



State of the Industry Report

2023 Edition







INTRODUCTION

Every year, the Foodservice Packaging Institute (FPI) conducts a survey to glean information on the industry. FPI looks at issues, like changes to volume and profits; expansion and purchasing plans; opportunities and challenges facing the industry; and more. The survey is sent to FPI members and non-members, representing the entire value chain in North America, including:

- raw material suppliers;
- machinery suppliers;
- converters;
- foodservice distributors; and
- foodservice operators.

Participation in the survey is completely voluntary and respondents can opt out of any question asked.

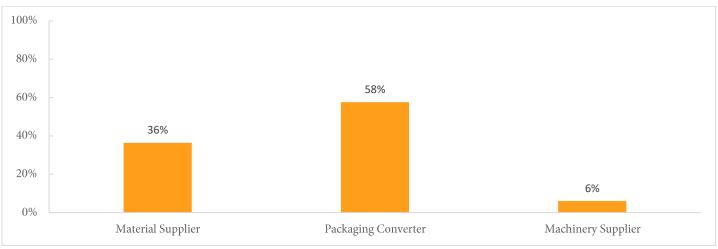
Using the data collected, FPI has produced its 23rd annual "State of the Industry Report," which contains questions and responses of the surveys conducted. Please note that responses included were taken verbatim, with very few exceptions. Results have been split into three sections:

- Pages 3-21: Converters, Raw Material Suppliers and Machinery Suppliers
- <u>Pages 22-26:</u> Foodservice Distributors
- <u>Pages 27-40:</u> Foodservice Operators

All questions are welcome. Please contact Ashley Elzinga, Director of Sustainability & Outreach, at aelzinga@fpi.org.

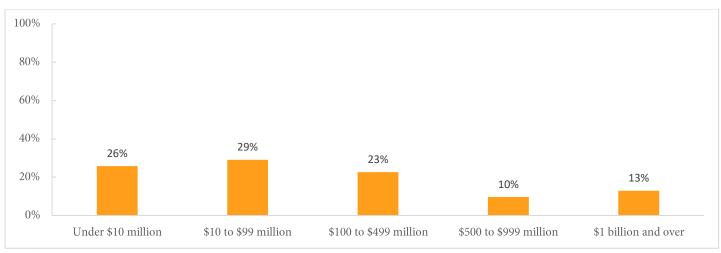
Converter, Raw Material Supplier and Machinery Supplier Results

Question 1. Are you a:



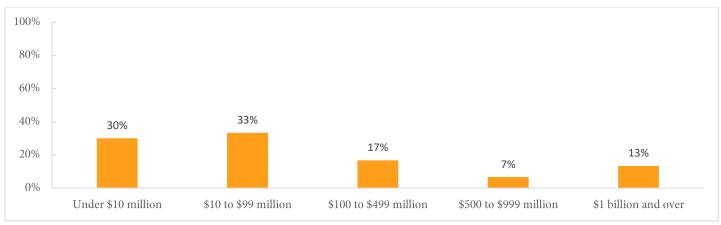
Total Count: 33

Question 2A. What were your firm's net global sales of <u>foodservice packaging</u> (i.e., cups, plates, cutlery, clamshells, etc.) products or <u>materials for the foodservice packaging industry</u> in the year 2022?

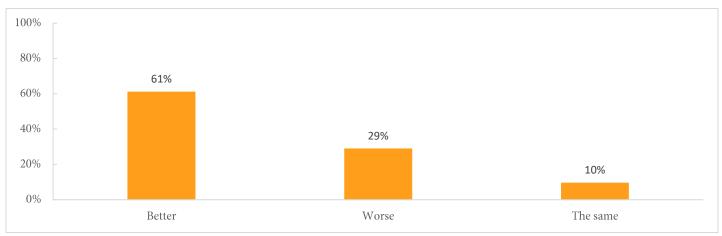


Total Count: 31

Question 2B. What were your firm's net global sales of <u>food packaging</u> (i.e., egg cartons, meat trays, dairy or produce containers, etc.) products or <u>materials for the food packaging industry</u> in the year 2022?



Question 3A. How do you rate 2022 compared to 2021, in terms of volume?



Total Count: 31

Key Influences:

Converters

Better...

- Covid re-opening.
- Customer service, supply chain constraints (ability to supply), new products.
- First half of year less imports in the market creating more demand for domestic supply.
- Improvement with pandemic. Due to pandemic restaurants are providing more take out and less in service restaurants.
- Labor improvement and demand steady.

- Opening of more casual dining and quick service restaurant dining rooms.
- PFAS legislation and expanded capacity.
- Return to work and increased consumer mobility. Substrate choices from customers shifting to fiber packaging.
- Still Covid effects, people are eating more at home.

Worse...

- Market contraction vs. prior year.
- Outsized gains within specific product categories during 2021 have normalized in 2022 resulting in lower unit volume.

The same...

- H1 constrained resources. H2 softer demand.
- More single use items used as market grows post covid-19.

Raw Material Suppliers

Better...

- New products, new applications, post-pandemic demand.
- Relaxing of Covid restrictions Economy returning to "normal".
- Return from covid shutdowns and interest in clients to have more material in inventory.
- Strong demand recovery.

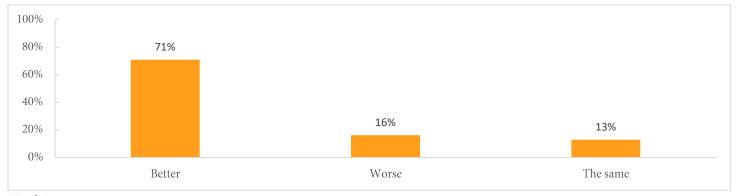
Worse...

- 4Q22 demand fell-off as customers claimed inventory issues.
- Economy mostly and bans.
- FM, feedstock volatility and depressed economy in 2H22.
- Recession.

Machinery Suppliers

No input

Question 3B. How do you rate 2022 compared to 2021, in terms of profit?



Total Count: 31

Key Influences:

Converters

Better...

- \$ value up due to inflation.
- Increased demand.
- Inflation recovery. [mentioned 2 times]
- PFAS legislation and added capacity.
- Price and volume improvements.
- Price increases have contributed to improved profit margins.
- Profit growth with resin cost pass through but offset by reduced volume.
- Purchase of new equipment.
- Same as above; fewer supply chain disruptions.

Worse...

• Purchase of new equipment.

Raw Material Suppliers

Better...

- Customer & product mix improvement opportunities, implementation of price increases.
- Inflation and raw material pricing.
- Intense increase in material costs led to better focus on margins.
- Price increases and raw material cost in the last half of the year.

Worse...

• Inflation and at times a recessionary like attitude. As some customers noted - "if the US Govt is claiming a rebounding/strong economy - it's not in Food Serviceware!"

• Volume down.

The same...

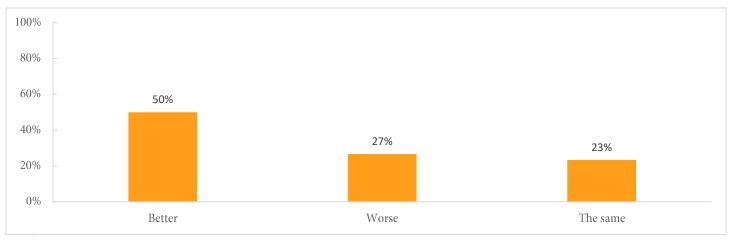
• Strong 1H22 and very weak 2H22

Machinery Suppliers

Better...

Backlog growth throughout covid.

Question 4A. How do you expect 2023 to be compared to 2022, in terms of volume?



Total Count: 30

Key Influences:

Converters

Better...

- Expected continued recovery within key product categories should drive higher unit volume.
- For our company, 2023 volume will be largely influenced by increases in market share within our own customer base. We'll also benefit from new business secured during 2022.
- Growth with market rates and additional gains from new applications.
- Growth.
- Inflationary pressures. Labor is still a challenge in our mfg. plants and distribution centers.
- Less players in the market, demand growing.
- Many bans on PS coming into effect and shrinking market size.
- New equipment allows for greater capacity.
- New products, new business.
- PFAS legislation and added capacity.

- price competitiveness, excess inventory.
- Q1 soft volume due to inflation. Uncertain full market demand for full year. Strong pipeline expected to propel rest of year.

Worse...

• Many bans on PS coming into effect and shrinking market size.

The same...

- Inflationary pressures. Labor is still a challenge in our mfg. plants and distribution centers.
- Price competitiveness, excess inventory.

Raw Material Suppliers

Better...

- Market is getting serious about trends put on hold during the pandemic.
- New products, new applications

Worse...

- Competitive pressure as well as economic downturn.
- Inflation is constraining consumer behavior, Asian supply of food service packaging is returning due to improvements in transportation.

The same...

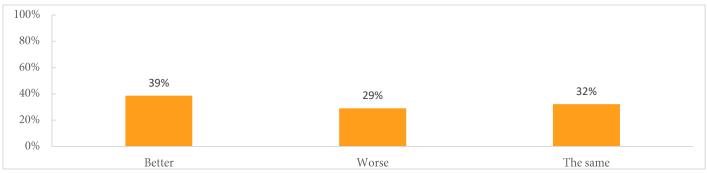
- Healthy demand.
- Jan is flat and many remain uncertain.
- Similar to 2022. Hope to see a good boost in demand by 2H23.

Machinery Suppliers

Worse...

- Inflation creating a drag on the market.
- Over capacity on market because of Covid build up.

Question 4B. How do you expect 2023 to be compared to 2022, in terms of profit?



Total Count: 31

Key Influences:

Converters

Better...

- Greater capacity = better sales volume = more profit
- Growth.
- PFAS legislation and added capacity.
- Profit growth consistent with anticipated volume increases but offset by inflation, including labor and resin.

Worse...

- Downward pricing pressure will likely negatively impact margins.
- Lower volume / lower profit.

The same...

- Cost focus, inflation recovery and demand.
- Labor rates continue to rise; demand outlook is not as strong as 2022.

Raw Material Suppliers

Better...

• New products, new applications.

Worse...

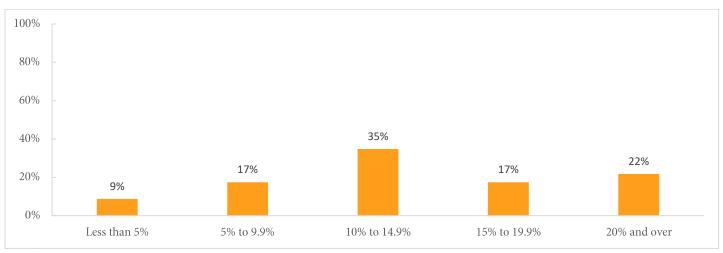
- Inflation and lower demand will result in lower pricing.
- Low demand, cheap imports, recession fears, etc. are impacting margins.
- Price decreases.

Machinery Suppliers

Worse...

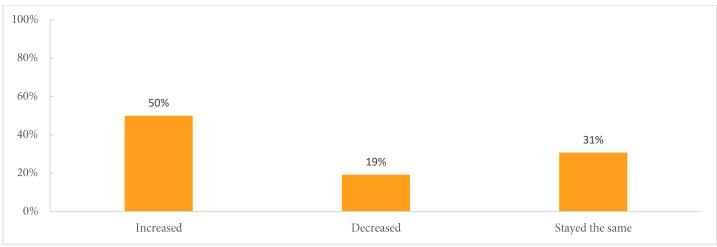
- Inflation creating a drag on the market.
- Over capacity on market because of Covid build up.

Question 5. What was your firm's 2022 EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) as a percent of net sales?



Total Count: 23

Question 6A. In 2022, what happened to your <u>production levels</u> (pounds/kilograms, units, etc.) as compared to 2021? (Be sure to include any acquisitions made in 2022.)



Total Count: 26

Question 6B. By what percent?

Converters

Increased by...

- 5% [x2]
- 10%
- 15%
- 18%
- 50%

Decreased by...

- 7%
- Approx. 9%

Raw Material Suppliers

Increased by...

- 5%
- 25%

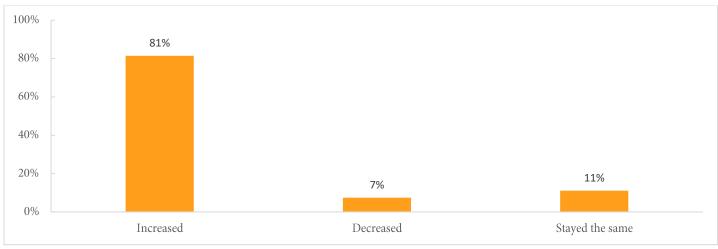
Decreased by...

• 10%

Machinery Suppliers

No input

Question 7A. In 2022, what happened to your <u>dollar value of shipments</u>, as compared to 2021? (Be sure to include any acquisitions made in 2022.)



Total Count: 27

Question 7B. By what percent?

Converters

Increased by...

- 10% [mentioned 3 times]
- Double digit due to inflation
- 15%
- Approx. 20%
- 20%
- 30%
- 65%

Raw Material Suppliers

Increased by...

- Unsure
- 5%
- 8%
- 20%
- 25%

Decreased by...

• 10%

Machinery Suppliers

Increased by...

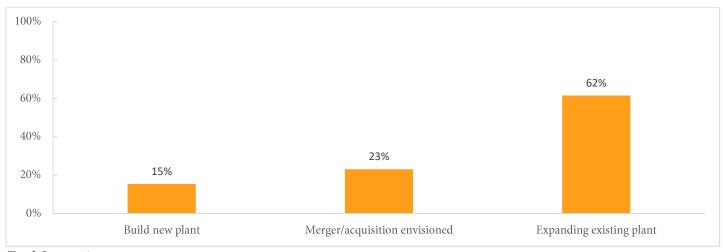
- 5%
- 20%

Question 8A. Is your company planning to expand in 2023?



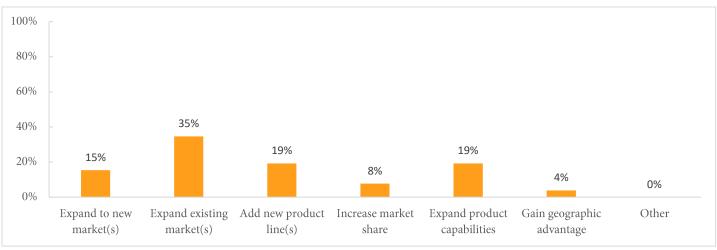
Total Count: 27

How/where does your company plan to expand (select all that apply)?



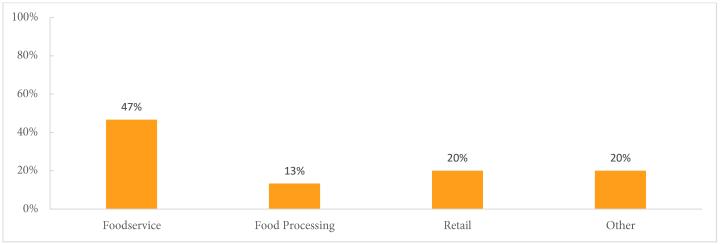
Total Count: 13

Question 8B. What is the main purpose of this expansion to your operations (select all that apply)?



Total Count: 26

Question 8C. In what market segment do you plan to expand (select all that apply)?

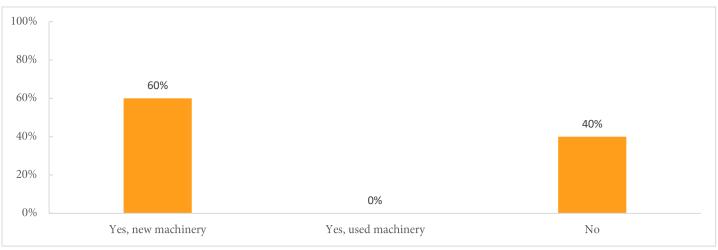


Total Count: 15

Other:

- Auto
- Construction
- Dairy packaging
- Industrial food packaging
- Retail

Question 9A. Does your company plan to purchase converting machinery in 2022 (select all that apply)?**



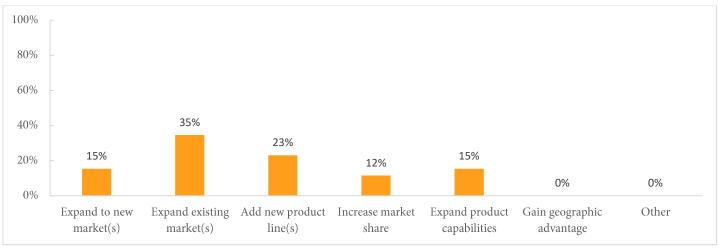
Total Count: 15

Question 9B. If your company does plan to purchase, what type of machinery and/or for what application?

- Bag machines.
- Containers.
- Converting equipment.
- Food packaging.
- Packaging converting.
- Presses.
- Self built molding machines.
- Thermoforming.
- Tooling.

^{**}Question asked solely of converters

Question 9C. For what purpose does your company plan to purchase new converting machinery (select all that apply)?**

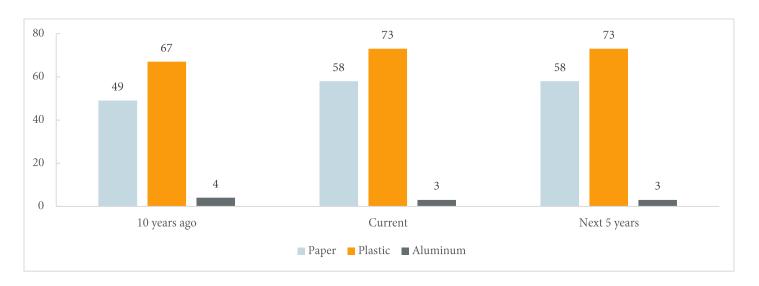


^{**}Question asked solely of converters

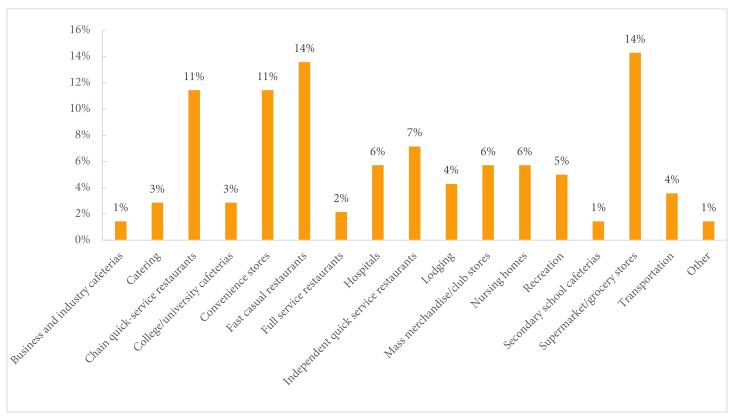
Question 10. Please check the appropriate box according to your company's production or use of the following substrates for the time frames listed:

	10 Years Ago	Currently	Next 5 Years
Paper	10	10	10
Coated Paperboard w. Traditional Coatings	10	10	9
Coated Paperboard w. Bio-based Coatings	5	7	8
Uncoated Paperboard	7	8	8
Pulp/Molded Fiber (from trees)	5	7	10
Pulp/Molded Fiber (from other sources)	4	6	7
Paper w. Recycled Content	8	10	10
PET	6	9	9
PE	5	5	5
HDPE	4	4	4
LDPE	5	5	5
LLDPE	1	2	1
PP	5	8	9
PS	10	7	7
EPS	9	8	3
OPS	5	3	3
HIPS	4	3	8
Bio-based plastic	6	8	13
Plastic w/ recycled content	7	11	12
Aluminum Foil	4	3	3
Other	0	0	0

Based on the information above:



Question 11A. Which of the following market segments do you believe will see strong growth in the next five years (select as many as you wish)?



Other:

- Food delivery.
- National Parks/Government/Defense.

Question 11B. Please indicate which ONE market you believe will see the greatest growth and explain why:

Chain quick-service restaurants [mentioned 5 times]

- Food prep and ordering automation plus takeout focused business models position this segment for outsized growth.
- More people getting take home items.
- Ready to rebound.
- See the strongest growth resulting from increased traffic driven by inflation. C-Store will also see significant growth as operates expand higher-quality foodservice.
- Will continue to leverage marketing strengths and technology to take market share, leverage scale to create value for consumers.

Fast casual [mentioned 4 times]

- Department of Labor statistics show restaurants and bars added over 60,000 jobs in December of 2022 and have almost returned to pre-pandemic employment levels. Fast casual restaurant capacity diminished greatly because of workforce challenges. Optimistic that those restaurants will begin to see a turnaround.
- Due to value and the economy.
- Inflationary spending better suited to this segment, offer both dine-in and take-out options or drive-thru see more innovation in this segment.
- People will want to eat out more, but convenience and cost effectiveness will outweigh that. So they'll order/get delivered food that they would have normally have eaten at a restaurant in the past.
- Trending.

Hospitals [mentioned 2 times]

- Grow the most on a percentage basis due to the aging population.
- Population continues to live longer.

Convenience stores

- Incorporating more ready to eat / single serving options.
- Increasingly becoming more of a one stop shop and are improving their food service offering.

Full service restaurant

• In the post-pandemic world, takeout will be of greater importance to their business and will have greater demand for foodservice disposables.

Mass merchandise/club stores

• Bulk purchases to bring down food costs.

Recreation

• Pent up demand.

Question 12. Please review the list below and select what you believe are the FIVE most important challenges facing the food/foodservice packaging industry over the next couple of years. Please rank (1-5) the following in order of importance, with 1 being the most important:

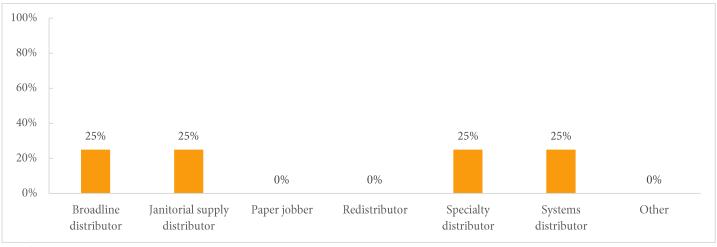
[Listed in descending order, in terms of cumulative number of mentions and weighting.]

Comparison of Top 5 Challenges Facing the Food/Foodservice Packaging Industry

	CONVERTERS	RAW MATERIAL SUPPLIERS	MACHINERY SUPPLIERS	
1	Lack of qualified labor	Government legislation/regulation	Recovery/end of life options for foodservice packaging	
		Public perception of packaging or foodservice packaging as "waste"		
2	Government legislation/regulation	Recovery/end of life options for	Government legislation/regulation	
		foodservice packaging	Public perception of packaging or foodservice as "waste"	
3	Public perception of packaging or foodservice as "waste"	Lack of qualified labor	Lack of qualified labor	
4 II	Increasing raw material costs	Increasing raw material costs	Globalization and the increased competition from outside national borders	
		increasing raw material costs	State of the global economy	
5	Recovery/end of life options for foodservice packaging	State of the global economy	Increasing raw material costs	
		otate of the global economy	Margin compression	

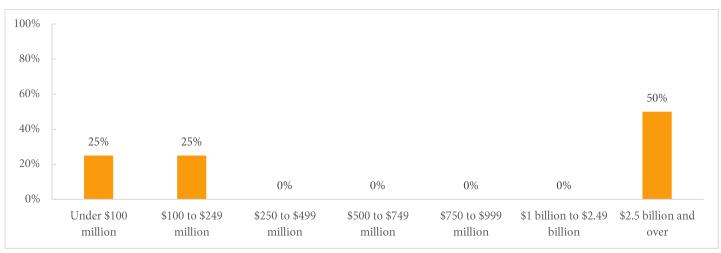
Foodservice Distributor Results

Question 1. Which category best describes your company (select only one):



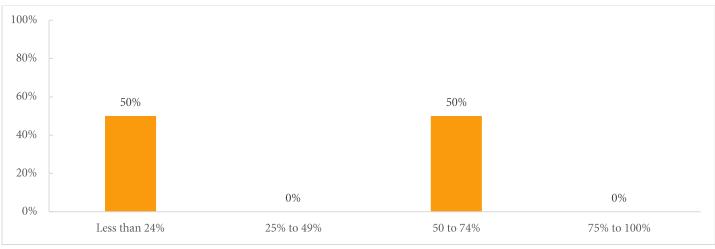
Total Count: 4

Question 2. What were your company's North American systemwide foodservice sales in 2022 (in U.S. dollars)?

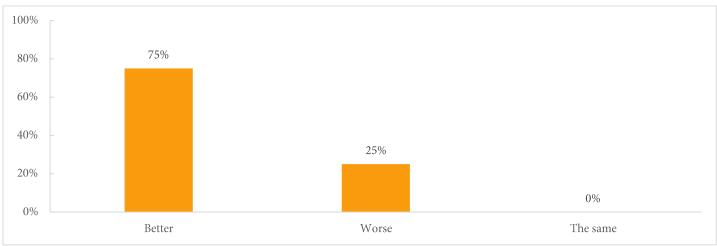


Total Count: 4

Question 3. If known, what percent of your company's North American systemwide foodservice sales were foodservice packaging products in 2022?



Question 4. How would you rate 2022 compared to 2021, in terms of total foodservice sales?

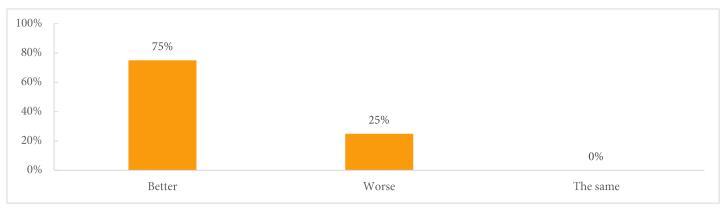


Total Count: 4

Key Influences:

No response given

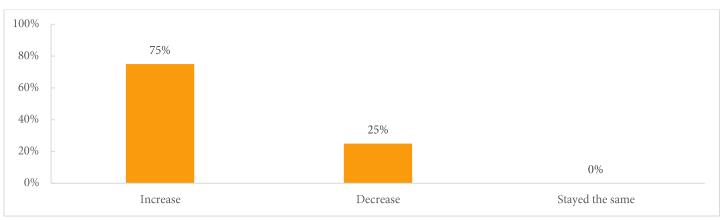
Question 5. How do you expect 2023 to be compared to 2022 in terms of total foodservice sales?



Key Influences:

No response given

Question 6A. Specifically looking at foodservice packaging products, do you expect that your sales of will increase, decrease or stay the same in 2022, as compared to 2021?



Total Count: 4

Question 6B. By what percent?

Increase...

• 8%

Question 6C. For what reasons?

Increase...

- Company share growth.
- Continued & growing demand for all disposables.

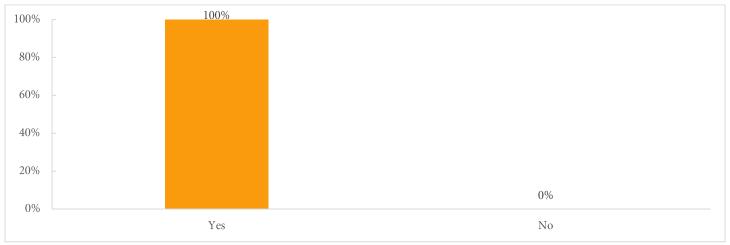
Decrease...

• Deflation of raw materials combined with lower volumes.

Question 7. From how many manufacturers does your company purchase foodservice packaging?

- 25
- 40
- 1,000

Question 8A. Does your company plan to change foodservice packaging suppliers in 2023?

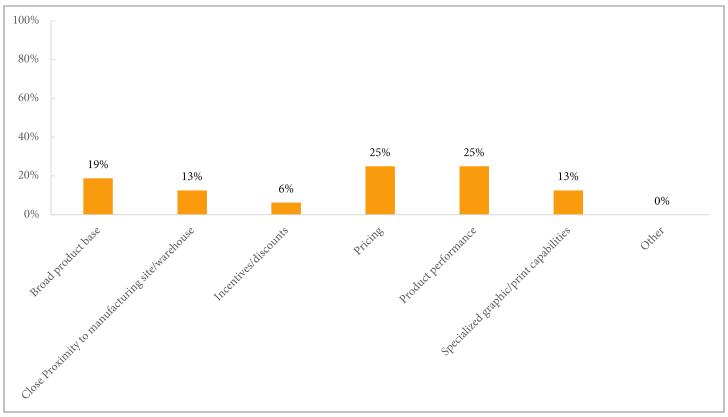


Total Count: 4

Question 8B. If yes, why?

- Constantly changing customer demands outpace our manufacturers offerings.
- Cost Savings, Product Portfolio Consolidation, DEI efforts.
- Lower cost.

Question 9. What criteria do you use to select your foodservice packaging suppliers (select all that apply)?

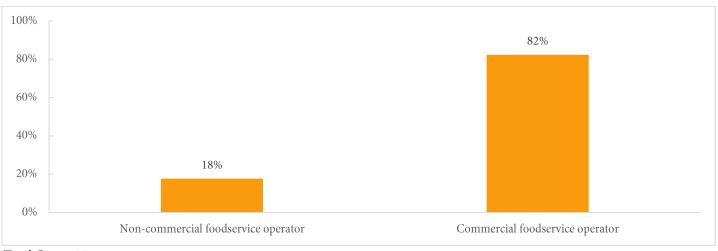


Question 10. What changes would you like to see made to the foodservice packaging you currently sell?

- More flexibility in order size.
- More recycled content and better end of life claims.
- More sustainable.

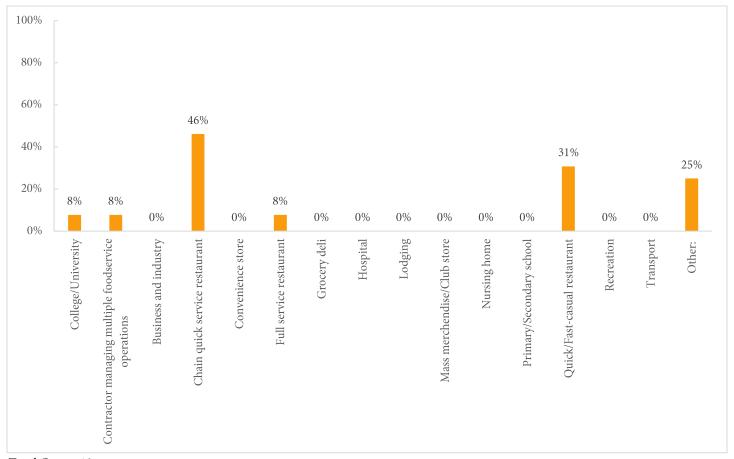
Foodservice Operator Results

Question 1. Do you work for a (select only one):

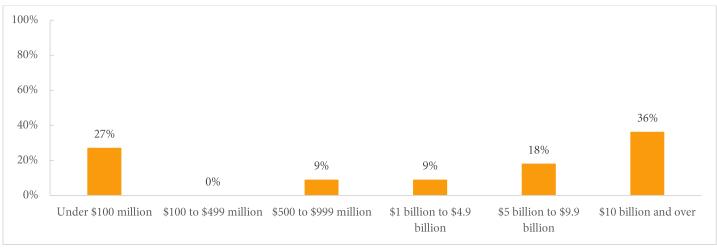


Total Count: 17

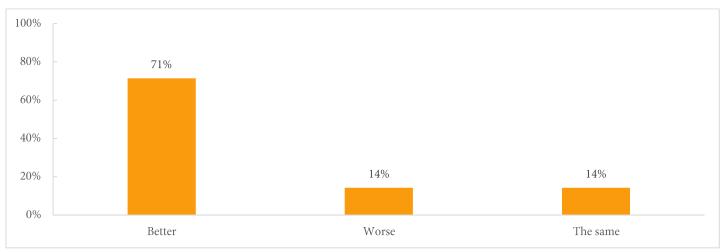
Question 2. Which category best describes your foodservice operation (choose only one):



Question 3. What were your company's North American systemwide foodservice sales in 2022 (in U.S. dollars)?



Question 4. How do you rate 2022 compared to 2021, in terms of foodservice sales?



Total Count: 14

Key Influences:

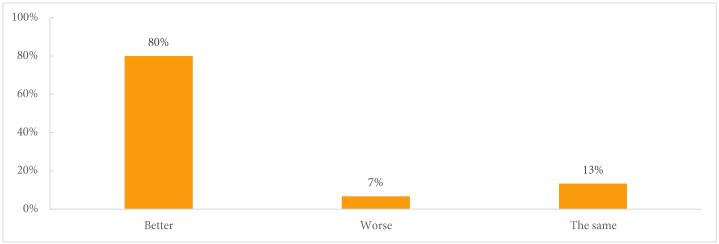
Better...

- Inflationary pressure on food & packaging costs, supply chain constraints, and labor challenges.
- People felt comfortable returning to public spaces.
- Post covid affect [sic].
- Things getting back to "normal".
- We increased 3rd party sales and experienced some franchise growth.

Worse...

- Inflationary pressure on food & packaging costs, supply chain constraints, and labor challenges.
- Ongoing Covid issues--Inflation + low foot traffic.

Question 5. How do you expect 2023 to be compared to 2022, in terms of foodservice sales?



Total Count: 15

Key Influences:

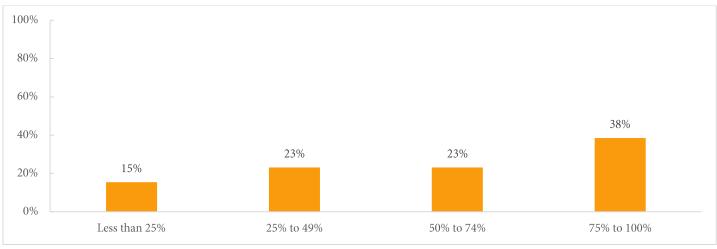
Better...

- Cost of goods is returning to pre-pandemic levels.
- Inflation coming down, better value offers and stabilization of the supply chain.
- Manufacturers have returned to capacity.
- Supply Chain has improved.
- We have a lot of growth planned for 2023 with signed deals on the table.

The same...

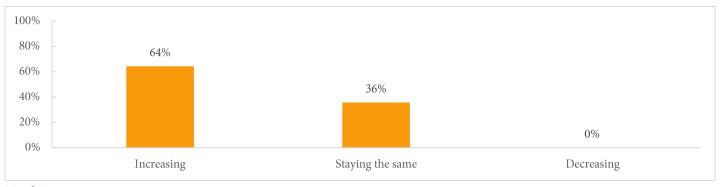
Many units are maxed out.

Question 6A. If known, what percent of your company's foodservice sales are takeout (i.e., drive thru, carryout or delivery)?



Total Count: 13

Question 6B. In 2021, do you foresee your company's takeout sales increasing, decreasing or staying the same?



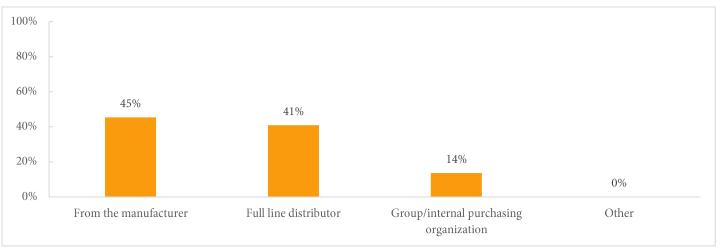
Total Count: 14

Key Influences:

Increasing...

- Consumer preference, ease of use and return to office for white collar workers.
- Growth, new stores intended only for carryout and 3rd party business, adding virtual concepts, and partnering with ghost kitchens.
- Leaning into methods like delivery and other initiatives that will simplify the drive-thru/pick-up options.

Question 7. From where do you purchase your foodservice packaging (select all that apply)?



Question 8A. Does your company plan to change your foodservice packaging suppliers in 2022?

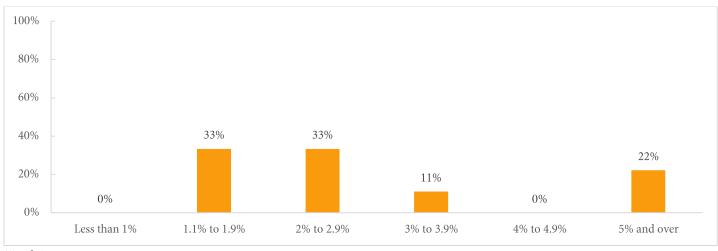


Total Count: 13

Question 8B. If yes, why?

- Keeping up with consumer demands.
- Redundancy, additional supply needed, pricing, supply security.
- Some of these vendors are no longer a good fit for our business and vice versa (especially in the paper/packaging category). We will also be changing to accommodate the packaging legislation in certain areas of the US, and throughout Canada.

Question 9. On average, what is the cost of the foodservice packaging you use, as related to the menu price?



Question 10. Please rank your <u>top three</u> most important characteristics for your foodservice packaging, in order of preference ("1" being the most important).

[Listed in descending order, in terms of cumulative number of mentions and weighting.]

	1	<u>2</u>	<u>3</u>
Cost	4	4	1
Performance	2	1	1
Recyclable	2	2	2
Product availability			
Made with renewable materials			1
Appearance/Presentation			1
Compostable		4	3
Made with recycled content	1	3	2
Reusable by consumer			1
Ease of use for staff	1	1	
Ease of use for consumer			1
Insulation	1		
Microwavable/Ovenable			1
Other	3		

Other:

- Environmental regulations
- Compliant with ban ordinances
- Regulatory overreach and incongruent legislation pathways

Question 11. Please check the appropriate box according to your company's use of the following packaging materials for the time frames listed (i.e., 10 years ago, did you use paper? Do you currently use it? Do you foresee using it in the next 5 years?):

	10 Years Ago	Currently	Next 5 Years
Paper	8	8	8
Coated Paperboard traditional coatings	11	8	3
Coated Paperboard bio-based coatings	2	7	10
Uncoated Paperboard	3	4	5
Pulp/Molded Fiber	4	5	6
Non-tree cellulose (like bagasse)	3	5	8
Paper w. Recycled Content	4	8	6
Rigid Plastic	9	6	4
Foam	7	2	2
Bio-based Plastic	1	5	7
Plastic w. Recycled Content	2	5	5
Aluminum Foil	6	6	5

Question 12A. Do you foresee a switch in the type of packaging material used (i.e., from paper to plastic, or from one type of plastic to another)?



Total Count: 14

Question 12B.

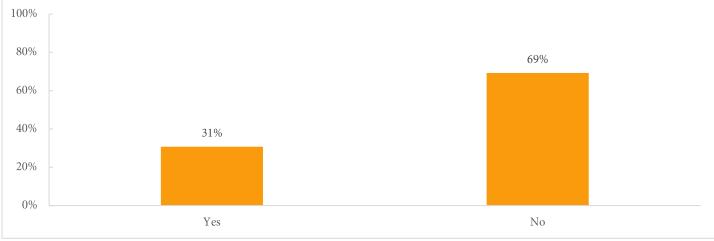
Why yes?

- CA regulatory drivers. AB 1201 and SB54 will narrow the definition of compostables.
- In order to have materials that are more recoverable we will likely have to switch the base material. Especially for items that are difficult to recycle now such as service ware items.
- Moving from plastics to molded fiber.
- Not necessarily for all markets but for some due to sustainability mandates, particularly reusable and compostable/fiber based compostable.
- There is always potential that there may be a switch especially with legislative pressures.
- To meet sustainability goals.

Why no?

- People want what gives them the best food.
- Uniformity is important for chain restaurants. If half of our stores can't use plastic due to single use bans, then none should be using plastics.

Question 13A. Do you foresee a shift from single-use packaging to reusable to-go packaging?



Question 13B.

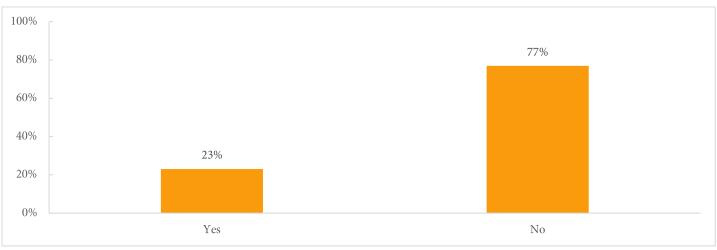
Why yes?

- It seems to the wave of the future. The younger population is used traveling with their reusable water bottles. Why not dinnerware?
- Large trend. Need to prove it out.
- Legislation will likely drive reusable packaging by region.

Why no?

- Cost/Consumer Responsibility.
- Despite the public's intrinsic love of the idea of reuse, it's actually really impractical in most contexts. There are too many performance/functionality, logistics, and actual systemic LCA hurdles for the idea to really work at a wide scale.
- Reusables are too impactful on operations with many additional costs. we wouldn't make the move proactively.
- Sanitation.

Question 14A. Do you foresee a shift from single-use packaging to permanent ware in-store?



Total Count: 13

Question 14B.

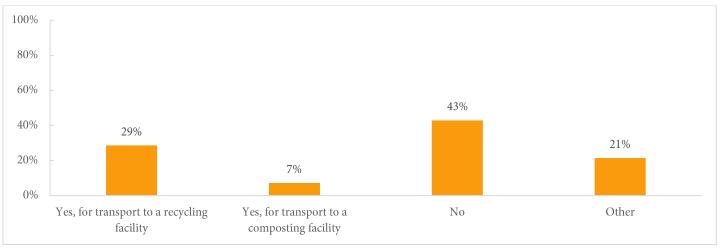
Why yes?

- There are certainly some contexts where fast casual type restaurants could feasibly use in-house serviceware where they currently are not.
- We already use reusable packing in store today.

Why no?

- Convenience, delivery, and to-go orders are only going to increase. stores that don't already offer permanent may have a hard time making the case to do so (dishwashing infrastructure, labor, etc).
- I think we will see this happen where there is a significant portion of dine-in business. However, in the QSR space, dine-in represents such a small portion of overall sales that it doesn't really make sense.
- Most of our operations have the guest walking away with their food item. Recapturing that permanent ware would be difficult at this time.
- Reusables are too impactful on operations with many additional costs. we wouldn't make the move proactively.
- We are already using permanentware in front of house.

Question 15A. In the "front-of-house" area, do you provide bins for customers to separate their waste, i.e., source separate items for recycling or composting (select all that apply)?

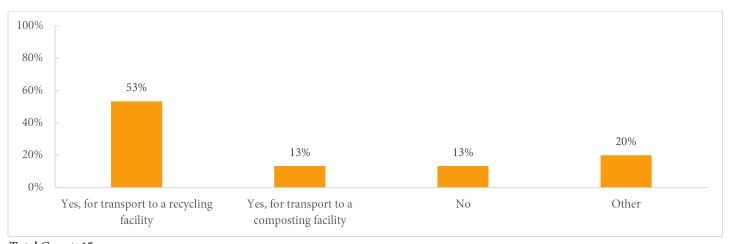


Total Count: 14

Other:

- Depends on store location and owner.
- In some locations but not all.
- In some of our locations we do separate for recycling and composting but that is a small percentage.

Question 15B. In the "back-of-house" area, do you separate your waste, i.e., source separate items for recycling or composting (select all that apply)?



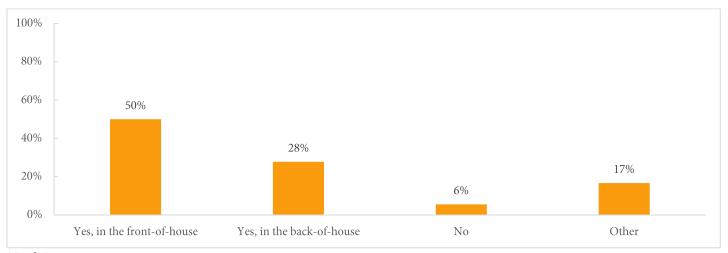
Total Count: 15

Other:

Depends on store location and owner.

- In some locations we do separate back of the house, but that is a small percentage.
- Varies by location.

Question 15C. Do you expect to offer these options in the next five years (select all that apply)?



Total Count: 18

Other:

- If the infrastructure exists for removal and disposal, we would love to recycle and compost.
- Maybe, but this will also depend on store location and/or owner.
- Varies by location.

Question 16. What changes would you like to see made to the foodservice packaging you currently use?

- Additional recycled content for paper & plastic materials. Acceptance of foodservice paperboard & plastic into more recovery streams.
- Better tamper evident and heat retention.
- Better understanding of how sustainable the product really is.
- I'd like to see more innovation instead of recreating the same wheel. I'd like to see new companies/substrates coming to the industry bring new solutions not just straws and cutlery.
- More affordable.
- More backyard compostable and broadly recyclable substrates to make disposal easier for guests.