



— AN EVALUATION OF THE —
PALLET MARKET
— 2018 —

CONDUCTED BY:

PRG[®]
PEERLESS RESEARCH GROUP

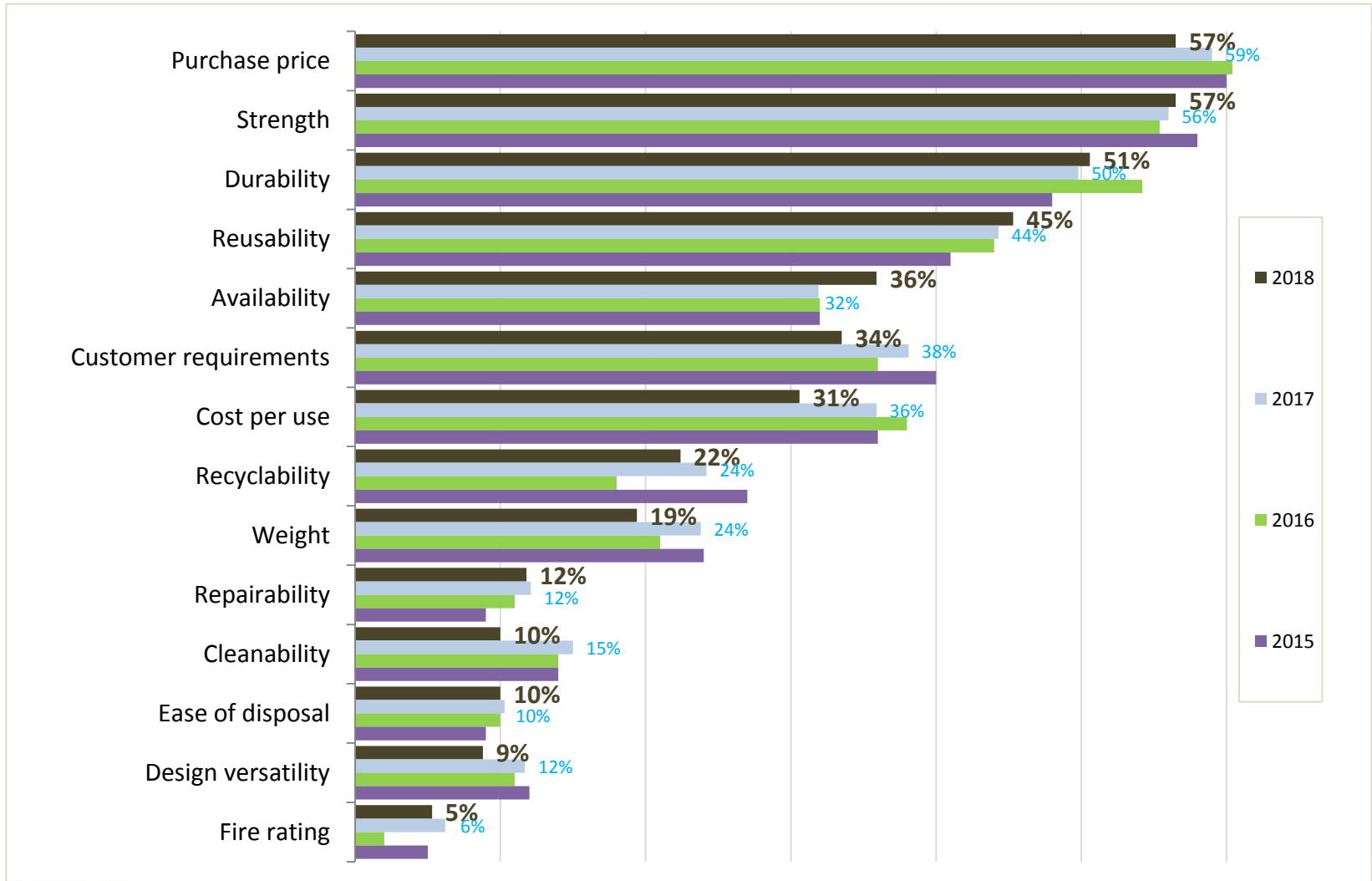
MODERN
MATERIALS HANDLING

Methodology

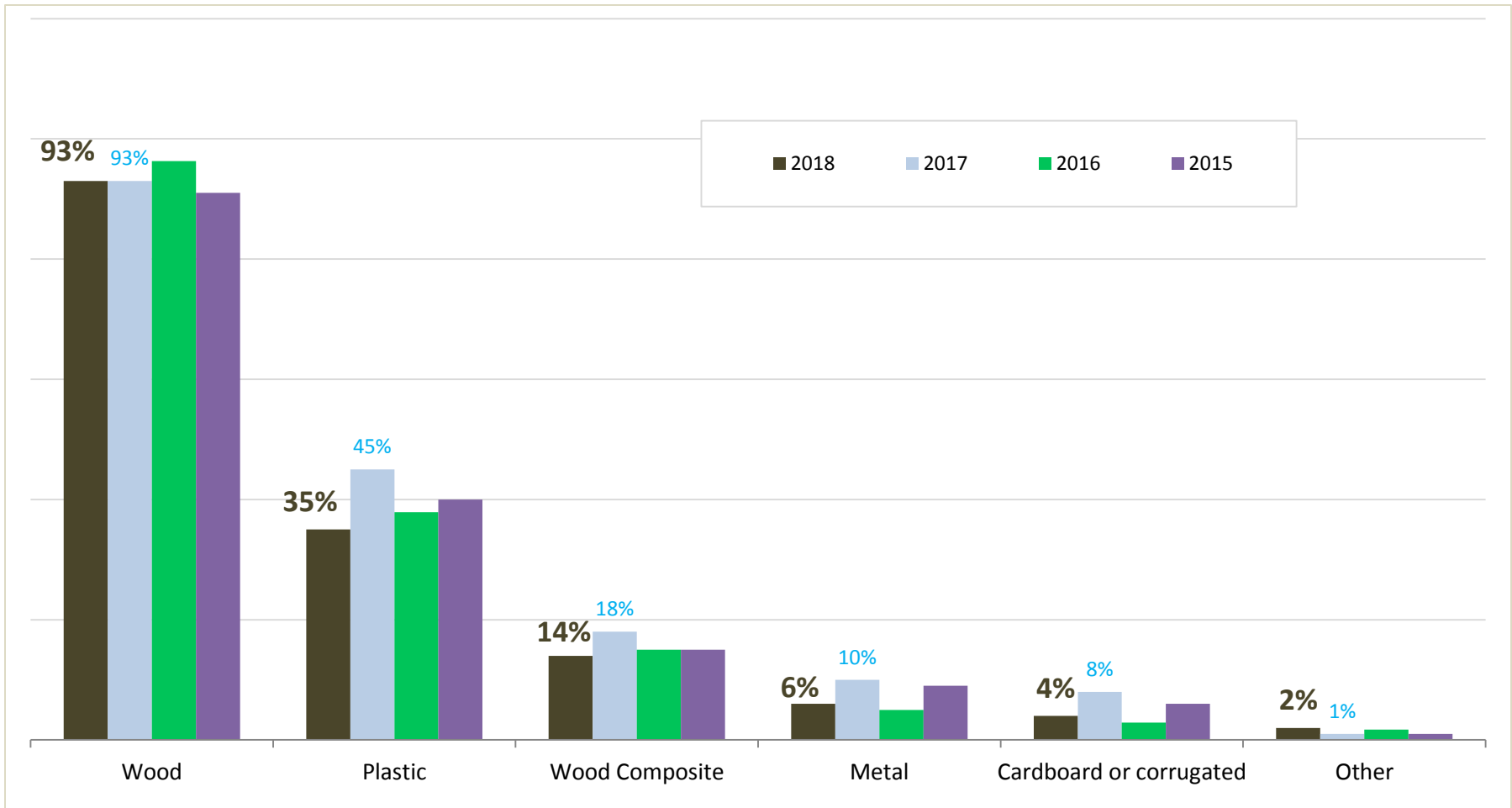
- ❖ **Background:** This study is the fourth wave of a tracking study conducted on behalf of *Modern Materials Handling*. The research is conducted to better understand current & future usage of pallets and to assess any trends that may be occurring in the pallet market. Results in this report trend back to the 2015 wave.
- ❖ **Areas of Investigation:**
 - ✓ Factors considered important when determining which types of pallets to use
 - ✓ Types of pallets (wood, plastic, metal, etc.) in use/planned for future use
 - ✓ Usage of new vs. used wood pallets
 - ✓ Usage of plastic pallets
 - ✓ Usage of metal pallets
 - ✓ Level of usage for pallets during the next two years
 - ✓ Recent changes to pallet usage patterns
 - ✓ Usage of pallets rental services
 - ✓ Usage of pallets outside the US
- ❖ **Sample:** Subscribers of *Modern Materials Handling* magazine
- ❖ **Respondent Qualifications:** Being employed at a location that uses pallets
- ❖ **Research Method:** By email invitation. The invitation included a URL linked to a dedicated website which hosted the questionnaire

Field & Response:	Field	# of usable returns	+/- Sampling variation at 95% confidence level
	2015 June 2015	355	5.4%
	2016 August 2016	286	6.0%
	2017 July 2017	274	6.1%
	2018 July 2018	170	8.0%

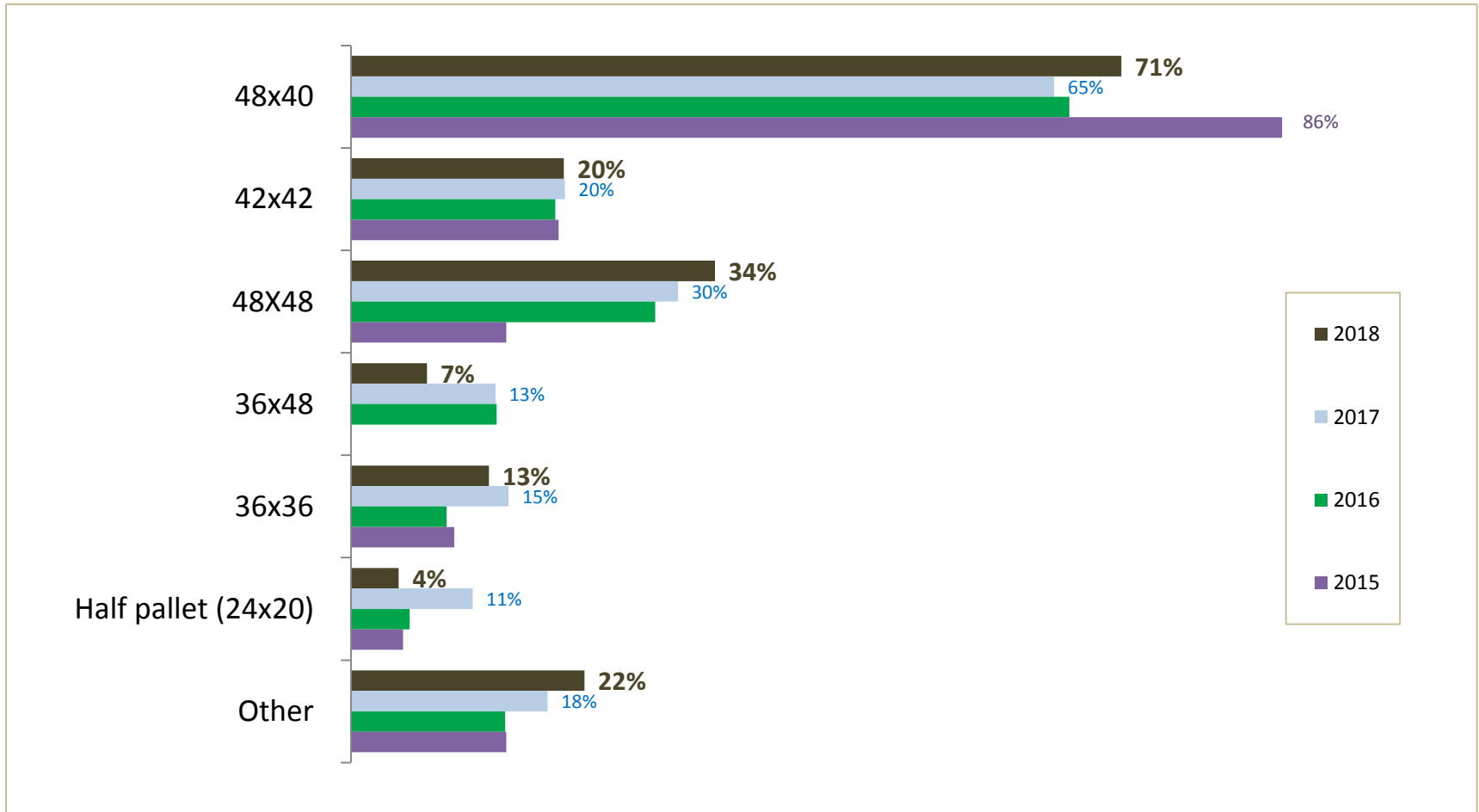
What are the most important factors in your decisions to use a certain type of pallet?



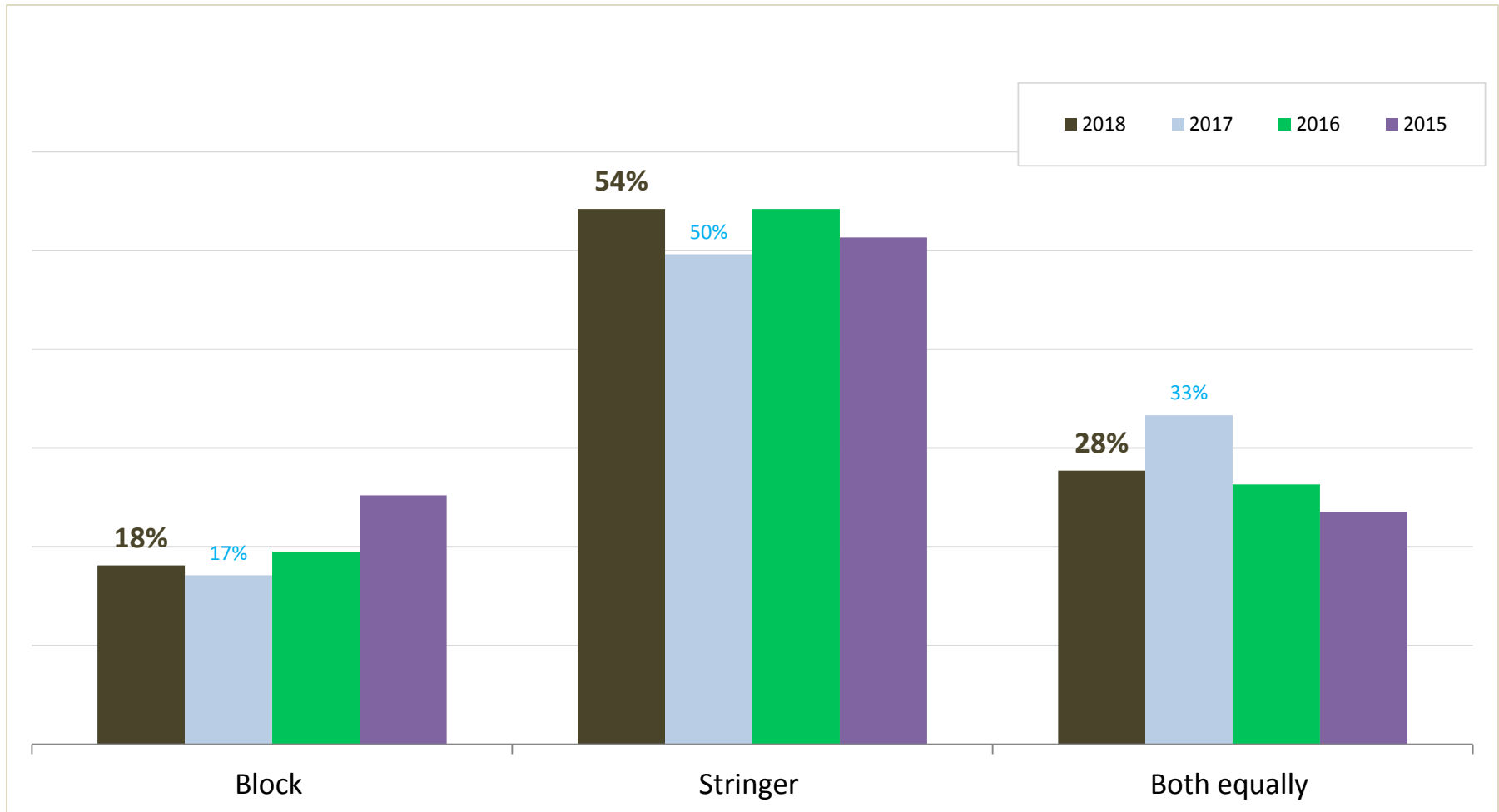
What types of pallets do you use?



What are the sizes you commonly use?

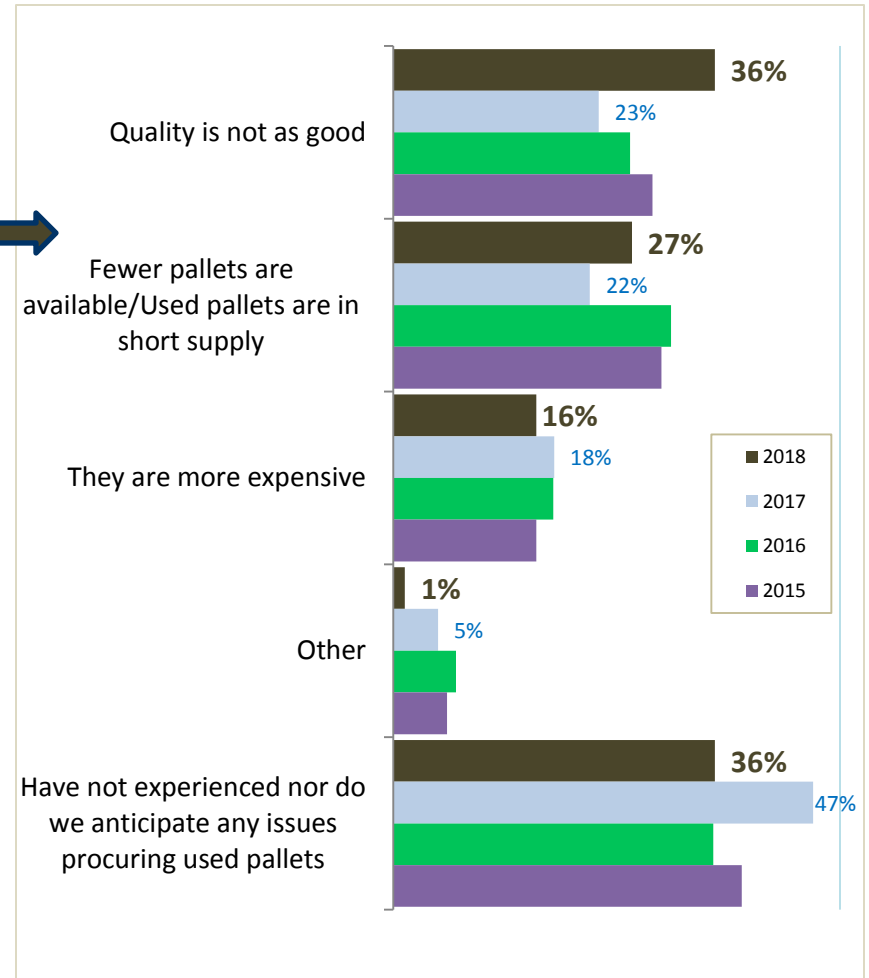
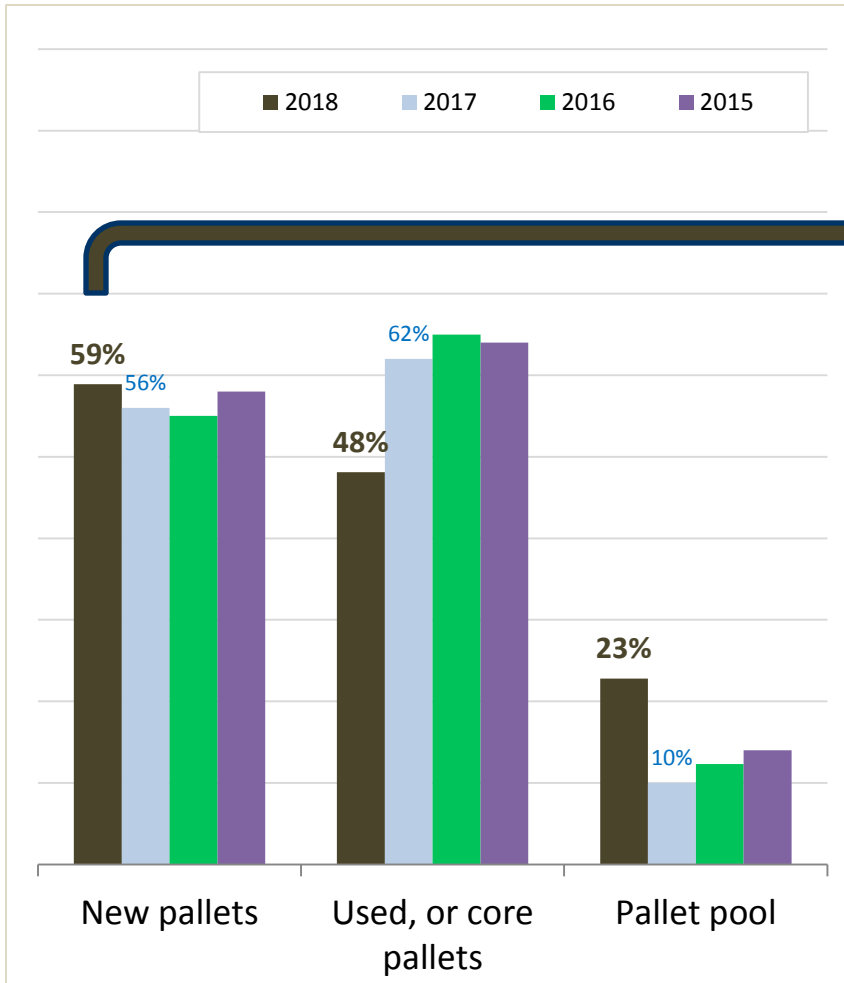


What type of wood pallets are you primarily using?

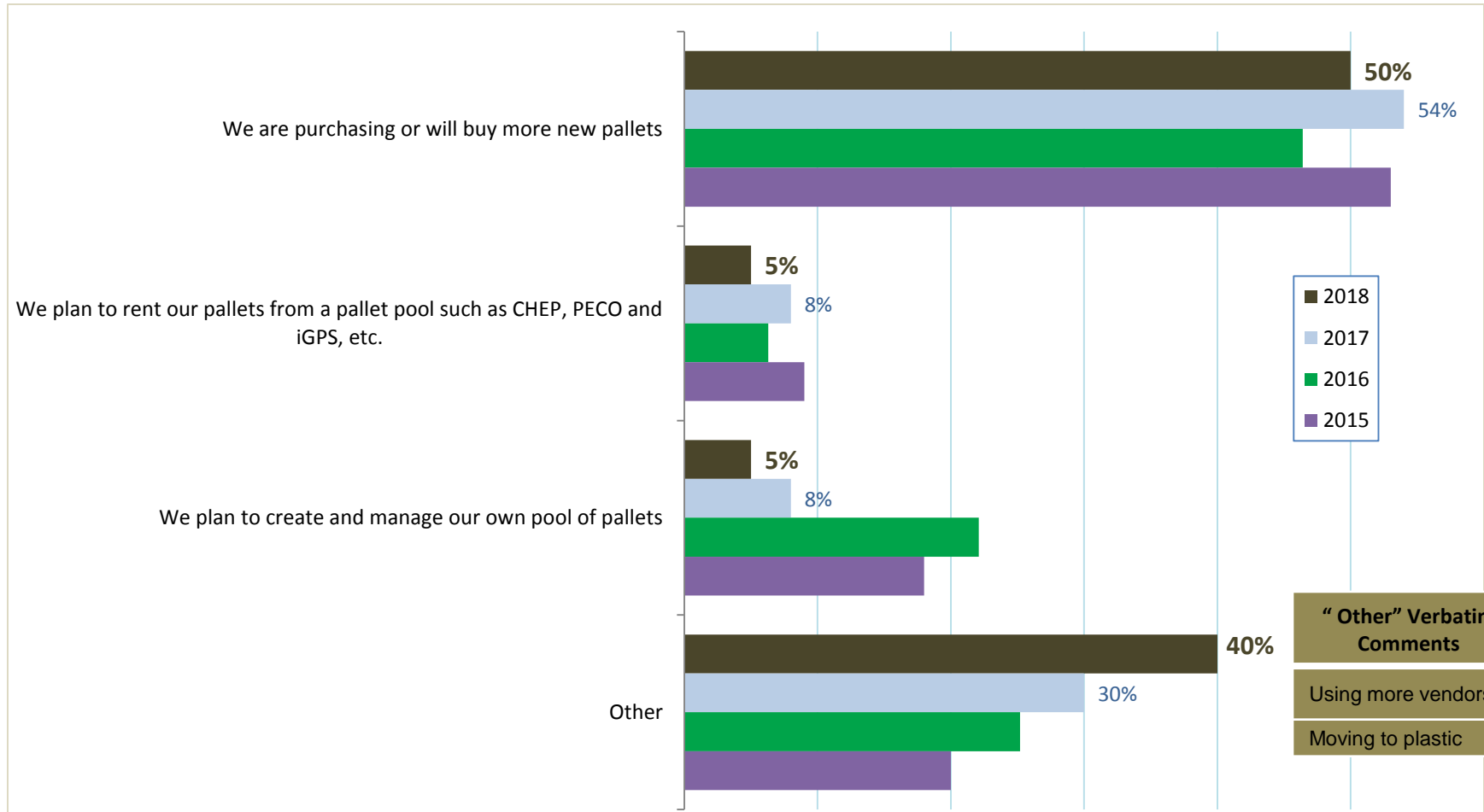


Are the *wood* pallets you purchase new or used?

What has been your experience obtaining used *wood* pallets?

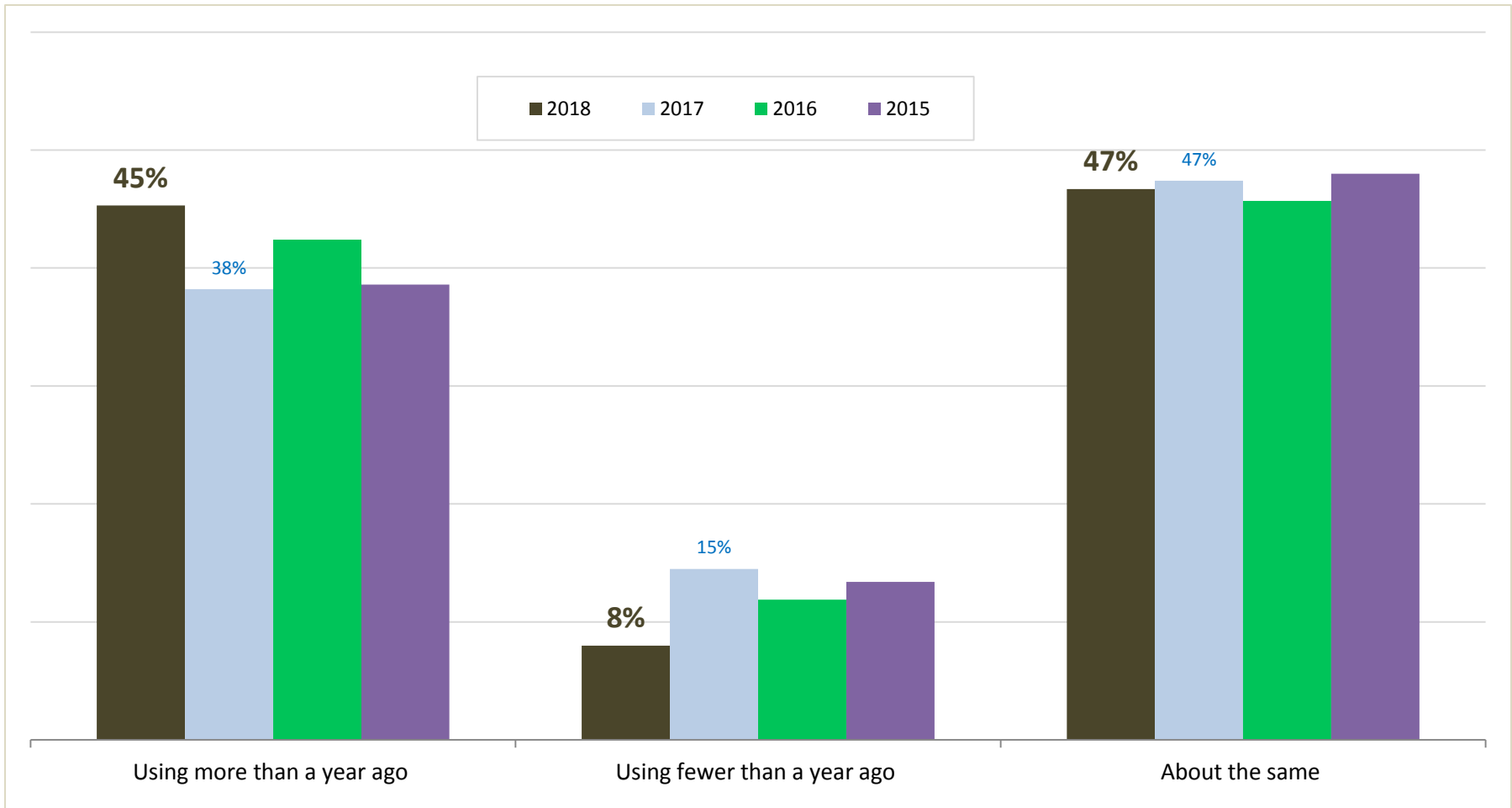


As a result of any problems with used *wood* pallets, which options have you considered?

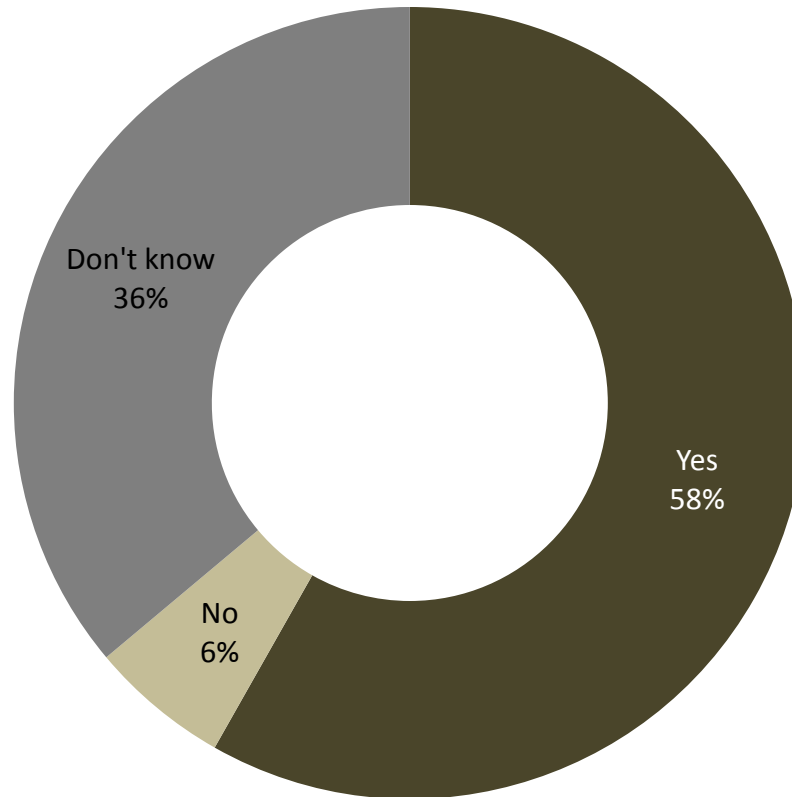


2018 - Due to the small number of cases, these data are unstable and any projections based on this information may be unreliable. Figures should be used with caution.

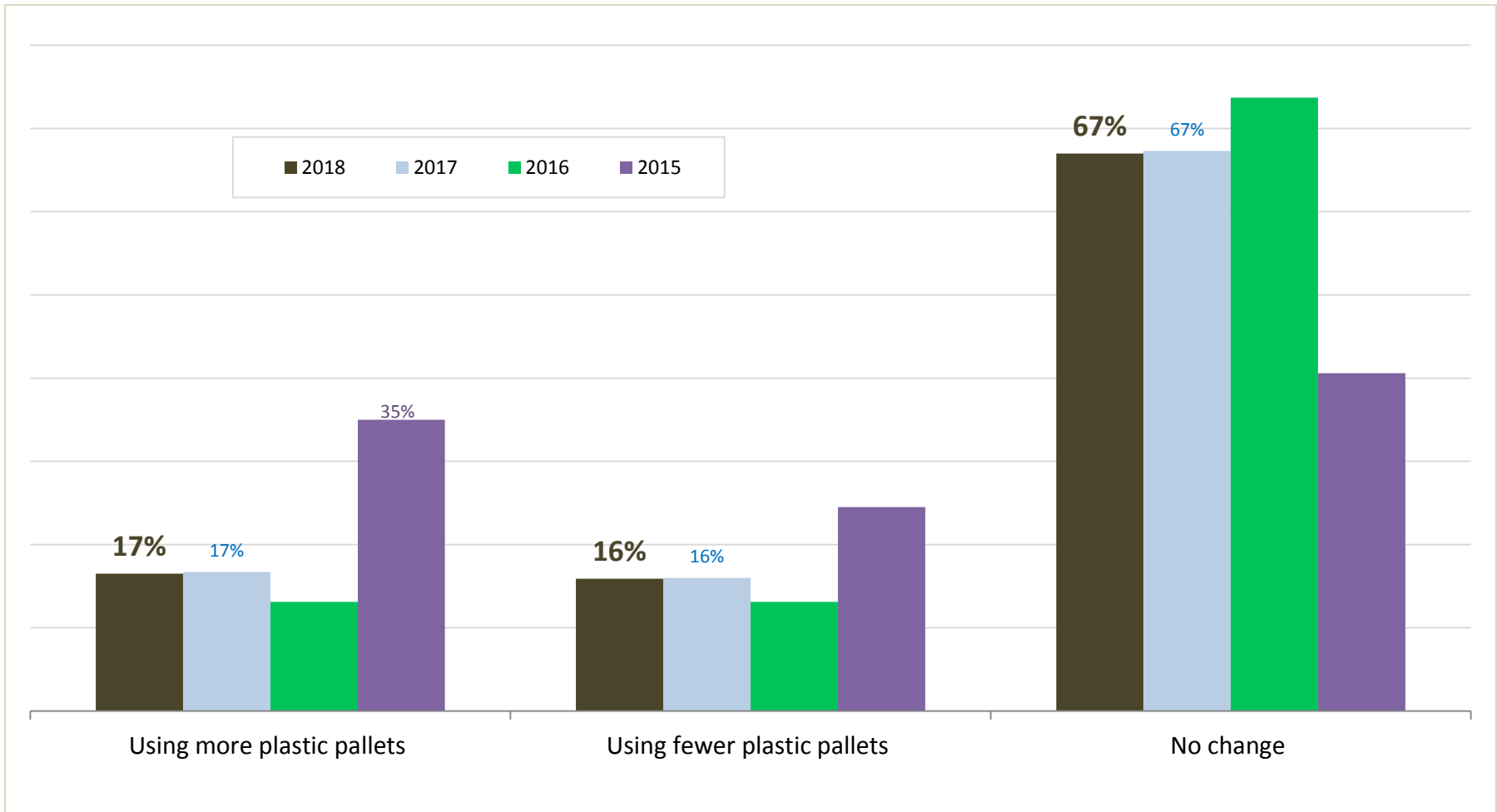
Which best describes your level of usage for *used wood pallets*?



Are you able to get hardwood pallets?

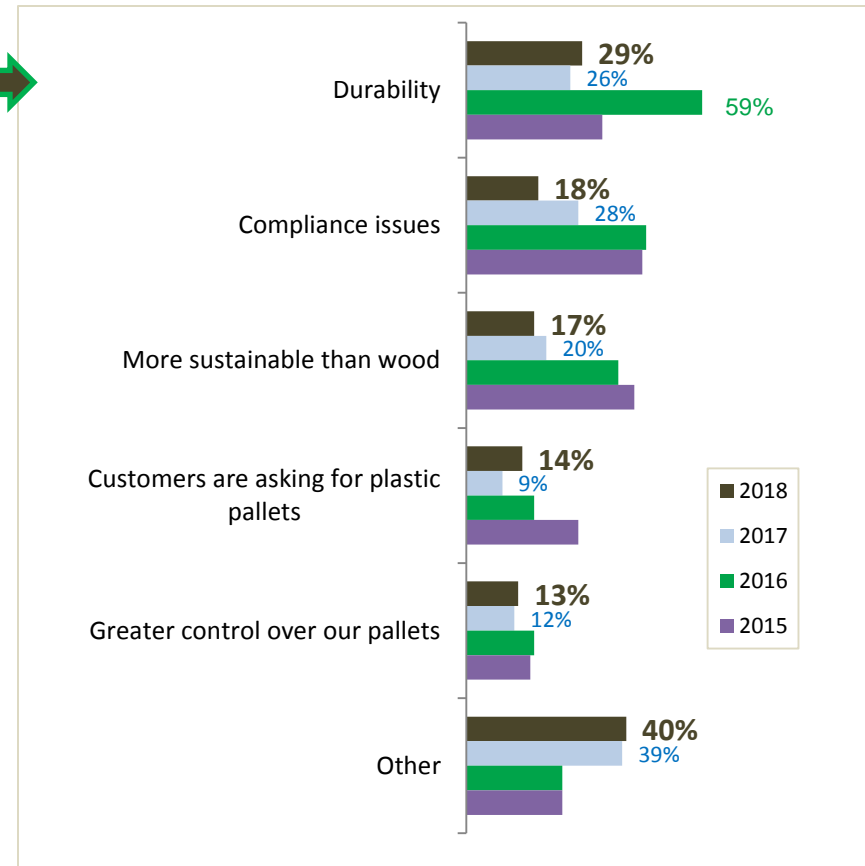
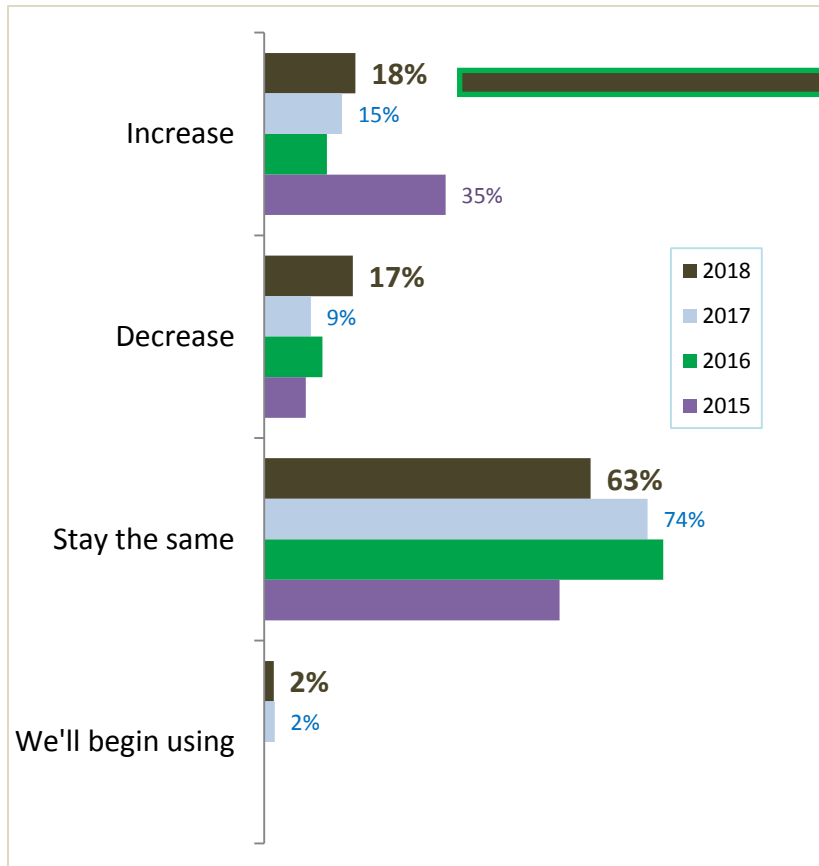


How would you describe your usage of *plastic* pallets during the last year?



During the next 12 months do you expect your usage of *plastic* pallets to . .

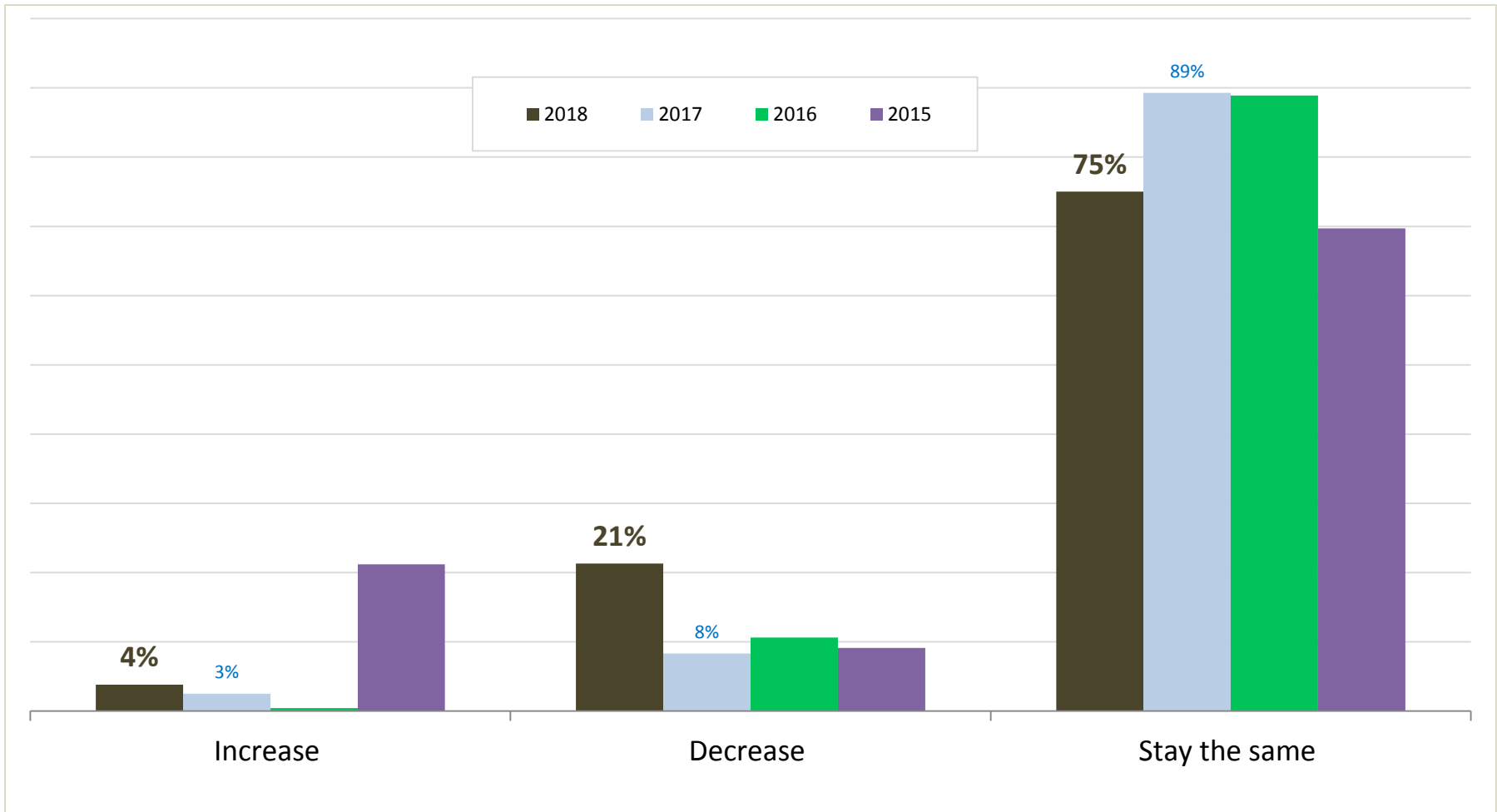
Why do you expect your usage of *plastic* pallets to increase?



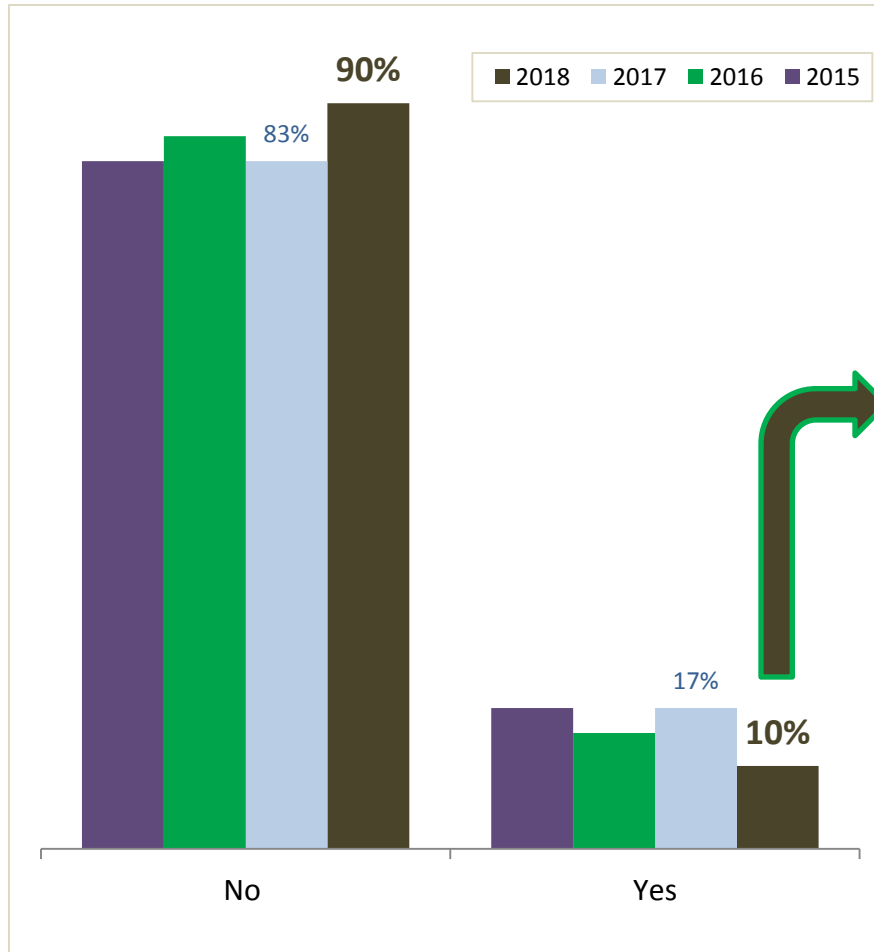
See Appendix for verbatim responses to the question, 'For what purposes are you using plastic pallets?'

Due to the small number of cases, these data are unstable and any projections based on this information may be unreliable. Figures should be used with caution.

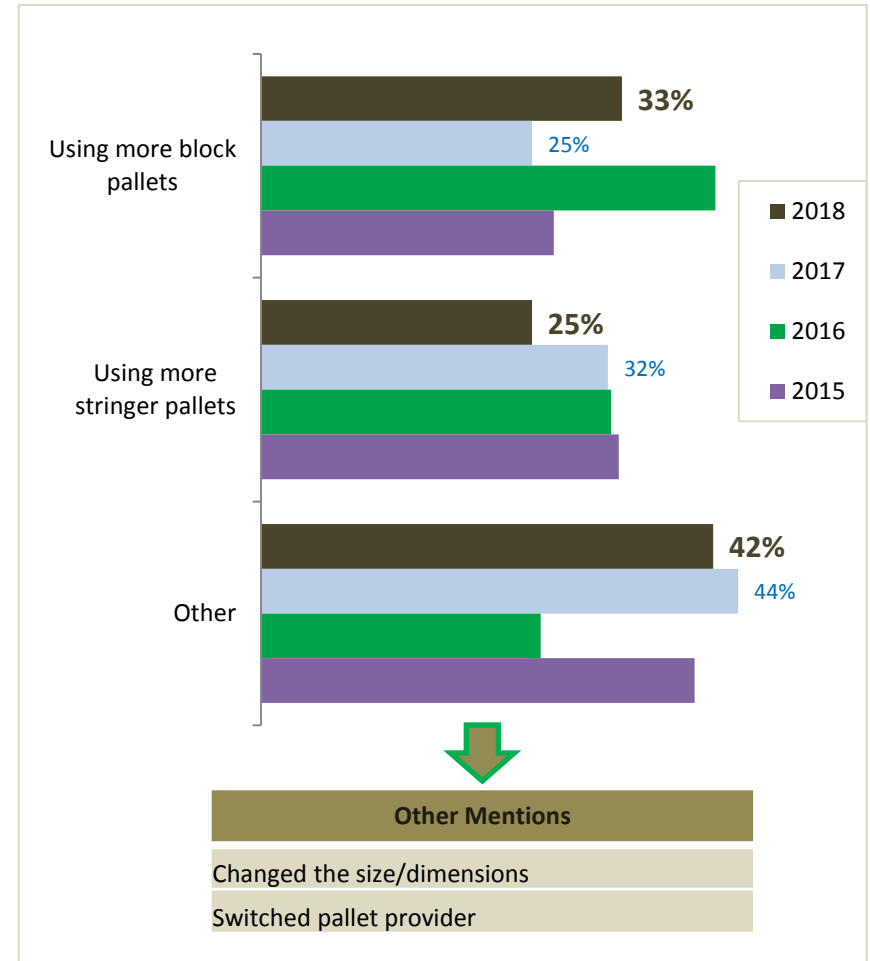
During the next 12 months do you expect your usage of metal pallets to . . .



Over the past 12 months have any customers required you to change your pallet usage?

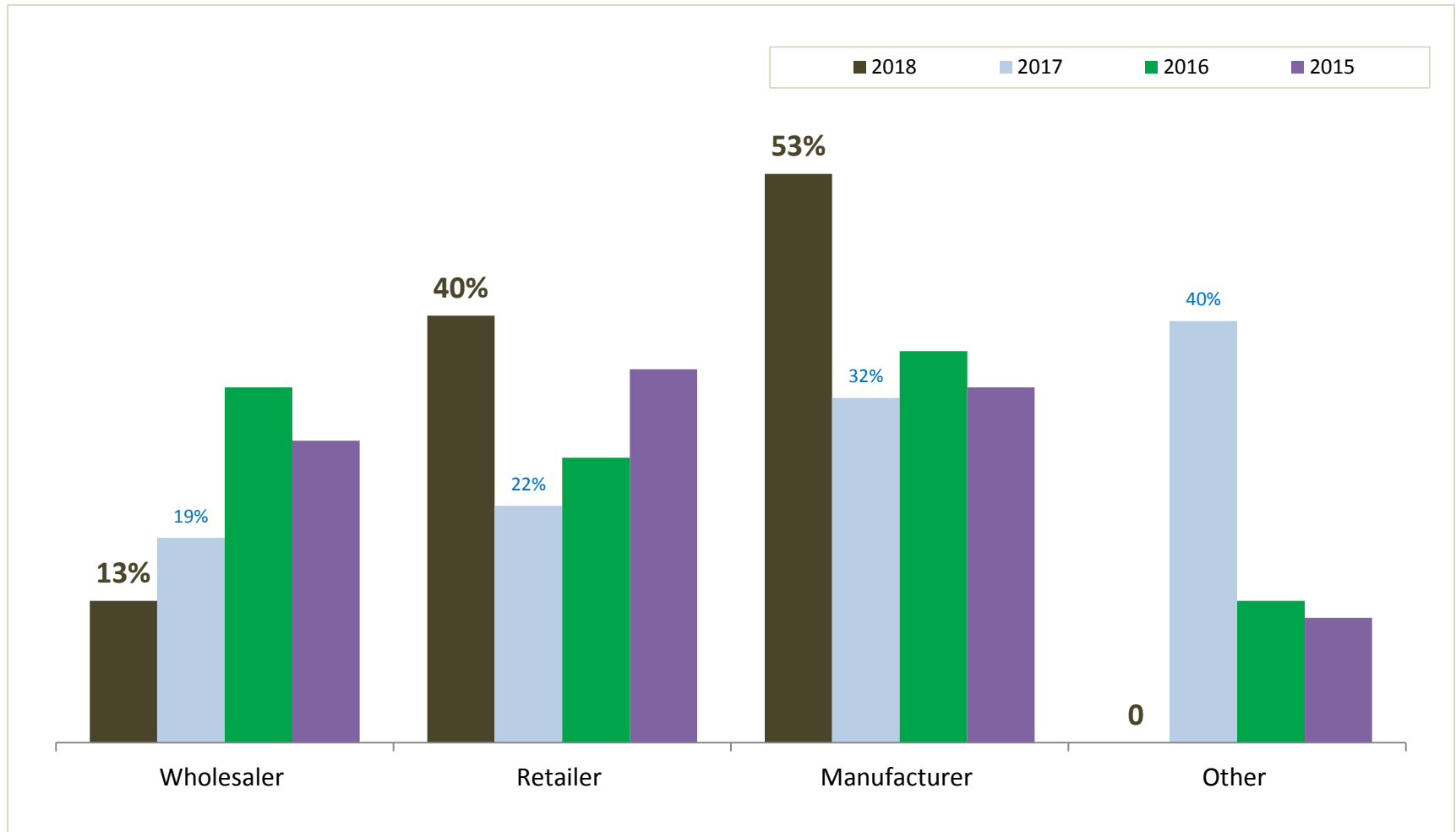


What changes are you making or did you make?

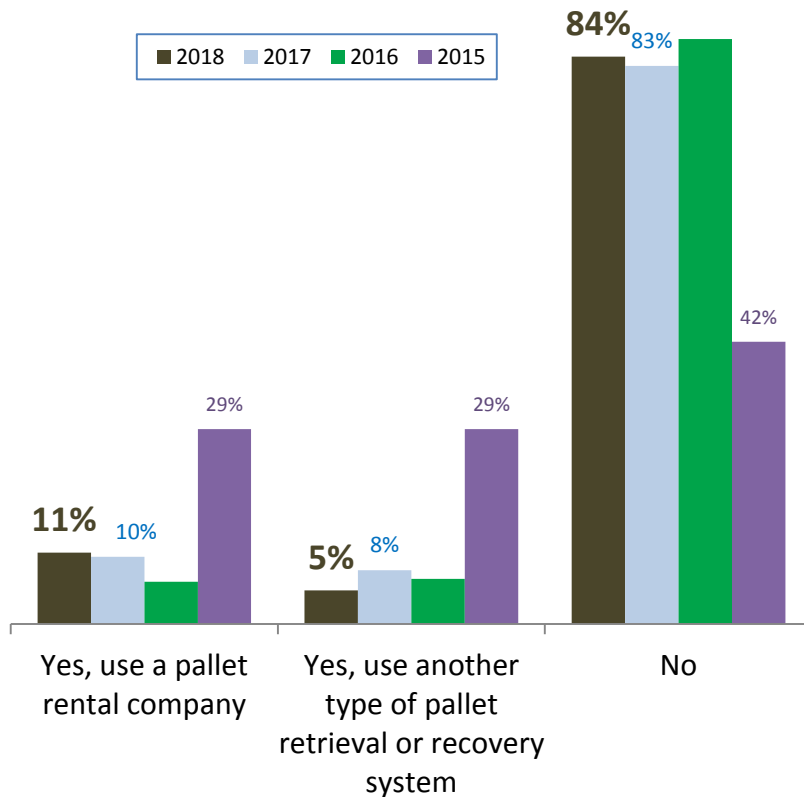


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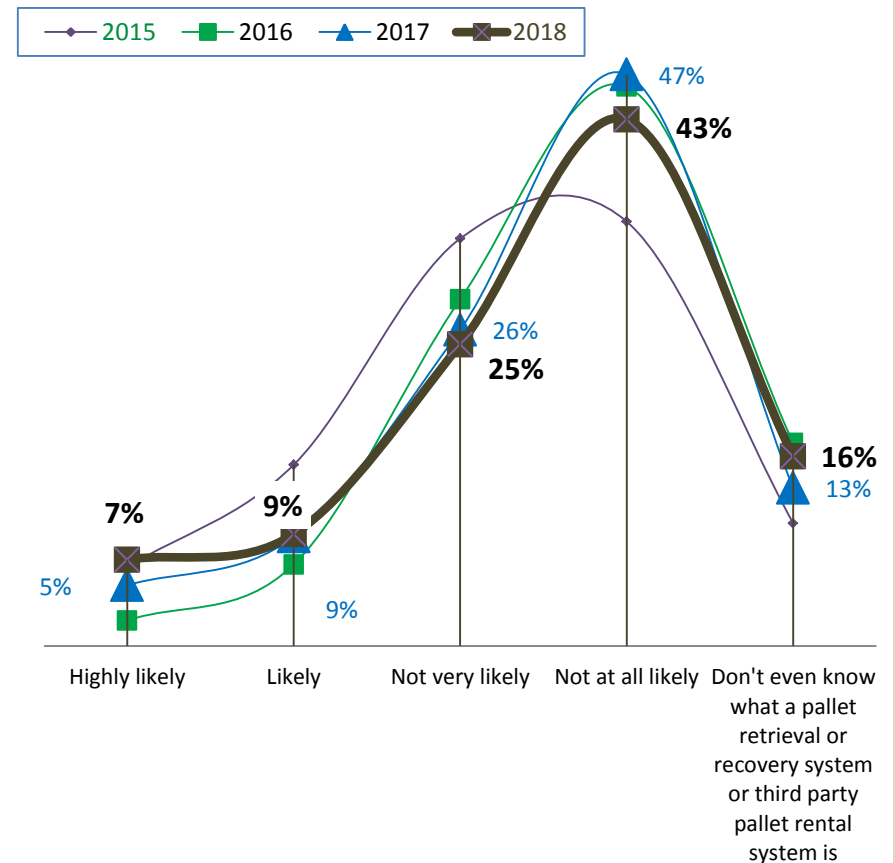
What type of business is requiring this change?



Does your company rent, plan to rent pallets or use a retrieval/recovery provider?

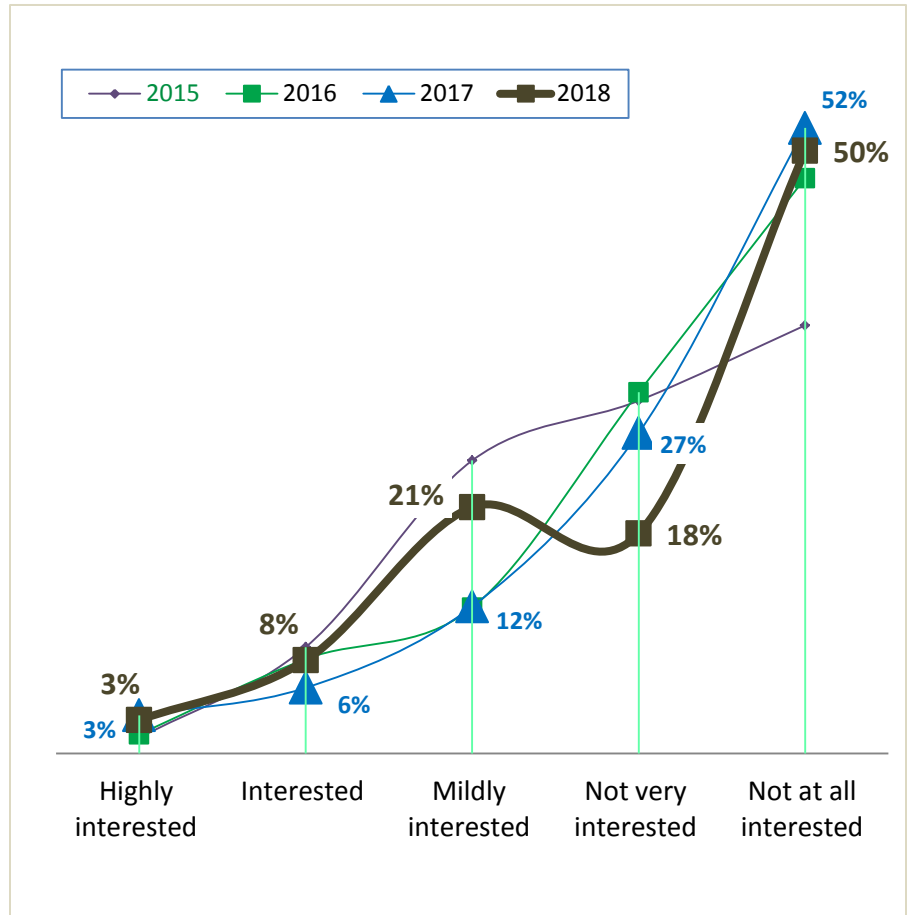
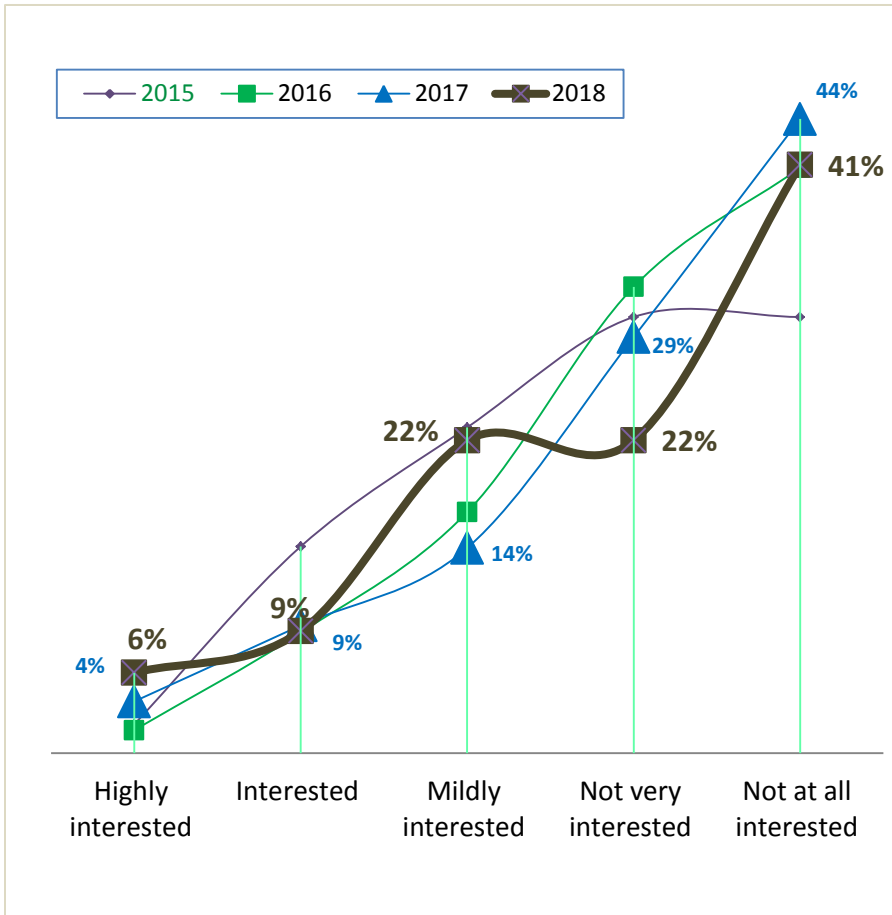


Would you consider participating in a pallet retrieval, recovery system or a third party pallet rental system in the next year?

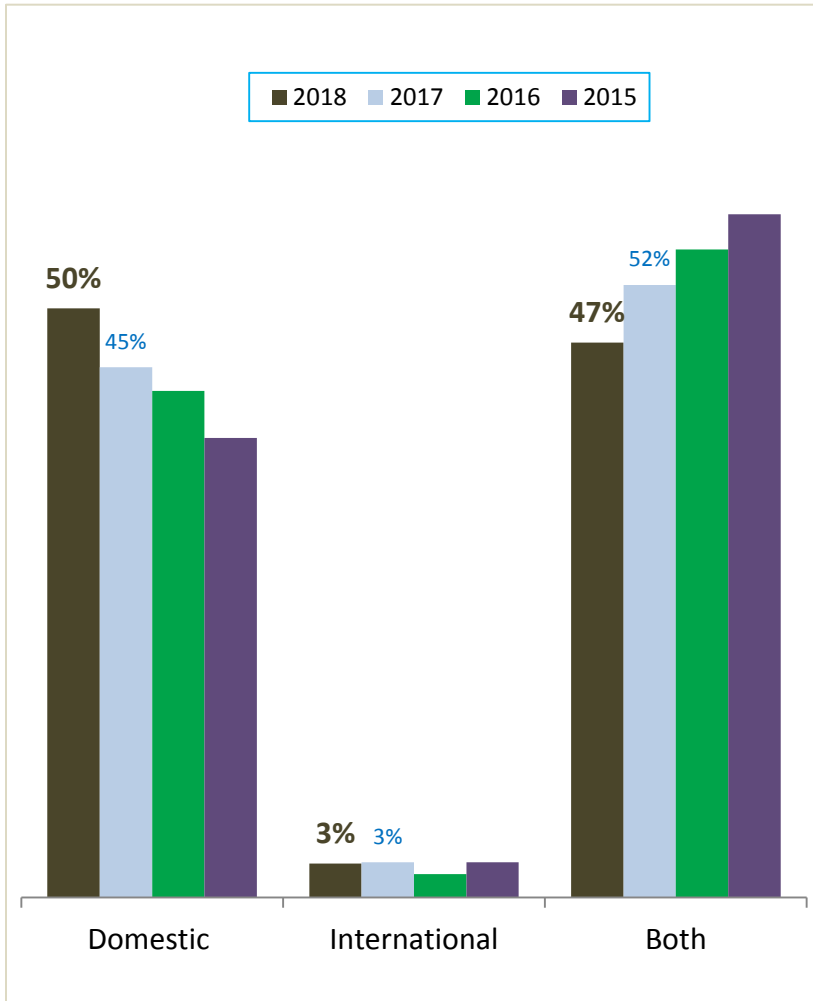


If available, how interested would you be in using a pallet pooling service managed by the pallet industry and that would serve as an alternative to CHEP, PECO and iGPS, 9Bloc, etc.

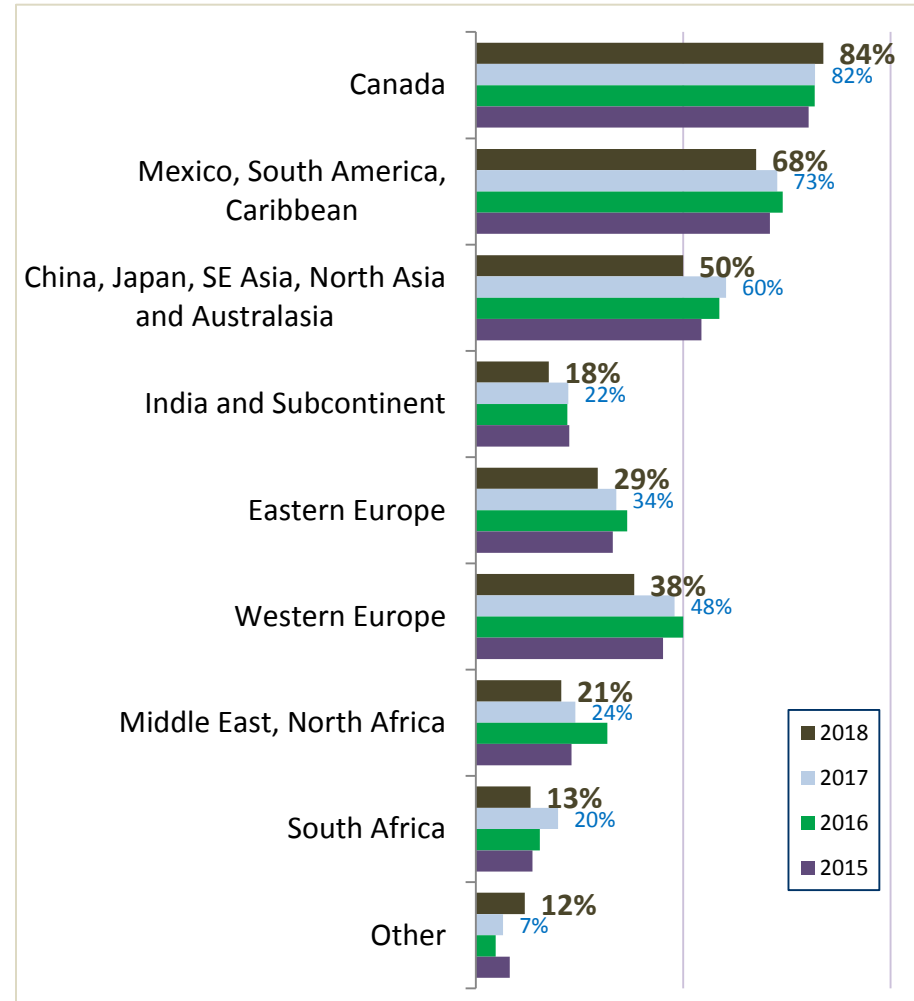
If available, how interested would you be in using a *plastic* pallet pooling service managed by a company other than iGPS that would serve as an alternative to CHEP, PECO, iGPS, etc.?



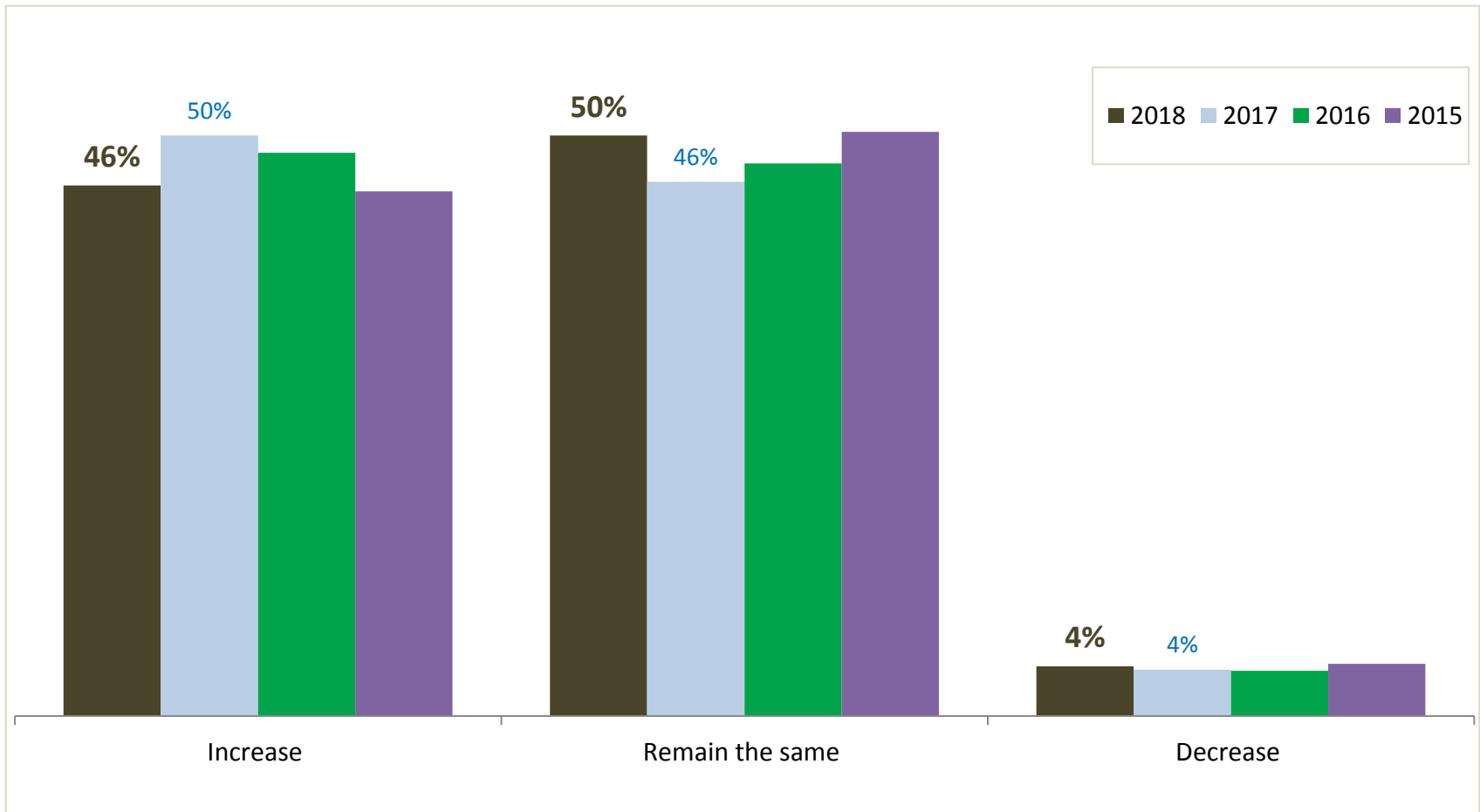
What is the nature of your shipments?



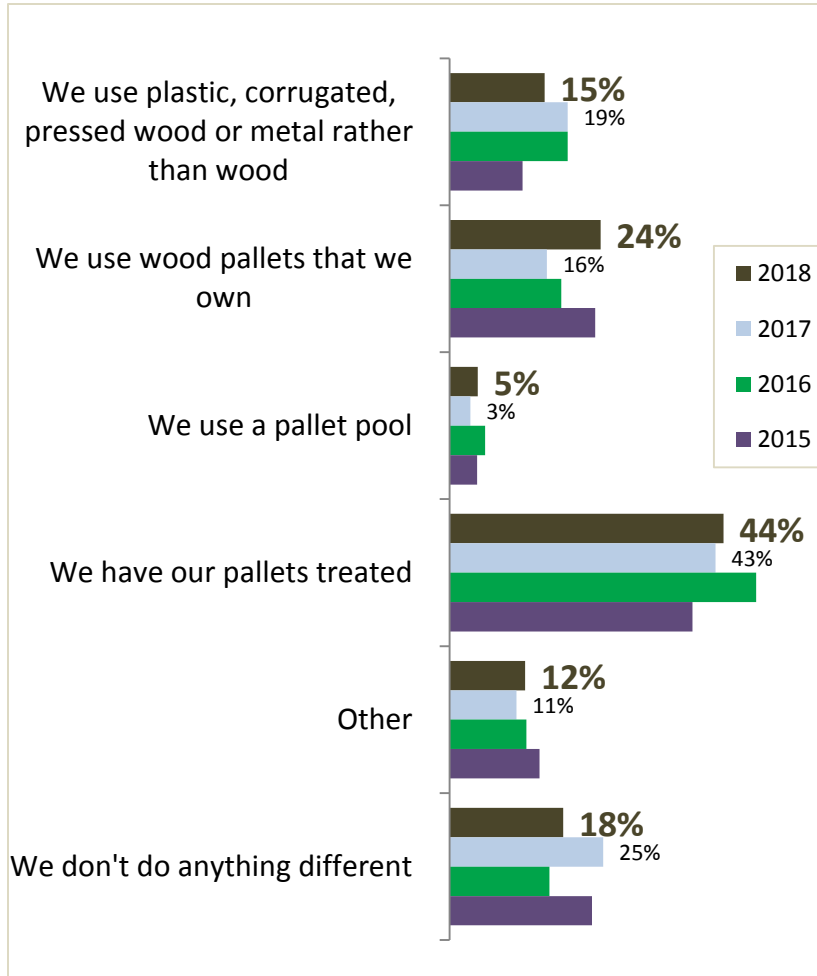
Which countries or regions are you shipping to?



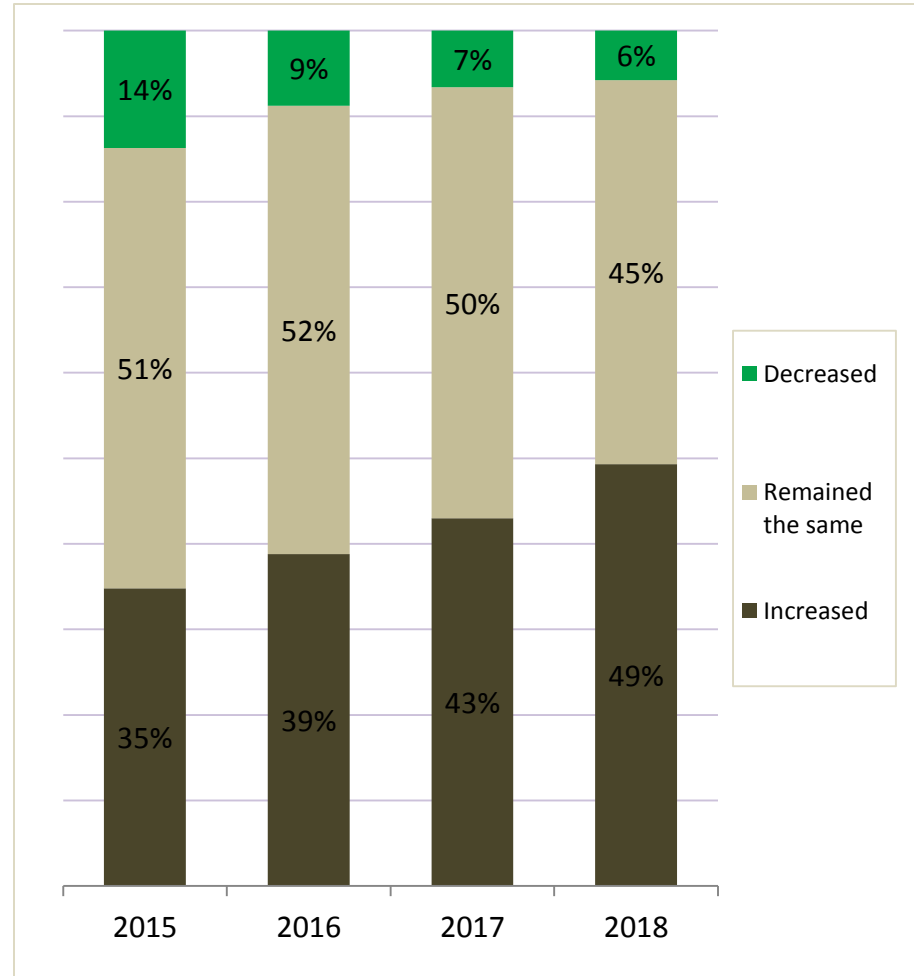
Over the next two years do you expect the number of pallets you ship internationally to . . . ?



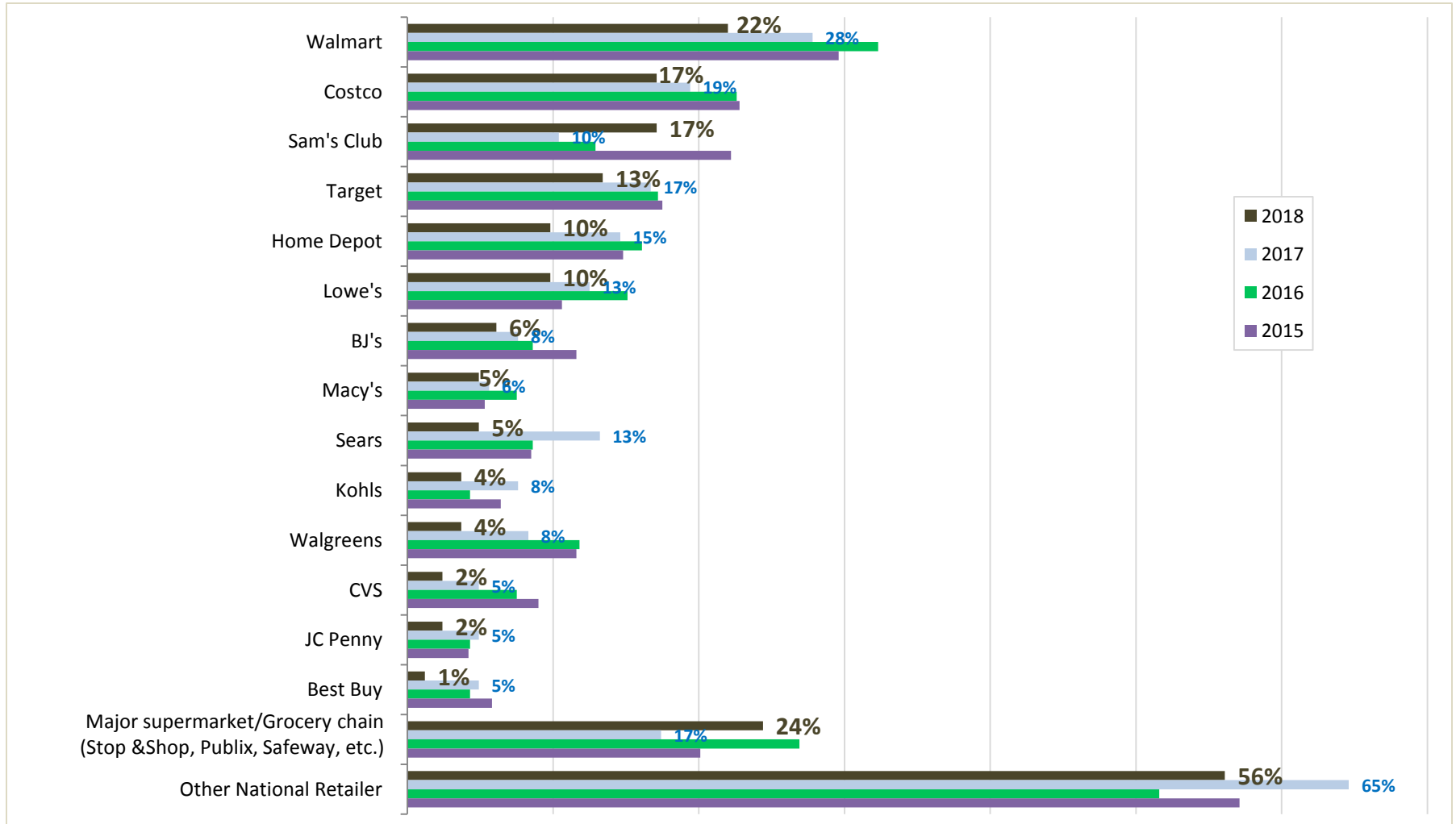
When shipping internationally, what do you do differently from domestic shipments?



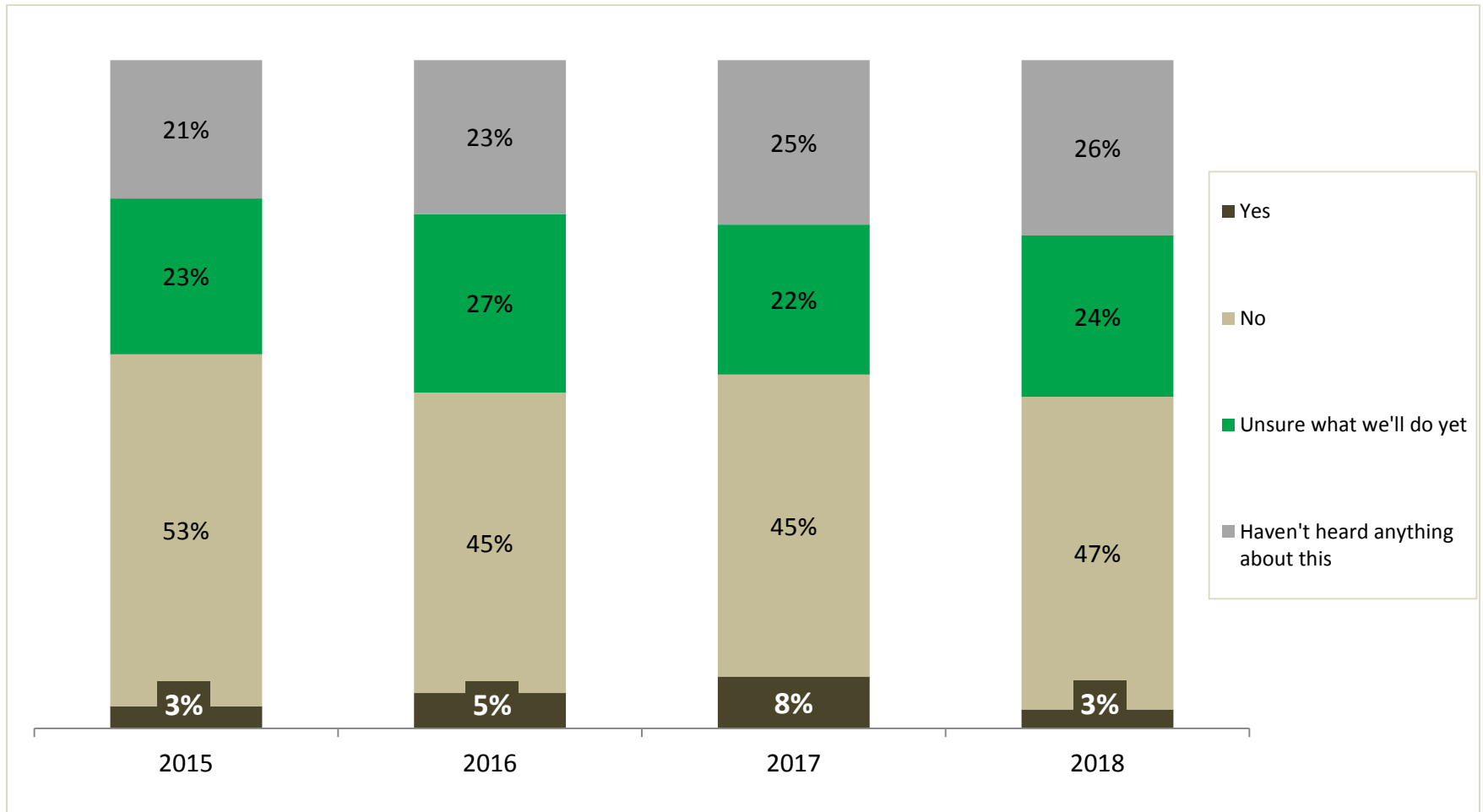
During the past two years, how has the number of pallets shipped internationally changed?



To which of the following do you ship?

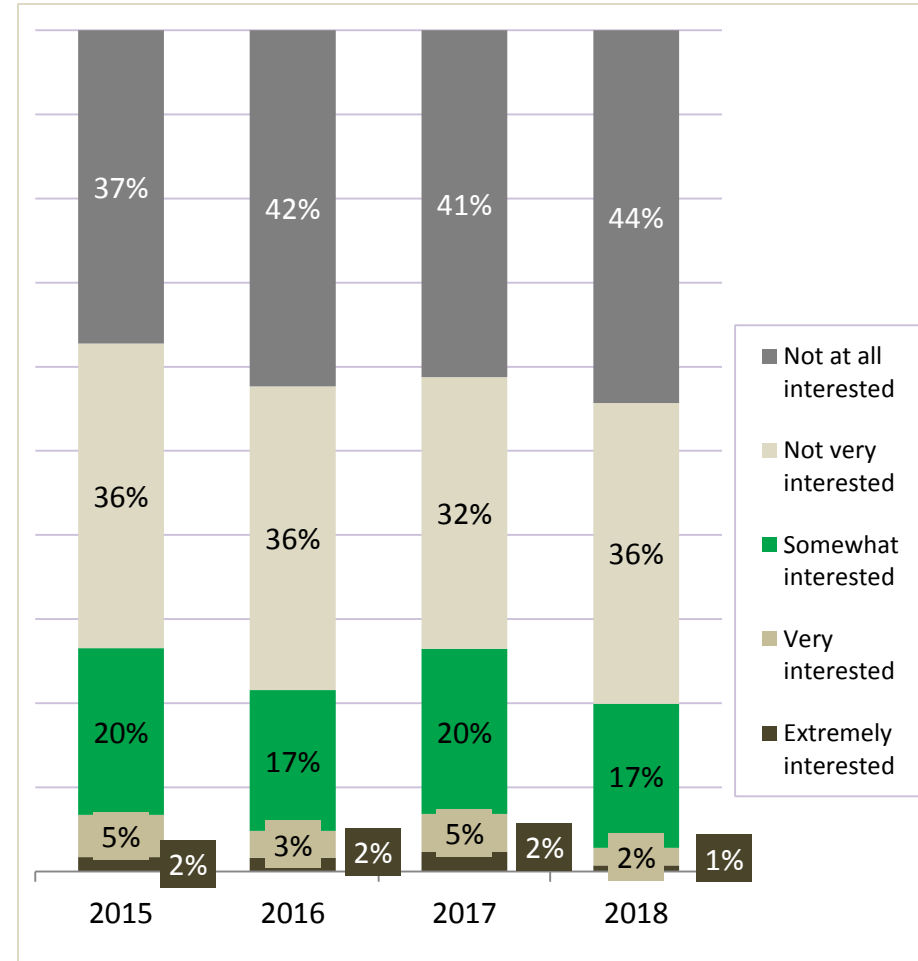
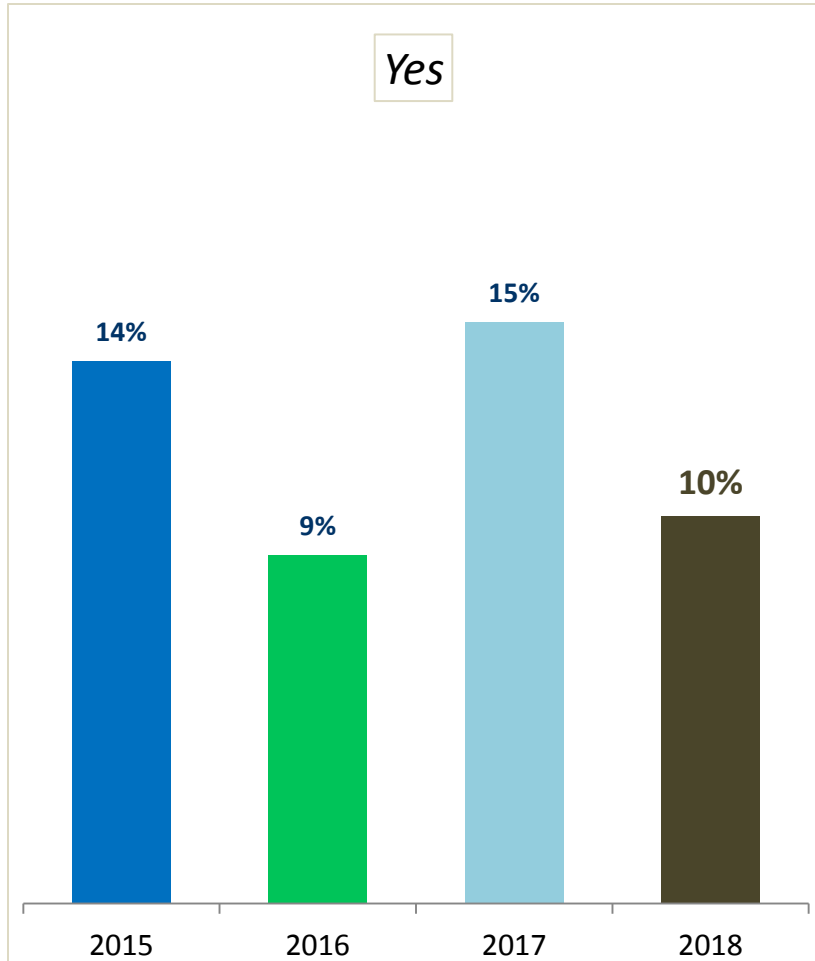


Some retailers are switching from accepting stringer pallets and are now requiring distributors to use block pallets. Is your company planning a similar strategy?

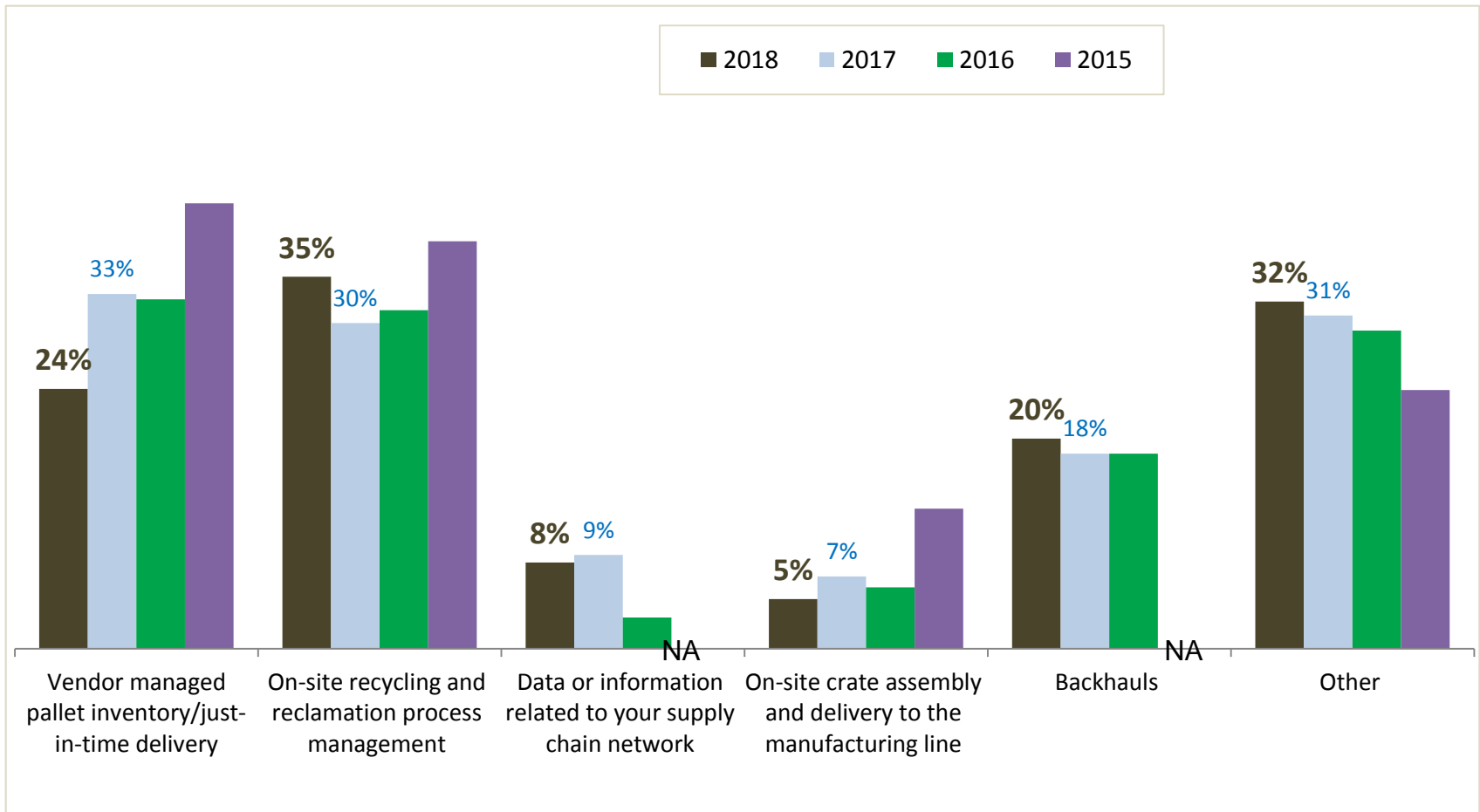


Are you now using/have you used in the past a third-party service to help you to better understand the pallet and transport packaging combination (i.e. stretch wrap, shrink wrap, banding, etc.) that's best suited to your operation?

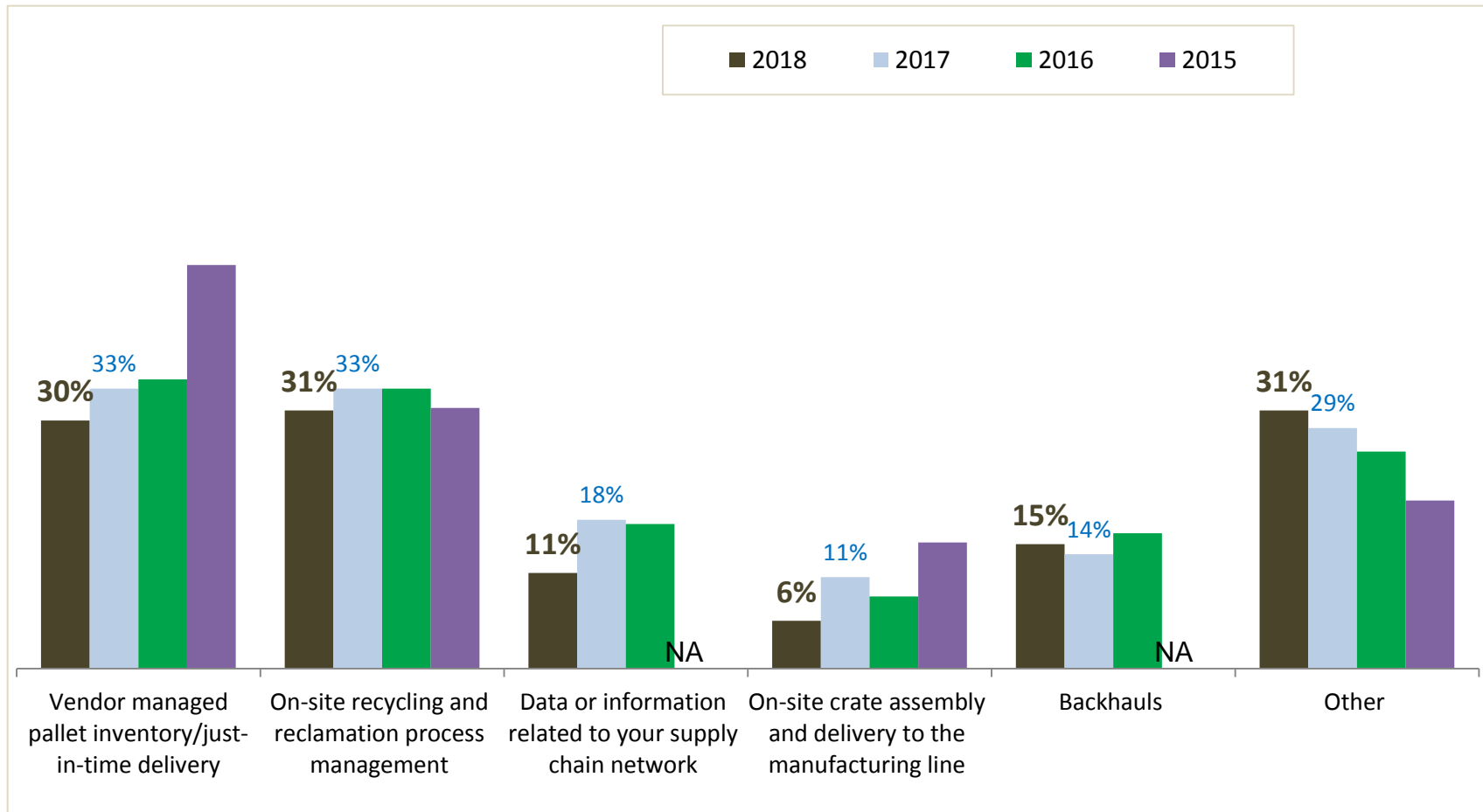
How interested are you/would you be in using a third-party service that would help you better understand the optimal pallet and transport packaging combination (i.e. stretch wrap, shrink wrap, banding, etc.) for your operation?



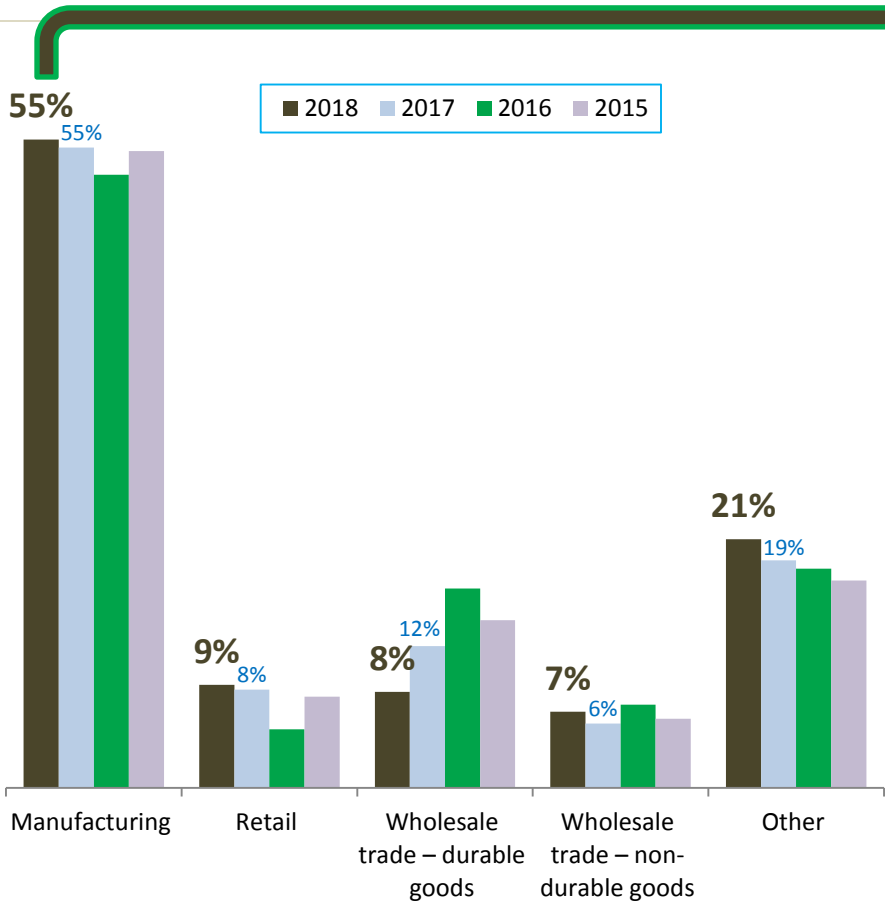
Are your pallet providers offering any of the following solutions?



If available, which might you be interested in receiving from a third-party pallet provider?



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

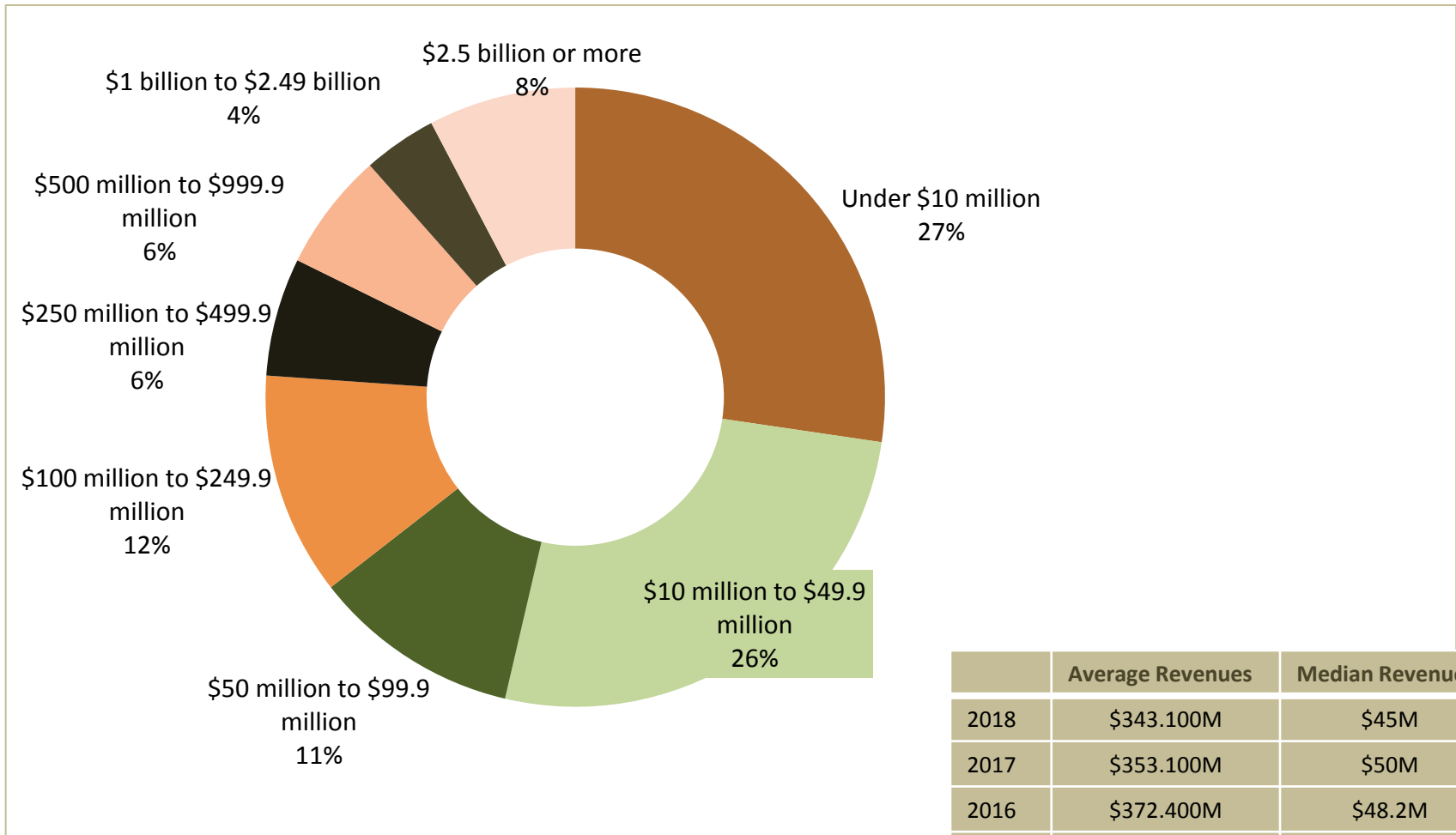


In which industry do you manufacture goods?

Industry	2018	2017
Aerospace	--	2%
Automotive & Transportation Equipment	9%	15%
Chemicals/Pharmaceuticals	7%	8%
Computers & Electronics	5%	1%
Electrical Equipment	3%	5%
Fabricated Metals	15%	11%
Food, Beverage & Tobacco	11%	9%
Furniture	1%	3%
Industrial Machinery	10%	9%
Paper/Printing	11%	7%
Plastics & Rubber	9%	7%
Primary Metals	--	2%
Textiles/Apparel	2%	1%
Other	18%	19%

Not asked in 2015 and 2016

What do you estimate your company's total revenues for 2018 will be?



	Average Revenues	Median Revenues
2018	\$343.100M	\$45M
2017	\$353.100M	\$50M
2016	\$372.400M	\$48.2M
2015	\$322.300M	\$62.8M

APPENDIX

Verbatim comments:

Q. Why are you using plastic pallets? And, for what purposes?

Q. Why do you say you would be interested/not interested in using a pallet pooling service managed by the pallet industry and that would serve as an alternative to CHEP, PECO and iGPS, 9Bloc, etc.?

Q. How interested are you/would you be in using a third-party service that would help you better understand the optimal pallet and transport packaging combination (i.e. stretch wrap, shrink wrap, banding, etc.) for your operation?

For what purposes are you using plastic pallets?

Because they stack within each other and are neater and don't generate nails when busted

Cleanliness

Closed Loop Distribution Routes

Cost

Customer requirements.

Customer specifies

Durability for shipping and in house storage

European imports Restriction on wood

Export

Export product. Avoid insect infestation.

Export shipments requirement

For materials that are shipped to customers, and will return these for re-use.

For returnable containers

For returnable containers.

Free

Green

I recycle/repurpose pallets I receive shipments on.

In some cases it is a customer requirement as part of their container program

In warehouse storage. The pallets never leave our facility. Empty pallets are nestable when stacked to save space.

Incoming

Internal order picking

Internal use to keep wood out of food product in our environment

LIGHT WEIGHT

Limited to inbound international shipments. May be only 3-4% of our pallet throughput

Merchandise. Returns and fulfillment.

Palletize bundles of mail and packages

Plastic Pallets stay in house.

Product shipments in drums, FIBC and boxes.

For what purposes are you using plastic pallets?

Returnability, reusability, "green", cost over the life vs. wood

Returnable & reuse

Returnable between facilities

Reusable, cleanability

Reuse coming from our suppliers

Shipping over seas

Shipping products overseas

Special pallets for beer kegs, that seat each individual keg. Safety and transportation damage concerns demand the use of these.

Storing finished goods

Storing ingredients and to meet bio security needs

The pallets we use nest, thus take up less space upon return good cost per use

They require less space to store.

They show up

To move larger quantities

To place raw materials on wood pallets on top of them so they can be taken to the productions floor (cleanliest)

To ship to our customers that require them.

Use them internally for scrap conveying. More of a plastic tote and also we use a plastic pallet to transfer plastic rolls of materials that are up to 2000 lbs.

We Manufacture and Recycle Pallets

We use lightweight plastic pallets (8 kg each) for their durability, lightweight to save on air shipping costs, as well as non-wood material moves through customs easily.

We use plastic pallets for all of our crops that we keep in house and wooden as it is being shipped out

We use plastic pallets for in house use only.

We use some plastic pallets as it is a customer requirement. We also use it for internal movement of goods.

Weight and easy to use

When required by customer

Work in process movement. They are a standard pallet that cradles our rolls and store dense.

Yarn storage

How interested would you be in using a pallet pooling service managed by the pallet industry and that would serve as an alternative to CHEP, PECO and iGPS, 9Bloc, etc.?

Why do you say this?

Highly interested	CHEP is a nightmare to work with.
	In the hope that the pooling service is less expensive and less time consuming for my organization than CHEP, PECO, etc.
	Known cost
	Sustainability
	We currently use a pallet rental company

Interested	Always interested in opportunities to reduce costs
	Because it allows another service to look after the pool of pallets instead of our customers
	Might be a good way to keep supply constant
	Mostly to learn more about what it is and how it works.
	Need control over quality and availability
	Next to labor our pallet cost is our next highest expense
	Possibly better turnaround due to availability and quality
	Return stream on plastic pallets is difficult to manage

How interested would you be in using a pallet pooling service managed by the pallet industry and that would serve as an alternative to CHEP, PECO and iGPS, 9Bloc, etc.?

Why do you say this?

Mildly interested

Always good to look at different options to reduce cost

Anything to save costs

Cost peruse may go down

Curiosity

Depends on availability of the sizes we need; quality of the products and costs

Don't know much about it. We have a good source of pallets currently that mostly meet our expectations. They company has been able to supply us with pallets as our needs have increased over the years.

I can not control this financial decision

I would only recommend this if there is a cost savings.

I'm a pallet manufacturer and recycler. They are my competition

I'm unsure what a pallet pooling service is.

Need to see the cost

Never thought about it

No knowledge of the pallet pooling system

Not evaluated yet

We are always looking for alternatives

We have supplier in Mexico providing unbeatable pricing

We ship across the border, it's more complicated.

How interested would you be in using a pallet pooling service managed by the pallet industry and that would serve as an alternative to CHEP, PECO and iGPS, 9Bloc, etc.?

Why do you say this?

<i>Not very interested</i>	Does not fit our needs/usage
	Don't need
	Don't see need.
	It's a cost issue to our purchasing personnel
	Most of our pallets are custom build for the project.
	Need worldwide supply, as manufacturing and distribution is global.
	No current need
	No need
	Not that many pallets used here
	Our pallets program is dictated by the customer
	Pallets often exported
	We do not use pallets as a regular daily item.
	We get more pallets in than we send out. I have trouble finding someone to take the excess.
	We have our own internal pallet pooling operation.
	We make conveyors to handle empty / full pallets.
	We use too many custom sized pallets, or make our own.
We used refurbished wood pallets to ship our product. Most of our customers do not want their product on pallets, but it is mandated by the carriers we use.	

How interested would you be in using a pallet pooling service managed by the pallet industry and that would serve as an alternative to CHEP, PECO and iGPS, 9Bloc, etc.?

Why do you say this?

<i>Not at all interested</i>	95% shipments international
	Additional labor required to keep records
	Are pallets are made to our specs and we ship nationwide and they are soft wood.
	Because the vendor pool pallets are free
	Cost
	Cost is too high.
	Customer base
	CUSTOMER CHOICE/SUPPLIED
	Customers require new pallets on all shipments.
	Does not fit our supply chain model
	Happy the way things are
	Happy with CHEP.
	Have individual supply
	I recover my own from inbound shipments.
	Mandatory government contract
	No need
	Not enough volume.
	Not interested
	Not worth it
	Our customer pallet requirements, are high quality one use pallets. The customer will reuse the pallets in their supply chain and recycle when they are done with them.
Our pallets are custom made	

How interested would you be in using a pallet pooling service managed by the pallet industry and that would serve as an alternative to CHEP, PECO and iGPS, 9Bloc, etc.?

Why do you say this?

<i>Not at all interested</i>	Our pallets need to be new for the customers.
	Our product is food grade and has to be new pallets.
	Purchase my own
	The pallet we use are custom made for the product and as such are not used by any other industry.
	To much trouble to keep up with
	Too expensive
	Too many custom sizes
	Tracking work is undesirable
	Use recycle pallets from our inbound shipments
	We buy our pallets and ship them to multiple end users
	We dispose of wood pallets every day.
	We don't need this service
	We get our pallets for free
	We have our own sources
	We have our own system in place
	We use 2-3 pallets a year
	What we do works
	Worked with CHEP in the past and it was a nightmare. I have no desire to exhaust resources managing pallet inventories and movement.

How interested are you/would you be in using a third-party service that would help you better understand the optimal pallet and transport packaging combination (i.e. stretch wrap, shrink wrap, banding, etc.) for your operation?

Why do you say this?

<i>Extremely/Very interested</i>	We currently use a third party to assist with this.
<i>Somewhat interested</i>	<p>Any potential to reduce cost would be good.</p> <p>Cost</p> <p>Depends on cost involved</p> <p>I have experience doing it and have resources through ISTA</p> <p>I would only recommend this if there is a cost savings.</p> <p>Most of our shipment methods are customer specified.</p> <p>Never thought about it</p> <p>Possibly better our shipping process</p> <p>Save money time</p> <p>Want to understand it.</p> <p>We are always looking for alternatives</p> <p>We do have supplier constantly monitoring our operation with timely update recommendation on cost saving measures and misc. production improvement solutions</p> <p>We do these things today</p> <p>We have over 100 different cartons that we place on a pallet. That doesn't change for the entire pallet. What we place in the cartons changes, but we are already at an optimal configuration on the pallet with the existing cartons that we use. A third party has not been able to come up with a way to better identify items that can go into a carton more efficiently than what we have come up with.</p>

How interested are you/would you be in using a third-party service that would help you better understand the optimal pallet and transport packaging combination (i.e. stretch wrap, shrink wrap, banding, etc.) for your operation?

Why do you say this?

Not very interested

- 1/3 of our product is shrink wrapped, and 2/3 of our product is shipped lose.
- Already handled at local levels and documented.
- Corporate decision
- Don't see need.
- Everything is working very well now.
- Have done that
- Low volume shipped
- Most of our pallets are custom build for the project.
- Not interested we have it covered
- our pallets program is dictated by the customer
- Our parent company supply's industrial packaging
- See no growth at the moment
- We already have a system that works
- We are serviced by two very good third-party services already
- We currently use a system we have developed for this task
- We customize our own.
- We do it in house
- We have a third party doing these inspections for us now .
- We have adequate internal resources for such an evaluation.
- We have our own sources
- We have spent considerable time exploring and experimenting with the various options available
- We only send out a couple pallets per month.

How interested are you/would you be in using a third-party service that would help you better understand the optimal pallet and transport packaging combination (i.e. stretch wrap, shrink wrap, banding, etc.) for your operation?

Why do you say this?

<i>Not at all interested</i>	Cost
	Custom design pallet and shipping system
	Customer base
	Does not fit our supply chain model
	I control all of my outbound containers, period.
	In house (2)
	Mandatory government contract
	No current need (5)
	Not enough volume.
	Not feasible
	Not interested (2)
	Our company Philosophy is vertical integration which mean if we can do ourselves we will do ourselves.
	Our management team has all of the resources we need in this area.
	Our pallet costs zero
	Strict adherence to company policy regarding pallet procurement
	Too expensive
	We are not in the business to manage pallets. We use pallets for our inbound floor loads only. We ship 99% parcel, so we reuse pallets until they break.
	We are too small
	We buy and use our pallets much easier and less accounting
	We do not have a high enough use load to look into this
	We don't need this service
We make pallet handling equipment. We build all our own MTO pallets/skids	
What we do works	