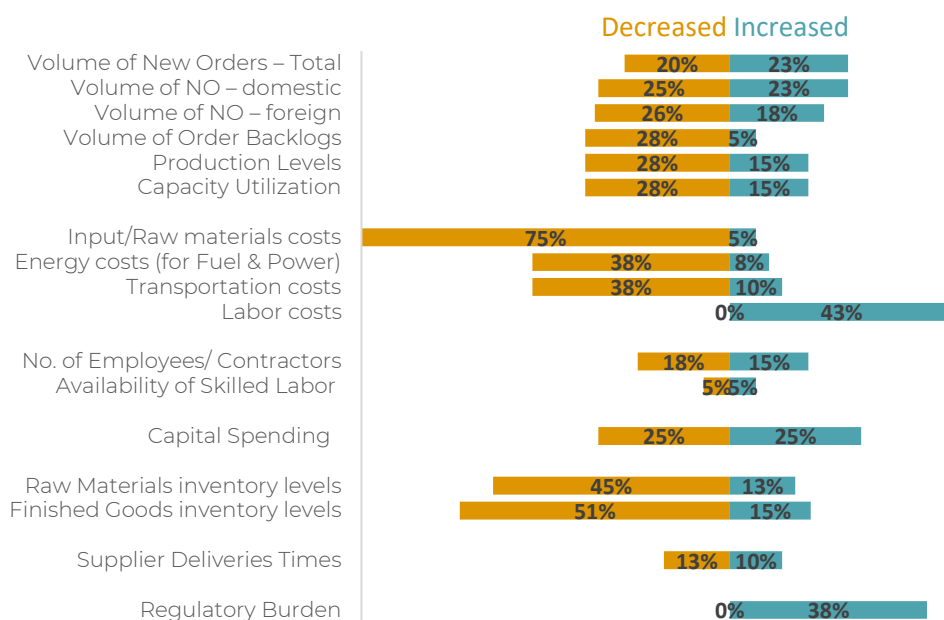


American Chemistry Council Chemical Manufacturing Economic Sentiment Index

Economic Sentiment Index (ESI) Survey responses were collected from July 10 to July 26.

Summary: Chemical manufacturers' assessment of their own company's activity level (e.g., sales, production, output) deteriorated over the second quarter, according to findings from ACC's Chemical Manufacturing Economic Sentiment Index (ESI). New orders growth flattened out and production and capacity utilization fell. Manufacturers' volume of order backlogs continued to decline. Inventory destocking accelerated with declines in inventories of finished goods and raw materials. Labor costs continued to rise while production costs related to inputs/raw materials, energy (for fuel and power), and transportation eased. The level of regulatory burden (i.e., compliance and opportunity costs) is growing and expected to build further over the coming six months. Capital spending is on pause. The number of chemical industry jobs declined by a small margin. Availability of skilled labor was about the same. Chemical manufacturers' assessment of demand from major customer markets deteriorated further and their sentiment on the state of economic conditions in the U.S. and globally has been largely pessimistic this year. Further weakening in economic conditions is expected in the coming six months.

Chemical Manufacturers Assessment of their US Business, Q2 2023 vs Q1 2023



U.S. chemical production declined during Q2. The ESI reading for production levels turned negative, falling 23.0 points to -12.5, as the share of companies reporting declines exceeded the share reporting gains. While 58% of companies reported production levels were about the same in Q2, 28% saw declines and 15% reported gains. Looking ahead, companies expect production to return to growth but at a slower pace than previously anticipated.

Growth in **new orders** for U.S. chemicals slowed over Q2 allowing producers to continue working down the volume of order backlogs. The new orders index declined from 10.8 in Q1 to 2.5 in Q2. Producers report weakened demand from both domestic and export customers. The index for volume of new orders in the coming six months fell 44.1 points to 10.0, indicating chemical companies' sentiment remains optimistic though increasingly cautious. The **volume of order backlogs** index continued to decline through the second quarter but is expected to stabilize over the coming six months.

The Q2 ESI readings for change in **inventory levels** were negative suggesting continued destocking in the chemical industry. The raw materials inventory levels index fell 24.6 points to -32.5 in Q2 as 45% of companies reported declines and 13% reported increases. The index for finished goods inventories turned negative in Q2, dropping 54.3 points to -35.9. Chemical companies expect destocking to continue through H2. A key metric for supply chain and inventory management, the **supplier delivery times** index was negative in Q1 and Q2, suggesting supply chain pressures continue to ease.

Production costs related to input/raw materials, energy (for fuel and power), and transportation have declined steadily over Q1 and Q2. Labor costs, however, continued to escalate. Input and raw materials costs are expected to continue easing over H2, while the readings for other production costs suggest stabilization over the coming six months.

Chemical industry employment levels were about the same in Q1 but the index moved into negative territory in Q2 suggesting a small decline. While most chemical producers anticipate maintaining their current employment levels through the second half of the year, the overall index reading fell further

from -2.5 in Q2 to -12.5 in H2 as the percent of companies anticipating workforce reduction in H2 exceeded the percent planning to expand. For the most part, **skilled labor availability** issues have neither worsened nor improved this year.

Following a pullback in Q1, at 0.0, the index for chemical manufacturers' **capital spending** was flat in Q2 and are expected to hold there through the remainder of 2023 have dissipated as well. Manufacturers are facing a growing **level of regulatory burden** (i.e., compliance and opportunity costs). The Q2 reading for regulatory burden was 37.5 and rises further to 40.0 through H2.

Sentiment among chemical manufacturers deteriorated in the second quarter as their assessment of their company's activity level remained negative, moving from -13.2 in Q1 to -20.0 in Q2. Chemical manufacturers report deterioration in economic conditions in the U.S. and globally and they continue to face weakening demand from their major customer markets. Though the index for their assessment of their own company's activity levels is improved for H2, chemical manufacturers are planning for a challenging environment. The outlook index for the state of economic conditions in the U.S. fell 4.2 points to -15.0, the index for the global economic conditions fell 17.5 points to -17.5. Chemical manufacturers had been expecting improvements in demand last time ACC surveyed, however, their outlook has softened and they are now planning for demand to remain weak through the rest of 2023.

Indicator	Current Assessment (Q2 vs Q1 2023)			Index:		Short-term Outlook (6 months from Q2 2023)			Index:	
	Decreased	About the Same	Increased	Q2	Q1	Decrease	About the Same	Increase	Q2	Q1
Volume of New Orders – total orders	20%	58%	23%	2.5	10.8	20%	50%	30%	10.0	54.1
Volume of New Orders – domestic	25%	53%	23%	-2.5	8.1	15%	58%	28%	12.5	51.4
Volume of New Orders – foreign	26%	56%	18%	-7.7	0.0	18%	55%	28%	10.0	40.5
Volume of Order Backlogs	28%	68%	5%	-22.5	-25.0	15%	70%	15%	0.0	2.8
Production Levels	28%	58%	15%	-12.5	10.5	18%	55%	28%	10.0	44.4
Capacity Utilization	28%	58%	15%	-12.5	13.2	15%	56%	28%	12.8	41.7
Input/Raw materials costs	75%	20%	5%	-70.0	-55.3	28%	68%	5%	-22.5	-13.5
Energy costs (for Fuel & Power)	38%	55%	8%	-30.0	-44.7	8%	80%	13%	5.0	8.1
Transportation costs	38%	53%	10%	-27.5	-21.1	8%	83%	10%	2.5	8.3
Labor costs	0%	58%	43%	42.5	71.1	5%	80%	15%	10.0	54.3
Number of Employees/Contractors	18%	68%	15%	-2.5	2.6	20%	73%	8%	-12.5	8.1
Availability of Skilled Labor	5%	90%	5%	0.0	0.0	8%	88%	5%	-2.5	13.5
Capital Spending	25%	50%	25%	0.0	-26.3	23%	55%	23%	0.0	35.1
Raw Materials inventory levels	45%	43%	13%	-32.5	-7.9	35%	65%	0%	-35.0	-16.2
Finished Goods inventory levels	51%	33%	15%	-35.9	18.4	45%	43%	13%	-32.5	-5.4
Supplier Deliveries Times	13%	78%	10%	-2.5	-13.2	15%	75%	10%	-5.0	-5.4
Level of Regulatory Burden (i.e., compliance and opportunity costs)	0%	63%	38%	37.5	NA	0%	60%	40%	40.0	NA

		Current Assessment (Q2 vs Q1 2023)			Index:		Short-term Outlook (6 months from Q2 2023)			Index:	
		Deteriorated	About the Same	Improved	Q2	Q1	Deteriorate	About the Same	Improve	Q2	Q1
Economic Conditions:	What's your assessment of the state of economic conditions in the U.S.?	38%	53%	10%	-27.5	-42.1	28%	60%	13%	-15.0	-10.8
	What's your assessment of the state of economic conditions globally?	53%	48%	0%	-52.5	-36.8	28%	63%	10%	-17.5	0.0
Company Activity Level:	What's your assessment of your company's activity level overall (e.g., sales, production, output)?	28%	65%	8%	-20.0	-13.2	20%	50%	30%	10.0	32.4
Customer Market Demand:	What's your assessment of demand from your company's major customer markets overall?	48%	48%	5%	-42.5	-26.3	20%	60%	20%	0.0	18.9

ACC conducts a voluntary online quarterly survey of over 100 diversified chemical manufacturers with operations in the United States. Chemical manufacturers consider key business indicators and how those indicators changed for their company in the current quarter (compared to the prior quarter) as well as how they expect the indicators to have changed six months from the current quarter. Categorical responses are aggregated, and a diffusion index is calculated by subtracting the percentage of respondents indicating "decreased" or "deteriorated" from the percentage indicating "increased" or "improved". Measured at a base value of 0, an index reading above 0 means that the indicator has generally increased. A reading below 0 means that the indicator has generally decreased over the reference period. Contact Emily Sanchez, Director, Economics & Data Analytics (emily_sanchez@americanchemistry.com) with questions about this survey and the survey findings.

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