



United States Country Commodity Report

Q2 2023



United States

Q2 2023

The economic landscape has taken a positive turn as Q2 2023 GDP figures surpassed expectations, pointing toward an economic recovery. Encouraging signals of inflation cooling down have emerged, adding to the optimistic outlook. While prices for a few commodities are stabilizing, prices for materials such as cement and concrete, which experienced high input costs last year, remain inflated. Lead times for some materials are showing signs of stabilization, although they have not yet returned to pre-COVID levels.

There is cause for cautious optimism in the construction industry. Although the Commercial sector is facing headwinds, robust growth is expected in the infrastructure and manufacturing sectors, supported by policies including the Infrastructure Investment and Jobs Act, the CHIPS And Science Act, and the Inflation Reduction Act. The non-residential domain, especially manufacturing, has flourished, doubling since late 2021. The Data Centers sector is attracting investments, as major hyperscale firms unveil expansion plans. However, elevated interest rates and a tight labor market are affecting cashflows and construction budgets. The industry confronts a surplus of unfilled positions, potentially leading to rising worker compensation. The labor situation poses an upside risk as things currently stand.



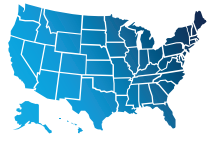
John Fitzgerald
Vice President



Eoin Byrne
Vice President



Dawn Cantrell
Vice President



Key Indicators

GDP

Expanded at an annualized rate of 2.4 % in Q2 2023 (advance estimates)



- Increase in real GDP reflected increase in consumer spending, non-residential fixed investment, government spending and private inventory investment

CPI

CPI-U rose by 3% in June 2023



- June 2023 saw the lowest annual inflation increase since March 2021
- Housing costs contributed to inflation the most, while the energy index fell by 16.7% on YoY basis

Construction output

Expected to contract by 2.5% in 2023 in real terms



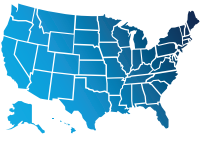
- Contraction is largely attributed to weakness in the residential sector
- The non-residential sector is likely to register a growth of 8% in 2023

Commodities Pricing Snapshot

	Price % change			Remarks
	YoY Q2 '22 - Q2 '23 (e)	QoQ Q1 - Q2 '23 (e) Q2 (e) - Q3 '23 (f)		
Copper	↓ -11%	↓ -5%	↓ -1%	Prices have stabilized but likely to remain volatile
Steel rebar (raw)	↓ -3%	↑ 2%	↔ 0%	Prices appreciated slightly in the last quarter but likely to edge downwards
Cement	↑ 12%	↑ 1%	↔ 0%	Prices edged up slightly and likely to remain elevated
Lumber	↓ -59%	↔ 0%	↑ 2%	Prices are stable but likely to edge downwards

(e) - estimate (f) - forecast

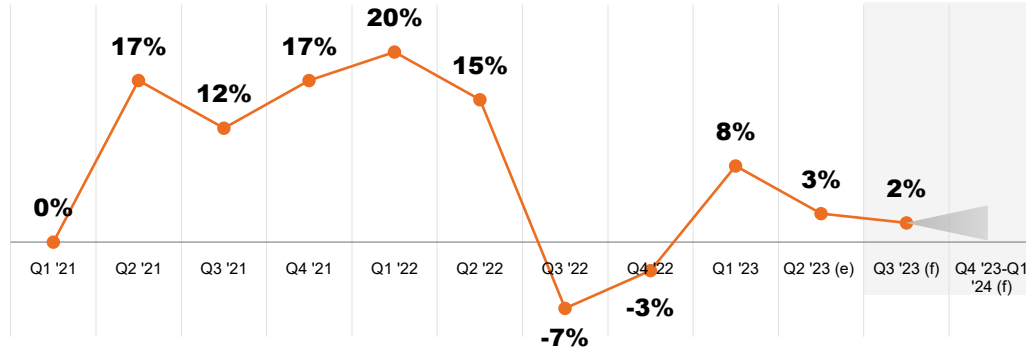
United States – Construction Materials Price Trends



Copper

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Low		Moderate	Moderate
Price (US\$/t)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$7,891	US\$7,813	↓ -4.8%	↓ -1.0%

Price change comparison against Q1 2021



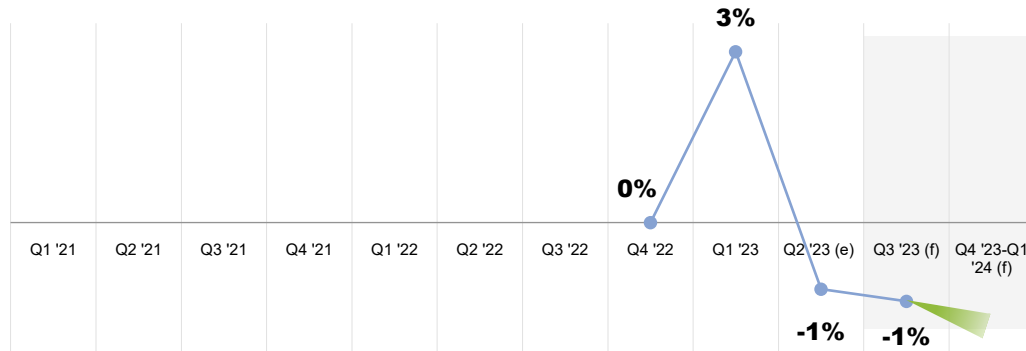
- Copper prices have been volatile in recent months, but on a quarterly average basis prices were down by 4.8% QoQ in Q2 2023.
- High interest rates have dampened investment activity, but federal government spending programs have driven up industrial and infrastructure activity
- There will also be significant investment in electric vehicles and renewable energy projects, which will be a key factor in supporting copper prices



Stainless Steel

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Moderate		Moderate	Moderate
Price (US\$/t)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$4,816	US\$4,792	↓ -3.2%	↓ -0.5%

Price change comparison against Q4 2022



- Stainless steel prices have been weakening, with a 3.2% QoQ drop in Q2 2023
- This decline was reflected in falling nickel prices in May owing to a surplus in supply, coupled with low demand from the construction sector
- However, measures to reduce production will partially offset the impact on prices in the coming quarter

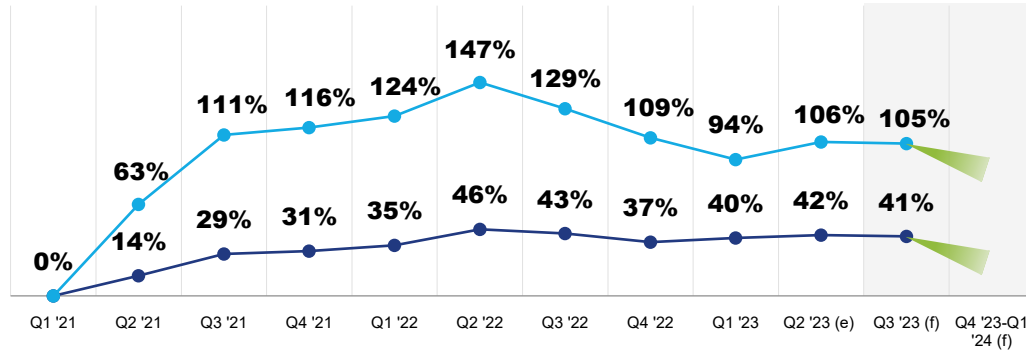
United States – Construction Materials Price Trends



Steel – rebar and flat

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
o o o o Moderate		o o o o Moderate	o o o o Moderate
Price		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
— Steel rebar (raw) (US\$/t) US\$1,034 US\$1,029 ↑ 1.7% ↓ -0.5%			
— Steel flat product (US\$/t) US\$1,612 US\$1,603 ↑ 6.3% ↓ -0.5%			

Price change comparison against Q1 2021

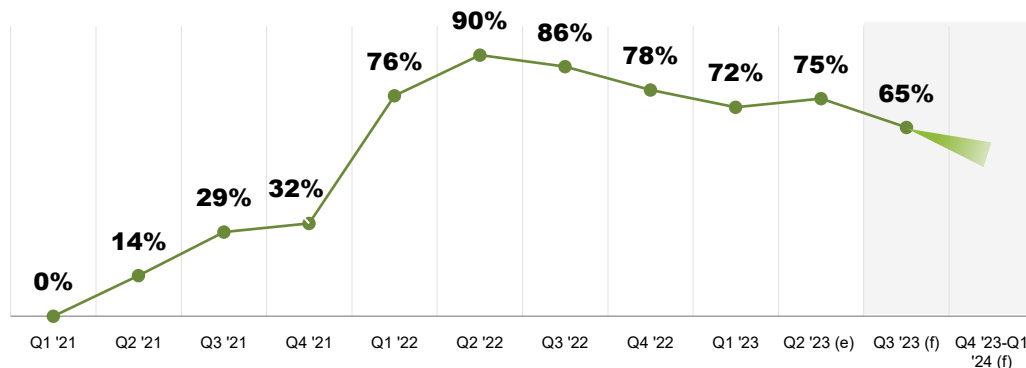


- Steel prices stayed relatively high in Q2 2023 on a quarterly average basis, with rebar up by 1.7% QoQ, and flat increasing by 6.3%
- Prices have been edging downwards in recent months, and this trend is expected to continue, aided by easing production costs and cheaper imports
- However, this will be slightly offset by a strengthening in non-residential buildings and the infrastructure sector

Welded mesh

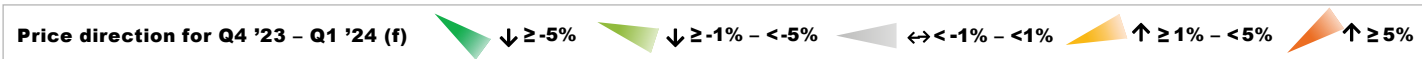
Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
o o o o Moderate		o o o o Low	o o o o Moderate
Price (US\$/unit*)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$230 US\$217 ↑ 1.7% ↓ -5.7%			

Price change comparison against Q1 2021



- Welded mesh prices stayed fairly high in Q2 2023, but there has been a general downward trend as reflected in steel rebar prices
- Demand will be bolstered by investment in infrastructure and non-residential buildings, offsetting the drop in residential building activity, which means welded mesh prices will stay high compared to historical levels

* 47.2 x 118.1 in, dia.-0.24



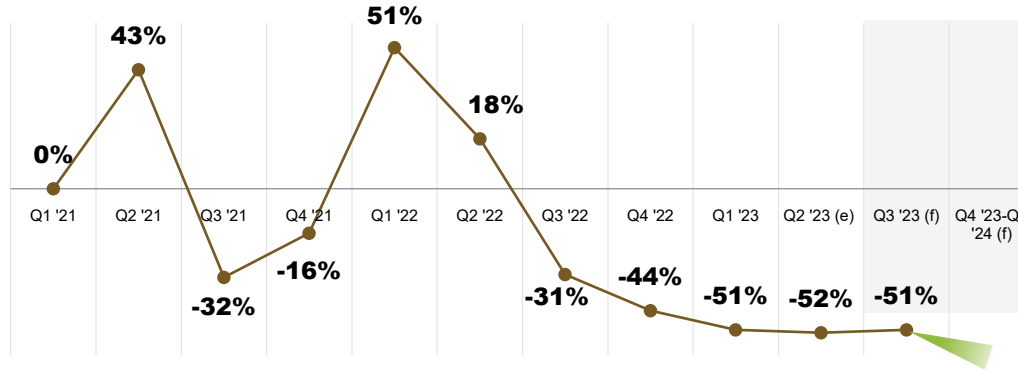
United States – Construction Materials Price Trends



Lumber (raw)

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
o o o o Moderate		o o o o Moderate	o o o o Moderate
Price (US\$/ft ³)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$4.92	US\$5.02	↓ -0.2%	↑ 2.0%

Price change comparison against Q1 2021



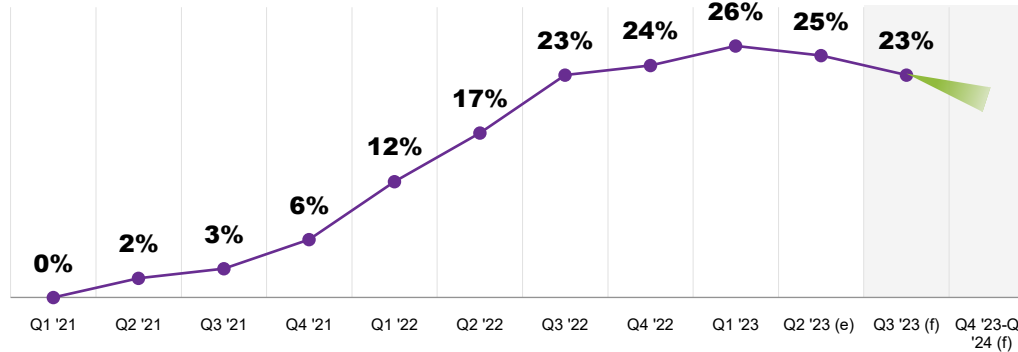
- Lumber prices have been relatively stable in recent months when compared to the volatility recorded over the past two years
- Prices picked up in June, though, owing to wildfires in Canada that resulted in mills shutting down
- However, demand remains weak given the downturn in housing construction



Drywall

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
o o o o Moderate		o o o o Moderate	o o o o Moderate
Price (US\$/unit*)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$13.0	US\$12.8	↓ -0.8%	↓ -1.5%

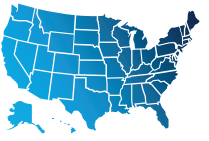
Price change comparison against Q1 2021



- Drywall prices have started to edge downwards after having stabilized at a high level in recent quarters
- On a quarterly average basis, prices were down by 0.8% in Q2 2023 compared to Q1, but there has been a slightly steeper drop in monthly terms recently
- With residential construction activity weakening, prices are expected to follow a steady decline in the coming quarters

* 47.2 x 143.7 x 0.49 in (L x W x T)

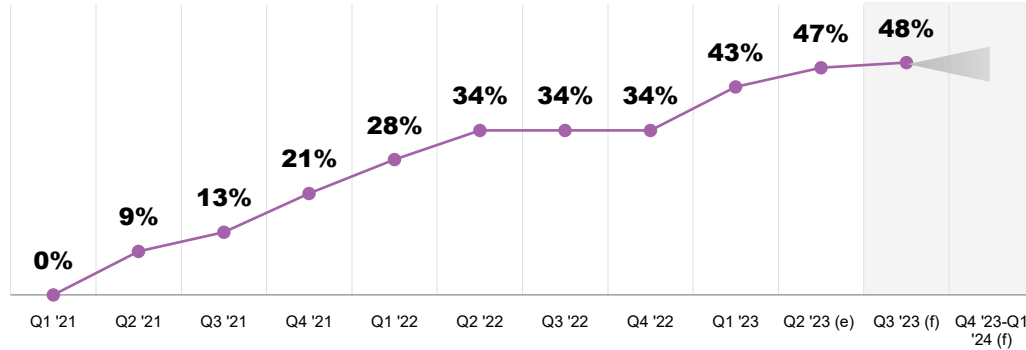
United States – Construction Materials Price Trends



Limestone

Level of Impact			
Price Change (e) vs (f)	Material Availability	General State of Supply Chain	
Moderate	Low	Low	
Price (US\$/t)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$30.8	US\$31.0	↑ 3.0%	↑ 0.5%

Price change comparison against Q1 2021

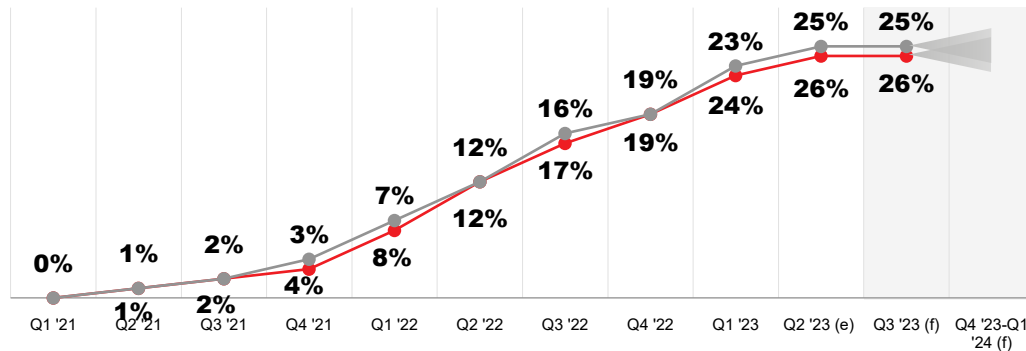


- Limestone prices have continued to increase steadily in recent quarters, rising by 3.0% QoQ in Q2 2023, and standing at a level that was 47.4% higher than in Q1 2021
- Demand from infrastructure construction will support prices at this high level in the coming quarters

Cement and Concrete

Level of Impact			
Price Change (e) vs (f)	Material Availability	General State of Supply Chain	
Moderate	Moderate	Moderate	
Price		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$141.7	US\$142.4	↑ 1.5%	↑ 0.5%
<p>● Cement (US\$/t)</p> <p>● Concrete (US\$/yd³)</p>			
US\$123.7	US\$124.3	↑ 1.8%	↑ 0.5%

Price change comparison against Q1 2021



- Although prices are increasing at a slower pace, there has been no reduction in the upward trend in cement and concrete prices. On a quarterly average basis, cement prices were up by 1.5% in Q2 2023, while concrete was up by 1.8%
- High production costs and strong demand had been the main factors in pushing prices up to current levels. Although residential construction demand has weakened, other sectors are gathering growth momentum, thereby ensuring continued upward pressure on prices

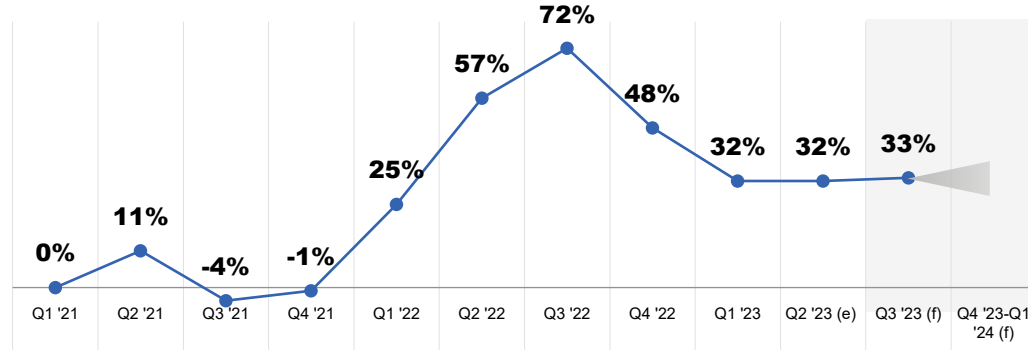
United States – Construction Materials Price Trends



Asphalt

Level of Impact			
Price Change (e) vs (f)	Material Availability	General State of Supply Chain	
Moderate	Moderate	Moderate	
Price (US\$/t)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$531	US\$536	↑ 0.1%	↑ 1.0%

Price change comparison against Q1 2021



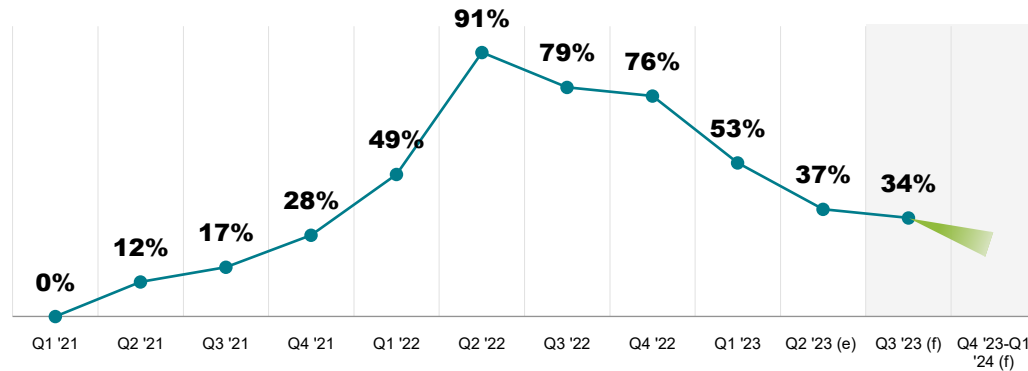
- Asphalt prices stabilized in the first half of 2023. Although dropping back from the highs of mid-2022, prices in Q2 2023 were still 32% higher than in Q1 2021
- Significant investment is planned for road construction projects which will keep upward pressure on pricing



Diesel

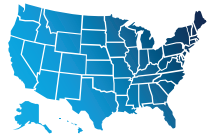
Level of Impact			
Price Change (e) vs (f)	Material Availability	General State of Supply Chain	
Low	Moderate	Low	
Price (US\$/gallon)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$1	US\$1	↓ -10.5%	↓ -2.0%

Price change comparison against Q1 2021



- Quarterly average diesel prices dipped by 10.5% QoQ in Q2 2023, continuing a downward trend from the highs of mid-2022
- The trend in part reflects improved domestic oil production and lower demand caused by a relatively warm winter across the country, coupled with lower trucking activity
- Prices will continue to edge downwards, but concerns regarding crude oil supply and OPEC+ production cuts could generate some volatility

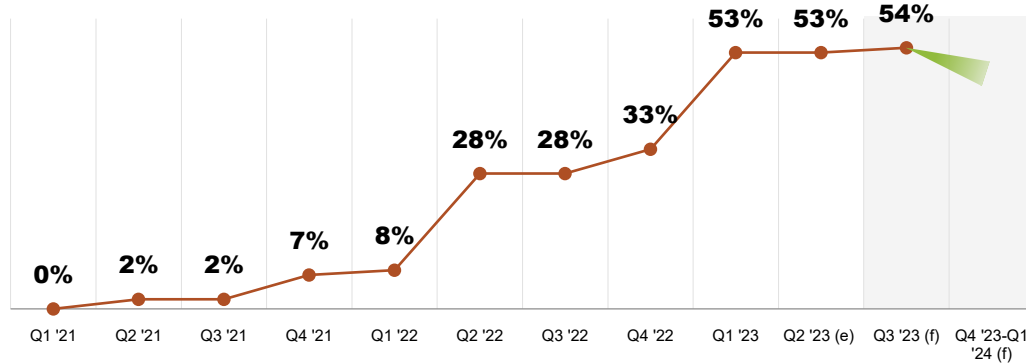
United States – Construction Materials Price Trends



Bricks

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Low		Moderate	Moderate
Price (US\$/'000 unit)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
US\$973	US\$976	↔ 0%	↑ 0.3%

Price change comparison against Q1 2021



- Prices for bricks have been stable this year, and are projected to remain close to current highs in the coming quarters
- In Q2 2023 prices were 53% higher than in Q1 2021, which reflects a surge in demand along with a jump in production costs over this period
- Despite weakness in the housebuilding sector, demand has been sustained by an improvement in non-residential building construction in recent months

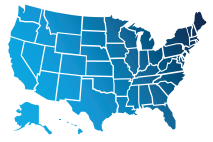
Level of impact rating reflects a combination of factors: price change (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

Level of Impact					
Price Change Estimate (e) vs Forecast (f)		Material Availability		General State of Supply Chain	
Range	Impact	State	Impact	State	Impact
≥5%	High	Deficit	High	Stressed	High
≥1% – <5%	Moderate	Balanced	Moderate	Adequate	Moderate
<1%	Low	Surplus	Low	Easily Available	Low

Please note that commodity prices are based on representative materials available in the respective countries, and as these materials may not be standard across all markets, cross-country comparisons on prices can be ineffective. For example, asphalt types can vary between hot, cold or a bitumen price, and standard unit sizes for materials can vary across countries. Material prices relate to raw or unfinished materials, and not to finished, delivered and erected on-site prices.

QoQ Quarter on Quarter
 YoY Year on Year
 MoM Month on Month
 GDP Gross Domestic Product
 CPI Consumer Price Index (wherever not specified)
 e estimated
 f forecasted
 EV Electric Vehicles
 DC Data Centre

United States – Construction Materials Price Trends



Commodity	Unit	Central		West		East	
		Q2 '23 (e)	Q3 '23 (f)	Q2 '23 (e)	Q3 '23 (f)	Q2 '23 (e)	Q3 '23 (f)
Copper	US\$/T	7,850	7,772	7,849	7,771	7,975	7,895
Steel rebar (raw)	US\$/T	1,029	1,024	1,028	1,023	1,045	1,040
Steel-flat product	US\$/T	1,603	1,595	1,603	1,595	1,628	1,620
Stainless Steel	US\$/T	4,790	4,766	4,790	4,766	4,816	4,792
Lumber	US\$/cu.feet	4.9	5.0	4.9	5.0	5.0	5.1
Asphalt	US\$/T	543	549	494	499	556	561
Limestone	US\$/T	30.8	31.0	30.8	31.0	30.8	31.0
Cement	US\$/T	139	140	144	144	143	143
Concrete	US\$/yd3	121	122	126	127	124	124
Welded mesh 47.2 x 118.1 in, dia.-0.24	US\$/unit-(a)	230	217	243	241	243	241
Bricks	US\$/'000 unit	973	976	973	976	973	976
Drywall 47.2 x 143.7 x 0.49 in (L x W x T)	US\$/unit-(b)	12.6	12.4	13.8	13.6	12.6	12.4
Diesel	US\$/gallon	3.76	3.68	4.33	4.24	4.00	3.92

- Fuel prices across the US vary depending on their proximity to the source of supply, which affects the cost of transportation. For instance, diesel prices are comparatively higher in the west, due to the region's distance to refineries and the absence of interconnected pipelines. Diesel supply is catered by in-region refineries, which isn't always sufficient. Hence, transporting the supplies from outside the region is expensive due to the longer distance from the source of supply.
- In addition, varying taxes across the states also affect prices. For instance, Alabama, a southeastern state, imposes a 20% federal and state tax on diesel prices, whereas in a western state, California, the tax is as high as 39%. The federal and state tax imposed on diesel prices in Maryland in the eastern region is 25%. As a result, the variation in taxes has a significant impact on diesel prices across the US.
- Local competition and regional operating costs also affect diesel prices. The cost of doing business can vary substantially depending upon the location of the retail outlet, which includes overhead and local real estate costs. The location of local competition also affects the prices. Retail outlets with high-volume truck stops that cater to large commercial vehicles sell diesel at a cheaper price than the smaller-volume service stations.

(e) - estimate
(f) - forecast

United States – Industry trends



Sector trends



Data Centres

Demand for data centers in the US is projected to grow at a 10% annual rate until 2030, reaching 35GW in 2030 from 17GW in 2022.¹ The vacancy rate in major North American markets is just 2.88% due to considerably high demand and low inventory.² To address the high demand, the Data Centers construction sector is increasingly adopting prefabricated infrastructure. Although commodity supply chains are gradually normalizing, lead times for central mechanical and electrical equipment remains long. The industry is facing a skilled labor shortage, which poses another significant challenge in meeting the growing demand for data centers.



Life Sciences

There is a slowdown in overall VC funding, but public funding from NIH and R&D investments by companies continue to drive momentum in the industry. However, Life Sciences construction, along with other high-tech sectors, is encountering labor shortages and extended material lead times, leading to project delays. To address these challenges, the industry is embracing modularization and emphasizing design flexibility to enhance operational agility, scalability, and meet evolving biotechnology demands.



High-Tech Industrial

There has been considerable momentum in both semi-conductor and battery manufacturing projects in the US. Semi-conductor projects worth \$223bn to \$260bn are underway.³ The government's \$52.7bn investment in grants through the CHIPS and Science act also aims to boost domestic semiconductor manufacturing. Battery growth is accelerated by the Inflation Reduction Act which allocates \$369bn of subsidies for electric vehicles and other clean technologies. The DOE's Vehicle Technologies Office predicts a nearly 20-fold increase in total battery manufacturing capacity between 2021 and 2030. Georgia, Kentucky, and Michigan are expected to dominate electric vehicle battery manufacturing in the country. Challenges include limited construction expertise, regional bottlenecks, and the need for localizing the value chain for supply chain resiliency.



Renewable Energy

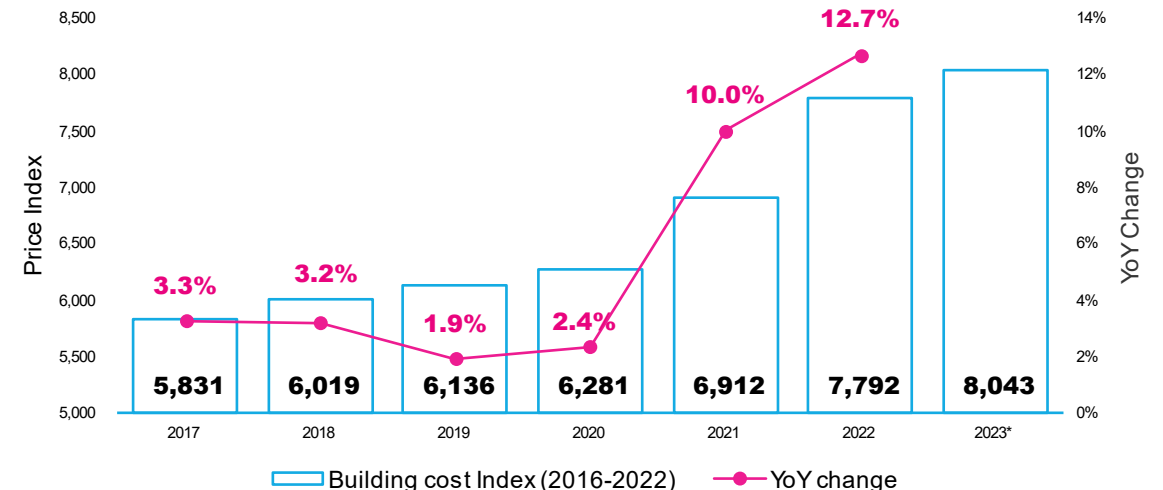
The US government is focused on renewable energy, aiming to add 54.5GW of new electric generating capacity in 2023, with the majority from solar energy (54%). The goal is to achieve 100% clean power by 2035 and cut climate pollution levels by half by 2030. The government also aims to deploy 30GW of offshore wind energy by the end of the decade.



Commercial

The Commercial sector has been facing challenges since the pandemic. Construction output for the office sector in real terms is expected to contract by 0.1% in 2023. While there is a demand for high-quality sustainable spaces, the office vacancy rate in a lot of major cities is still high. Tenant improvement costs are still elevated but the markets are showing signs of decreasing escalation..

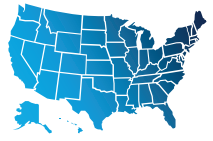
Building Cost Index**



*Average from Jan to July 2023

**YoY Change

United States – Report methodology



Linesight has commissioned independent global research to track construction materials and commodity prices. The approach and methodology for the collection of construction material pricing and other indicators is based on primary and secondary research.

Primary and secondary research

Primary research is conducted on a quarterly basis with stakeholders in the value chain, including manufacturers and suppliers/distributors of the target materials, to ascertain market information on prices in recent quarters, and also on projections for changes in the coming quarter and remainder of the year. The market analysis also involves a thorough assessment of secondary sources of data on materials and labor prices, in addition to underlying demand and supply trends that will impact market prices.

Sources include GlobalData's Construction Intelligence Center (CIC), the World Bank, IMF, OECD, as well as country specific national statistics offices, such as the U.S. Bureau of Economic Analysis, Bureau of Labor Statistics, and also industry specific associations and publications.

Disclaimer: The commodity report contains information, data, and analysis related to the construction industry.

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Definitions

- Commodity prices are net of taxes for all the countries
- Prices are not customer delivered
- All commodities are raw materials
- Nominal and real data

Nominal data series do not exclude changes in prices and are also referred to as current prices series.

Annual changes in nominal data for construction output will include changes in construction activity, as well as changes in costs for materials and equipment.

Real data series are calculated by keeping prices constant (so, are also referred to as constant price series), and therefore, they reflect changes in activity only. Growth rates in nominal terms can overstate the pace of growth in construction activity if there is high inflation stemming from rising prices for key inputs.

Sample sources – United States

For the United States, sources for this report include, but are not limited to:

- ENR
- IMF
- GlobalData's Construction Intelligence Center (CIC)
- Bureau of Economic Analysis
- Economic Research Institute
- World Data
- U.S. Energy Information Administration
- International Energy Agency (IEA)
- US Energy Information Administration (EIA)
- 1- Article by Mckinsey & Company : *Investing in the rising data center economy*, 17, Jan 2023
- 2- datacenterHawk
- 3- Article by Mckinsey & Company: *Semiconductor fabs: Construction challenges in the United States*, 27, Jan 2023



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