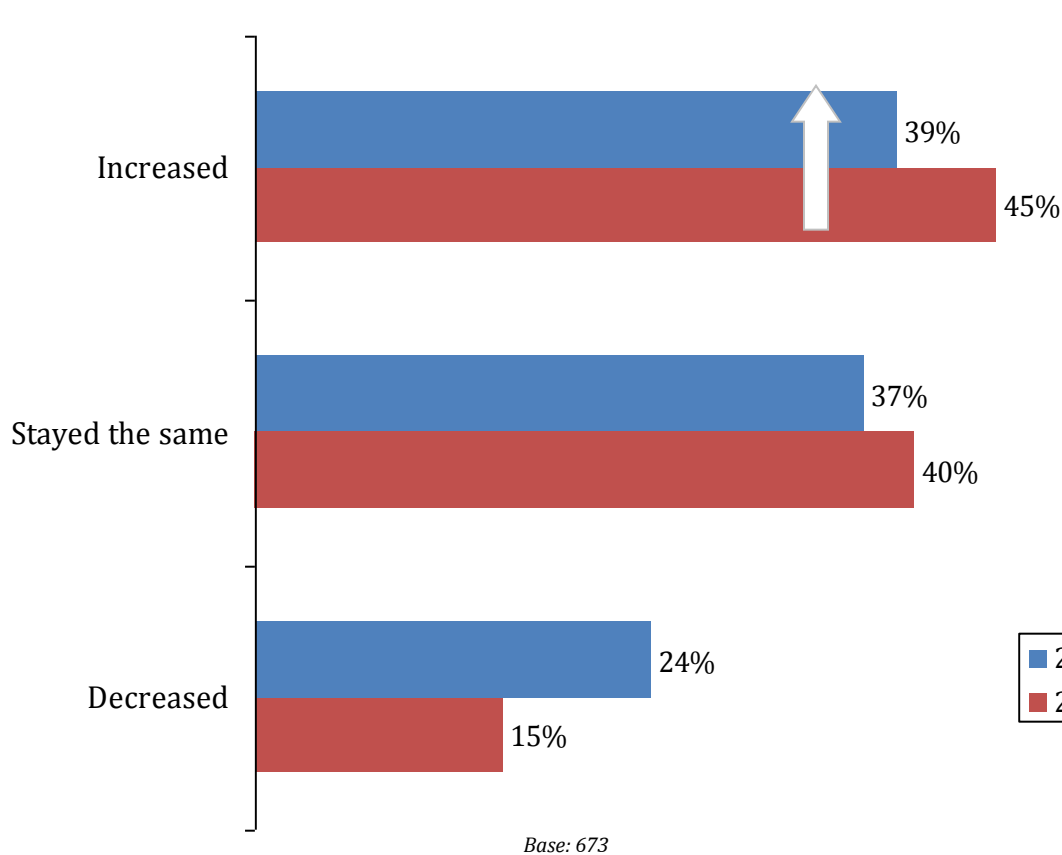


What would you estimate is the number of pallets purchased at or for your location per year?



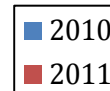
	2010	2011
Average # of pallets	9,913	9,020
Median # of pallets	2,324	2,727

During the past two years, how has the number of pallets purchased at this location changed?

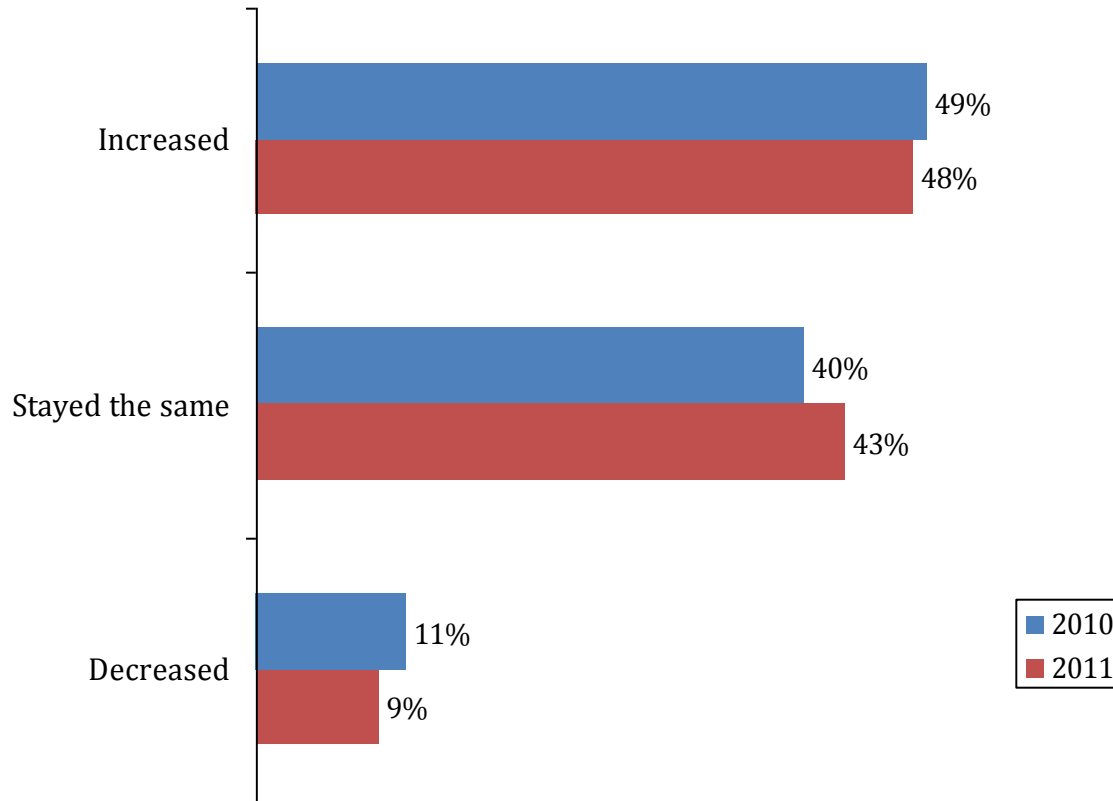


By what percent?

	Increased	Decreased
Average % change: 2010	25%	27%
Average % change: 2011	20%	29%



Looking ahead over the next two years, how do you believe the number of pallets you will purchase will change?

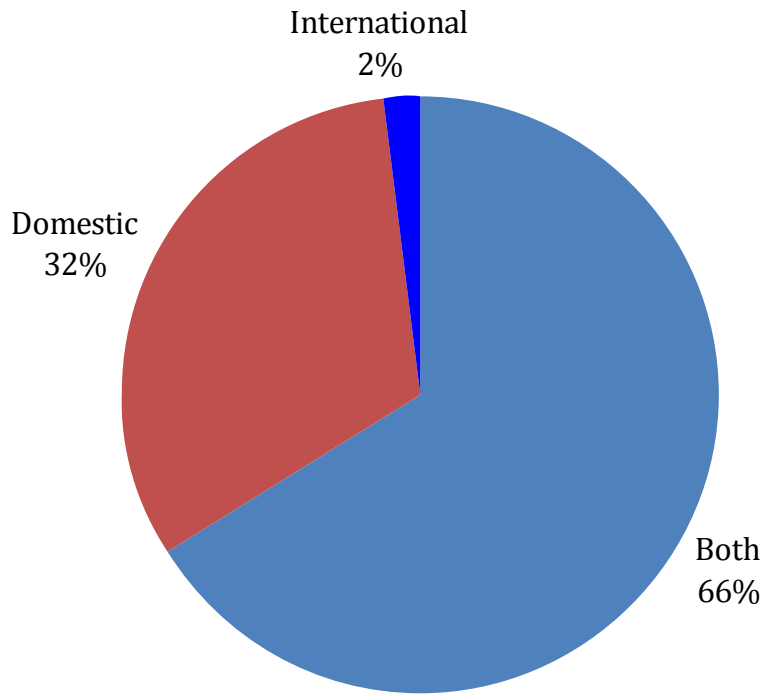


Base: 673

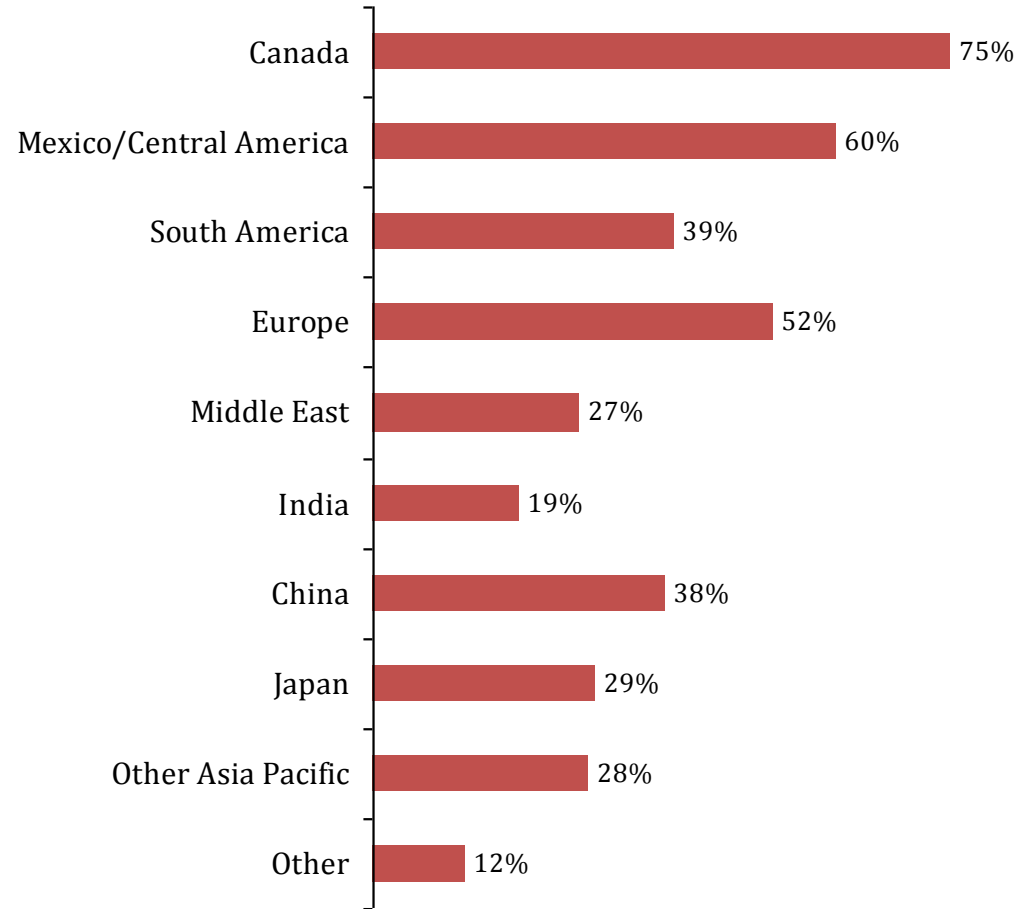
By what percent?

	Increased	Decreased
Average % change: 2010	21%	29%
Average % change: 2011	17%	31%

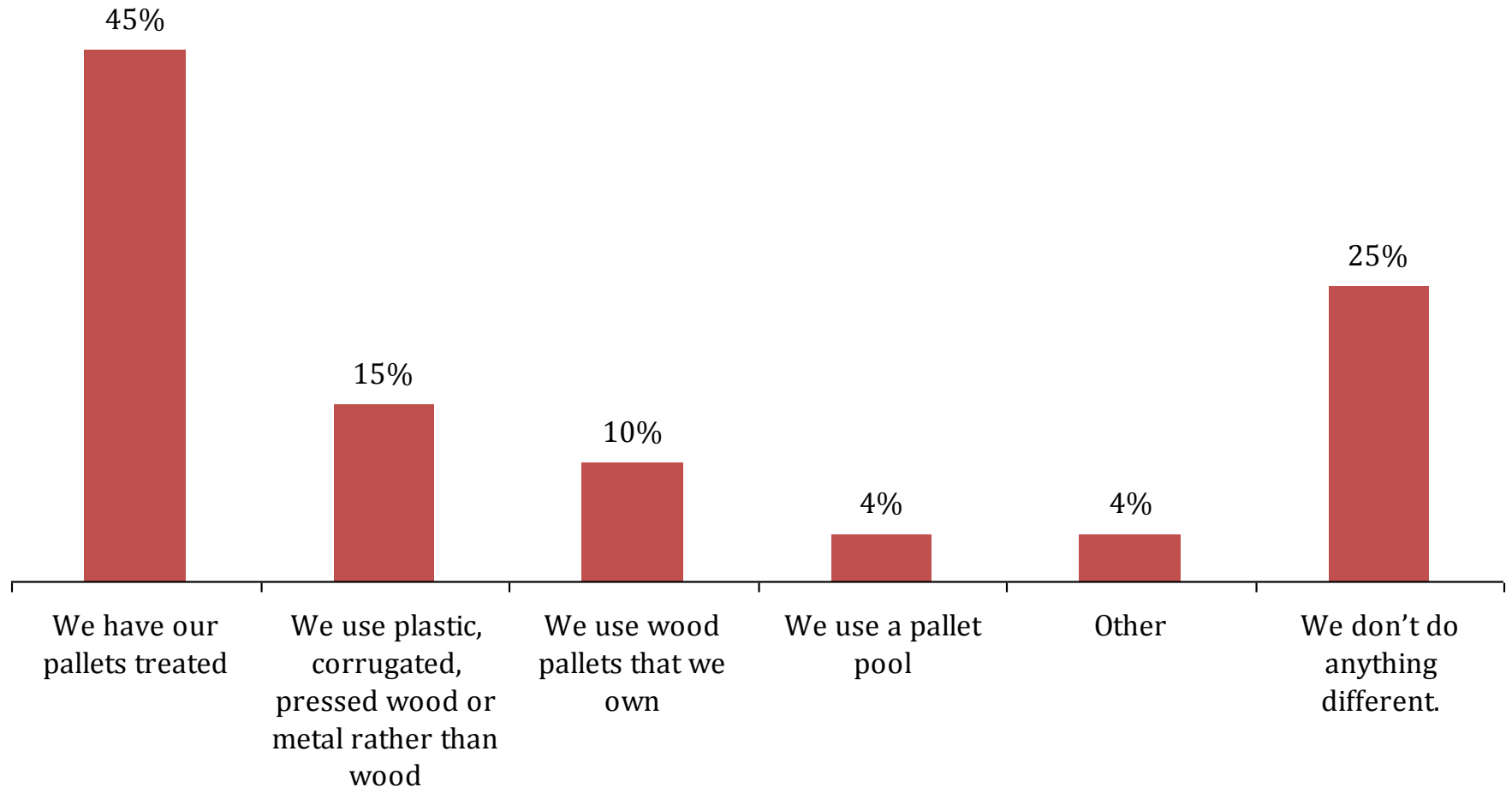
Are your shipments . . .



If you ship internationally, to which countries/regions are you shipping?



When shipping internationally, what do you do differently than when your shipments are domestic?



What types of pallets do you use?

	2010*	2011
Wood	92%	95%
Plastic	33%	39%
Wood composite	15%	14%
Cardboard/corrugated	10%	8%
Metal	6%	7%
Other	3%	2%

*Question was asked differently in 2010. *What percentage of pallets bought are composed of each type material?*

How important are each of the following factors when selecting wood pallets?

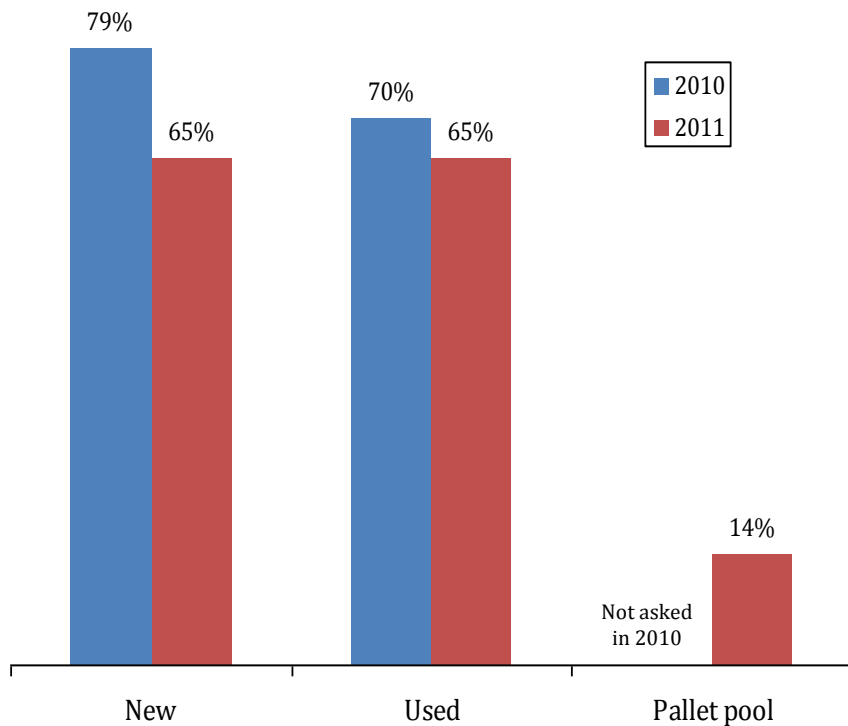
	Rated Very Important		Rated Very Important/Important	
	2010	2011	2010	2011
Purchase price	70%	69%	94%	95%
Strength	56%	55%	97%	95%
Availability	54%	48%	93%	93%
Durability	49%	48%	92%	92%
Cost per use	52%	58%	83%	88%
Reusability	34%	36%	71%	74%
Weight	21%	21%	63%	61%
Recycleability	25%	24%	60%	59%
Ease of disposal	17%	16%	54%	49%
Design versatility	16%	17%	54%	56%
Cleanability	20%	20%	50%	49%
Repairability	19%	16%	50%	48%
Fire rating	11%	12%	34%	35%

How important are each of the following factors when selecting plastic pallets?

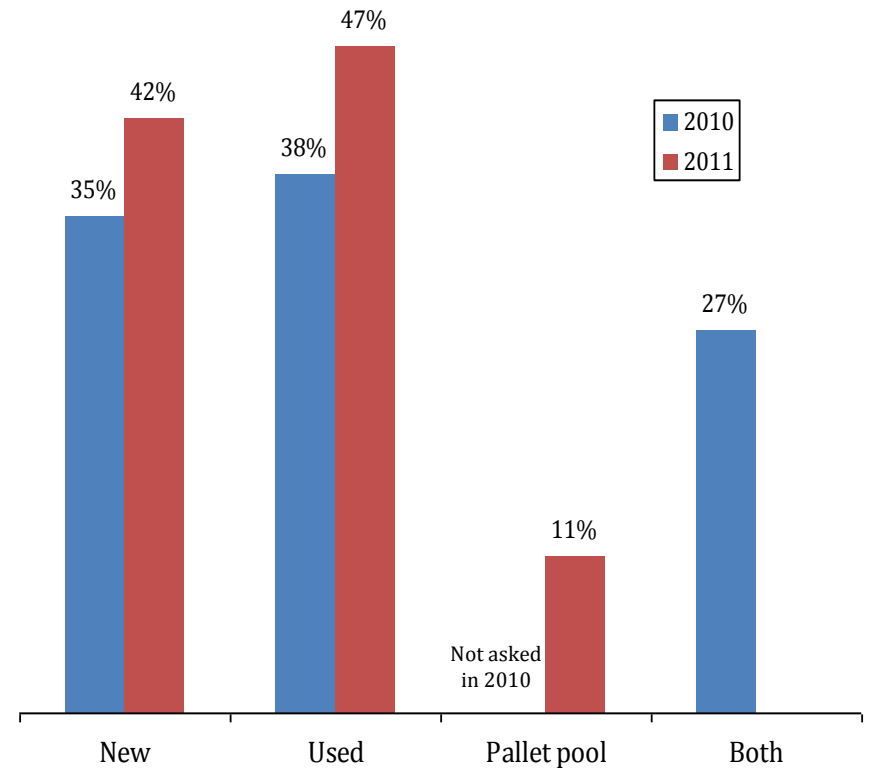
	Rated Very Important		Rated Very Important/Important	
	2010	2011	2010	2011
Strength	57%	53%	92%	83%
Purchase price	61%	62%	89%	83%
Availability	42%	37%	85%	76%
Durability	58%	54%	92%	82%
Cost per use	55%	54%	83%	78%
Reusability	53%	54%	83%	74%
Weight	31%	31%	73%	63%
Recycleability	32%	34%	66%	58%
Ease of disposal	24%	20%	53%	47%
Design versatility	26%	27%	71%	60%
Cleanability	38%	35%	68%	58%
Repairability	15%	15%	44%	36%
Fire rating	19%	22%	48%	46%

If wood pallets are in use . . .

Are the wood pallets you purchase new or used?



And, which one would you say is the type you primarily buy?



Response options slightly differed in 2010

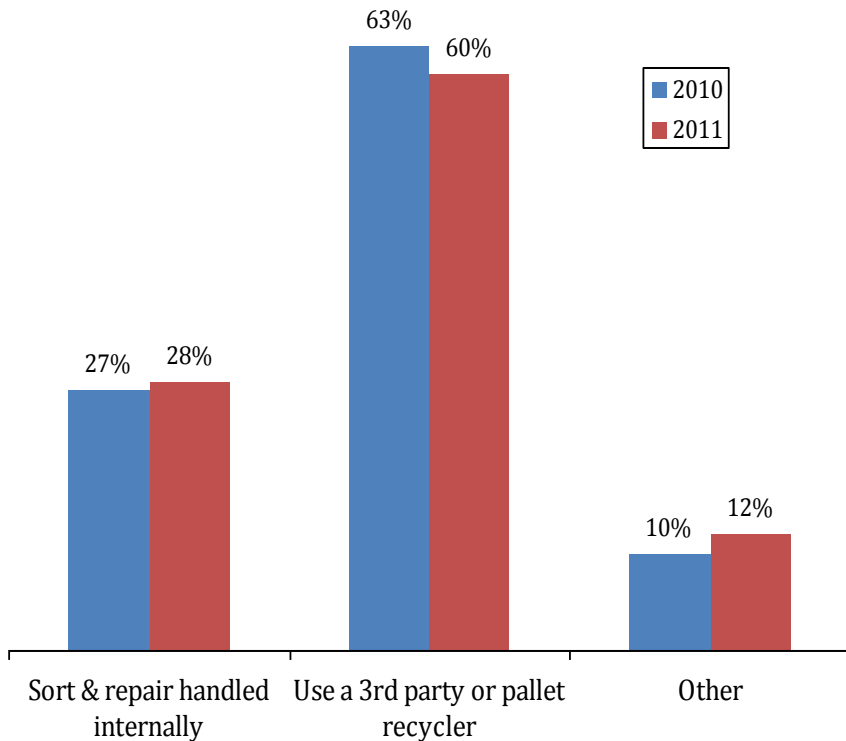
How has the number of used wood pallets you use/have acquired changed during the last 2 years?

How do you expect the number of used wood pallets to change in the *next 2 years*?

	Past 2 years		In next 2 years	
	2010	2011	2010	2011
Use/Acquire more used pallets	31%	32%	41%	32%
Use/Acquire used pallets on same level	49%	41%	43%	44%
Use/Acquire fewer used pallets	20%	20%	16%	17%
Rely more on a pallet pool	<i>Not asked</i>	7%	<i>Not asked</i>	7%

If wood pallets are in use . . .

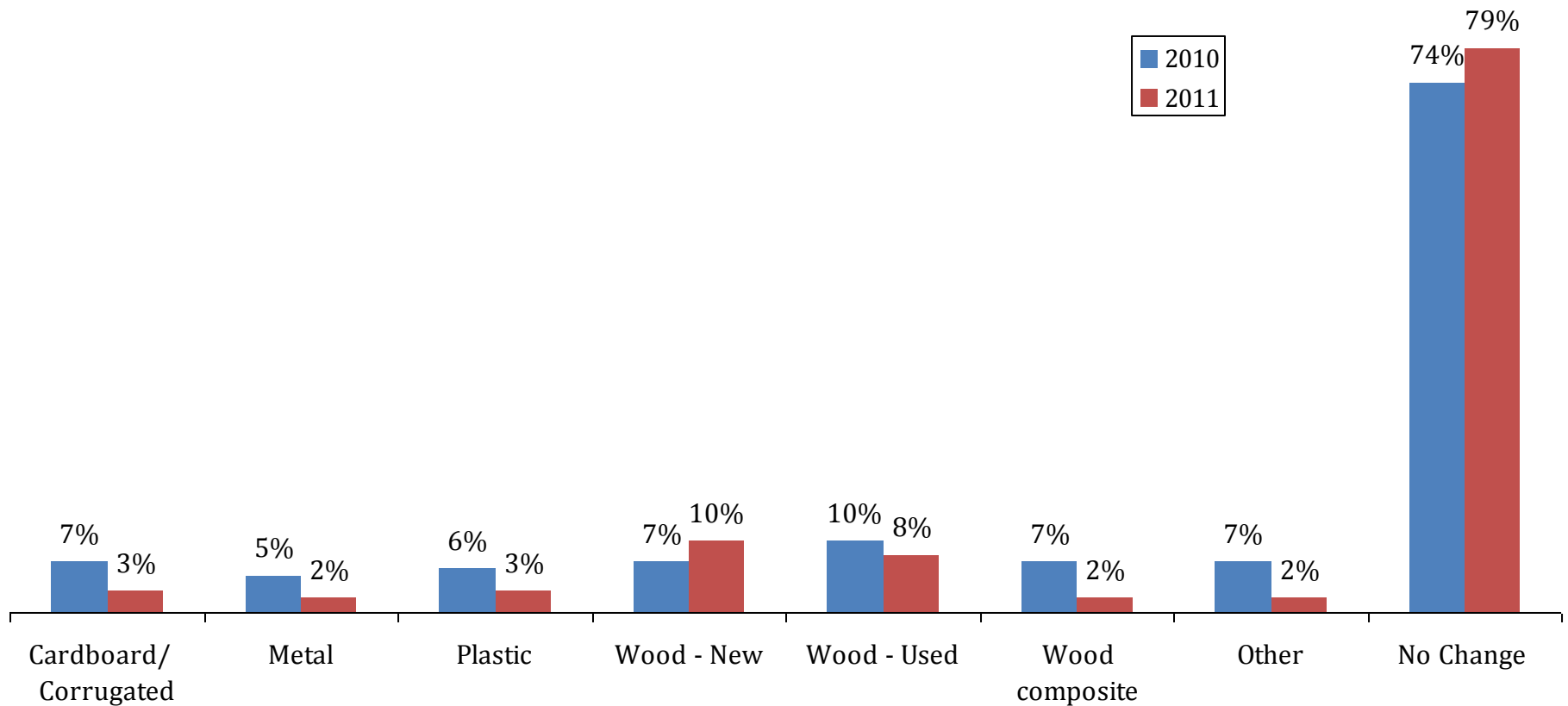
Which best describes how they are primarily maintained?



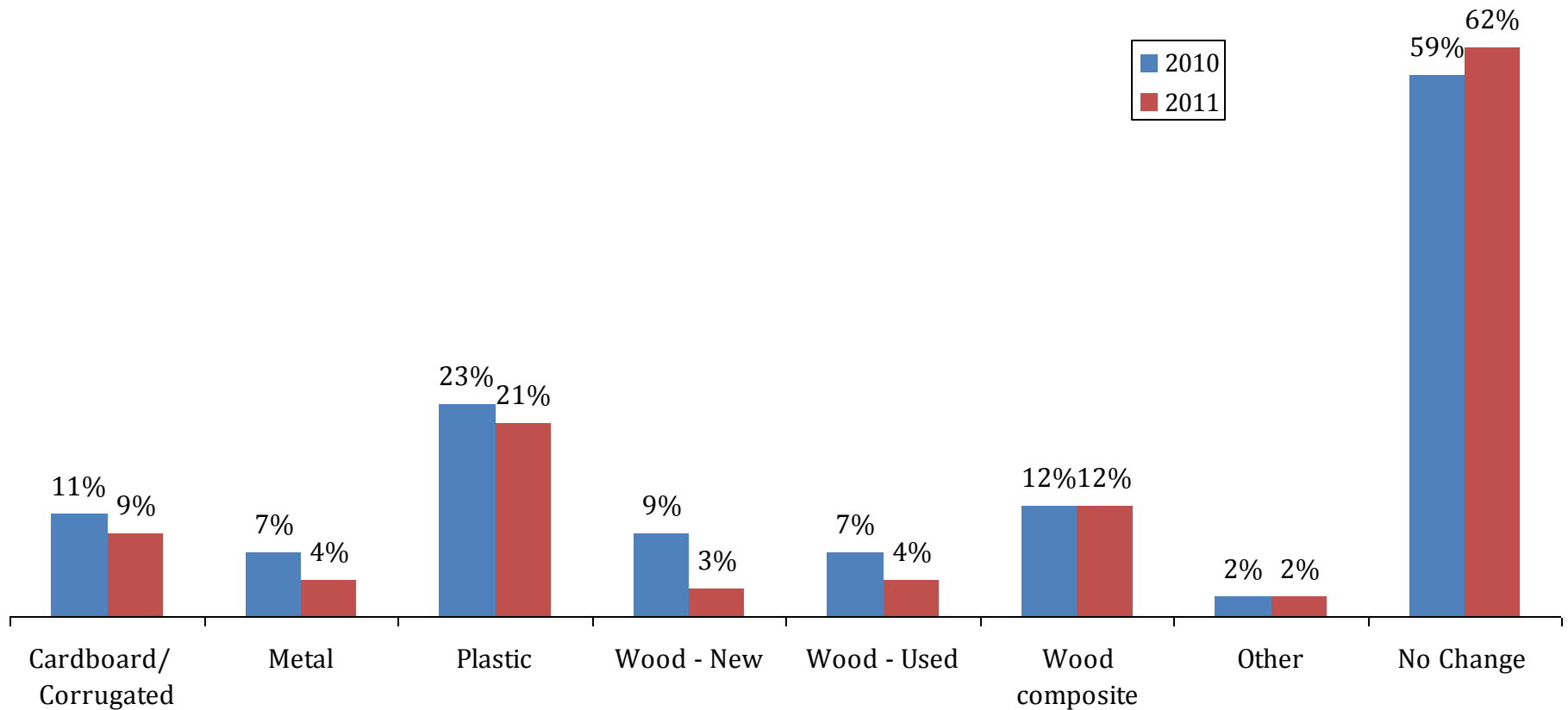
And, why do you use this resource?

Rank	Handled internally	Use 3 rd party/recycler
#1	Least expensive/ Most cost effective	More cost effective/Less costly than handling in-house
#2	Convenience	Convenience
#3	Quicker to fix/Efficient	Don't have the resources/personnel to handle the maintenance
		Easier to manage
		Not in the pallet business. Just a user

What type(s) of pallets were you using 2 years ago that you no longer use?



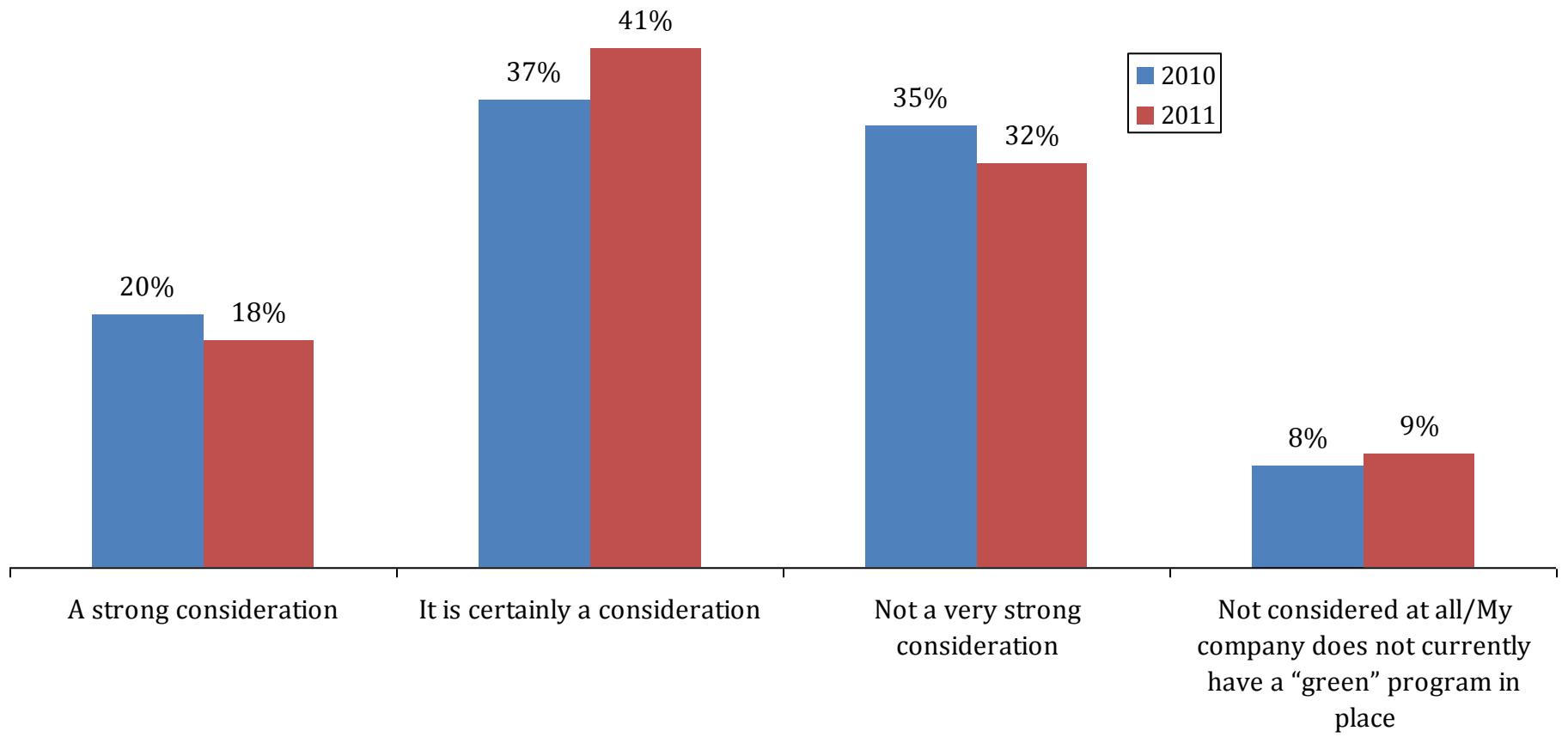
And, what type(s) of pallets are you not currently using but may consider for future use?



What do you believe will be the primary reasons for future changes regarding your pallet usage?

	Reasons for Future Changes in Pallet Usage (2011)
#1	Cost/Price
#2	Durability/Better quality
#3	Customer requirements/Demands
#4	Increase in exporting & regulations
#5	Increased sales/Business/SKU growth
#6	Green/Eco-friendly
#7	Availability by type of pallet

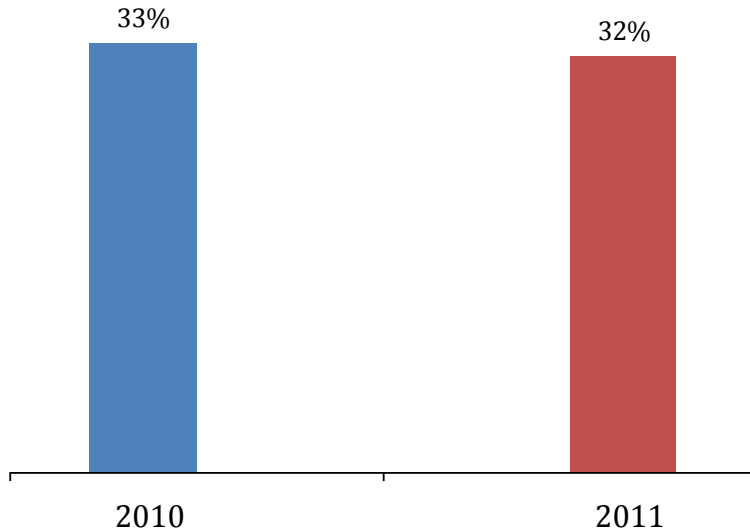
To what extent is your company's overall "green strategy" taken into account when acquiring pallets?



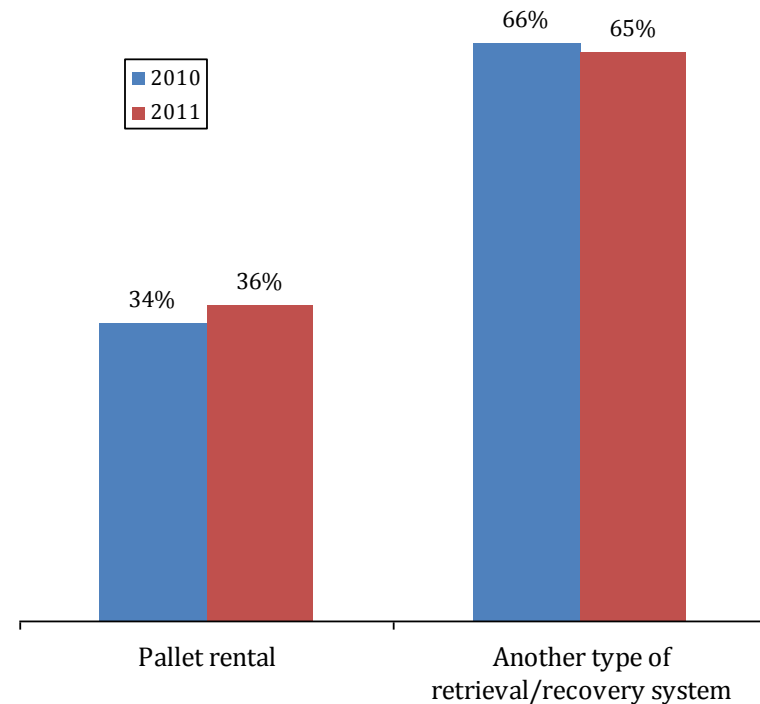
Base: 673

Does your company currently participate, or plan to participate, in a pallet retrieval/recovery system or a pallet rental system?

Yes, participate/plan to participate, in a pallet retrieval/recovery/rental system

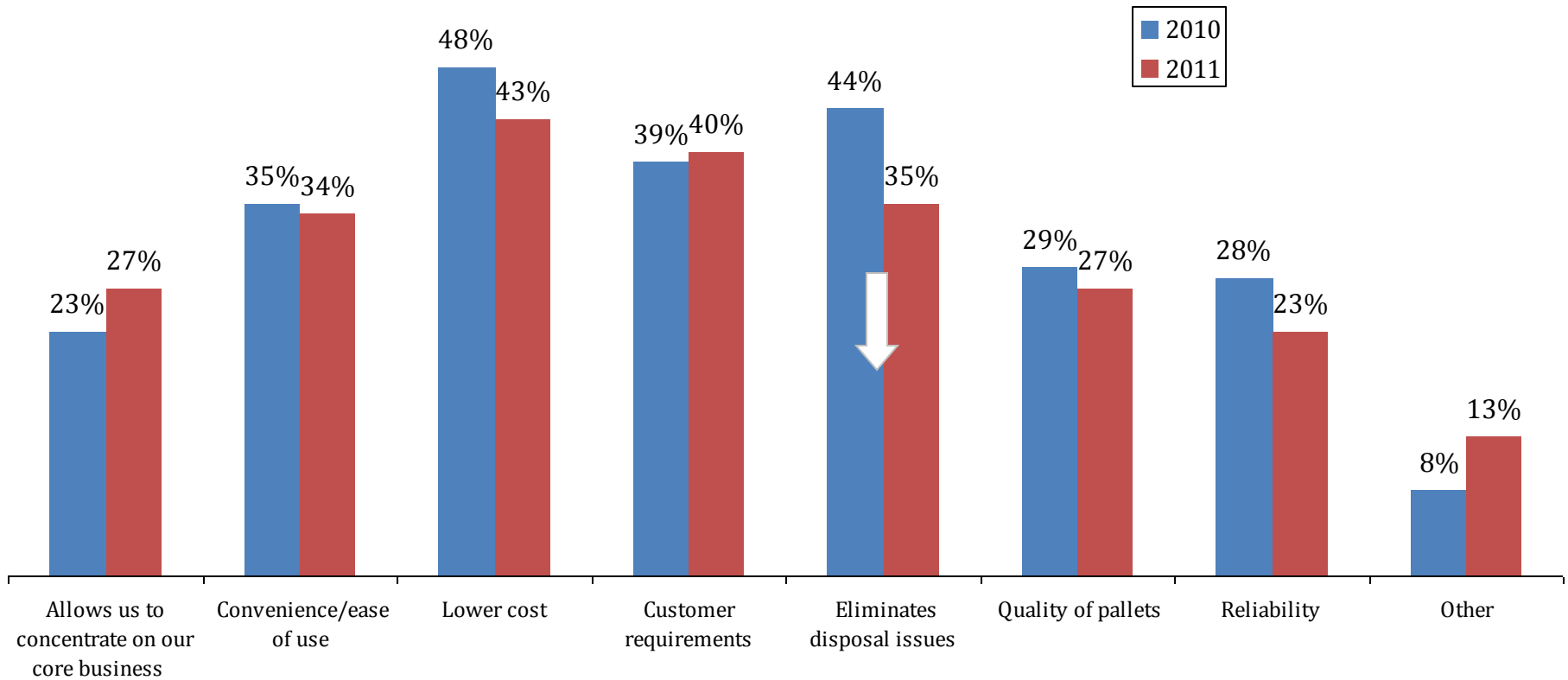


In which of the following does your company currently participate or plan to participate?

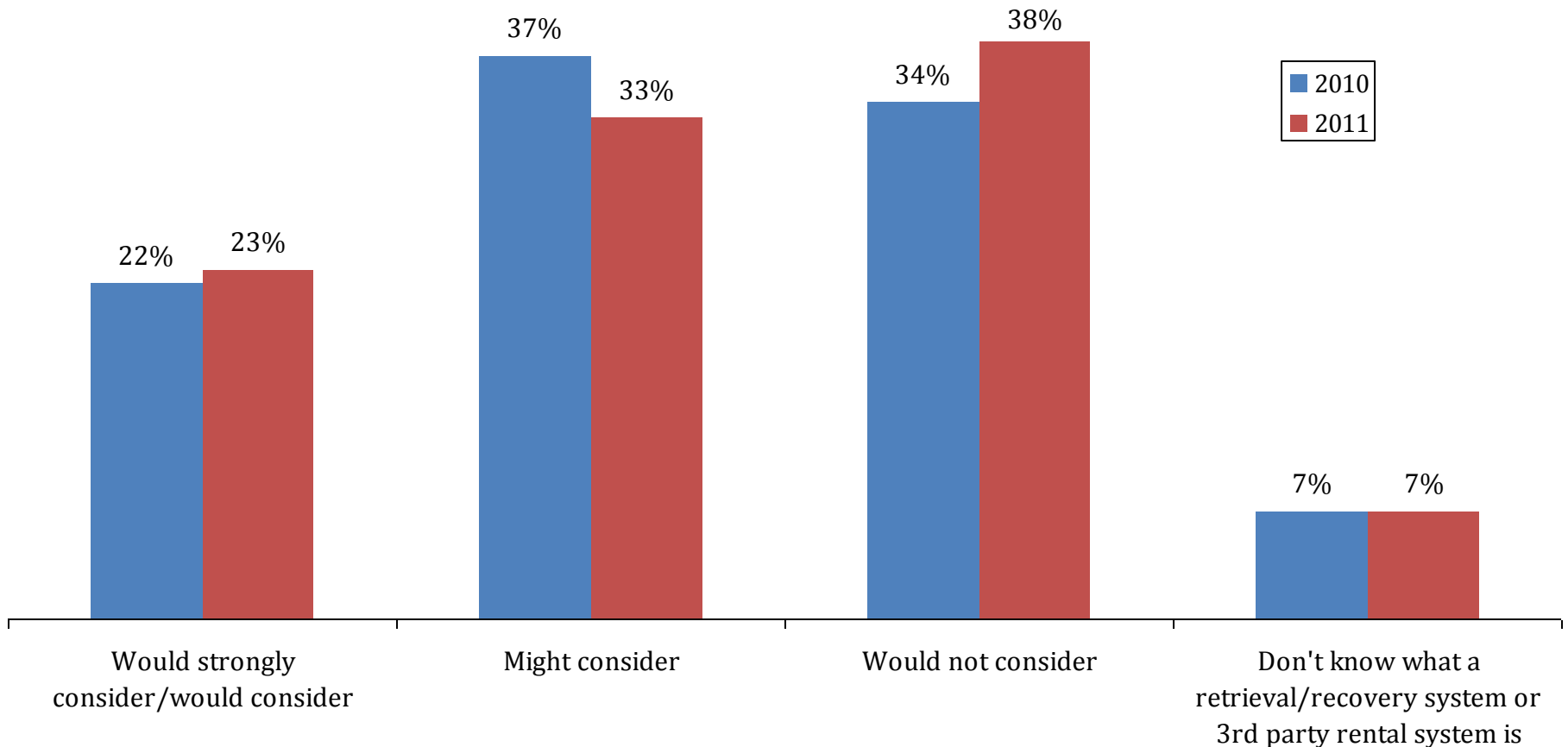


Base: 223

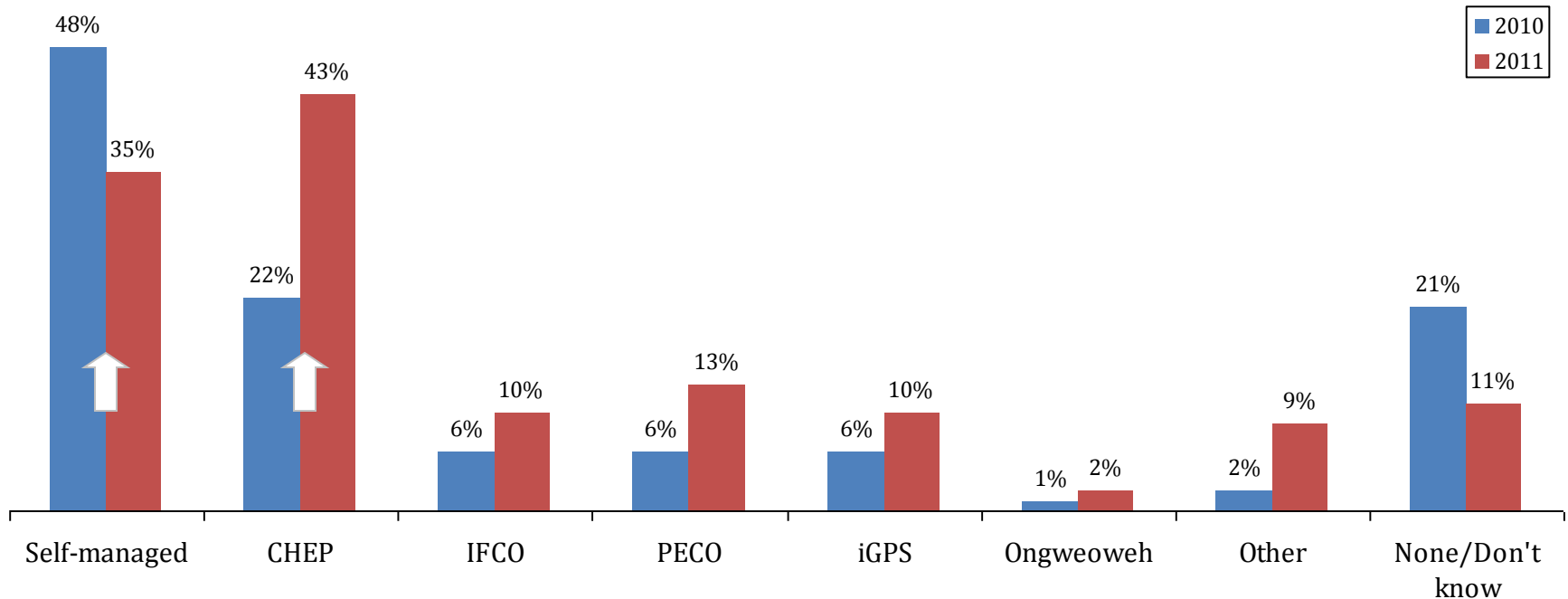
Which of the following best describes your reasons for using a pallet rental or pallet retrieval/recovery system?



What is your company's potential for participating in a pallet retrieval/recovery system or in a third party pallet rental system?



Whose pallet rental system do you participate in or would you consider?



Questions & Answers



Moderator: **Michael Levans**
Group Editorial Director

Peerless
MEDIA, LLC



Speaker: **Robert Trebilcock**
Executive Editor

MODERN
MATERIALS HANDLING



Speaker: **Dr. Marshall "Mark" White**
Professor Emeritus, Virginia Tech

The Department of
Wood Science & Forest Products
at Virginia Tech

The logo features a stylized green tree or leaf shape to the right of the text.