



Japan Country Commodity Report

Q2 2023



Japan

Q2 2023

Japan's economy has seen a faster-than-expected growth rate, primarily attributed to the revival of tourism due to eased pandemic-related border restrictions. Inflation has shown a downward trend but remains elevated.

The construction industry in Japan is grappling with a significant labour shortage, as per a recent study by Recruits Works Institute suggesting a potential shortage of 11 million workers by 2040. The scarcity of skilled labour is driving up wage costs, posing additional challenges for the industry. In particular trades related to mechanical, electrical, and plumbing (MEP) are experiencing the highest increase in labour costs. The weakening yen is also having an impact on construction costs.

Commodity prices have started to stabilize but remain elevated. Further reduction in price is expected in steel and lumber. Freight costs are also slowly normalizing. Overall, the construction sector is expected to grow at a moderate pace, but continued investments are expected in the data centre and semi-conductor space.



Garvan Barry
Director - North East Asia



Key Indicators

GDP

Grew by 2.7% QoQ
annualised in Q1 2023



- Despite high inflationary pressures, the economy has rebounded and is projected to grow by 1.5% in FY 2023
- Bank of Japan (BOJ) projects a QoQ annualised growth rate of +2.2% for the real GDP in Q2 2023

CPI

In May 2023 rose to 3.2%
YoY, slightly lower than
April's 3.4%



- Inflation remains above the BOJ's target of 2%, but the bank expects it to reach 2.4% in FY 2023
- However, with wages set to increase at the highest rate in 30 years, the forecast has been significantly revised upward due to the cyclical rise in labour market





Construction output

Expected to grow by 1% in
2023 in real terms



- Investment in renewable energy, telecommunication and manufacturing is likely to spur the growth

Commodities Pricing Snapshot

	Price % change			Remarks
	YoY Q2 '22 - Q2 '23 (e)	QoQ Q1 - Q2 '23 (e) Q2 (e) - Q3 '23 (f)		
 Copper	↓ -6%	↓ -2%	↔ 0%	Prices declined on a quarterly basis and likely to remain volatile
 Steel rebar (raw)	↓ -3%	↓ -2%	↔ 0%	Prices continue to decline
 Cement	↑ 15%	↔ 0%	↔ 0%	Prices remained elevated but are stable
 Lumber	↑ 2%	↓ -1%	↓ -1%	Prices are trending downwards

(e) - estimate (f) - forecast

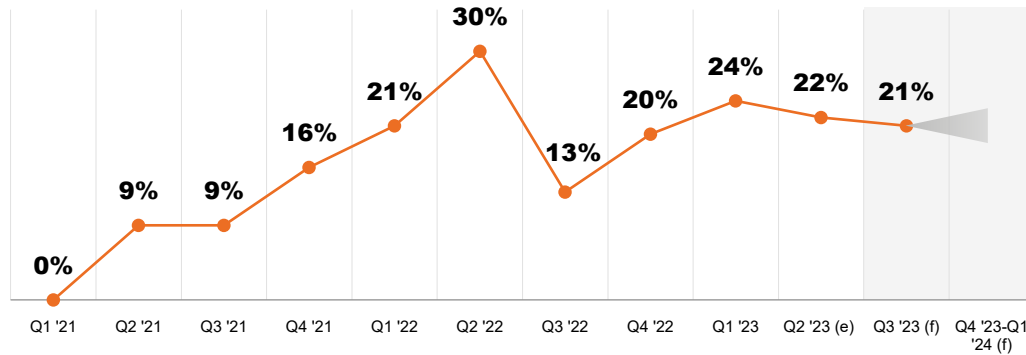
Japan – Commodity Price Trends



Copper

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
●●●● Moderate		●●●● Low	●●●● Low
Price (JPY/mt)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
1,213,754	1,208,978	↓ -1.7%	↓ -0.4%

Price change comparison against Q1 2021



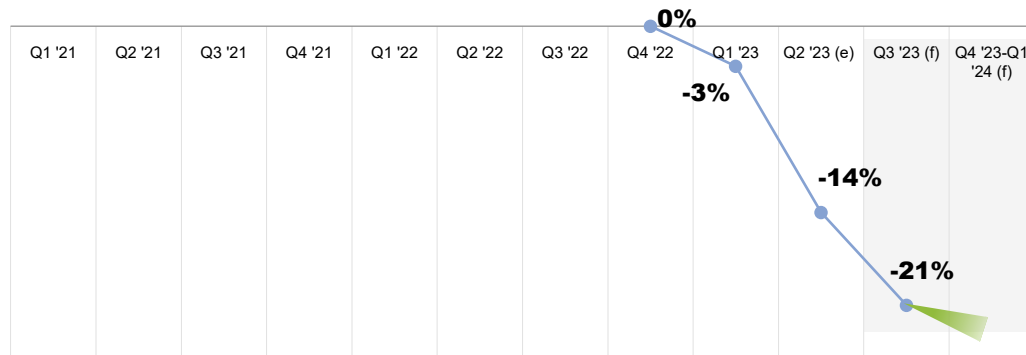
- Copper prices declined by approximately 1.7% QoQ in Q2 2023, predominantly due to the slowing of China's economic recovery
- Despite this decline however, copper prices remain elevated, being 22% higher in Q2 2023 than in Q1 2021
- Copper prices will be volatile, but on a quarterly average basis will remain close to current levels. Weak manufacturing activity and slowing global economic growth weigh on demand, but concerns remain over copper inventories



Stainless Steel

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
●●●● Low		●●●● Low	●●●● Low
Price (JPY/mt)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
155,000	142,969	↓ -11.4%	↓ -7.8%

Price change comparison against Q4 2022



- Stainless steel prices continued to decline in Q2 2023, falling by approximately 11.4% QoQ during the quarter
- Weak factory activity in Japan and a softening of external demand has weighed on demand for stainless steel
- Nippon Steel cut the price of its July 2023 contract for cold-rolled stainless-steel sheet by JPY5,000 per ton, following a JPY20,000 per ton reduction in April 2023, reflecting a decline in demand

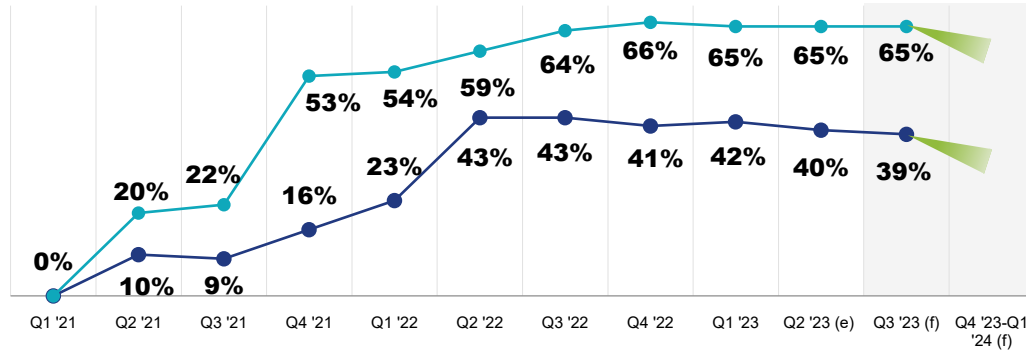
Japan – Commodity Price Trends



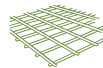
Steel – rebar and flat

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Moderate		Low	Low
Price		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
Steel rebar (raw) (JPY/mt)			
113,000	112,707	↓ -1.6%	↓ -0.3%
Steel flat product (JPY/mt)			
147,000	146,681	↓ -0.2%	↓ -0.2%

Price change comparison against Q1 2021



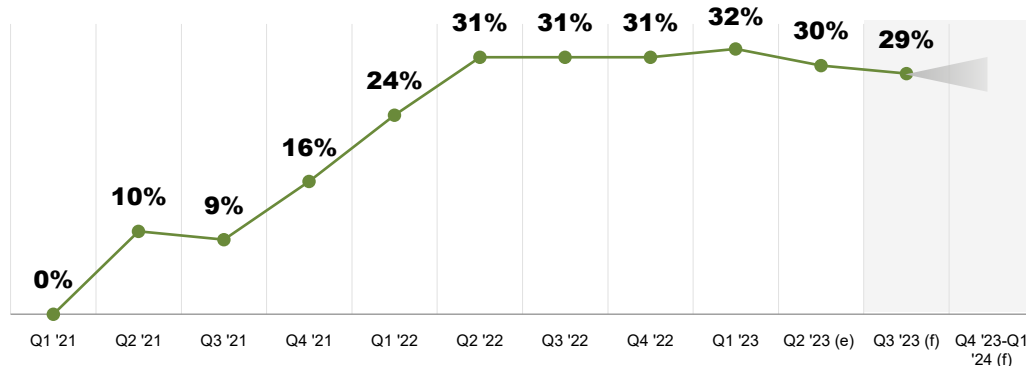
- Steel rebar prices declined by 1.6% QoQ in Q2 2023, while steel flat prices fell by 0.2% QoQ
- Steel prices however, remain elevated, with rebar prices being 40% higher in Q2 2023 than in Q1 2021, while steel flat prices were 65% higher
- Prices are projected to continue to decline in Q3 2023, driven down by weak global economic activity and falling iron ore prices



Welded mesh

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Moderate		Low	Low
Price (JPY/unit*)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
661	660	↓ -1.6%	↓ -0.1%

Price change comparison against Q1 2021



- Welded mesh prices declined by approximately 1.6% QoQ in Q2 2023, in line with the fall in steel rebar prices
- In comparison to Q1 2021, welded mesh prices were 29.5% higher in the second quarter of this year
- In the coming quarters, welded mesh prices are expected to weaken marginally amid sluggish demand

* 100 x 100 cm; diameter 6mm

Price direction for Q4 '23 – Q1 '24 (f) ↓ ≥ -5% ↓ ≥ -1% - < -5% ↔ < -1% - < 1% ↑ ≥ 1% - < 5% ↑ ≥ 5%

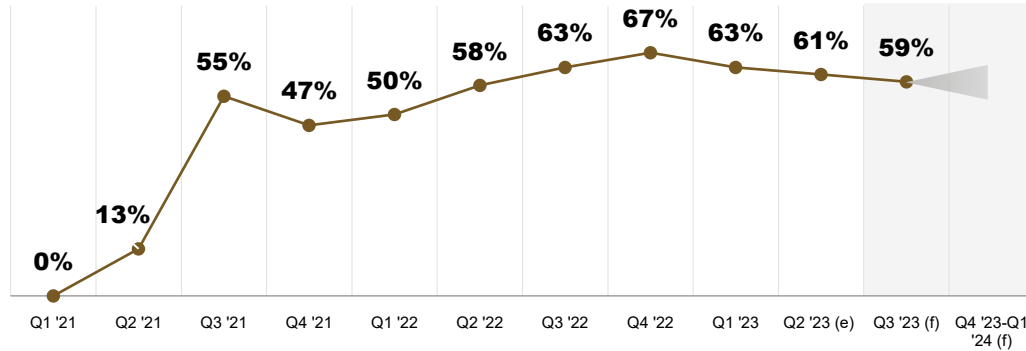
Japan – Commodity Price Trends



Lumber (raw)

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Moderate		Moderate	Moderate
Price (JPY/m ³)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
71,424	70,629	↓ -1.4%	↓ -1.1%

Price change comparison against Q1 2021



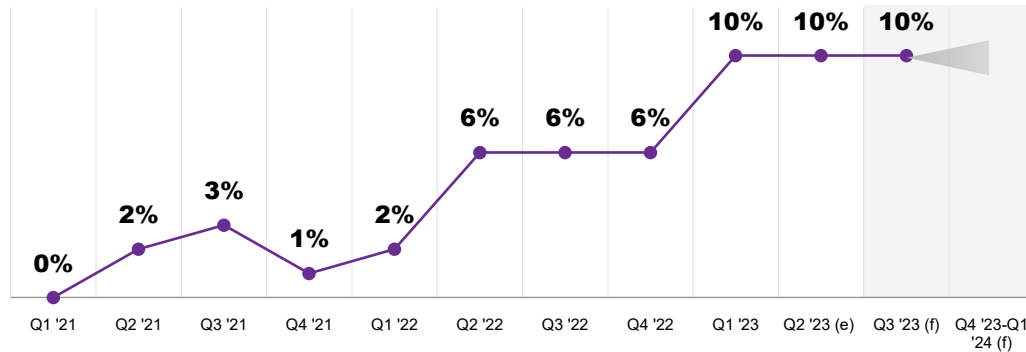
- Lumber prices trended downwards in Q2 2023, declining by 1.4% QoQ as weak activity in the housing sector weighed on demand
- Despite this decline, lumber prices remain elevated in comparison to their Q1 2021 levels, being 61% higher in Q2 2023
- Prices are expected to continue to fall in the second half of this year, with a stronger Japanese yen reducing the relative price of imported lumber



Plasterboard

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Moderate		Low	Low
Price (JPY/unit*)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
1,600	1,600	↔ 0%	↔ 0%

Price change comparison against Q1 2021



- Plasterboard prices have remained stable in the past two quarters and are expected to remain at their current level in the second half of this year
- In comparison to Q1 2021, plasterboard prices were 10.3% higher in Q2 2023. Weakness in the residential sector, with sluggish demand for new housing construction, will contain any further upwards pressure on prices

* 120 x 180 x 1.25 cm (L x W x T)

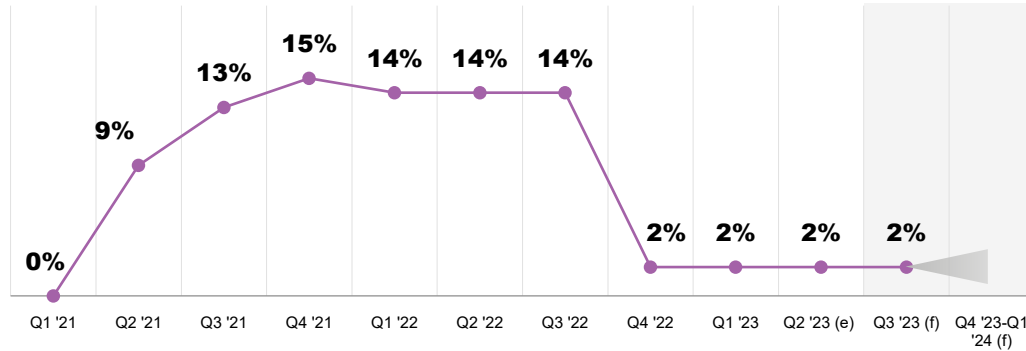
Japan – Commodity Price Trends



Limestone

Level of Impact			
Price Change (e) vs (f)	Material Availability	General State of Supply Chain	
Moderate	Low	Low	
Price (JPY/mt)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
81,667	81,667	↔ 0%	↔ 0%

Price change comparison against Q1 2021

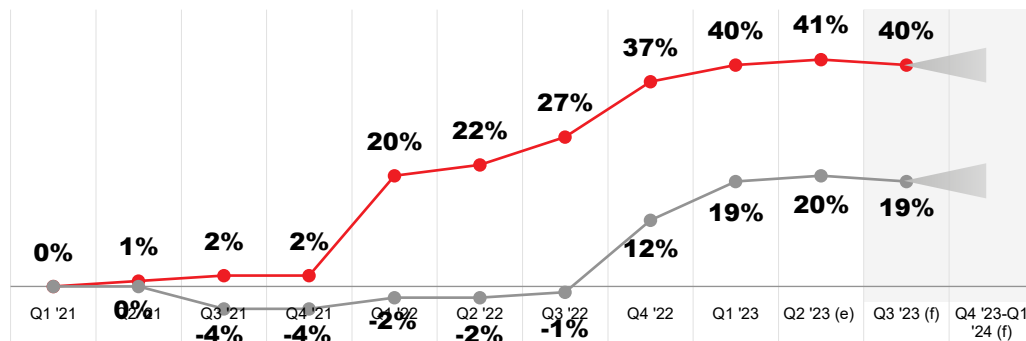


- Having fallen in late 2022 from previous highs, limestone prices have remained stable in recent quarters
- Prices did, however, remain higher than their Q1 2021 levels, being up by 2.3% in Q2 2023
- Limestone prices are projected to remain around their current levels in the coming quarters

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)
14,947	14,900	↑ 0.4%	↓ -0.3%
—●— Cement (JPY/mt)			
18,336	18,223	↑ 0.4%	↓ -0.6%
—●— Concrete (JPY/m³)			

Price change comparison against Q1 2021



- Cement and concrete prices remained relatively stable in Q2 2023, with both recording only a marginal increase of 0.4% in comparison to Q1 2023
- In comparison to Q1 2021 however, concrete prices up 19.6% and cement prices up 40.7%
- Prices are expected to remain around their current levels in the coming quarters, moderated by softer demand from the construction sector, due to increased interest rates and the general slowing of economic activity

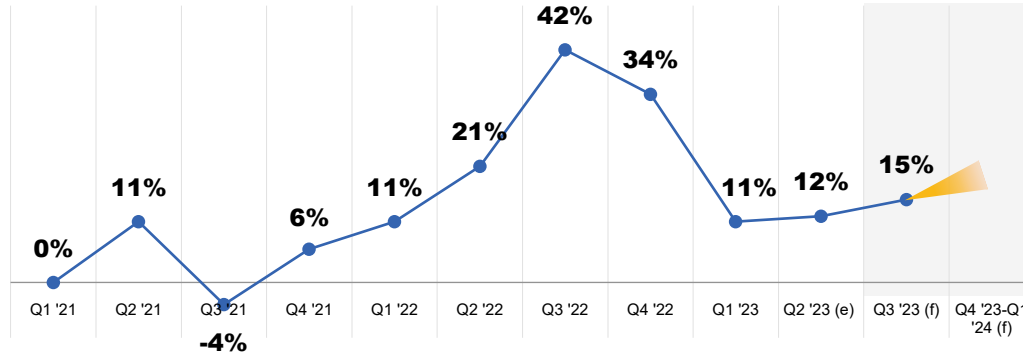
Japan – Commodity Price Trends



Asphalt

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Moderate		Low	Low
Price (JPY/mt)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
96,500	98,789	↑ 0.9%	↑ 2.4%

Price change comparison against Q1 2021



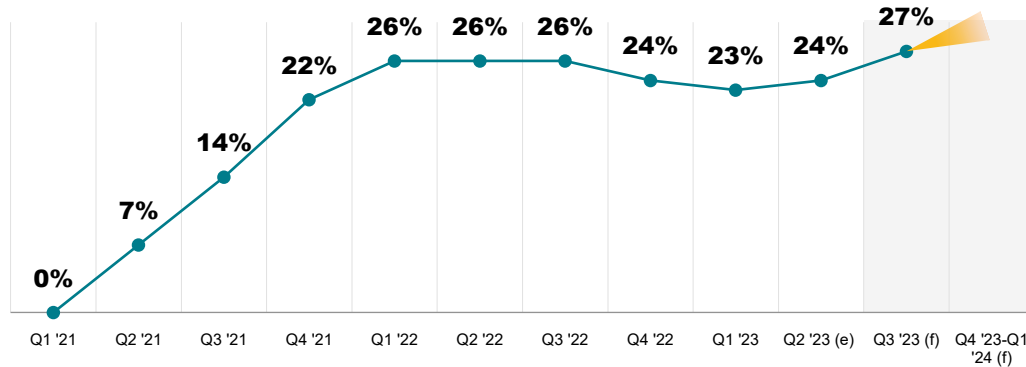
- Asphalt prices rose marginally in Q2 2023, driven in part by the weakening of the yen during the quarter and the phasing out of government oil subsidies in June 2023
- Asphalt prices are expected to continue to rise in the third quarter of this year, despite the strengthening of the yen, due to the progressive phasing out of subsidies to oil wholesalers. Spending on road infrastructure is also set to edge upwards



Diesel

Level of Impact			
Price Change (e) vs (f)		Material Availability	General State of Supply Chain
Moderate		Low	Low
Price (JPY/litre)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
149	152	↑ 0.6%	↑ 2.1%

Price change comparison against Q1 2021



- Diesel prices edged up marginally in Q2 2023, with the depreciation of the yen and the beginning of the phased ending of the government's fuel subsidy program in June 2023
- Prices remain significantly high in comparison to their Q1 2021 levels, being 24.1% higher during the second quarter
- Prices are expected to continue to rise in Q3 2023, with fuel subsidies ending, but a stronger yen will help to moderate this increase

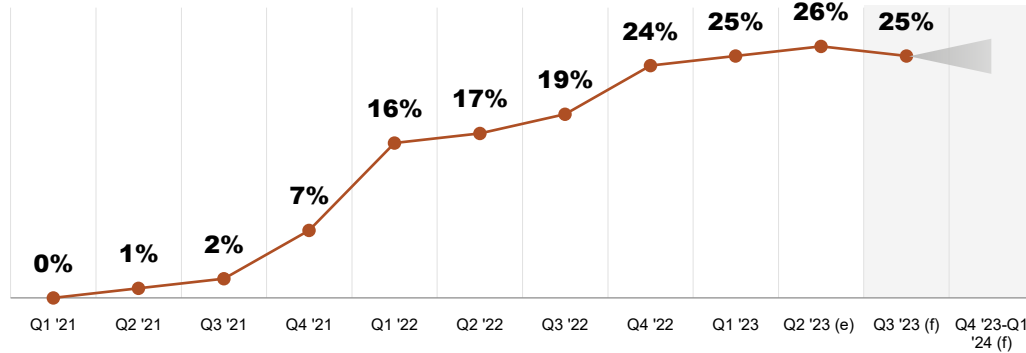
Japan – Commodity Price Trends



Bricks

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 (JPY/'000 unit)		% change	
Q2 '23 (e)	Q3 '23 (f)	Q1 '23 - Q2 '23 (e)	Q2 '23 (e) - Q3 '23 (f)
136,694	135,711	↑ 0.5%	↓ -0.7%

Price change comparison against Q1 2021



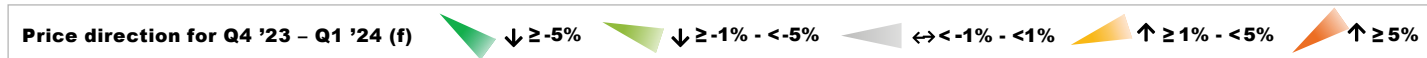
- Brick prices rose marginally in Q2 2023, recording an increase of 0.5% QoQ during the quarter
- In comparison to their prices in Q1 2021, brick prices were 25.5% higher in Q2 2023.
- Rising energy costs as government subsidies come to an end are expected to contribute to upward pressure on costs. However, this is expected to be offset by subdued demand from construction sector, keeping prices relatively stable in the second half of this year

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%	o o o o High	Deficit	o o o o High	Stressed	o o o o High
≥1% - <5%	o o o o Moderate	Balanced	o o o o Moderate	Adequate	o o o o Moderate
<1%	o o o o Low	Surplus	o o o o Low	Easily Available	o o o o 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



Japan – Industry trends

Sector trends



Data Centres

The data centre market in Japan is rapidly growing, due to an increase in cloud adoption, high internet penetration and boosted by government funds dedicated to research in 6G communications systems. Improved submarine and inland connectivity is further supporting the sector's expansion. The market is expected to witness substantial growth, with a projected increase in value from JPY 2.1 tn in 2018 to JPY 3.7 tn in 2023, and a further rise to JPY 4.4 tn in 2027, according to Fuji Chimera Research Institute. While Greater Tokyo and Osaka remain the preferred data centre locations, the government is now promoting other regions such as Hokkaido and Kyushu.



Life Sciences

Japan's biotechnology and pharmaceutical market is one of most prominent in APAC. The government has taken several initiatives such as tax breaks and financing for R&D to promote the sector. The Life Sciences sector in Japan is expected to expand due to an ageing population and rapid digitisation and as such, is attracting investments from international investors. Mirroring global trends, in 2021 US and European venture investors brought in US\$98mn worth of biopharma deals - almost triple the deals in 2019 and 2020.¹



High-tech Industrial

The Japanese government plans to boost semiconductor production by offering subsidies to attract global chip manufacturers. In October 2022, they announced plans to establish new semiconductor and battery factories. They have also allocated JPY 450bn (US\$373.1 mn) for semiconductor production, and JPY 6 tn (US\$49.8bn) for clean energy vehicles and research and development in the budget for 2023.

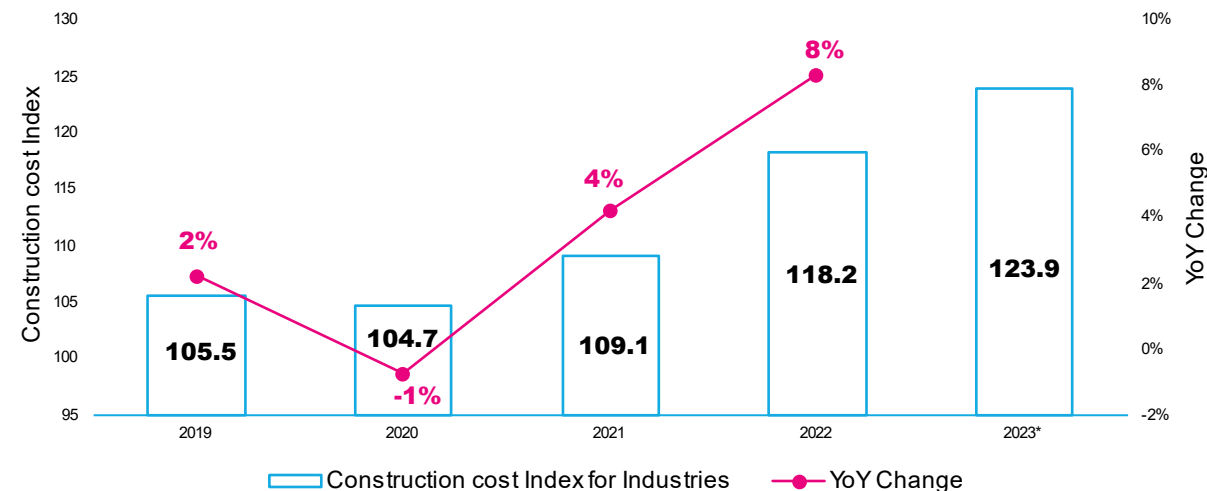


Renewable Energy

Japan aims to generate 36-38% of its power from renewables by 2030 and achieve carbon neutrality by 2050. There has been a focus on offshore wind power as a sustainable energy source. One of the notable projects include offshore windfarm in Fukuoka, with 220 MW capacity.



Construction price Index (CPI) for Industries**



**QoQ Change in CPI on annual basis

*Average taken from Jan-23 to June-23

YoY Change (June-22 to June-23) - 6.27%

Japan – 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 labour 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.

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 – Japan

For Japan, sources for this report include, but are not limited to: IMF

- Japan Industrial Safety and Health Association
- Statistics Bureau of Japan
- GlobalData's Construction Intelligence Center (CIC)
- Bank of Japan (BOJ)
- Construction Prices Research Institute
- Statista
- Economic Research Institute
- Ministry of Land, Infrastructure, Transport and Tourism
- 1- labiotech.eu

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