



# Taiwan

## Country Insights and Commodity Report

**Q1 2023**



# Taiwan

## Q1 2023

Taiwan's GDP is projected to grow by 2.1% in 2023, a reduction from the 2.45% growth forecast for 2022. This downward revision is attributed to weak export performance at the beginning of the year. However, the inflationary pressures in the country are showing signs of easing, with the Consumer Price Index (CPI) dropping from 2.4% in February 2023 to 2.35% year-on-year in March 2023.

Taiwan's construction industry grew by 1.5% in real terms in 2022 and is expected to grow by 0.5% in 2023. Growth has slowed due to rising construction costs, subdued demand and a scarcity of skilled labour and contractors. However, it is forecasted that the industry will continue to grow at an average annual growth of 3.6% from 2023 to 2027. The country is emerging as one of the major connectivity hubs in APAC, and data centers are one of the sectors experiencing rapid growth in the country.



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### Lumber

An expected weakening of construction activity in the first quarter of this year is anticipated to have resulted in a decline in lumber prices. An additional interest rate hike by the Central Bank of the Republic of China at its March 2023 meeting is expected to further constrain residential construction demand, weighing on lumber demand and prices in the coming quarters.



### Cement and aggregates

A glut of domestic supply, a moderation of thermal coal prices and a decline in demand from the construction sector as activity slowed saw cement prices fall sharply in the first quarter of this year. In contrast, concrete prices rose marginally. Some upwards pressure on prices will be generated by the enforcement of tariffs on Vietnamese cement and clinker exports.



### Concrete blocks and bricks

Falling thermal coal prices and a moderation of domestic demand as construction activity slowed have weighed on prices in early-2023. Taiwan is reliant on imports from China and Vietnam to meet demand given the steady reduction in domestic production since 2013.



### Steel (rebar and structural)

China Steel Corp, Taiwan's largest steel mill, increased its list prices of steel products in March 2023 and April 2023, citing increased input costs due to rising iron ore and metallurgical coal prices. Global steel demand is expected to strengthen as infrastructure construction activity ramps up in the coming months, generating further upwards pressure on steel prices in Taiwan. However, weak manufacturing activity in Japan, the Eurozone and the United States will weigh on steel demand, softening the rise in steel prices.



### Copper

Stronger demand from China, disrupted supply due to widespread anti-government protests in Peru and depleted inventories saw copper prices rise sharply in the first quarter of this year. Price increases are expected to moderate in the coming quarters as Peruvian supply recovers, though robust Chinese demand and the more positive global economic outlook will drive continual price growth. Domestically, a less positive economic outlook and weaker manufacturing activity will partly offset the expected global increase in copper prices.



# Taiwan – Commodity Report



Materials	Q2 2023 (f)	Q2 2022 – Q2 2023 (f)		Q4 2022 – Q1 2023 (e)
	NT\$	NT\$	2022-23 % change	% change
<b>Copper</b> (NT\$/MT)	275,452	264,945	4.0% ↑	8.4% ↑ ●
<b>Steel rebar</b> (NT\$/MT)	21,295	24,011	-11.3% ↓	5.3% ↑ ●
<b>Steel flat</b> (NT\$/MT)	32,010	33,747	-5.1% ↓	-1.6% ↓ ●
<b>Stainless steel</b> (NT\$/MT)	37,924	NA	NA	2.1% ↑ ●
<b>Lumber</b> (NT\$/M <sup>3</sup> )	6,805	6,927	-1.8% ↓	0.1% ↑ ■
<b>Asphalt</b> (NT\$/MT)	13,244	13,541	-2.2% ↓	0.2% ↑ ■
<b>Limestone</b> (NT\$/MT)	1,796	1,839	-2.4% ↓	-1.9% ↓ ●
<b>Cement</b> (NT\$/MT)	3,379	3,697	-8.6% ↓	-11.0% ↓ ●
<b>Concrete</b> (NT\$/M <sup>3</sup> )	1,730	1,599	8.2% ↑	2.4% ↑ ●
<b>Welded mesh</b> (NT\$/unit)	362	373	-2.9% ↓	0.0% ↔ ■
<b>Bricks</b> (NT\$/'000 unit)	17,452	17,797	-1.9% ↓	-0.1% ↓ ■
<b>Plasterboard</b> (NT\$/unit)	250	250	0.0% ↔	0.0% ↔ ■
<b>Diesel</b> (NT\$/litre)	27.6	27.8	-0.8% ↓	1.7% ↑ ●

(f) Forecast (e) Estimated

- Q4 2022 to Q1 2023 % change greater than estimation in our Q4 2022 report
- Q4 2022 to Q1 2023 % change less than estimation in our Q4 2022 report

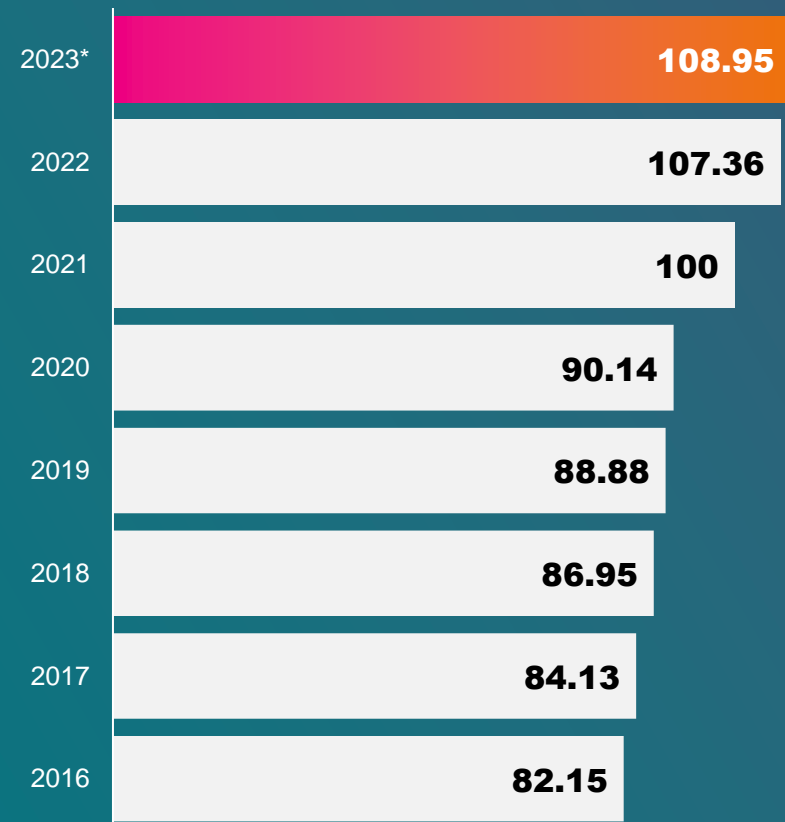
Welded mesh: 200 x 300cm, dia.-4mm Plasterboard: 10 x 20 x 1.25cm (L x W x T)

Material	% change Q1 – Q2 2023 (f)	Level of impact of pricing on construction procurement and supply chain *	
 <b>Copper</b>	+1.4% ↑	Low	Copper prices are estimated to have risen by approximately 8% in Q1 2023, primarily due to stronger demand in China. Prices did, however, decline through the quarter, being 1.3% lower in March 2023 than in January 2023. Weak manufacturing output in Taiwan and concerns of a weak global economy weighed on prices during the quarter. Copper prices are expected to continue to rise in Q2 2023.
 <b>Steel prices</b> - Steel rebar - Flat steel	+1.7% ↑ +2.4% ↑	Low	Steel rebar prices increased by approximately 5% in Q1 2023. In contrast, steel flat product prices declined by 1.6%. Weaker global manufacturing activity during the quarter weighed on steel flat demand, while robust demand from China's construction sector underpinned rebar price growth. Prices for both steel flat and rebar are expected to rise in the second quarter of this year.
 <b>Stainless Steel</b>	+2.8% ↑	Low	Stainless steel prices are estimated to have risen by approximately 2.1% in the first quarter of this year, primarily due to higher input costs as iron ore and ferrochrome prices rose. With input costs expected to remain elevated, stainless steel prices are projected to continue to rise into the second quarter of this year.
 <b>Lumber</b>	-0.2% ↓	Moderate	Lumber prices remained fairly flat in the first quarter of this year. In the coming quarters, lumber prices are expected to stay around their current levels, with risk to the price outlook weighted to the downside.
 <b>Asphalt</b>	+0.5% ↑	Low	Asphalt prices edged up in the first quarter of this year. With diesel prices likely to increase in the coming quarters, as crude prices rise on the recent OPEC+ output cut and improving demand in China, asphalt prices are expected to appreciate.
 <b>Limestone</b>	-1.2% ↓	Low	Limestone prices are estimated to have fallen by approximately 1.9% in the first quarter of this year, in comparison to their Q4 2022 levels. A contraction of construction activity this year is expected to weigh on demand for limestone, with prices projected to continue to decline in Q2 2023.






# Taiwan – Commodity Report



## Construction Cost Index 2016-2023\* (2021=100)

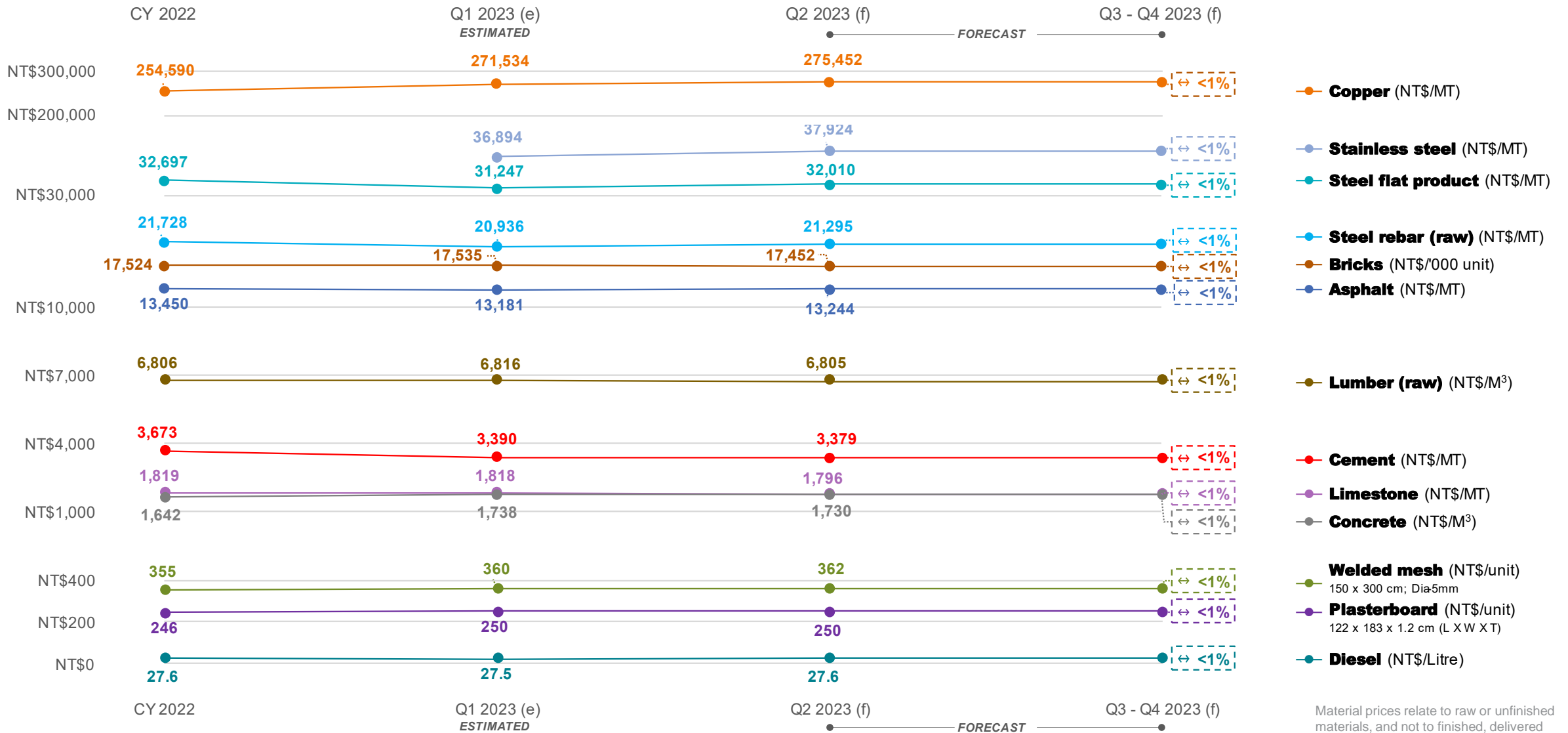


\* Average of Jan and Feb 2023

Material	% change Q1 – Q2 2023 (f)	Level of impact of pricing on construction procurement and supply chain *	
 <b>Cement Concrete</b>	-0.3% ↓ -0.5% ↓	Moderate	Cement prices fell by 11% in Q1 2023, but concrete prices expected to have risen marginally. Weak construction activity is expected to have weighed on cement demand in the first quarter of this year and will continue to soften prices in the coming quarters. The prices of cement and concrete are both expected to decline in the second quarter of this year.
 <b>Welded mesh</b>	+0.7% ↑	Low	Welded mesh prices have remained stable and recorded no notable change from their Q4 2022 levels. With steel rebar prices expected to rise, welded mesh prices are expected to increase marginally in Q2 2023.
 <b>Bricks</b>	-0.5% ↓	Moderate	Brick prices have remained relatively stable, recording only a marginal decline from their Q4 2022 levels. Soft demand from the construction sector weighed on brick prices in the first quarter of this year. With construction activity expected to remain relatively weak in the short-term, brick prices are expected to continue fall in Q2 2023.
 <b>Plasterboard</b>	0.0% ↔	Low	Plasterboard prices have been stable in the past quarter. With interest rates rising and economic activity slowing, the demand for plasterboard from the housing sector is expected to soften, preventing any notable increase in prices. The price of plasterboard is expected to remain around its current level in Q2 2023.
 <b>Diesel</b>	+0.4% ↑	Low	Diesel prices increased between January and mid-February, with Taiwan's CPC and Formosa Petrochemical Corp increasing their prices. In March 2023, CPC and FPC reduced their diesel prices in accordance with the government's requirement that fuel prices in Taiwan remain lower than those in neighbouring economies. With crude prices likely to rise on OPEC+ production cuts, diesel prices could face some upwards pressure.

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

# Taiwan – Construction Materials Pricing (2022-2023)



Material prices relate to raw or unfinished materials, and not to finished, delivered and erected on-site prices.

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# Taiwan – Macroeconomic overview



## Economic indicators



**2.10%**

GDP growth in 2023 (f)  
and 2.45% in 2022



**1.92%**

inflation rate in 2023 (f)  
and 2.94% for 2022



**11.49M**

people employed in 2023 (f)  
and 11.45M in 2022



**3.53%**

unemployment rate for Feb 2023  
(f) and 3.65% in Feb 2022



**104.32**

Consumer Price Index in Mar  
2023 and 101.92 in Mar 2022



**109.38**

Producers Prices Index in Mar  
2023 and 109.14 in Mar 2022

## National holidays

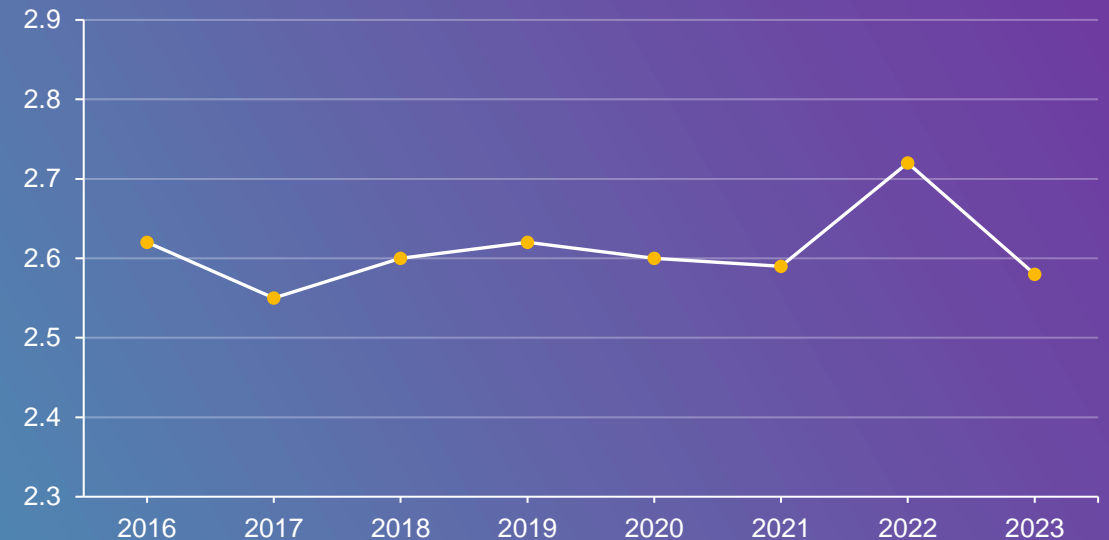


**14 public holidays**

in Taiwan each year

## Taiwan Energy Prices

Electricity Average Selling Price  
NT\$ per kWh









Note: Electricity Prices are from Taiwan Power company

\*For 2023 Price is average of Jan to March 2023 prices

# Taiwan – Construction overview



## Output 2022 and 2023 (in NT\$ millions)

	Total 2022	Total 2023 (f)	Total 2024 (f)
Commercial 	106,262	104,906	108,592
Energy and utilities 	326,403	332,567	341,021
Industrial 	261,135	256,771	264,183
Infrastructure 	484,275	502,309	524,745
Institutional 	92,783	93,558	95,853
Residential 	555,148	545,659	566,855

\*The output is in real terms at constant prices with 2017 as base year

## Long lead equipment (LLE) - Supply Chain Overview

2022 was a turbulent year for the global supply chain with the fallout from the global pandemic combined with the emergence of the Russia-Ukraine conflict, leading to supply chain disruptions across the globe. However, 2023 is showing signs of relief in the market for long lead equipment (LLE). The following are the specifics of the LLE supply chain dynamic:

- 1. Demand:** Demand for LLE has remained exceptionally high across all regions and industry sectors. Organizations have moved to expand their supply chain portfolios and include secondary and tertiary suppliers, whilst most are continuing to invest in inventory management systems to prevent any supply chain disruptions. There is no sign of reduced demand, so the constraints to the supply chain will continue for the remainder of 2023.
- 2. Supply:** The stock levels of raw materials finally started to stabilize, alleviating some recent pressures on manufacturers and suppliers. However, it is worth noting that most LLE suppliers have reported being at operational capacity, with order books full up to Q3 2024, which may cause some concern for those relying on their products. Nevertheless, there is some hope as Tier 2 and Tier 3 supply chains have started to increase their capacity and support the larger demand within the market, which may help to mitigate any negative impact of capacity restrictions.
- 3. Freight durations and costs:** Freight durations have begun to shorten in early 2023 as the global infrastructure and operations have developed to meet the rising demand and freight companies are shipping much faster than they did during the pandemic. Average freight costs have also reduced to align with pre-pandemic levels suggesting a return to normality within the industry. The benefits have been experienced in early 2023 and further reductions are expected throughout the rest of 2023.

## Construction Health and Safety practices and culture



**7.75 per 100 persons is the occupational injury incidence rate** for Construction in Taiwan for 2022. It was 8.60 in 2021

# Taiwan – Report methodology



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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.

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## 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 – Taiwan

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

- IMF
- National Statistics
- Directorate General of Budget, Accounting and Statistics (DGBAS)
- GlobalData's Construction Intelligence Center (CIC)
- Research and Markets
- Economic Research Institute
- Public Holidays
- Bureau of Energy Taiwan



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