

Cold Chain Strategic Initiatives

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SUPPLY CHAIN PROFITABILITY

Energy Excellence Recognition Program





- Energy Champion/Team
- Energy Waste Walks
- Site-Specific Energy KPI Goals
- Energy Efficiency Action Plans
- Energy Monitoring Activities

COMPLETE YOUR ENERGY MANAGEMENT ASSESSMENT

The Energy Management Assessment (EMA) Tool offers a strategic and confidential analysis of your organization's current energy management business practices and specific areas of opportunity. The EMA Assessment and other SEM Hub resources can then help you develop or improve your Strategic Energy Management (SEM) practices for your organization.

TAKING THIS ASSESSMENT WILL HELP YOU:

- ✓ Review your current energy practices
- ✓ Identify priority actions for improvement
- ✓ Implement an energy management program
- ✓ Compare your practices against your peers

[Review the quick start guide →](#) | [Take a sample assessment →](#)

Session Dashboard

Find and edit current or past session reports from your session dashboard.

[Go to Dashboard](#)

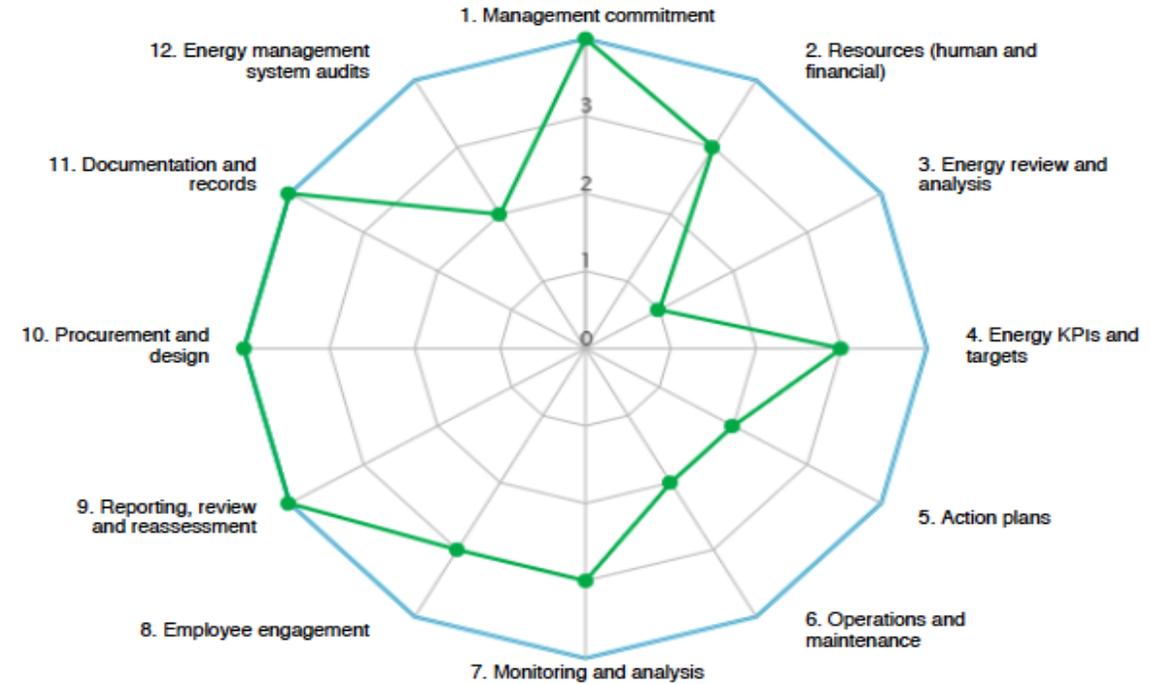
RECOMMENDATIONS FOR YOUR BUSINESS

The following recommendations are provided based on the results of your self-assessment. The recommendations are prioritized based on your responses provided in the self-assessment, your level of development in each of the 12 components and the assessment prioritization factors for each component.

	By When	By Whom
<p>Energy review and analysis</p> <p>Conduct a review of your energy using equipment and energy bills to identify savings opportunities.</p> <p>More info: https://semhub.com/resources/browse?query=audit</p>		
<p>Action plans</p> <p>Prepare an energy improvement plan(s) for the current year for reducing energy use and organizational activities. Incorporate clear timeframes and responsibilities for each project and activity.</p> <p>More info: https://semhub.com/resources/browse?query=Energy+project</p>		
<p>Operations and maintenance</p> <p>Review and revise your standard operating procedures to include specific actions to reduce energy waste to ensure persistence of energy savings.</p> <p>More info: https://semhub.com/resources/browse?query=operations+maintenance</p>		



YOUR SELF-ASSESSMENT RESULTS



Component	Description
1. Management commitment	Executive involvement in promoting and deploying energy management
2. Resources (human and financial)	Resources required for with energy management, including as budgets, energy leaders, energy teams
3. Energy review and analysis	Regular assessment of energy consuming activities and waste
4. Energy KPIs and targets	Strategically relevant metrics of energy consumption and waste
5. Action plans	Specific plans related to energy management
6. Operations and maintenance	Ongoing attention to energy during regular business operations
7. Monitoring and analysis	Monitoring of energy consumption at the appropriate level and the continuing analysis of data
8. Employee engagement	Employees involvement in energy consumption and savings
9. Reporting, review and reassessment	Information flow and periodic adjustments in response to changes
10. Procurement and design	Including energy in purchasing and design of equipment and supplies
11. Documentation and records	Documentation of operational processes and the management system
12. Energy management system audits	Periodic assessment of the entire management system for energy

Congratulations!!!

Best in Class. Outstanding!!!

You have rated your business at the Best in Class level (6) for the following components:

Management commitment
Documentation and records

6

Refrigeration System

Refrigeration System Type

Refrigeration System Set Points

Blast Freezers

Conventional Freezers

Refrigerated/Chilled

Ammonia Single Stage Screw

Ammonia Two Stage

Low Charge Ammonia

CO2 Refrigerant

Freon Air Cooled

Freon Water Cooled

Other / Unknown

7

Door Automation

Door Automation by Space

Blast Freezers

Conventional Freezers

Refrigerated/Chilled

8

Facility Lighting

Facility Lighting Type by Space

Blast Freezers

Conventional Freezers

Refrigerated/Chilled

Non-Conditioned Storage (Ambient)

Office/Support

LED

T5

T5HO

T8

T12

Mercury Vapor

Metal Halide

High Pressure Sodium

Other

9

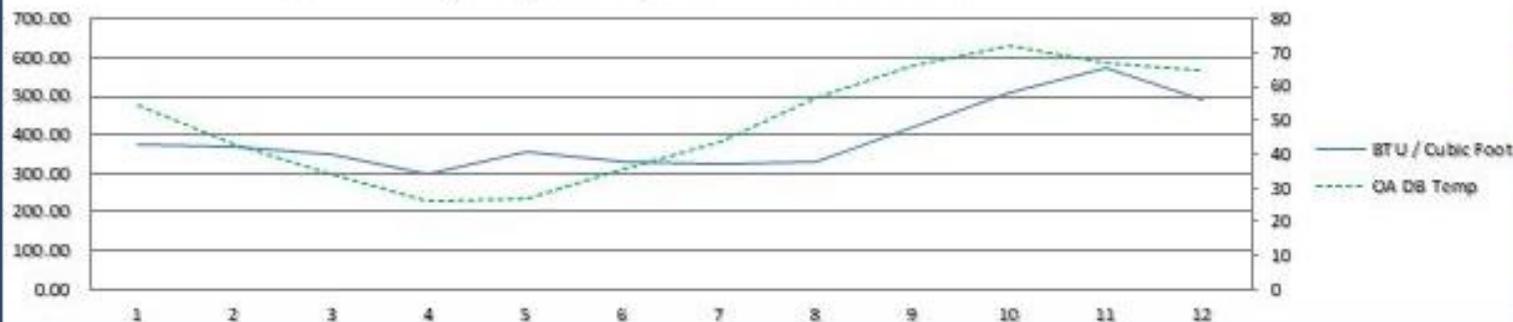
Building Envelope R-values

Building Wall R-value

Building Roof R-value

Corelation Graphics - Comparing Energy Use to Dry Bulb, Wet Bulb and Throughput

ENERGY USE (compared to) OA DRY BULB TEMP

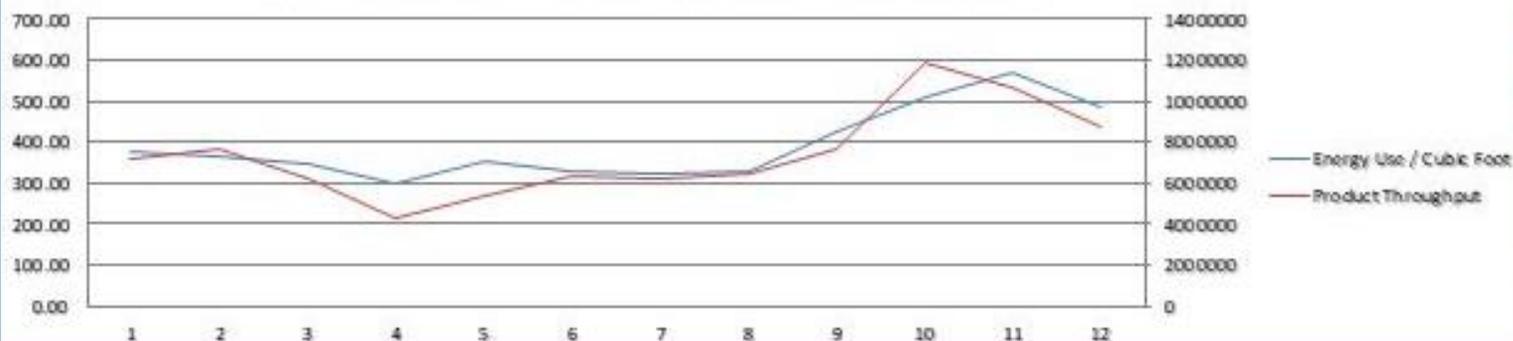


Corelation Factors Year 1,2,3

●	0.795
●	0.804
●	0.767

Green indicates weather may directly effect energy use; building envelope and insulation may warrant further review.

ENERGY USE (compared to) PRODUCT THROUGHPUT

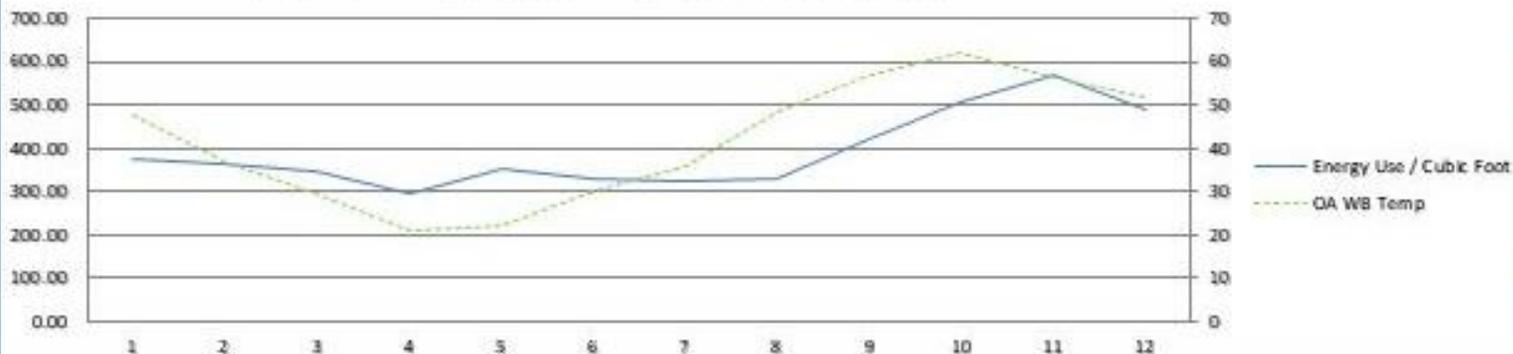


Corelation Factors Year 1,2,3

●	0.913
●	0.847
●	0.596

Green indicates product throughput greatly effects energy usage and may warrant review of doors and door controls.

ENERGY USE (compared to) OA WET BULB TEMP

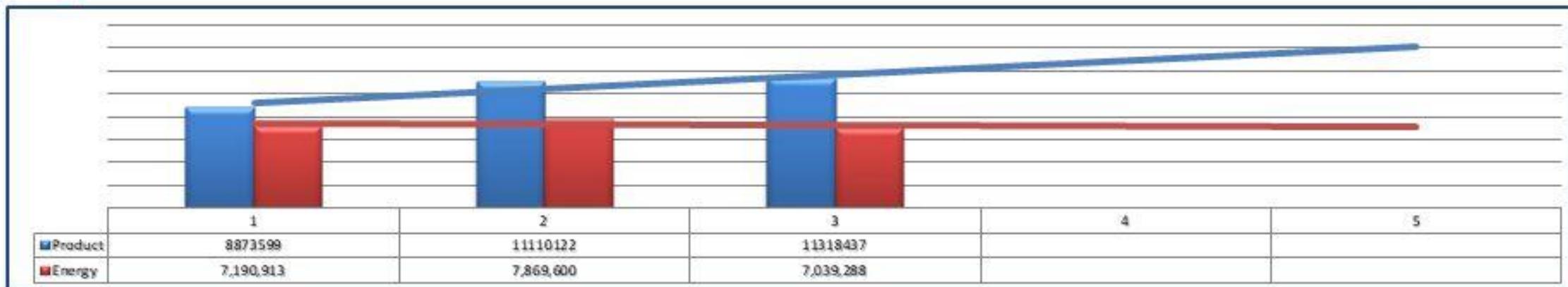


Corelation Factors Year 1,2,3

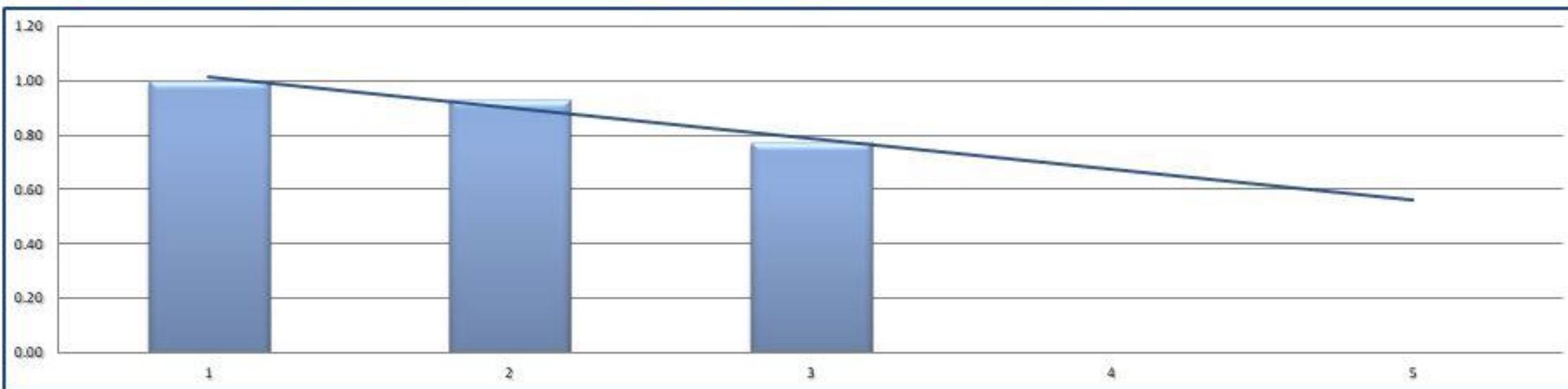
●	0.774
●	0.782
●	0.836

If green, and greater than dry bulb correlation in previous column then refrigeration system may warrant review.

Total Annual Energy Use and Product Throughput (snapshot of annual facility data)



Annual Energy Use Per Product Throughput (Energy / Pounds Product)



Quarterly Reports - Comparison of Current Quarter to Average of First Year

Quarter	Product Throughput	Total Energy Consumed	Energy Per Throughput	Average Energy per Throughput Improvement
Q1 Y1				6%
Q2 Y1				-19%
Q3 Y1				1%
Q4 Y1				3%
Q1 Y2				11%
Q2 Y2				3%
Q3 Y2				-27%
Q4 Y2				24%
Q1 Y3				18%
Q2 Y3				31%
Q3 Y3				15%
Q4 Y3				14%

Gold Level Qualification (Energy Savings vs Throughput)

Facility Savings - Energy Per Throughput - 10% Reduction Target	
Year 1 to Year 2	 7%
Year 1 to Year 3	 23%
Year 1 to Year 4	(Data Not Provided)
Year 1 to Year 5	(Data Not Provided)
	(indicates 0% savings)
	(indicates 0-9% savings)
	(indicates 10%+ savings)

WWW.GCCA.ORG/ENERGYEXCELLENCE



**Now
accepting
applications!**

GROW THE INDUSTRY



COLD CHAIN CUSTOMER RESEARCH REPORT

About the Research

GCCA embarked on a three-prong research strategy to learn about the perceptions from food companies of the cold chain, and how cold chain providers can improve their services and relationships with these partners.

GCCA's research approach included both qualitative and quantitative research:

- 2016: One focus group at the 2016 Global Cold Chain Expo primarily involving processors who were customers of GCCA members.
- 2017: One focus group at the 2017 Global Cold Chain Expo with retailers, representing varied and distinct national and regional grocery retailers' operations, markets and target consumers.

• A comprehensive market research survey sent to customers of GCCA members, which primarily included food manufacturers and processors and refrigerated/frozen distribution customers. For this report, we will refer to any company related to refrigerated or frozen food storage, distribution, etc. (anyone who responded to the survey) as food companies. Respondents were asked to only consider their primary cold chain provider (no transportation or ambient included).

The report below encompasses a holistic view of the research conducted over the last 18 months, including both qualitative and quantitative. Of the 270 quantitative responses, 202 were considered complete and included in the final analysis.

For this report, any group within the category of refrigerated and/or frozen 3PLs, warehouse providers and/or cold chain partners are referred to as 'cold chain providers.'

GCCA SURVEY BY THE NUMBERS

202 COMPLETED RESPONSES

14 COUNTRIES REPRESENTED

United States 69%
South Africa 19%
Canada 5%

- 56.9% Food manufacturers or processors (refrigerated and frozen)
- 29% In refrigeration and/or frozen distribution (to include broad line food service distributors, traders such as importers and exporters, specialty food distributors)

- 67% Directors/Managers with supply chain logistics functions
- 10% C-Suite Executives
- 9% Owners/CEO

*Respondents self-selected their identifying information, such as role in company and type of company.

COLD CHAIN CUSTOMER RESEARCH REPORT | 9

"Small players may not have the resources... but the smaller ones, sometimes you're just talking to the owner, so you got the ears of the right person."

—Processor

Satisfied with their Primary Cold Chain Provider

Figure 3 | Overall Satisfaction with the Primary Cold Chain Provider

- Overall:
- 30% Extremely Satisfied
 - 43.57% Somewhat Satisfied
 - 7.86% Neither Satisfied nor Dissatisfied
 - 13.57% Somewhat Dissatisfied
 - 5% Extremely Dissatisfied



Extremely Satisfied:
56.63% of companies Greater than \$100,000,000 are Extremely Satisfied
40% of companies \$50,000,000 to \$100,000,000 are Extremely Satisfied
25.41% of companies \$10,000,000 to \$50,000,000 are Extremely Satisfied
39% of companies Less than \$10,000,000 are Extremely Satisfied

COLD CHAIN CUSTOMER RESEARCH REPORT | 11

Indicators: Reporting Needs a Conversation

Figure 11 | KPIs, Ranked

KPI	Score
Shipping Accuracy	151
Warehouse Cost per Unit	138
On-Time Delivery/ On Time Shipment	127
Inventory/Cycle Count Accuracy	117
Out-bound Turn Times	75
In-bound Turn Times	72
Recent Warehouse Audit Score (AE, BEC, SOP, Siliars, etc)	70
Warehouse Shrinkage (adjustments)	65
Case Pick Percentage	56

For food processors, they want consistency and standardization. And many feel that cold chain providers have customized KPIs to individual requests making industry-wide comparisons and standards difficult if not impossible. Customers want to be able to measure across the cold chain, not attempt to compare KPIs that are named the same thing but contain different data points. Understanding that customers want and need a more uniform approach to KPIs across the industry will allow providers to address customer needs.

*For figures 12-13, respondents were asked to identify all KPIs their company is interested in when evaluating logistical operations. The numbers represented in these figures show how many times that KPI was selected by the noted respondent type.

When looking at what key performance indicators companies are interested in broken down by demographics, there were three notable outcomes.

1. Companies with an annual revenue greater than \$100,000,000 saw "Warehouse Cost Per Unit" drop to #4 compared to #1 in overall reporting.
2. When looking at company type or function, those in refrigerated or frozen distribution saw "Warehouse Cost Per Unit" drop to last place (#9).
3. There was no differentiation noted when broken down by respondent title.

"I think the industry could use some standardization, frankly, in terms of their reporting back to their clients or retailers. So, with some consistency there, I think that to me, represents a big step that can be made."

—Retailer



Results and findings of GCCA's research into food companies' perceptions of the cold chain, and how cold chain providers can improve their services and relationships with these partners.

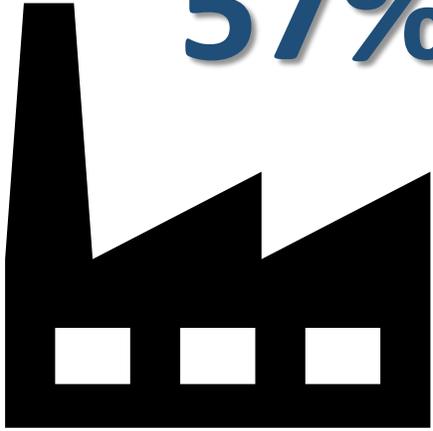


Smart & Final. *Wegmans* *Kwik Trip* *Walgreens*



Respondent Company Function

57%



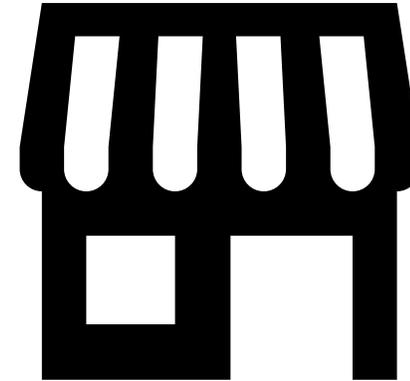
*Food
Manufacturers/Processors*

29%



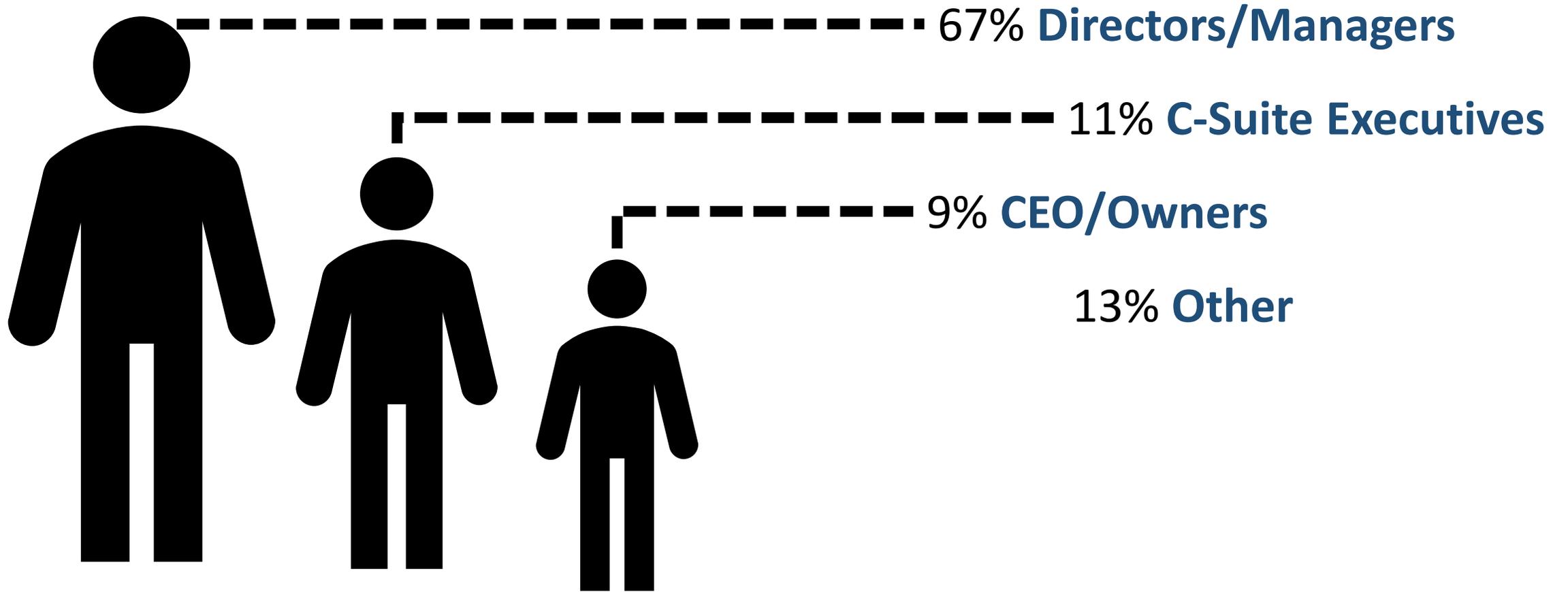
*Refrigerated/Frozen
Distribution*

14%



*Agriculture production,
Retail, HRI*

Respondent Position



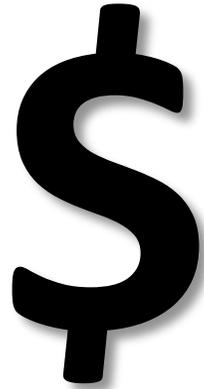
Respondent Company Revenue

\$100,000,000 or
Greater



55%

100,000,000 –
50,000,000



\$50,000,000 -
\$10,000,000



20%

Less than
\$10,000,000



Customer Headquarters



69%



13%



5%

Needs & Wants in a Cold Chain Provider

Space Locally Decrease Labor Rate

Location **Interactive Website**

Communication **More Storage Capacity**

Accuracy and Reliability

Nothing/Satisfied Customer Service

Transparency **Robotics Reporting**

Help with Future E-Commerce

Privacy **Cost** Strategic Partnership

Chilled Capability Proximity to Supply

KPIs Ranked

1. Shipping Accuracy
2. Warehouse Cost per Unit
3. On-Time Delivery/On-Time Shipment
4. Inventory/Cycle Count Accuracy
5. Out-bound Turn Times
6. In-bound Turn Times
7. Recent Warehouse Audit Score (AID, BRC, SQF, etc.)
8. Warehouse Shrinkage (adjustments)
9. Case Pick Percentage



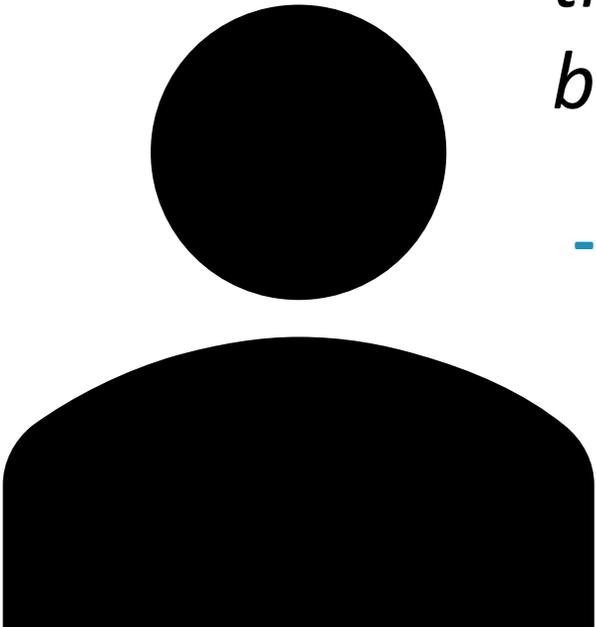


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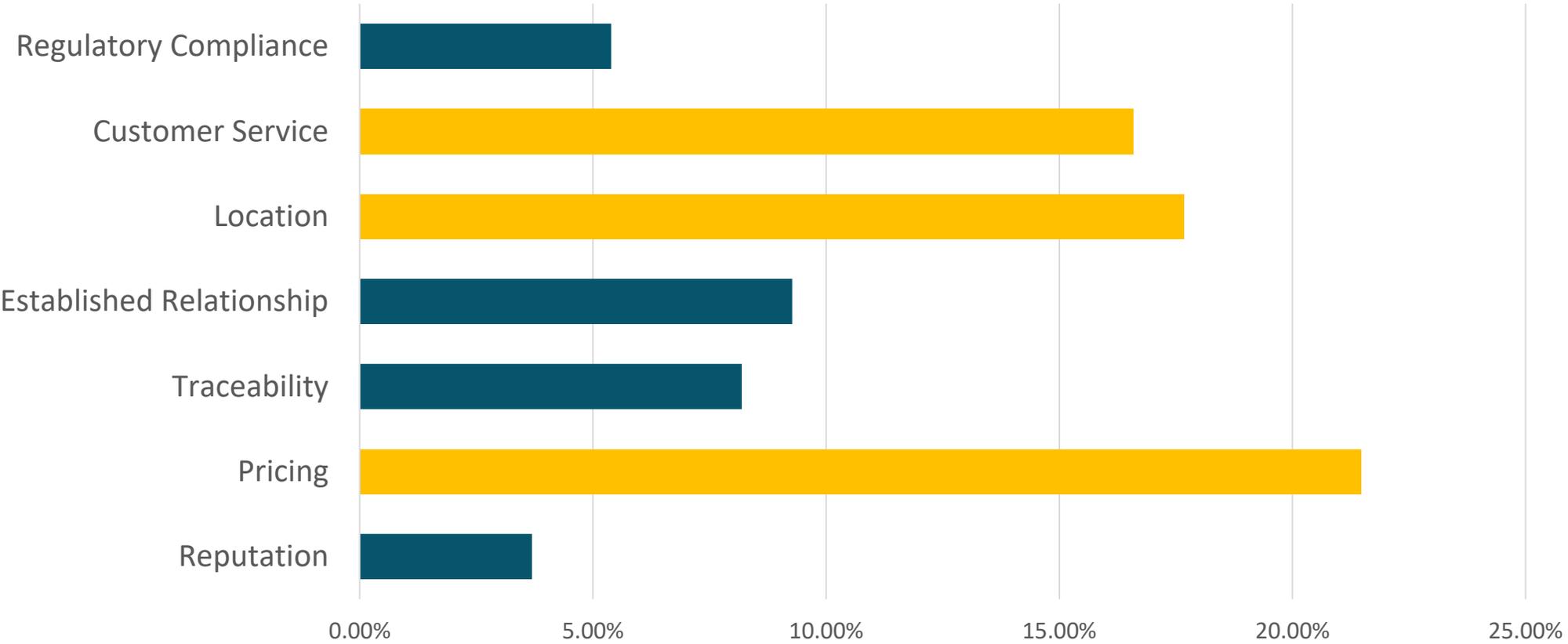
I think the industry could use some standardization, frankly, in terms of their reporting back to their clients or retailers. So, With some consistency there, I think that to me, represents a big step that can be made.

- 2017 Retailer Focus Group

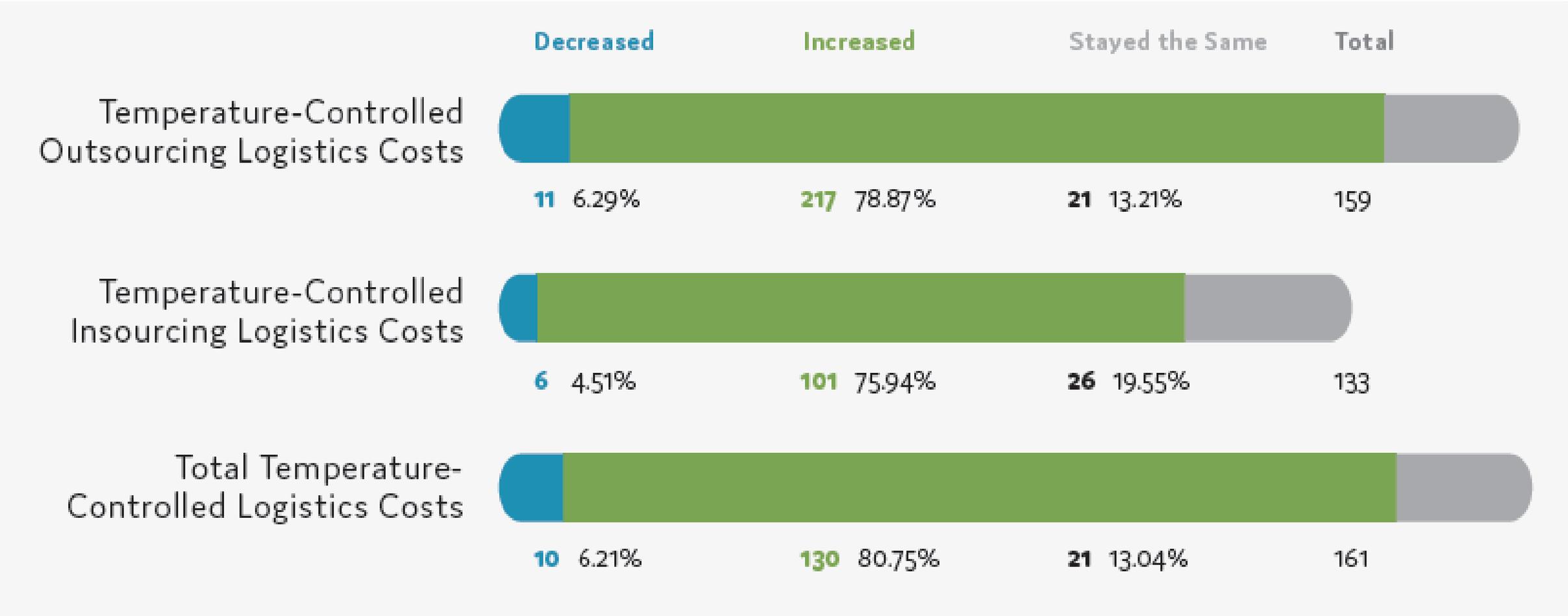
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Factors in selecting a 3PL partner



Temperature-Controlled Logistics Costs in the Last 24 Months



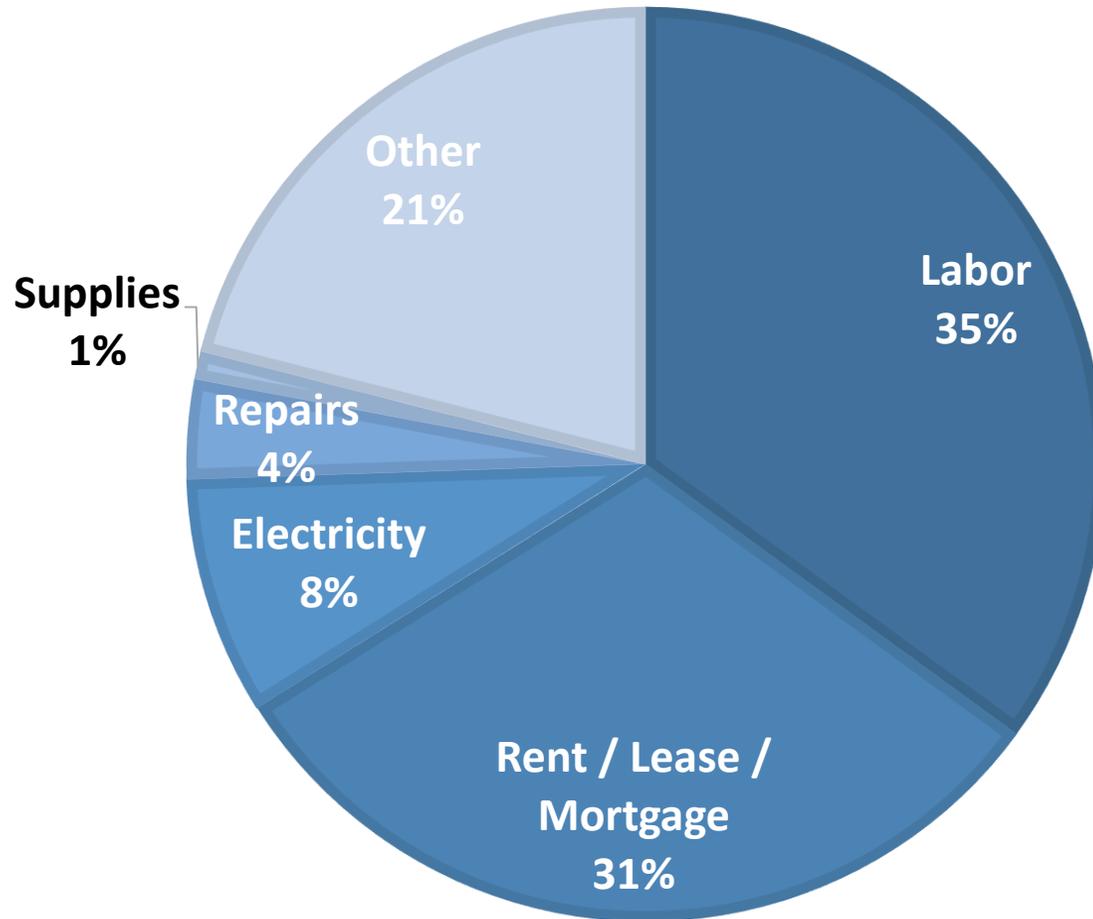
Warehouse Cost Per Unit Discrepancies

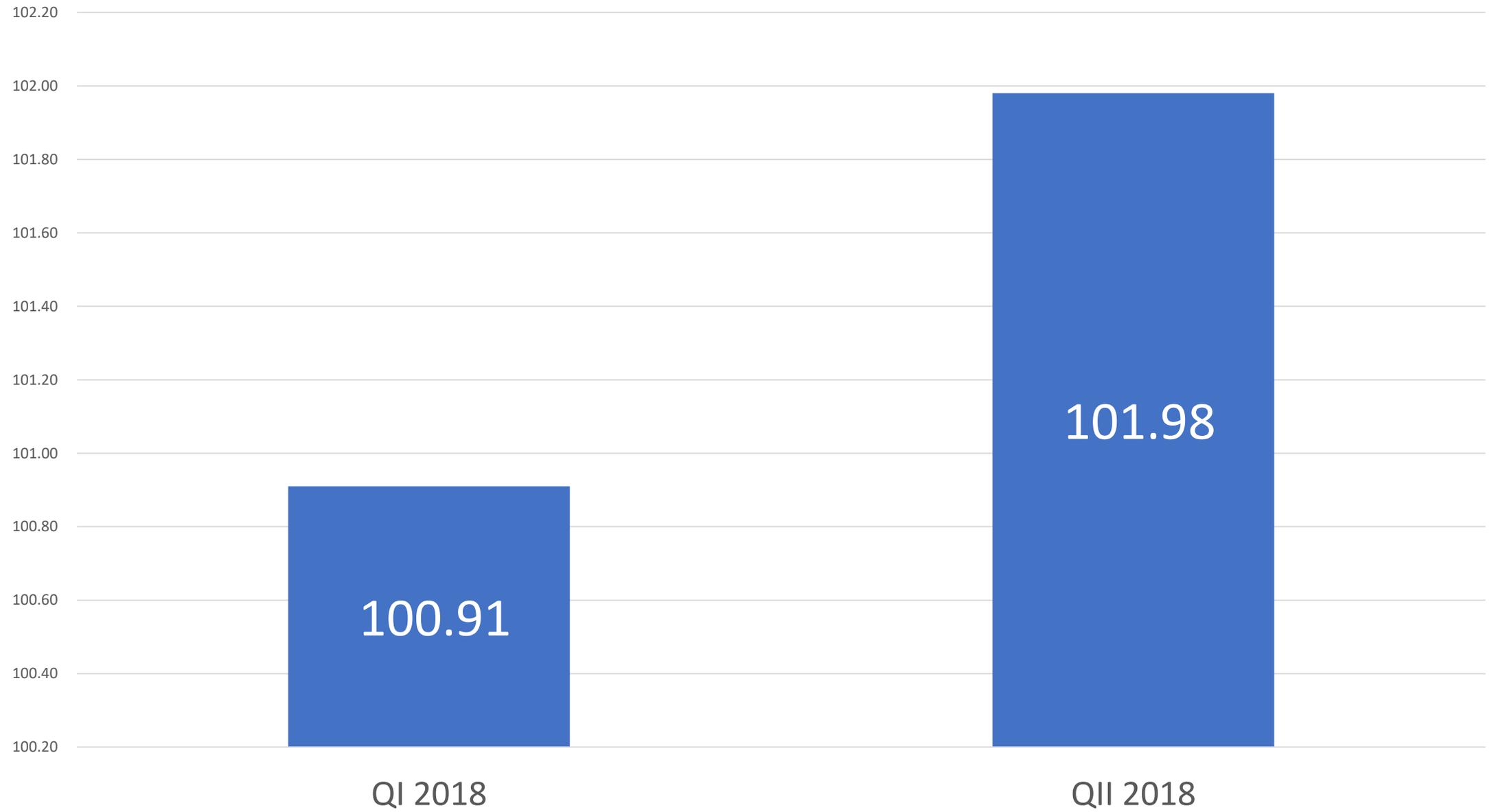
Companies with an *annual revenue greater than \$100,000,000* saw 'Warehouse Cost Per Unit' drop to #4 compared to #1 in overall reporting.

When looking at company type or function, those in *refrigerated or frozen distribution* saw "Warehouse Cost Per Unit" drop to last place (#9).

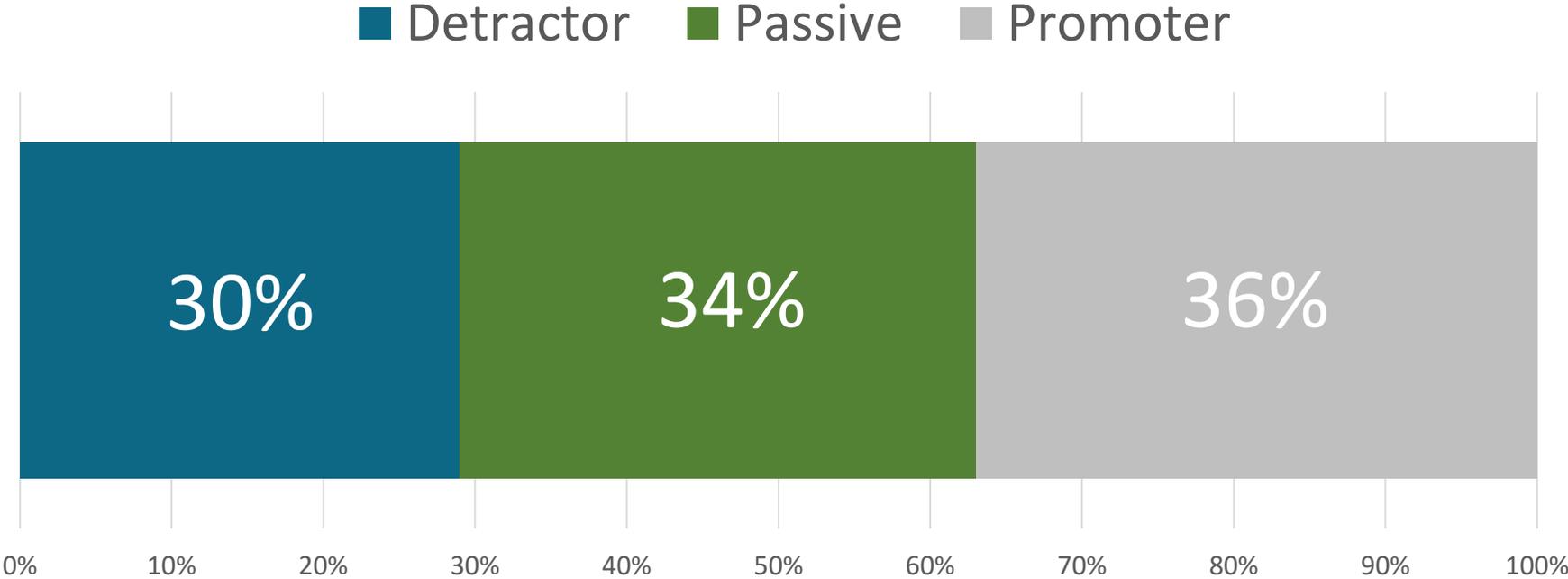


Cost Shares are derived from most recent GCCA Productivity & Benchmarking program





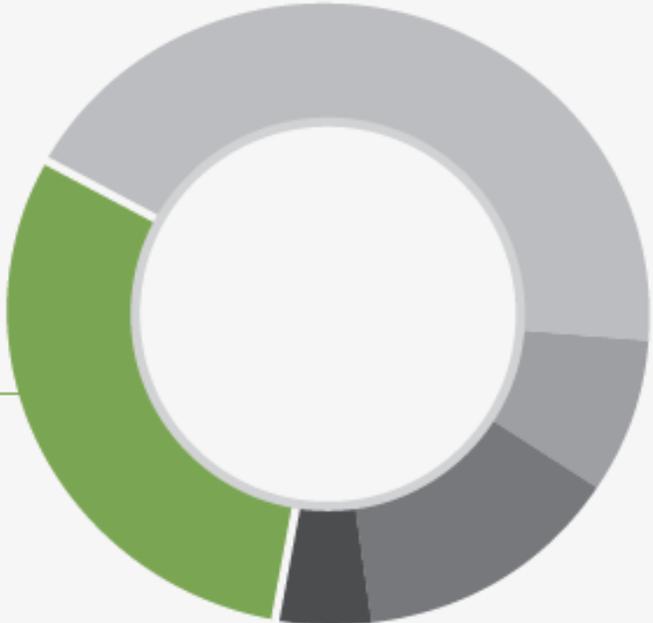
How likely are customers to promote the use of temperature-controlled 3PL services?



“Overall satisfaction with your primary cold chain provider.”

Overall:

- 30% Extremely Satisfied
- 43.57% Somewhat Satisfied
- 7.86% Neither Satisfied nor Dissatisfied
- 13.57% Somewhat Dissatisfied
- 5% Extremely Dissatisfied

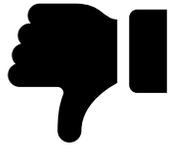


Extremely Satisfied:

- 56.63% of companies Greater than \$100,000,000 are Extremely Satisfied
- 40% of companies \$50,000,000 to \$100,000,000 are Extremely Satisfied
- 29.41% of companies \$10,000,000 to \$50,000,000 are Extremely Satisfied
- 50% of companies Less than \$10,000,000 are Extremely Satisfied

Net Promoter Score

In the NPS range of -100 to 100+, anything above 0 is considered "good", while anything above 50+ is "excellent."



-100

3.6



+100



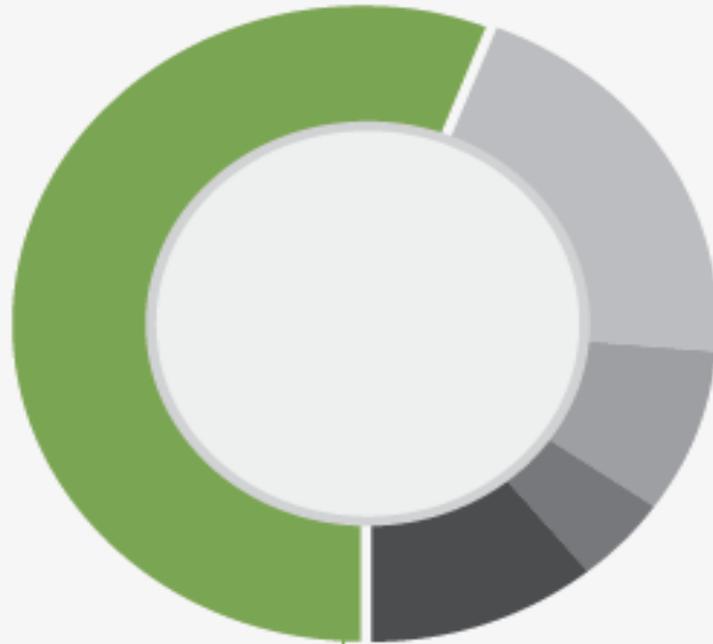
Most common reasons for ceasing work with a 3PL



Business trends in the next 5 years



My cold chain provider plays an important role in my company's food safety.



Overall:

- 56.06% Strongly Agree
- 20.45% Somewhat Agree
- 8.33% Neither Agree nor Disagree
- 4.55% Somewhat Disagree
- 10.61% Strongly Disagree

Strongly Agree:

- 63.22% of Directors/Managers of Supply Chain Operations Strongly Agree
- 50% of C-Suite Executives/Vice Presidents/Senior Executives Strongly Agree
- 41.67% of CEOs/Owners Strongly Agree
- 41.18% of Others Strongly Agree

Cold chain 3PL providers are experts in temperature and supply chain management. They partner with fresh/frozen food companies and retailers to provide distribution, warehousing and value-added services that enable these companies to:



Protect and enhance the brand

+

Thank You!

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