

## **Global** Country Commodity Reports





## **AMERICAS**

**United States** 

Canada

Mexico



## **EUROPE**

Belgium Italy

Denmark Netherlands

Finland Norway

France Spain

Germany Sweden

Ireland Switzerland

Israel United Kingdom



## **APAC and GCC**

Australia

Hong Kong

India

Japan

Singapore

South Korea

Taiwan

UAE







## **United States** Q4 2022

The overall GDP growth rate for 2022 is expected to be around 2%, and slowdown is anticipated to continue well into 2023. In its most recent update, the IMF forecasts a 1.4% GDP growth in 2023. Inflation has been similarly high, at 6.2% in 2022, and is expected to remain around 4.7% in 2023, despite all of the policies introduced by federal authorities to minimize inflation.

In 2022, the US construction industry is expected to contract by 7%. This anticipated contraction is significantly larger than the previous estimate of 4.3%. The growth of the sector is being hampered by high input costs, rising interest rates, inflationary pressures, and supplychain issues. With investments by the government in the housing, transportation and manufacturing sectors from this year through to 2026, the industry is expected to grow at an average annual rate of 3.7%. While demand for the majority of commodities is expected to ease in the coming year, rising input costs, high energy costs and other factors are expected to offset this.



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#### Lumbei

The lumber market has calmed after a period of extreme volatility as intensive demand- and supply-side disruptions have subsided. Demand-side signals now largely dominate the narrative in the lumber market with increased interest rates. Demand for housing has slowed resulting in reduced demand for lumber. With further rate hikes anticipated and the cost-of-living crisis likely to intensify, residential construction is not expected to recover in the short- to medium-term.



#### **Cement and aggregates**

High cement prices in recent quarters have mainly stemmed from elevated energy prices, and supply issues from lower shipments. However, the downturn in residential construction will add to negative demand-side pressure in the coming quarters.



#### **Concrete blocks and bricks**

Brick prices have remained elevated in recent quarters, with high production costs driving the recent upward trend at a time of waning residential demand. With high interest rates and a weak economic outlook, residential construction will remain sluggish in the coming quarters, containing further upward pressure on brick prices.



#### Steel (rebar and structural)

Steel producers will seek to reverse the downward trend in prices, but demand in the coming quarters will remain weak, and buyers appear to be running down their relatively high stock levels. Over the longer term, demand will be bolstered by spending under key public investment programs, but the real incomes squeeze and low investor sentiment remain key issues for the industry in the short term.



#### Copper

Demand for copper has been relatively weak, but supply issues are prevalent; political instability and protests in Chile and Peru have disrupted supplies. Over the short- to medium-term, despite weak global economic growth, copper demand will be bolstered by public spending programs related to the energy transition, and a recovery in auto manufacturing.



## **United States** - Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	US\$	US\$	2022-23 % change	% change
Copper (US\$/T)	7,313	9,206	-20.6% ↓	1.2% 个 •
Steel rebar (US\$/T)	988	978	1.0% ↑	-4.7% ↓ •
Steel flat (US\$/T)	1,770	1,743	1.6% ↑	-8.8% ↓ •
Stainless steel (US\$/T)	4,603	NA	NA	NA
Lumber (US\$/cu.ft.)	5.7	15.3	-62.9% ↓	-18.4% ↓ •
Asphalt (US\$/T)	590	514	14.8% ↑	-14.0% <b>↓</b> •
Limestone (US\$/T)	28.2	26.9	5.0% ↑	0.0% ↔ ■
Cement (US\$/T)	135	123	9.4% ↑	1.6% 个 •
Concrete (US\$/CY)	118	108	8.9% ↑	1.6% 个 •
Welded mesh (US\$/unit)	232	231	0.4% ↑	-4.7% ↓ •
Bricks (US\$/'000 unit)	850	683	24.4% ↑	4.5% 个 •
<b>Drywall</b> (US\$/unit)	13.1	12.4	5.5% ↑	1.2% 个 •
<b>Diesel</b> (US\$/gallon)	4.9	4.6	8.3% ↑	-2.0% ↓ ■
(f) Forecast (e) Es	timated			

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 47.2 x 118.1 in, dia.-0.24 in Drywall: 47.2 x 143.7 x 0.49 in (L x W x T)

	Material	% change Q4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+0.5% ↑	o 0	Copper prices rose in Q4 2022, reflecting in part supply disruptions and an expectation of a demand boost from the re-opening of the Chinese economy. Recession fears and the Fed's interest rate hikes will apply downward pressure on copper in the short term, but this will be offset by investment in the energy transition and concerns over tight supply.
B	Steel prices - Steel rebar - Flat steel	-0.5% ↓ -0.5% ↓	o 0	Steel prices continued to fall in late 2022, reflecting underlying weakness in demand, and the lack of new investment in infrastructure recently. Furthermore, the drop in European demand and the stronger dollar will further add to negative pressure. However, public investment programs such as the Investment Infrastructure and Jobs Act, the CHIPS and Science Act, and the Inflation Reduction Act, will help to boost the demand in coming years.
	Stainless st	t <b>eel</b> +0.5% ↑	o O D D D Moderate	Despite weak demand, stainless steel prices have come under upward pressure owing to higher raw materials prices.
	Lumber	-1.0% ↓	o 0	As the housing market has slowed, price pressure has eased and stockpiles have been replenished. After significant supply setbacks in Canada caused by forest fires and flooding in early to mid-2022, producers have rebuilt stock levels. Prices are expected to decline further in the near future given the gloomy outlook for housebuilding demand.
	Asphalt	-0.6% ↓	o D D D Moderate	A recent drop in oil prices has reduced costs for producers. As spending on infrastructure projects starts to ramp up again, growth in demand is expected to keep prices relatively elevated.
0000	Limestone	+0.5% ↑	•0000 Low	Prices for limestone will remain relatively stable in the near future, with weaker demand being offset by continued high production costs.



## **United States** - Commodity Report



# Building cost Index 2016-2022



Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Cement Concrete	+0.5% ↑ +0.7% ↑	o D	Despite weaker demand in the residential construction sector reflected in a drop in housing starts, cement and concrete prices continued on an upward trend in late 2022. This primarily reflects higher production costs; the producer price index for cement and concrete manufacturing was up by 15% year on year in November 2022. However, demand-side price pressure is expected to ease. The Portland Cement Association (PCA) estimates that demand will decline by 3.5% in 2023.
Welded mes	sh -0.5% <b>↓</b>	o	Similar to the steel price trend, the price of welded mesh is set to fall steadily.
Bricks	+0.4% ↑	o Û █ Û Û Moderate	Housing starts have been steadily declining since February and there has been a decline in refurbishment work. However, supply-side pressures have persisted, contributing to the continued upward trend in brick prices. The producer price index for brick manufacturing was up by 15% year on year in November. Ongoing weakness in demand will limit further upward pressure in the coming quarters.
Drywall	+0.5% 个	•0000 Low	High production costs contributed to a steady rise in drywall prices in late 2022, along with restocking efforts by building material suppliers. However, with the residential building sector continuing to decline, demand-side price pressures will ease in 2023.
Diesel	-2.5% ↓	o O D D High	Diesel prices dropped below \$5 per gallon in December, and will continue to decline from recent highs. The Energy Information Administration, in its December Short-Term Energy Outlook, lowered the forecast for the average 2023 retail diesel price by 17 cents to \$4.48 per gallon, falling 11% from the expected full-year 2022 average of \$5.05 per gallon owing to high refinery utilization.

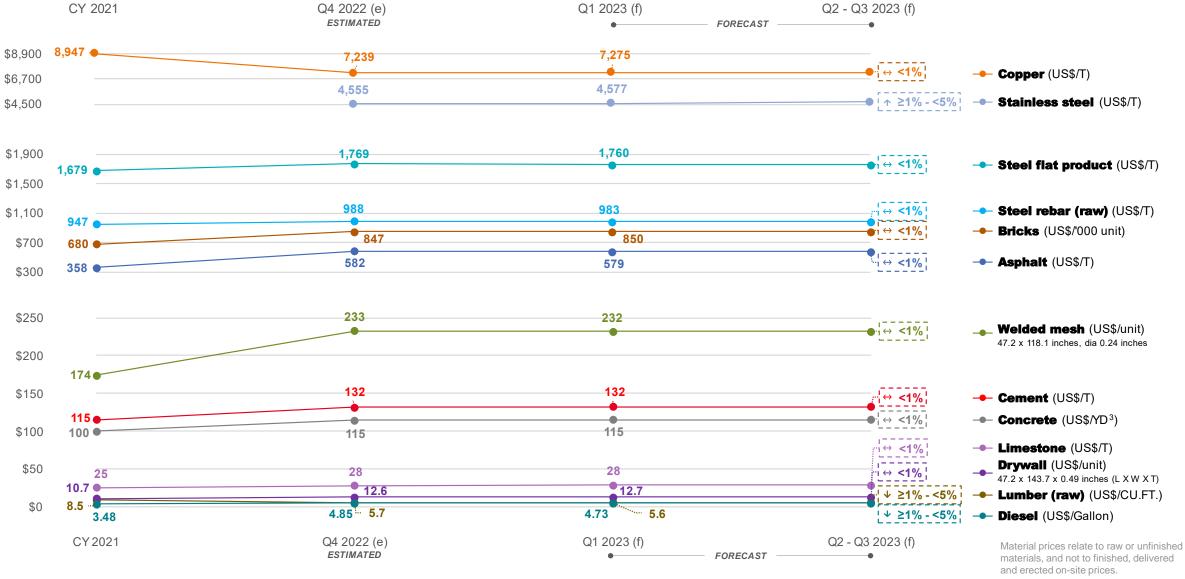
Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

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.



## **US Central** - Construction Materials Pricing (2021-2023)

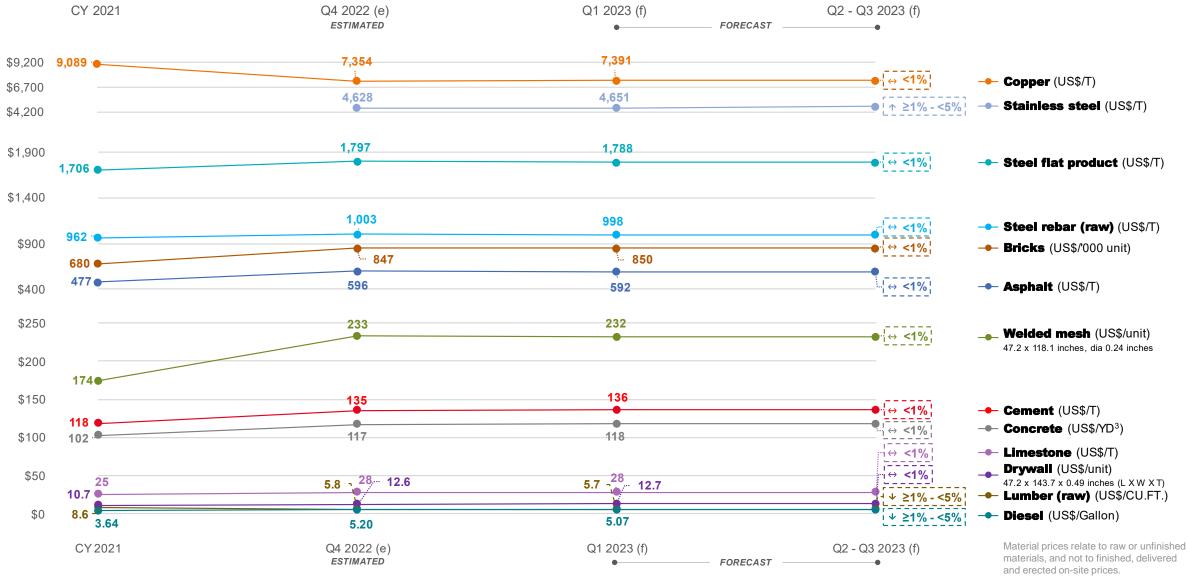






## **US East** - Construction Materials Pricing (2021-2023)

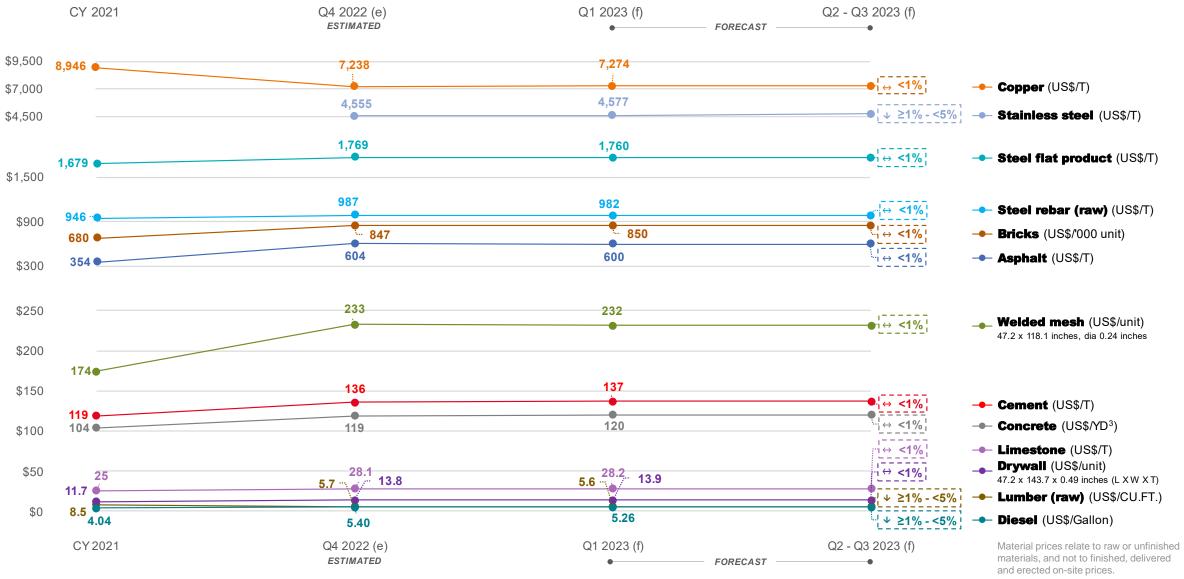






## **US West** - Construction Materials Pricing (2021-2023)







## **United States** - Report methodology



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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.

#### **Definitions**

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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)
- Federal Reserve Economic Data
- Bureau of Economic Analysis







## **Canada** Q4 2022

According to a recent IMF estimate, Canada's economy will rise by 3.5% in 2022 but will then drop to 1.5% in 2023. High inflationary pressures, lower consumer spending and high interest rates are the key factors causing the economy to weaken in 2023. However, inflation is expected to ease throughout 2023 with improvements in the supply chain globally and a tightening of fiscal policy with increased interest rates. While general unemployment may increase in 2023, a shortage of core skilled construction labor is expected, resulting in stable costs for labor throughout the year.

In 2022, Canada's construction industry is expected to grow by 1.7% in real terms. Residential construction is likely to be slower this year because of the overall economic sentiment, an increase in interest rates and a readjustment for significant house price inflation over the past few years. The government has announced a significant number of major infrastructure projects such as road and light rail projects in the major metropolitan areas. This will help offset some of the slowdowns in other areas of the economy. Opportunities for growth in the Data Center and Life Sciences sectors, similar to what is seen in the United States, are likely to emerge in the coming year, with a majority of these projects based in Eastern Canada



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#### Lumber

Canadian lumber prices have continued along a slight downward trend over the past quarter as demand has remained subdued. Due to a high dependence on US exports (85% of the US softwood imports are sourced from Canada), price determination is linked to the US housing market, which is facing a prolonged downturn. With interest rates expected to remain high over 2023, the US housing market is unlikely to recover in the short- to medium-term. This has led many producers in Canada to curtail production and shut down mills to maintain a demand-supply balance.



#### **Cement and aggregates**

Hauler strikes and a shutdown of major plants due to fires added to supply tightness in mid to late 2022. However, supply has gradually recovered, and stocks have been replenished while intensive demand from the housing sector has subsided. However, high energy prices remain a key factor in keeping prices for cement and aggregates high. Furthermore, over the medium term, producers are likely to be hit by higher costs due to increased environmental regulations on production.



#### Concrete blocks and bricks

Although demand from the residential sector has subsided, energy prices have remained a key determinant in a high brick price.



Elevated oil and gas prices will continue to put upward pressure on brick prices over the next quarter.



#### Steel (rebar and structural)

Around 50% of steel supply is produced in Canada. With supply-side issues easing and inventories now stable, demand-side uncertainty has been the key driver behind price weakness. However, a long-term infrastructure program by the government will help to boost the demand to some extent.



#### Copper

Although the anticipation of the global economic recession impacted copper demand, prices have picked up in part owing to political and social unrest in Chile and Peru, with subdued output in the two countries restricting global copper supply. Demand over the medium-to long-term will be supported by the Net Zero agenda and renewable energy drive.



## Canada – Commodity Report



	Q1 2023 (f)	Q1 2022 -	- Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	CA\$	CA\$	2022-23 % change	% change
Copper (CA\$/T)	9,911	11,474	-13.6% ↓	7.3% ↑ ■
Steel rebar (CA\$/T)	808	907	-10.9% ↓	3.3% ↑ ■
Steel flat (CA\$/T)	2,106	2,363	-10.9% ↓	3.3% ↑ ■
Stainless steel (CA\$/T)	9,083	NA	NA	NA
Lumber (CA\$/cu.ft.)	49.8	127	-60.8% ↓	-21.5% <b>↓ •</b>
<b>Asphalt</b> (CA\$/T)	1,113	877	26.8% ↑	-11.1% <b>↓ •</b>
<b>Limestone</b> (CA\$/T)	35.6	33.9	5.2% ↑	0.0% ↔ ■
Cement (CA\$/T)	259	228	13.9% ↑	0.0% ↔ ■
Concrete (CA\$/CY)	192	176	9.2% ↑	0.0% ↔ ■
Welded mesh (CA\$/unit)	219	245	-10.5% ↓	3.3% ↑ ■
Bricks (CA\$/'000 unit)	663	513	29.2% ↑	4.2% 个 •
<b>Drywall</b> (CA\$/unit)	17.9	16.8	6.5% ↑	2.4% 个 •
Diesel (CA\$/gallon)	8.4	8.1	3.5% ↑	-5.5% <b>↓</b> •

(f) Forecast	(a) Estimated
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- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 47.2 x 118.1 in, dia.-0.24 in Drywall: 47.2 x 96.1 x 0.5 in (L x W x T)

	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Copper	+0.5% ↑	o 0	The supply outlook for copper has been impacted by subdued output from Chile and Peru, which contributed to upward pressure in late 2022. The demand outlook is more complex. While economic activity is down globally due to increased interest rates, the reopening of the Chinese economy and the continued momentum behind the energy transition will keep copper prices volatile in the coming quarters.
	Steel prices - Steel rebar - Flat steel	-0.6% ↓ -0.6% ↓	o 0	Steel prices remained relatively low in late 2022 compared to the high levels in the first half of the year. Demand from the infrastructure sector will be supported by federal and local government investments in upgrading the country's transport infrastructure, but residential construction will be sluggish in the coming quarters.
	Stainless Sto	eel +1.0% ↑	•0000 Low	Stainless steel prices have been pushed up by higher raw materials prices, and this will continue to be the case in the coming quarters.
	Lumber	-2.0% ↓	o D D D High	Short-term volatility in the lumber market looks to be in the past, as supply chain issues have largely been resolved. However, with continued downward pressure from the residential market domestically and in the US, prices are expected to fall.
	Asphalt	+1.0% 个	o 0	Asphalt prices eased in Q4 2022, with the trend reflecting in part the decline in crude oil prices. Although staying below the highs reached in 2022, prices for crude oil are expected to remain around \$80 per barrel, thereby keeping asphalt prices elevated.
0000	Limestone	+0.8% ↑	• 0 0 0 Low	Mining for limestone and primary aggregates has been stable in Canada and supply chains remain strong. However, elevated energy prices will continue to put upward pressure on prices. Hence, prices are expected to remain stable at current highs in the coming quarters.



## Canada – Commodity Report



# Non- residential building construction price index 2020- Q3 2022



	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+0.2% ↑ +0.2% ↑	00 █ █ █ Moderate	Cement prices have flattened in recent months as demand pressures have lessened, although supply issues remain prevalent. A slowing construction market has been the key driver in lower demand for cement. However, elevated energy costs and logistical issues such as the haulers' strike continue to impose upward pressure on prices.
	Welded mes	sh -0.1% <b>↓</b>	o	Following the steel price trends, demand for welded mesh will ease in the latter part of the year, but production and logistical costs will remain elevated.
盘	Bricks	+0.2% ↑	00 <b>I</b> ∭ Moderate	Construction output for the residential sector is expected to decline in 2023, driving down demand for bricks. However, supply chains remain tight, hence the price is expected to remain around current levels.
	Drywall	+0.5% ↑	•0000 Low	As the residential construction sector loses momentum, pressure on plasterboard prices is expected to ease. Consequently, prices will likely remain at similar levels to the previous quarter.
	Diesel	-0.5% ↓	o O D D High	Diesel prices have been on a declining trend since June 2022. However, the recent decision by OPEC+ to cut production targets is expected to keep prices elevated in the near future.

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.



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.

## Canada – Construction Materials Pricing (2021-2023)







## Canada – Report methodology



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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.

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## **Sample sources - Canada**

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

- IMF
- Bank of Canada
- Statistics Canada
- Oxford Economics
- GlobalData's Construction Intelligence Center (CIC)







# **Mexico** Q4 2022

The IMF estimated a 3.1% growth in Mexico's GDP in 2022 and raised its forecast for 2023 by 0.5% to 1.7%. The upward revision is attributed to a rebound in economic activity and higher-than-expected growth in major trading partner economies. The Consumer Price Index for 2022 reached a record high of 7.8%, but with the demand supply gap stabilizing and global markets recovering, it is expected to fall in coming quarters.

Construction output has been weak, with a 1.1% (in real terms) year-on-year decline expected in 2022, as construction activity remained subdued from January to September 2022. Although upward price pressures, supply chain constraints, interest rate hikes, and infrastructure project cancellations are affecting the industry in the short term, the mid-to long-term outlook appears to be positive, with an 2.8% average annual growth expected between 2024 and 2026.



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#### Lumber

Lumber prices are heavily dependent on residential construction domestically and are also impacted by demand trends in the US given that around 38% of Mexico's lumber imports are sourced from the US. Declining residential construction demand due to high interest rates and low consumer confidence, in addition to more stable supply chains in Canada, has caused a gradual decline in lumber prices over the past year. With further rate hikes on the horizon that will hit residential investment, prices are expected to go down further.



#### **Cement and aggregates**

Cement prices have largely reflected the rise in production costs primarily due to energy cost increases, which have been directly passed onto consumers. However, there has also been strong demand in infrastructure, industrial, and warehouse construction, which will continue to put pressure on cement prices in the near-term.



#### **Concrete blocks and bricks**

In addition to higher production costs for bricks, concrete block suppliers will be impacted by additional taxes on key materials. The newly introduced green tax levied on quarry operations in early 2022 has put additional pressure on the concrete supply chains.



#### Steel (rebar and structural)

Weakening demand growth globally has been a key factor in the decline in steel prices. On the upside, the recovery of the auto manufacturing industry and increased production is likely to reinvigorate demand into the medium term. Furthermore, in an effort to protect the steel industry, the Mexican government has introduced a 15% tariff on 224 steel items, which will keep prices relatively high.



#### Copper

Domestic copper demand remains uncertain. Demand from the construction sector is weak, given a lack of investment and cost hikes that have led to many major energy and infrastructure projects being postponed or canceled in addition to weak demand from the residential sector. However, demand for copper from auto manufacturing is expected to brighten; US automobile exports picked up towards the end of 2022 and are likely to increase further in 2023.



# Mexico – Commodity Report



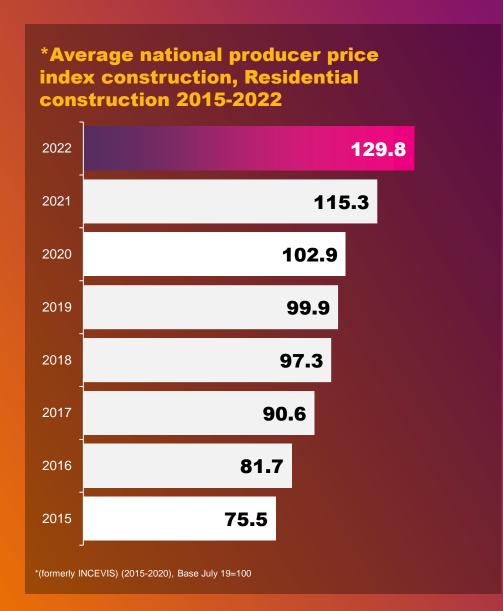
	Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	MXN	% change
Copper MXN/T)	142,441	3.7% ↑
Steel rebar MXN/T)	19,427	-4.3% ↓
Steel flat MXN/T)	25,435	-1.1% ↓
Stainless steel	69,485	-18.2% ↓
<b>_umber</b> MXN/cu.ft.)	40.1	1.1% 个
Asphalt MXN/T)	10,589	-14.3% ↓
_imestone MXN/T)	178	0.2% ↑
Cement MXN/T)	2,978	1.9% 个
Concrete MXN/CY)	1,476	0.5% ↑
Welded mesh MXN/unit)	4,327	-4.3% ↓
Bricks MXN/'000 unit)	7,677	1.7% ↑
<b>Drywall</b> MXN/unit)	164	0.2% ↑
<b>Diesel</b> MXN/gallon)	86.4	-0.2% ↓

	Material	% change – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+0.5% ↑	•OOD Low	Copper prices picked up in Q4 2022, owing in part to concerns over supply tightness and disruptions in Peru caused by political unrest. Despite the slowing global economy, which will weigh on prices, volatility is expected to continue in the coming quarters given ongoing concerns over supply shocks and weak demand.
	Steel prices - Steel rebar - Flat steel	-2.8% ↓ -1.2% ↓	• O O O	Steel prices continued to decline in Q4 2022, reflecting weakening demand domestically and falling prices globally. Although prices have dropped from the highs of mid-2022, they are still relatively high compared to levels before early 2021, due to elevated production costs.
	Stainless Steel	-4.0% ↓	•OOOO	Stainless steel prices have trended downwards from recent high levels. Weaker demand will contribute to further downward pressure, but the high costs for key raw materials, notably nickel, will prevent a sharp decline in the coming quarters.
	Lumber	-2.8% ↓	• O O O O	Lumber prices edged upwards in late 2022, but price pressures will dissipate given the weak outlook for the construction industry, with residential construction, in particular, to be weighed down in the short term by the hike in interest rates.
	Asphalt	-9.6% ↓	•0000 Low	Asphalt prices fell sharply in Q4 2022, and this downward trend is expected to persist in the coming months. However, with crude oil prices remaining close to current levels, prices on average will be relatively stable throughout the year.
00°	Limestone	<b>+3.1% ↑</b>	•ODD Low	Prices for limestone have been stable in recent quarters, and high production costs will keep prices high in the coming quarters.



## Mexico – Commodity Report





Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Cement Concrete	-0.7% ↓ -1.0% ↓	00 █ █ █ Moderate	Concrete and cement prices have continued on an upward trend, with producers passing on high production costs. Infrastructure construction has contributed to strong demand for bulk cement and ready-mixed concrete, but weaker residential growth has impacted the sales of bagged products.
Welded mes	sh -2.8% <b>↓</b>	•0000 Low	In line with trends for steel, prices for welded mesh is expected to trend downwards in the coming quarters.
Bricks	+1.3% ↑	• DO DO Low	Owing to higher production costs, brick prices rose in Q4 2022. As demand weakens in the coming quarters, upward price pressure will ease, but prices will remain relatively high.
Drywall	+1.0% ↑	•0000 Low	Plasterboard prices will remain high, given that producers are facing higher costs. However, weak growth in buildings construction will limit further rises.
Diesel	-0.5% ↓	•0000 Low	Diesel prices have edged lower with global crude prices stabilizing. Government subsidies will help contain price inflation in the coming quarters.

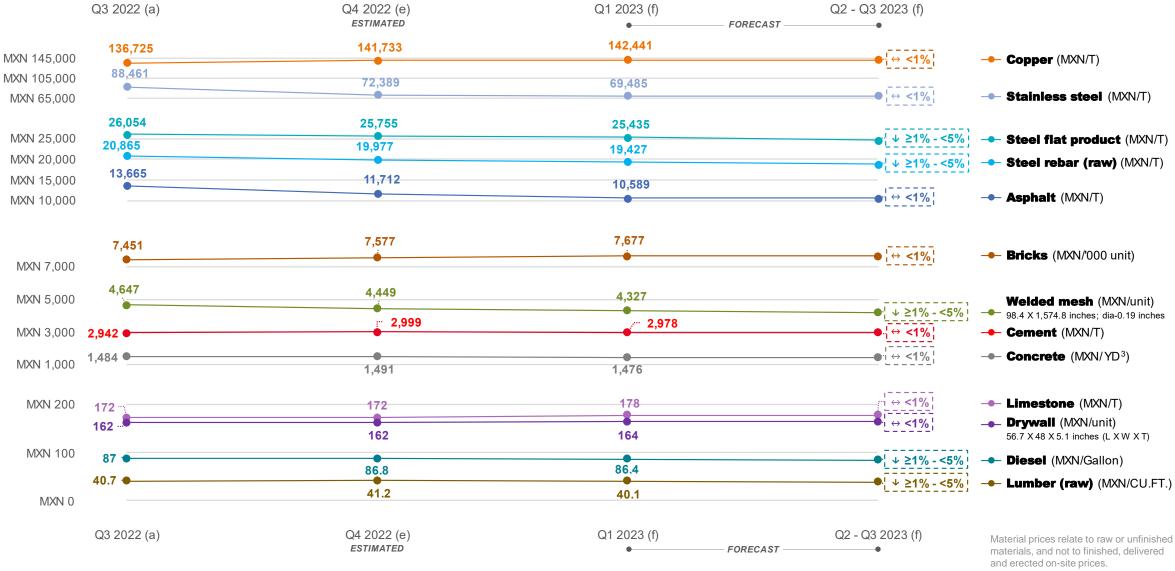
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Real data series are calculated by keeping prices constant (so, are also referred to as constant price series), and therefore, they reflect changes in activity only. Growth rates in nominal terms can overstate the pace of growth in construction activity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

## **Sample sources – Mexico**

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

- IMF
- National Institute of Statistics and Geography (INEGI)
- GlobalData's Construction Intelligence Center (CIC)









# **Belgium**

Q4 2022

The overall growth rate of the Belgian economy for 2022 is expected to hover around 3.1%, given moderate growth in the last quarter. As far as the coming years are concerned, the growth rate will drop back in 2023 to around 0.6% as a result of pressures on the economy, a slowing labour market and international cues such as energy related headaches arising from the Russia-Ukraine conflict. Inflation has continued to increase over the last few quarters as a result of energy prices remaining strained especially given the extreme cold conditions, although moderating slightly in last two months of 2022, to make the year average around 10%. Inflation is expected to further ease out over the coming years, riding on an expectation of energy prices normalising.

The construction sector in Belgium looks stagnated at 0.3% growth in the last quarter of 2022, which is not all bad, given that the other sectors are bearing the brunt of a slowing economy, high inflation and adverse global economic and political pressures. Amid inflationary pressures and muted demand, the prices of commodities are expected to level off in coming quarters.



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#### Lumber

Lumber prices are set to remain relatively high. The decline in construction output in the short term will contribute to an easing in price pressure, but demand for lumber will increase over the long term given the growing popularity of wood as a construction material. Lumber accounts for around a 2% share of total construction value in Belgium, which is lower than in Scandinavian markets, but relatively high compared to other major markets in Europe.



#### **Cement and aggregates**

The construction industry is facing a challenging period with output set to decline in 2023, and this will impact on demand for cement and concrete. Prices for these materials soared over the course of 2022 and will stay relatively high over the coming quarters owing to high energy costs. According to Embuild (the Belgium Construction Association), there will be some price stability going forward, but given the risk of market volatility it has advised construction companies to continue to include price review clauses in their contracts.



#### **Concrete blocks and bricks**

Brick prices rose throughout 2022, with producers passing on higher energy costs. Higher material costs along with product shortages have been a key factor in reports of construction companies having to halt projects temporarily. Heading into 2023, weaker demand will be a factor in containing upward price pressures, given the wider economic slowdown and rising interest rates, but a marked reversal in materials prices is not expected.





#### Steel (rebar and structural)

Steel prices have fallen from the highs reached during the second quarter of 2022, with rebar prices in particular dropping sharply, such that in December 2022 they were marginally below the levels in December 2021. With high energy costs and a rise in cheaper imports from Asian suppliers, local producers have been temporarily cutting production and idling facilities.



#### Copper

As has been the case in recent quarters, copper prices will remain volatile in the coming quarters. Although demand will be subdued in the short-term owing to the global economic slowdown, there are fears of supply shortages and disruptions. Over the long term, global demand for copper will be strong as it will be a key material used in EV production and renewable energy technology.



# **Belgium** - Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	€	€	2022-23 % change	% change
Copper (€/MT)	8,249	9,116	-9.5% ↓	1.8% 个
Steel rebar (€/MT)	822	982	-16.3% ↓	-17.0% ↓
Steel flat (€/MT)	1,144	1,164	-1.7% ↓	-1.3% ↓
Stainless steel (€/MT)	3,844	NA	NA	NA
<b>Lumber</b> (€/M3)	108	105	3.8% ↑	-2.2% ↓
<b>Asphalt</b> (€/MT)	77.1	73.7	4.7% ↑	-0.2% ↓
<b>Limestone</b> (€/MT)	84.8	63.0	34.7% ↑	2.2% 个
Cement (€/MT)	236	178	32.3% ↑	2.1% ↑
Concrete (€/M3)	123	78	56.6% ↑	10.1% 个
Welded mesh (€/unit)	25.0	29.1	-14.0% ↓	-15.7% ↓
Bricks (€/'000 unit)	682	619	10.2% ↑	4.4% ↑
Plasterboard (€/unit)	5.4	4.7	15.7% ↑	5.3% 个
<b>Diesel</b> (€/litre)	1.8	1.9	-5.1% ↓	-1.8% ↓
(f) Forecast (e) Esti	mated			

Welded mesh: 200 x 300cm, dia.-6mm Plasterboard: 260 x 60 x 1.3cm (L x W x T

	Material	% change Q4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+1.8% ↑	oD <b>∫</b> ∭ Moderate	Copper prices in Belgium are expected to follow global trends given the country's dependence on imports of raw material for copper production. Copper prices picked up again in late 2022 and will be volatile in the coming quarters. The global economic slowdown will exert downward pressure, but this will be offset by fears of a supply shortage as well as demand linked to investments in the green energy transition and electric vehicle production.
	Steel prices - Steel rebar - Flat steel	-6.0% ↓ -1.0% ↓	•0000 Low	Steel rebar prices declined by 17% when comparing the average in Q4 2022 to the average of the previous quarter, while flat products posted a more marginal decline. The sharp drop in rebar primarily reflects a slowdown in demand, as well as cheaper imports from outside the EU. The Belgian Construction Association expects a slowdown in demand in the country during the first half of 2023 owing to the higher interest rates.
	Stainless ste	eel +2.0% ↑	•0000 Low	The price of stainless steel is expected to increase because of high energ costs and high prices for raw materials, such as nickel.
	Lumber	-1.0% ↓	•0000 Low	Although edging downwards in Q4 2022, lumber prices are still at a relatively high level as a result of high production and manufacturing costs Price pressure will continue to ease, with rising interest rates impacting housing demand. However, over the longer term, the growing popularity o wood as a construction material will be a factor in keeping local prices elevated.
A	Asphalt	-1.0% <b>↓</b>	•0000 Low	Asphalt prices stabilised at a relatively high level in Q4 2022. Demand stemming from road infrastructure investment growth along with elevated crude oil prices will keep asphalt prices close to current levels in the coming quarters.
0000	Limestone	<b>+1.3% ↑</b>	•0 000 Low	Upward pressure on limestone prices has eased, but prices are still relatively high owing to supply-side factors. In the coming quarters, as construction demand growth wanes, prices will start to decline.

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## **Belgium** - Commodity Report



## **Construction Output Price Index 2015-2022** 2022 130.5 116.2 2021 109.9 2020 108.1 2019 105.5 2018 102.9 2017 101.6 2016 100.0 2015

Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Cement Concrete	+1.6% ↑ +1.3% ↑	o	Cement and concrete prices started to level off in Q4 2022, having been on a steep upward trend during the year as a result of rising production costs. By November, cement prices were close to 50% higher than in November 2021, while ready mixed concrete prices were up by 53%. Although prices remain elevated, further upward pressure on prices is expected to ease due to falling levels of activity in the construction industry, limiting cement producers' ability to continue to pass on higher costs.
Welded me	sh -5.7% <b>√</b>	00 <b>I</b> II Moderate	Welded mesh prices have declined from the highs of Q2 2022, in line with the general trend recorded for reinforcement bars. Prices are expected to decline on the back of sluggish demand in the coming quarters.
Bricks	+1.0% ↑	•0000 Low	Brick prices continued on an upward trend in Q4 2022, with prices at the end of the year around 15% higher than at the end of 2021. Given the energy-intensive nature of manufacturing, producers have faced a sharp jump in costs, which have been reflected in prices. However, weaker demand owing to declining levels of construction activity will contain inflationary pressures in the coming quarters.
Plasterboa	rd +1.0% 个	o D █ ∭ Moderate	Plasterboard prices edged higher in Q4 2022, with producers still facing high costs for raw materials and energy. However, with construction activity set to decline marginally in 2023, producers will struggle to continue passing on higher costs to buyers.
Diesel	-9.6% ↓	•0000 Low	Diesel prices dropped below €2 per litre in November for the first time since May 2022. Prices dropped further in December and are expected to continue to slide in the coming months. Crude oil prices will remain volatile given the production cuts by OPEC+ on one hand, and the expected global economic slowdown on the other. However, prices are not expected to

return to the peaks in 2022.

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.



## **Belgium** - Construction Materials Pricing (2021-2023)







## **Belgium** – 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**

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## **Sample sources – Belgium**

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

- National Bank of Belgium
- Organisation for Economic Co-operation and Development (OECD)
- GlobalData's Construction Intelligence Center (CIC)
- STATBEL (the Belgian Statistical Office)







## **Denmark** Q4 2022

The overall GDP growth rate of Denmark for the year 2022 is forecast to be around 3% as a result of a slowdown in the economy. This slowdown is expected to continue well into 2023, before recovering in the latter half, resulting in negligible growth for the year. Growth is expected to return in 2024, albeit marginal at a rate of 1% to 1.5%. The decline in growth is driven by economic and geopolitical pressures from the Russia-Ukraine conflict, volatile energy prices, and slacking labour market. Inflation is also impacting at almost 8% for the year however it is expected to ease out to 3.7% and 2% in the years after.

The Danish construction industry seems to, for now, defy the overall economic concerns in country, registering a robust growth of approximately 5.1% (in real terms) for the year 2022 with the sector forecast to grow at an average annual growth of 3% during 2024-26.



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#### Lumber

Denmark saw record high lumber prices in mid-2022 as a result of supply chain disruption. High production and transportation costs due to elevated energy costs sustained upward pressure on lumber prices, which eased slightly in recent quarters. However, this may be offset by weakening demand in construction industry in coming quarters. Falling residential demand is expected to dampen domestic lumber demand. However, residential construction will benefit from government's focus on affordable housing to combat housing shortage. Additionally, Copenhagen leads the 'Build-in-Wood' initiative funded by the EU to promote timber-based construction.



#### **Cement and aggregates**

High demand for cement and other aggregates amid the expansion in construction output in the first half of 2022 combined with high production and transportation costs caused the price of cement to rise sharply. However, declining demand amid falling levels of construction activity is expected to offset supply-side pressure in the coming quarters and keep prices relatively stable. Prices are likely to prove sticky over the medium term, owing to low competition in the domestic cement market.



#### **Concrete blocks and bricks**

Strong domestic demand amid strong growth in the construction sector has kept brick prices relatively high in Denmark in recent

years, while the supply-chain disruptions stemming from the Russia-Ukraine conflict have exacerbated upward pressure on prices in recent quarters. Despite high production and transportation costs continuing to feed into prices, falling demand for bricks as the construction sector weakens in 2023 will offset upward pressure from the supply side, keeping prices stable in the short term.



#### Steel (rebar and structural)

As a net importer of steel, Denmark has been heavily exposed to supply shortages and price volatility in the global market following the supply shock resulting from EU sanctions on Russian steel imports. However, demand for steel is expected to fall in the coming quarters due to weakening manufacturing output and a reduction in fixed capital investment amid rising interest rates, which will cause steel prices to decline. Moreover, greater levels of steel production in Turkey and China will offset pressures on the supply side and offer cheaper alternatives to net steel importers such as Denmark.



#### Copper

Long-term demand for copper will be driven by investment in renewable energy and electric vehicles to support the green transition in Denmark. However, global copper prices are expected to remain volatile in the short-term owing to competing pressures on the supply and demand sides. Low global stockpiles will sustain upward pressure on prices while falling demand amid slowing economic growth globally will limit further upward pressure. Economic recovery in China, the world's largest copper consumer, could offset the fall in demand from other large copper consumers, exacerbating volatility in global the copper market.

# **Denmark** – Commodity Report



	Q1 2023 (f)	Q1 2022 –	Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	DKK	DKK	2022-23 % change	% change
Copper (DKK/MT)	59,326	66,227	-10.4% ↓	2.1% ↑
Steel rebar (DKK/MT)	6,509	6,570	-0.9% ↓	-6.9% ↓
Steel flat (DKK/MT)	5,366	7,505	-28.5% ↓	-6.9% ↓
<b>Stainless stee</b> (DKK/MT)	28,457	NA	NA	NA
<b>Lumber</b> (DKK/M3)	768	771	-0.4% ↓	-2.4% ↓
<b>Asphalt</b> (DKK/MT)	2,284	2,025	12.8% 个	-0.2% ↓
<b>Limestone</b> (DKK/MT)	1,492	1,448	3.0% ↑	2.0% 个
<b>Cement</b> (DKK/MT)	1,655	1,459	13.4% 个	1.8% ↑
Concrete (DKK/M3)	1,153	1,029	12.0% 个	2.7% 个
Welded mesh (DKK/unit)	261	258	1.3% ↑	-9.4% ↓
Bricks (DKK/'000 unit)	7,493	6,361	17.8% 个	3.5% 个
<b>Plasterboard</b> (DKK/unit)	93.7	73.0	28.3% 个	2.0% 个
<b>Diesel</b> (DKK/litre)	14.0	13.1	6.3% ↑	-3.4% ↓

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 250 x 215cm, dia.-6mm Plasterboard: 240 x 90 x 1.3cm (L x W x T)

Material	% change – Q1 2023 (f)	Level of im	npact of pricing on construction procurement and supply chain *
Copper	+1.7% ↑	o0 ██ Moderate	Low global stockpiles and resilient demand have kept copper prices elevated in recent quarters, despite prices falling from record highs reached in Q2 2022. Slowing economic growth will keep demand subdued compared to historical levels, but supply-side issues will keep prices sensitive to changes in demand.
Steel prices - Steel rebar - Flat steel	-1.0% <b>↓</b> -1.0% <b>↓</b>	•0000 Low	Steel demand in Denmark is expected to continue to fall in the coming quarters, owing to the impact of high energy costs, weak consumer demand, and falling levels of fixed capital investment amid rising interest rates. Declining demand for steel globally, coupled with an increase in steel imports from Turkey and China to ease supply-side pressure, will exacerbate the downward trend in steel prices expected over the coming quarters.
Stainless steel	+1.5% ↑	•0000 Low	Stainless steel prices are expected to rise further due to increase in the prices of key raw materials such as nickel and molybdenum.
Lumber	-2.3% ↓	•0000 Low	Lumber prices are expected to remain stable over the coming quarters, owing to weaker demand in the construction sector, which will offset supply-side pressures stemming from high production and transportation costs. A cooling housing market, will drive the downturn in demand for lumber. Nevertheless, underlying demand for lumber as a sustainable construction material will limit downward pressure on prices.
Asphalt	-1.0% ↓	•0000 Low	Declining crude oil prices in recent months have eased pressure on asphalt prices, which marginally declined in Q4 2022. Falling demand for crude oil globally owing to slowing economic growth in 2023 will offset supply-side disruptions in the crude oil market, which will help to stabilise asphalt prices over the coming quarters.
Limestone	+1.0% ↑	•0000 Low	Limestone prices have fallen from highs reached in Q2 2022 and have since stabilised around DKK1,460/MT. Despite falling demand production and transportation costs for limestone producers remain high, keeping prices stable but elevated.

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## **Denmark** – Commodity Report





	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+1.0% 个 +1.0% 个	00 <b>I</b> ∏ Moderate	High energy costs feeding into production and transportation costs will keep prices elevated. However, falling output levels in the residential construction sector will offset further upward pressure on cement prices.
	Welded mes	sh -1.0% <b>↓</b>	•0000 Low	With an expected fall in steel prices, the price of welded mesh is expected to decline over the coming quarters. High production costs, as a result of high energy costs, are likely to limit downward pressure on prices, therefore, keeping prices elevated compared to historical levels.
盘	Bricks	+1.0% ↑	•0000 Low	Due to high energy costs, brick prices have remained elevated in recent quarters. While producers will continue to pass on higher costs to developers over the coming quarters, weakening demand from the construction industry will limit further upward pressure on prices, which are expected to remain stable in the first half of 2023.
	Plasterboar	d -1.0% <b>↓</b>	o D █ Û Û Moderate	High energy and raw materials costs have been the primary drivers of rising plasterboard prices in 2022. In recent months however, prices have begun to stabilise due to weakening demand and limited further upward pressure on energy and raw materials costs. Plasterboard prices are expected to remain stable at elevated levels over the coming quarters.
	Diesel	-5.8% ↓	•0000 Low	Since the start of the Russia-Ukraine conflict in 2022, diesel prices in Denmark have been among the highest in Europe. However, prices have been falling since Q3 2022, owing primarily to falling crude oil prices. Prices are expected to fall further in the coming quarters as weakening global demand for crude oil offsets supply-side issues. However, crude oil market volatility may cause diesel prices to rise again in the medium term

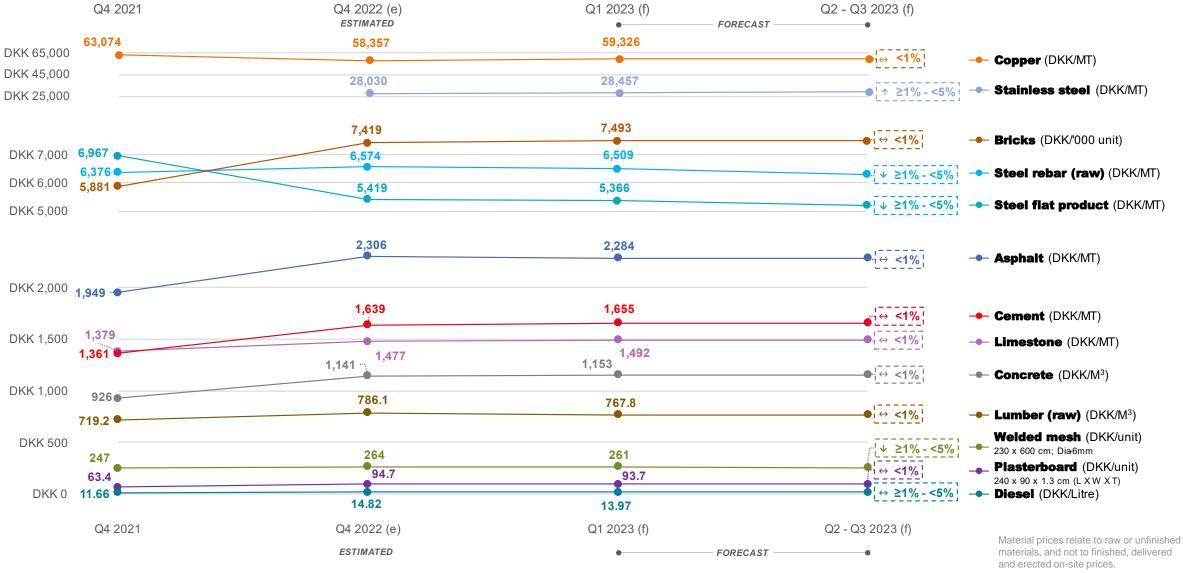
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### **Denmark** – Construction Materials Pricing (2021-2023)







### **Denmark** – 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.

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### **Sample sources – Denmark**

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

- IMF
- Statistics Denmark
- Nationalbanken
- GlobalData's Construction Intelligence Center (CIC)
- European Comission







# Finland Q4 2022

According to a latest update by Statistics Finland, Finnish GDP shrunk by 0.3% in Q3 2022 from the previous quarter and is expected to remain bleak in coming quarters as well. This is primarily because of a surge in energy prices and high inflation impacting purchasing power. The consumer price index in Finland grew by 7% in 2022, but with labour market recovery and government's support, it is predicted to moderate in 2023.

Amid challenges such as high construction costs, supply chain disruptions, high inflation rates, and low investor confidence, Finland's construction industry is expected to grow by 1.8% in real terms in 2022. However, growth is expected to accelerate somewhat to 1.9% in 2023-2024, due to government investments in infrastructure and renewables. Finland's national Recovery and Resilience Plan (RRP) under the EU's Recovery and Resiliency Facility (RRF) and EU's funding to boost SMEs are the key programmes that are likely to fuel the growth of the industry.



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#### Lumber

Finland has been reliant on Russian lumber imports in recent years, despite its large domestic wood industry. With the value of wood products accounting for 8% of its total construction production value, Finland uses more lumber for construction than any other European country. The domestic market has been sensitive to short-term supply shocks. However, Finland is likely to cut its lumber export volume and increase its usage of domestically produced lumber, which, according the Finnish Central Union of Agricultural Producers and Forest Owners, can meet the construction industry's needs.



#### **Cement and aggregates**

Supply disruptions and high energy costs have pushed up the price of cement and concrete in recent quarters. However, further upward pressure on prices will be contained by falling demand amid weakening activity in the construction sector. Prices are likely to remain elevated over the coming quarters due to limited competition in the cement and concrete markets, which will allow producers to pass on higher costs for longer. Finnsementti, a subsidiary of CRH, is the only Finnish cement manufacturer, with the majority of domestic cement production taking place at its Parainen and Lappeenranta plants.



#### **Concrete blocks and bricks**

Despite elevated energy costs continuing to feed into the production and transportation costs of bricks, weakening demand owing to slowing activity in the construction sector and a cooling housing market will limit further upward pressure on brick and concrete block prices over the coming quarters. Prices are likely to remain elevated over the medium term as domestic brick producers continue to pass on higher costs to developers.



#### Steel (rebar and structural)

Owing to its position as a net importer of steel, Finland has been heavily exposed to supply shortages and price fluctuations in the global market in the wake of EU sanctions on Russian steel imports. However, weakening global demand for steel, coupled with increasing production in China and Turkey is expected to ease pressure on prices over the coming quarters. Over the longer term, strengthening demand driven by improving economic conditions and government plans to develop transport and energy infrastructure could put upward pressure on steel prices in Finland.



#### Copper

Although copper prices have fallen from record highs reached in Q2 2022, low global stockpiles and the potential for an increase in demand from China, the world's largest consumer of copper, could keep upward pressure on copper prices. Copper prices are likely to remain volatile over the medium term due to its sensitivity to global supply and demand. Over the longer term, greater investment in renewable energy and electric vehicle production will keep copper demand strong.



### Finland - Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
			2022-23	
Materials	€	€	% change	% change
Copper (€/MT)	8,006	8,939	-10.4% ↓	2.1% ↑
Steel rebar (€/MT)	890	828	7.5% ↑	-13.9% ↓
Steel flat (€/MT)	887	1,003	-11.6% ↓	-1.6% ↓
Stainless steel (€/MT)	3,805	NA	NA	NA
<b>Lumber</b> (€/M3)	70.0	63.9	9.6% 个	-2.0% ↓
<b>Asphalt</b> (€/MT)	74.1	68.2	8.7% ↑	-1.8% ↓
<b>Limestone</b> (€/MT)	58.6	49.0	<b>19.6%</b> ↑	0.8% 个 □
Cement (€/MT)	299	228	31.0% ↑	0.9% 个 □
Concrete (€/M3)	154	133	15.7% ↑	6.9% ↑
Welded mesh (€/unit)	89.1	76.0	<b>17.2%</b> ↑	-6.0% ↓
Bricks (€/'000 unit)	822	773	6.4% ↑	1.8% 个
Plasterboard (€/unit)	14.3	10.5	35.6% ↑	12.8% 个
<b>Diesel</b> (€/litre)	2.0	1.9	4.5% 个	-1.8% ↓

(f) Forecast	(a) Estimated
(II) FUIECASI	ie) Esiillaieu

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 235 x 500cm, dia.-8mm Plasterboard: 120 x 240 x 1.3cm (L x W x T)

	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Copper	+1.9% ↑	•0000 Low	Global demand for copper has been relatively strong in recent months, despite prospects of slowing economic growth in 2023. Underlying demand also remains strong as it will increasingly be used in the renewable energy drive. Low global stockpiles are also increasing pressure on the supply side, which will keep prices high in the coming quarters.
B	Steel prices - Steel rebar - Flat steel	-1.0% <b>↓</b> -1.0% <b>↓</b>	•0000 Low	The impact of high energy costs was particularly strong in Finland where 40% of domestic production use the electric arc furnace process, causing prices to soar in Q2 2022. While high energy costs will continue to impact domestic producers, pressure on steel prices will ease somewhat as supply increases from Asian exporters such as China and Turkey and demand reduces due to slowing global economic growth.
	Stainless ste	eel +1.0%↑	•0000 Low	High energy costs and volatility in the price of nickel and key alloying materials such as molybdenum are expected to sustain upward pressure on stainless steel costs over the coming quarters.
	Lumber	-1.2% ↓	•0000 Low	Lumber prices have edged downwards but will remain at an elevated level due to high production and transportation costs as a result of continued high energy prices. However, further upward pressure on prices will be contained by falling demand from the construction sector, particularly in the residential sector which has been impacted by rising interest rates.
	Asphalt	-1.0% ↓	•0000 Low	The impact of declining crude oil prices in recent months has caused asphalt prices to fall. Weakening demand amid slowing economic growth will keep downward pressure on prices over the coming quarters.  However, uncertainty in the global crude oil market and planned supply cuts by OPEC+ could keep asphalt prices volatile in the medium term.
0000	Limestone	+1.0% 个	•0000	Although limestone demand is largely met through domestic production, high energy and transportation costs have driven inflated costs in recent

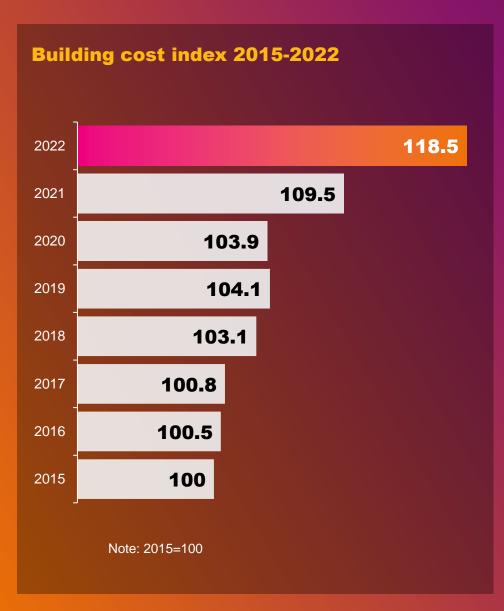
quarters. Supply-side costs will continue to keep upward pressure on

prices in the coming quarters, however, weakening demand in the

construction sector will limit further price increases.

# Finland – Commodity Report





	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+1.0% ↑ +1.0% ↑	o 0 <b>0</b>	Despite high energy costs continuing to exert upward pressure on production and transportation costs, falling demand for concrete and cement is expected to ease further pressure on prices, which are expected to remain elevated but stable over the coming quarters. Further ahead, legislation approved by the Finnish government such as the Building Act, which will go into force in early 2024, will ensure the increasing use of recycled and carbon-free materials in the production process such as fly ash or blast furnace slag. This is expected to keep prices on a declining trend.
	Welded mes	sh -1.0% <b>↓</b>	• O O O O	Welded mesh prices have retracted in recent quarters from highs reached in Q2 2022, owing primarily to declining steel rebar prices. As rebar prices are expected to continue to fall in the coming quarters, mesh prices are expected to be subjected to downward pressure. However, prices are likely to remain elevated due to volatility in the steel market.
盘	Bricks	<b>+1.0% ↑</b>	• 0 0 0 0 0 Low	Demand for bricks is expected to weaken over the coming quarters due to declining demand in the residential sector, which will ease further upward pressure on prices. However, high energy costs feeding into production and transportation costs will keep prices elevated.
	Plasterboar	d +1.0% 个	•0000 Low	Prices are expected to remain elevated, but weakening demand in the construction sector will prevent further upward pressure.
	Diesel	-4.8% ↓	•0000	Diesel prices are expected to fall over the coming quarters, as a result of decline in crude oil prices and weakening demand. However, from

in the medium term.



January 2023, the government has imposed a tax increase on paraffinic diesel of 2 cents per litre, partially offsetting the fall in prices. Volatility in the global crude oil market could renew upward pressure on diesel prices

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.

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# Finland – Construction Materials Pricing (2021-2022)







### Finland – 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**

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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 – Finland**

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

- IMF
- · Statistics Finland
- Finnish Institute of Occupational Health (FIOH)
- GlobalData's Construction Intelligence Center (CIC)
- · Conference-board.org







# **France** Q4 2022

The strong recovery of the French economy earlier in 2022 has been offset by a slowdown towards the end of the year as a result of the ongoing Russia-Ukraine conflict and elevated energy costs. GDP for the year is expected to remain at a moderate 2.6% but is projected to decrease to 0.7% in 2023 due to the current macroeconomic outlook. Inflation is estimated at 5.9% in 2022 and while high, it is a lower rate than many neighbouring countries. However, continued high inflation rates will impact consumer demand and cost of finance, resulting in the low levels of forecast growth outlined.

The construction industry in France is expected to contract by 0.5% in 2022, compared to earlier estimates of 3.3% growth with 0.6% decrease predicted for 2023. While there will be muted demand for key real estate sectors, investment is likely to continue to grow in mission-critical facilities such as data centres.



Ludovic Lecoeur
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#### Lumber

Weaker demand in the short term will contribute to a marginal fall in lumber prices. However, demand will be sustained over the longer term owing to key directives such as a requirement that any new buildings for the 2024 Summer Olympics (measuring eight stories or less) are to be made entirely from wood. In addition, a 2020 law was introduced requiring half of the materials used to construct public buildings to be wood or other natural substances.



#### **Cement and aggregates**

High production costs have driven up concrete and cement prices, but weakening demand and an easing in energy costs will result in prices falling back in 2023. Production levels have also been on a downward trend, with ready-mixed concrete volume falling by 4% in 2022, according to the National Union of Quarry and Materials Industries, and set to fall by a further 4% in in 2023.



#### **Concrete blocks and bricks**

France has domestic capacity to meet demand, being a major manufacturer of bricks. Brick manufacturers have faced a prolonged period of rising costs, which have been the key factor in driving up prices. However, with energy prices likely to have peaked, and with growth in the construction industry slowing amid wider economic weakness and higher interest rates, brick prices are set to ease.



#### Steel (rebar and structural)

The steel industry in France has been facing major challenges in the form of high energy costs, falling demand and competition from cheaper imports from Turkey and India. Although domestic prices are still relatively high compared to 2021 levels, major players in the steel industry have been cutting production. In November ArcelorMittal announced that it was temporarily shutting down one of the two blast furnaces at its Fos-sur-Mer site (Bouches-du-Rhône), blaming weak demand and high energy prices.



#### Copper

There will continue to be a high degree of volatility in copper prices, given the downside pressure from slowing global economic growth and upside pressure from potential supply-side disruptions and a possible revival in demand in China following the relaxation of its zero COVID policy.



# France - Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	€	€	2022-23 % change	% change
Copper (€/MT)	8,264	9,120	-9.4% ↓	2.6% 个(
Steel rebar (€/MT)	767	692	10.8% ↑	-6.5% ↓ (
Steel flat (€/MT)	813	801	1.6% 个	-3.6% ↓
Stainless steel (€/MT)	3,952	NA	NA	NA
<b>Lumber</b> (€/M3)	100	100	0.1% ↑	-1.2% ↓
<b>Asphalt</b> (€/MT)	79.6	78.6	1.3% 个	-1.6% ↓
<b>Limestone</b> (€/MT)	55.0	45.9	19.9% 个	-0.1% ↓
Cement (€/MT)	180	150	19.8% 个	2.3% 个
Concrete (€/M3)	160	134	19.8% 个	2.3% 个
Welded mesh (€/unit)	154	133	16.0% ↑	-5.0% ↓
<b>Bricks</b> (€/'000 unit)	1,111	760	<b>46.3%</b> ↑	10.0% 个
Plasterboard (€/unit)	3.2	3.1	<b>4.4%</b> ↑	2.0% ↑
<b>Diesel</b> (€/litre)	1.7	1.8	-4.3% ↓	-1.6% ↓ □

(f) Forecast	(a) Estimated
(II) FOIECasi	le) Estimateu

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 240 x 600cm, dia.-7mm Plasterboard: 250 x 120 x 1.3cm (L x W x T)

Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Copper	+2.0% ↑	o 0 <b>0</b>	Copper prices picked up towards the end of 2022, with supply disruptions in Peru and the relaxation in China's zero COVID policy having an influence on this trend. Although there are expectations of a global economic downturn, concerns over a global supply deficit in copper and higher demand from the renewable energy and electric vehicle sectors will keep prices elevated.
Steel pri - Steel reb - Flat stee	oar <b>-2.0% ↓</b>	o 0 <b>0</b>	Steel prices have continued to trend downwards from the highs reached in Q2 2022. Rising energy costs had been a key factor in driving up prices earlier in the year. However, weaker demand and cheaper imports from suppliers outside Europe will continue to drive down prices in the coming quarters. Producer prices for steel for use in construction were down by 14% in October 2022 compared to the May 2022, but were still up by 19% compared to October 2021.
Stainles	s steel +2.0% 个	• O O O O	Stainless steel prices will face upward pressure owing to high energy costs and disruption in the supply of raw materials. Russia is one of the largest suppliers of nickel globally, and the ongoing conflict in Ukraine has resulted in trade disruptions.
Lumber	-1.2% ↓	•0000 Low	Lumber prices have edged downwards in recent months as a result of slowing demand, particularly from the residential sector which saw a decrease of 2.3% year-on-year (January to September 2022). This trend is likely to continue through 2023 as demand continues to decline.
Asphalt	-1.0% ↓	•0000 Low	Asphalt prices have eased back in line with the fall in crude oil prices from mid-2022 highs. The use of recycled asphalt will help to contain the price increase in the future.
Limesto	ne +1.0% 个	•0000 Low	There has been minimal change in limestone prices in recent quarters, and prices are still elevated compared to 2021 levels.



# France - Commodity Report



### **Cost of Construction Index (CCI) 2019-2022** Q3 2022 2,037 Q2 2022 1,966 1,948 Q1 2022 1,886 Q4 2021 Q3 2021 1,886 1,821 Q2 2021 Q1 2021 1,822 1,795 Q4 2020 1,765 Q3 2020 Q2 2020 1,753 Q1 2020 1,770 Q4 2019 1,769 Q3 2019 1,746 Q2 2019 1,746 Q1 2019 1,728

	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+2.8% ↑ +2.8% ↑	o O O O O High	Cement prices continued on an upward trend in late 2022, with producers pushing up prices in line with higher production costs (which were up by 22% year-on-year in November). Although prices will remain high in the coming quarters, upward pressure will reduce as energy costs fall back and demand in the construction industry weakens.
	Welded mes	sh -2.0% <b>↓</b>	o	In line with the decline in steel prices, welded mesh prices have fallen from recent highs, and will continue to edge downwards.
盘	Bricks	<b>+1.0% 个</b>	o 0 <b>I</b>	Although the rate of increase in brick prices slowed in Q4 2022, prices were still elevated reflecting the high cost of production. In November, producer prices for brick manufacturing were up by 14% year-on-year. The French Association of Construction Products Industries anticipates that the price of bricks will remain high in the coming quarters, despite weakening demand.
	Plasterboard	d +1.0% <b>↑</b>	o0 <b>I</b> ∭ Moderate	Production costs have been a factor in driving prices up, as a result of higher costs for raw materials, transportation and energy. Demand has weakened as a result of a decrease in construction activity.
	Diesel	-6.2% ↓	•0000 Low	Diesel prices have continued to fall from the highs of around €2.1 per litre in mid-2022. This reflects the decline in crude oil prices. Diesel prices will continue to slide, but with OPEC+'s planned production cuts, crude oil prices will remain relatively high.

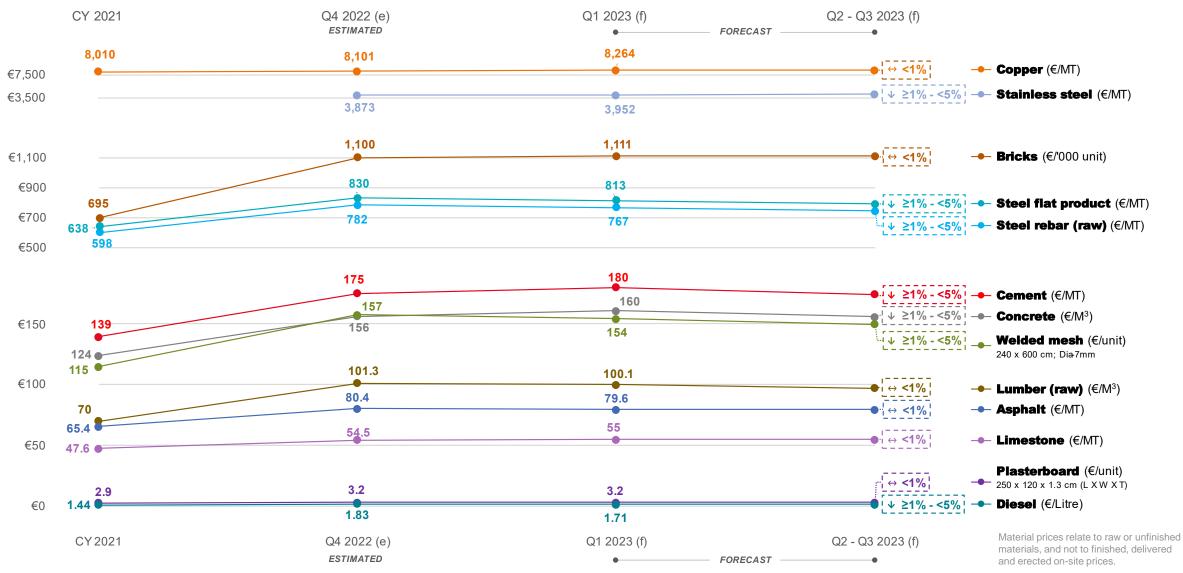
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# **France** – Construction Materials Pricing (2021-2023)





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### **Sample sources – France**

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- IMF
- French National Institute of Statistics and Economic Studies (INSEE)
- GlobalData's Construction Intelligence Center (CIC)







### **Germany**

Q4 2022

Amid massively increasing prices, labour shortages and supplychain bottlenecks, the German economy grew by 1.9% in 2022, as per a recent update by Destasis. Despite being adversely impacted by the energy crisis and high inflation caused by the Russia- Ukraine conflict, Germany's economy narrowly escaped recession and is now expected to grow at 0.2% in 2023, up from the October forecast of a contraction of 0.4%. Though the outlook appears to be positive, the situation remains volatile due to the record high inflation rates. While the inflation rate was 7.9% in 2022, it is expected to fall to 6% in 2023, a 1% decrease from the previous forecast.

Germany's construction industry output is expected to fall by 3.2% in 2022, compared to the previous 1.6% estimate. High energy prices resulting in higher material and financing costs have had a significant impact on the industry. Shortages of skilled labour and materials are exacerbating the industry's woes. Even though supply chain issues are subsiding, low investor confidence and high borrowing costs will have an impact on the residential and commercial sectors. Nonetheless, investment in mission-critical facilities such as Data Centres, Life Sciences, and High-Tech Industrial will continue.



Michael Riordan Senior Director - Europe michael.riordan@linesight.com



#### Lumber

Lumber prices will remain elevated as a result of the ongoing Russia-Ukraine conflict and high energy costs. In 2021, Russian softwood lumber accounted for 14% of overall imports. With weakness on the demand side, further upward price pressure will be contained.



#### **Cement and aggregates**

Despite weak demand amid the downturn in the construction industry, prices for cement have stayed high. Germany is a leading producer of cement within the EU, and key producers have been passing on higher costs to buyers. When presenting its recent results, Heidelberg Cement noted that high energy and raw material costs in the third quarter of 2022 were offset by energy savings, cost discipline, and price adjustments.



#### **Concrete blocks and bricks**

Despite weak demand, brick prices have stayed relatively high owing to rising production costs. Production capacity will remain healthy. Wienerberger recently took over the Steinheim brick plant in North Rhine Westphalia, which it stated was a demonstration of its commitment to long-term growth and further expanding the production of sustainable clay building materials.



#### Steel (rebar and structural)

Germany's construction industry remains weak, and demand for structural steel and rebar has been sluggish. Production costs have also fallen from recent highs, with electricity prices easing, it will become less expensive to manufacture with electric arc furnaces.



#### Copper

Copper prices faced significant volatility in 2022, reaching record highs in the second quarter amid uncertainty over the Russia-Ukraine conflict, before falling back on concerns over weakening global demand. Prices rallied again in the fourth quarter, with supply tightness and prospects of stronger demand. The outlook remains mixed, but a tightly balanced market and limited stocks will keep prices relatively high.



# **Germany** – Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	€	€	2022-23 % change	% change
Copper (€/MT)	8,169	8,900	-8.2% ↓	3.9% ↑ •
Steel rebar (€/MT)	569	626	-9.1% ↓	-13.0% <b>↓</b> •
Steel flat (€/MT)	760	714	6.5% ↑	-3.1% ↓ •
Stainless steel (€/MT)	3,773	NA	NA	NA
Lumber (€/M3)	128	114	12.2% ↑	2.2% 个 •
<b>Asphalt</b> (€/MT)	74.0	60.0	23.3% ↑	0.5% ↑ ■
<b>Limestone</b> (€/MT)	38.5	35.7	7.9% ↑	1.0% 个
Cement (€/MT)	157	130	20.3% ↑	0.9% ↑ ■
Concrete (€/M3)	186	168	10.9% ↑	1.5% 个 •
Welded mesh (€/unit)	68.9	75.6	-8.9% ↓	-12.9% <b>↓</b> •
Bricks (€/'000 unit)	715	610	<b>17.2%</b> ↑	3.1% 个 •
Plasterboard (€/unit)	3.7	2.9	28.9% ↑	12.2% 个 •
<b>Diesel</b> (€/litre)	2.0	1.8	9.7% ↑	-1.5% ↓ •

(f) Faragast	(e) Estimated
(II) Forecast	(e) Estimated

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 600 x 230cm, dia.-6mm Plasterboard: 200 x 60 x 1.25cm (L x W x T)

Material	% change – Q1 2023 (f)	Level of imp	pact of pricing on construction procurement and supply chain *
Copper	+1.55% ↑	o 0 <b>●</b>	Copper prices rose in the final few months of 2022, as supply tightness and expectations of a boost to demand from China's relaxation of its zero COVID policy. Political unrest in Peru, the second largest producer in the world, also added to upside price pressure.
Steel prices - Steel rebar - Flat steel	-6.78% <b>↓</b> -2.83% <b>↓</b>	o 0 <b>●</b>	Steel prices dropped in Q4 2022 reflecting weak demand and lower production costs (as gas prices have fallen from recent peaks). Prices are expected to remain weak, although sellers are reportedly demanding higher prices.
Stainless steel	+3.02% ↑	• O O O O	Stainless steel prices are expected to face further upwards pressure stemming from the increase in the prices for key raw materials, such as nickel.
Lumber	-0.99% ↓	o0 <b>I</b> ∭ Moderate	Lumber prices have remained relatively high, despite weak demand on the construction side. This trend mainly reflects limited raw materials and supply constraints stemming from the disruption caused by the Russia- Ukraine crisis.
Asphalt	-1.00% ↓	o 0 ∭ Moderate	Crude oil prices have dropped from the Q2 2022 highs but are expected to remain high relative to average levels in recent years, given action by OPEC+ to cut supplies. Demand in Germany though will be flat. The volume of new construction orders in civil engineering has been in decline in recent months, with new orders for road construction dropping by 6.3% year-on-year in the first three quarters of 2022.
Limestone	+0.72% ↑	•0000 Low	Limestone prices have been steady in recent months, reflecting high production and transportation costs on one hand and weak demand on the other.



## **Germany** – Commodity Report





Material (	% change Q4 – Q1 2023 (f)	Level of ir	npact of pricing on construction procurement and supply chain *
Cement Concrete	-0.74% ↓ +1.01% ↑	o () () () High	Weakness in the German construction industry is expected to continue into 2023, reflecting the downturn in the number of building permits issued and as a result of current economic headwinds. However, concrete and cement prices are set to remain close to recent highs given the determination of producers to pass on high production costs.
Welded mesh	-6.63% ↓	o 0 ■ □ □ Moderate	Welded mesh prices have continued to fall from the highs of Q2 2022, in line with the general trend recorded for steel. In addition to weakness in demand, domestic prices will fall amid a rise in cheaper imports from CIS and Asian suppliers.
Bricks	+1.00% ↑	• O O O O	Brick production costs remained elevated in the past quarter, and the producer price index for bricks was up by 17% year-on-year in November 2022. However, with building construction facing a downturn, brick demand growth will be limited.
Plasterboard	+1.01% ↑	• 0 0 0 0 Low	Plasterboard prices have stayed relatively high, reflecting ongoing high production costs. In November 2022, producer prices for plaster products for the construction industry were up by 18% year on year.
Diesel	-0.99% ↓	• 0 0 0 0 Low	Although crude oil prices have fallen from the highs of Q2 2022, the drop in diesel prices has been marginal. Prices are expected to edge downwards, but crude oil prices are projected to remain close to current levels.

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### **Sample sources - Germany**

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

- IMF
- Destatis
- GlobalData's Construction Intelligence Center (CIC)







# Ireland Q4 2022

According to a recent update by the CSO, GDP growth in Ireland is estimated to have increased by 12.2%, when compared with 2021. Initial indications reveal it has been mainly driven by expansion in the manufacturing sector. The annual inflation rate fell to 8.2% in December 2022 from 8.9% the previous month, due to a 6.5% drop in energy prices. However, energy prices are still 34.2% higher now than they were in December 2021, indicating that inflationary pressures are still high. Though Ireland's overall fiscal position and economic fundamentals remain strong, factors including high inflation and weak consumer confidence will keep the country's economic performance in check for the foreseeable future.

The fourth quarter of 2022 saw a decline in construction activity, particularly in the civil engineering sector, amid concerns of global recession. Construction output has been impacted by labour shortages, high energy prices, and high financing costs due to elevated interest rates, driving up construction prices and causing demand to weaken. However, with planned investments in data centres, leisure, and hospitality, as well as government's investments in infrastructure and housing, the industry is expected to gain momentum in the coming years.



Stephen Ashe Senior Director - Europe stephen.ashe@linesight.com



#### Lumber

Lumber prices are set to decline further in the coming quarters following the hyperinflation levels recorded in 2022, with supply disruptions easing across Europe and the expectation of improved domestic supplies. Although the construction industry will weaken heading into 2023, demand for timber framed houses could improve given the planned introduction of a concrete levy (to come into effect in September 2023).



#### **Cement and aggregates**

Cement and aggregate prices started to level off toward the end of 2022, but given the rising trend throughout the year, prices were still up sharply compared to levels in late 2021. The concrete levy will contribute to a jump in prices for concrete in late 2023, however the proposed measure has been cut to 5% (from the initial plan of a 10% levy).



#### **Concrete blocks and bricks**

With growth in building construction work set to slow, impacted in part by rising interest rates, demand for blocks and bricks will ease. Over the past year, prices have been pushed up by supply-side factors, but these too are expected to subside. Concrete blocks (and other concrete products) will be subject to a 5% levy from September 2023, a measure that has been introduced to fund the costs of the redress scheme for homeowners affected by defective products used in residential construction.



#### Steel (rebar and structural)

Having soared during the first half of the year, steel prices fell back in the second half of 2022. However, in October, prices for structure steel were up 51% year on year, and prices for steel rebar had increased by 16.4%. With costs pressures easing, and demand set to wane, prices are set to continue to trend downwards.



#### Copper

Reflecting trends on the London Metal Exchange (LME), copper prices picked up in Q4 2022 having previously eased from the highs reached in the first half of the year. Prices are expected to be volatile in the coming quarters reflecting concerns over supply shortages and weaker demand globally amid the slowing global economy.



# Ireland - Commodity Report



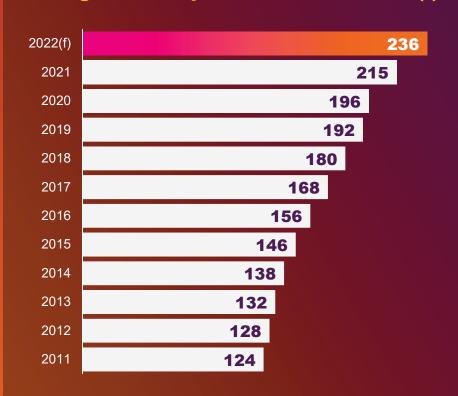
	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	€	€	2022-23 % change	% change
Copper (€/MT)	7,906	8,899	-11.2% ↓	2.0% 个
Steel rebar (€/MT)	883	781	13.0% ↑	-2.0% ↓
Steel flat (€/MT)	1,170	794	<b>47.3%</b> ↑	-1.9% ↓
Stainless steel (€/MT)	3,182	NA	NA	NA
<b>Lumber</b> (€/M3)	91.2	105.1	-13.2% ↓	-13.2% ↓
<b>Asphalt</b> (€/MT)	958	824	16.2% 个	1.4% 个
<b>Limestone</b> (€/MT)	95.1	86.2	10.4% 个	2.6% 个
Cement (€/MT)	251	221	13.8% ↑	0.0% 个
Concrete (€/M3)	90.2	73.0	23.6% ↑	6.2% ↑
Welded mesh (€/unit)	60.1	54.0	11.4% 个	-2.0% ↓
<b>Bricks</b> (€/'000 unit)	878	762	<b>15.3%</b> ↑	3.5% ↑
<b>Plasterboard</b> (€/unit)	15.1	11.5	31.0% ↑	27.5% 个
<b>Diesel</b> (€/litre)	1.7	1.7	0.4% ↑	-2.2% ↓
(f) Forecast (e) Es	timated			

	Material Q	% change 4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+0.8% ↑	o 0 ■ 0 Moderate	Prices for copper trended upwards in the final few months of 2022, partially recovering from the sharp decline during the second quarter of the year. Local wholesale prices for copper pipes and fittings jumped sharply in July (by 18%) and have remained at a relatively high level since then. However, all copper prices represented in this report reflect movements of copper prices as traded on the LME.  Note: Previous Linesight Commodity Reports tracked copper prices based on figures sourced from the CSO.
	Steel prices - Steel rebar - Flat steel	-1.0% <b>↓</b> -1.0% <b>↓</b>	00 <b>0 0 0 0 0 0 0 0 0 </b>	Although edging downwards, steel prices in late 2022 were still at an elevated level, with increased production costs keeping prices high. Prices are expected to fall further in the coming quarters, owing to a drop in energy costs and weaker demand from end-users.
	Stainless stee	∍I +0.5% ↑	•0000 Low	Stainless steel prices are expected to face further upwards pressure stemming from the increase in the prices for key raw material, such as nickel.
	Lumber	-0.8% <b>↓</b>	o 0	Lumber prices have fallen in recent months, as supply-side pressure has diminished and demand has weakened. Prices had remained at a high level during much of the first three quarters of 2022, propped up in part by supply disruption stemming from the conflict in Ukraine.
A	Asphalt	+0.7% 个	00 ∭ Moderate	Asphalt prices continued to edge upwards in late 2022 - in October prices were up by 20% year on year. Crude oil prices have fallen from the highs of mid-2022, but production cuts by OPEC+ will keep prices elevated in the coming quarters. Domestic demand for asphalt will also be propped up by spending on road infrastructure projects outlined in the New National Development Plan (NDP) 2021–30.
0000	Limestone	+0.5% ↑	•0000 Low	Limestone prices rose further in late 2022, reflecting higher production costs, but there will be a levelling off in the coming quarters.

### Ireland - Commodity Report



### Linesight tender price index 2011-2022(f)



Note: The above infers a full-year increase of +9.8% for 2022. Our 2022 estimate is broken down @ +7.5% for H1 2022 and +2.3% for H2 2022. There is a definite downward trend in the rate of increase going into 2023 as some key commodity prices reduce, shipping costs reverting to pre-pandemic level costs, fuel costs are reducing and with some traditional sector projects in question due to viability concerns.

Mate	rial % change Q4 – Q1 2023 (f	Level of in	mpact of pricing on construction procurement and supply chain *
Cem	ent -1.0% <b>↓</b>	o	Cement prices were relatively stable in late 2022 having been under upward pressure during much of the year as producers passed on higher costs to buyers. Weaker demand will be a key factor in containing further price inflation.
Cone	crete +0.9% 个	o () () () High	Despite the stability in cement and aggregates prices, high energy and transportation costs continue to impact ready mixed concrete prices. In October prices jumped by 5%, such that on a year-on-year basis prices were up by 32%, from October 2021.
Weld	ded mesh -0.4% ↓	o 0 <b>I</b>	Welded mesh prices have fallen marginally from highs of Q2 2022, and as with the general trend in steel prices, there will be a further decline in the coming quarters.
Brick	ks +0.9% 个	00 ∎∭ Moderate	Brick prices continued to rise in late 2022, with producers passing on higher costs to buyers, and were up 20% year on year by October. However, with demand weakening and supply-side pressures set to ease, further price inflation is expected to be contained.
Plas	terboard +0.4% 个	•0000 Low	Plasterboard prices jumped in Q4 2022 owing to higher production and raw materials costs, which were passed on to buyers.
Dies	el -8.2% <b>↓</b>	o O D D High	The decline in diesel prices quickened towards the end of 2022, with prices in December down by 15% compared to the June high of just over €2 per litre and were at the lowest level since February. Prices are expected to continue to drop back, but efforts by OPEC+ to cut

per barrel in 2023.



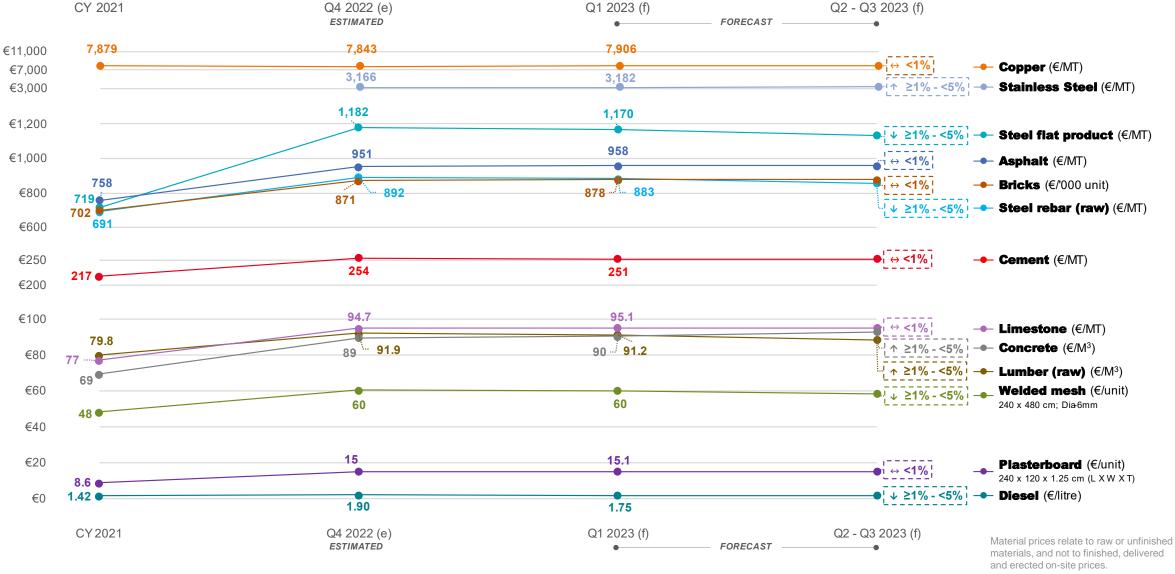
production levels could result in global crude oil remaining around \$80

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.

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# Ireland – Construction Materials Pricing (2021-2023)







### Ireland – 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.

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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.

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### **Sample sources – Ireland**

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

- IMF
- Central Bank
- CSO
- SCSI
- GlobalData's Construction Intelligence Center (CIC)







# **Israel** Q4 2022

According to a recent Finance Ministry's update Israel's economy is projected to grow at a rate of 6.3% in 2022, followed by a slower growth of 2.8% in 2023, owing to contractions in consumer spending, amid a slowdown in the global economy. Driven by the increasing cost of housing, transportation and communication, inflation has hit a record high, with the consumer price index rising to 5.3% in 2022, however it is expected to ease to 3% over the coming year.

The construction sector is expected to grow by 4% in real terms in 2022, driven by growth in the industrial and commercial sectors. Downside risks including high inflation, material costs, and supply chain disruptions as well as impacts of tightening monetary policy, which are likely to dampen the growth in the short-term. However, opportunities in sectors such as data centres and life sciences will continue to expand in the medium to long term



Shay Dahan Director shay.dahan@linesight.com



#### Lumber

With Israel's construction industry expanding rapidly, demand for materials such as lumber has been high. Israel relies on imports to meet its local demand, and weaker lumber prices globally have helped to contain upwards pressure on domestic prices.



#### **Cement and aggregates**

Cement and aggregate prices are expected to remain at a high level, given the high costs faced by domestic producers amid strong demand, primarily from significant investment in transport infrastructure projects. However, helping to alleviate some of this upward pressure is the availability of cheaper imports, notably from Turkey.



#### **Concrete blocks and bricks**

High interest rates will slow residential construction growth, but public housing programs will keep activity levels relatively high, thereby maintaining demand for blocks and bricks.



#### Steel (rebar and structural)

Domestic demand for steel is set to stay relatively high, given the ongoing expansion in building and infrastructure construction albeit at a slower pace than in the past two years. However, steel prices globally have been on a downward trend from the highs of mid-2022, and this will feed into domestic prices as Israel relies heavily on steel imports to meet its demand, given limited domestic capacity.



#### Copper

Copper prices recovered ground in late 2022, having previously dropped sharply from the highs reached in April 2022. Concerns on the supply-side, including disruptions in production in Chile and Peru, and underinvestment in new mining operations will contribute to upward pressure, but the global economic slowdown will contain price rises in the short term.



## Israel - Commodity Report



	Q1 2023 (f)	Q1 202	2 – Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	ILS	ILS	2022-23 % change	% change
Copper (ILS/MT)	28,241	31,772	-11.1% ↓	7.6% 个
Steel rebar (ILS/MT)	2,285	4,250	-46.2% ↓	1.9% 个(
Steel flat (ILS/MT)	1,911	2,520	-24.2% ↓	-4.7% ↓
Stainless steel (ILS/MT)	3,813	NA	NA	NA
Lumber (ILS/M3)	757	819	-7.6% ↓	-0.1% ↓
<b>Asphalt</b> (ILS/MT)	2,488	2,367	5.1% 个	0.0% ↔
<b>Limestone</b> (ILS/MT)	231	216	6.7% 个	0.8% 个
Cement (ILS/MT)	392	315	24.4% 个	-0.1% ↓
Concrete (ILS/M3)	430	347	23.9% 个	-0.1% ↓
Welded mesh (ILS/unit)	216	239	-9.9% ↓	-6.1% ↓
Concrete blocks (ILS/'000 unit)	3,417	3,167	7.9% ↑	0.4% 个
Plasterboard (ILS/unit)	43.9	42.2	3.8% ↑	-0.4% ↓
Diesel (ILS/litre)	6.5	6.7	-3.3% ↓	-7.0% ↓

- Q3 to Q4 2022 % change less than estimation in our Q3 report

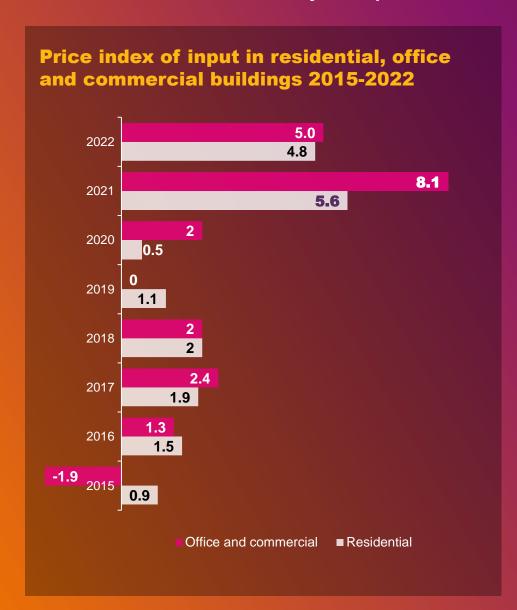
Welded mesh: 600 x 250cm, dia.-6mm Plasterboard: 260 x 120 x 1.25cm (L x W x T)

				<u> </u>
	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Copper	<b>+1.0% ↑</b>	•0000 Low	Copper prices appreciated by more than 5% in Q4 2022 compared to the previous quarter, with the reopening of China's economy providing an expectation of a boost on the demand side. In addition, low global stockpile and falling levels of copper production have sustained upward pressure on copper prices. Despite the outlook for weaker demand globally, copper prices are likely to remain volatile over the medium term.
	Steel prices - Steel rebar - Flat steel	-1.0% <b>↓</b> -1.0% <b>↓</b>	•0000 Low	On a quarterly average basis, flat steel prices registered a decline of close to 5% in Q4 2022 from Q3 prices, while steel rebar prices edged higher on a quarterly average basis. Strong demand from the construction sector driver by residential construction activity has kept the demand for steel rebar relatively high. However, declining steel demand globally and greater supply driven by increasing export volumes from China and Turkey will sustain downward pressure on prices.
6	Stainless st	eel +1.0% ↑	• O O O O	Rising nickel and other key alloying materials prices have sustained upward pressure on stainless steel prices, despite overall steel demand falling.
	Lumber	+0.5% ↑	•0000 Low	Lumber prices have remained stable in recent months. Construction industry demand has been strong, but improvements in the supply chain have helped to keep prices in check. Although increased interest rates will contribute to a slowdown in construction industry growth, residential construction will be supported by the government's plan to build new houses. Lumber prices will therefore stay elevated in the coming quarters.
A	Asphalt	-0.5% <b>↓</b>	o 0 █ ∭ Moderate	Asphalt prices have stabilized in recent quarters, owing primarily to cooling demand for crude oil on international markets. With demand for crude oil expected to remain weak in the coming quarters, asphalt prices are likely to remain stable. However, supply-side disruptions in the international crude o market could renew upward pressure on asphalt prices in the medium term.
0000	Limestone	+1.0% ↑	•0000 Low	Limestone prices have remained fairly stable in recent months. Although the pace of expansion in the construction industry will reduce, production and transportation costs will keep prices close to current levels.



## Israel - Commodity Report





			•
Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Cement Concrete	+4.0% ↑ +6.0% ↑	o 0	Prices for cement and related products have remained high in recent quarters, reflecting both solid demand from the construction industry and high production costs. Cement prices are expected to increase in the short term. In December ready-mixed cement industries announced that it was intending to increase ready-mixed concrete prices by up to 15% owing to abnormal increases in prices for key inputs.
Welded mes	sh -0.5% <b>↓</b>	•0000 Low	Welded mesh prices dropped back in Q4 2022 and will fall marginally in the coming months in line with steel rebar prices. However, with production costs remaining high, prices will remain elevated.
Concrete blocks	+0.5% ↑	00 █ █ █ Moderate	Concrete block prices have stayed at a high level in the past quarter, reflecting strong demand in the residential construction sector and high production costs. Although the pace of expansion in residential construction will slow, costs pressures will remain significant in the coming quarters.
Plasterboar	d +0.5% ↑	•0000 Low	Prices for plasterboard are expected to remain close to current high levels. Although demand pressure will ease as high interest rates are likely to impact rate of growth in construction, high production costs will prevent a marked decline in prices.
Diesel	-0.5% ↓	•0000 Low	Diesel prices fell by 7% in Q4 compared to Q3, primarily due to a decline in international crude oil prices. Decreasing demand for oil amid slowing global economic growth, coupled with fuel tax subsidies implemented by the Israeli government to ease cost-of-living pressures, will contain further increases in the price of diesel. However, supply-side disruptions

prices over the medium term.

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.

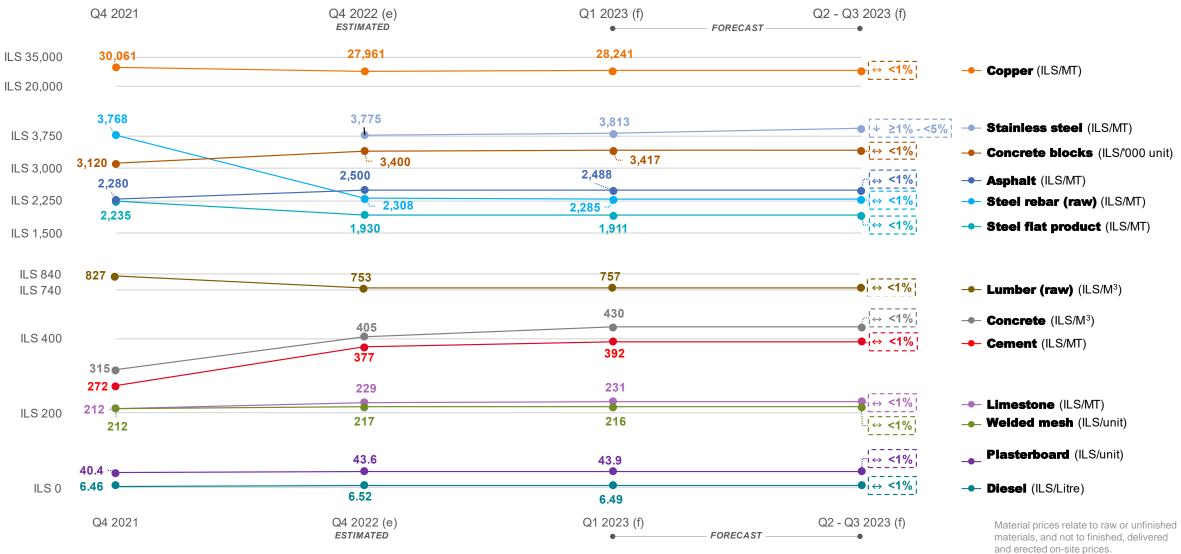
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in the international crude oil market could cause some volatility in diesel

## Israel – Construction Materials Pricing (2021-2023)





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## **Sample sources – Israel**

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

- IMF
- The Central Bureau of Statistics
- GlobalData's Construction Intelligence Center (CIC)







# **Italy** Q4 2022

According to a recent ISTAT update, Italian GDP is expected to grow by 3.9% in 2022 before reducing to 0.6% in 2023. As one of the largest exporters in Europe, Italy was heavily impacted by the rise in energy costs resulting in inflated production and transport costs. The average inflation rate in 2022 was 8.1%, and prices are expected to remain high in 2023.

The Italian construction industry expanded by 12.8% year-on-year in the first three quarters of 2022. The Recovery and Resilience Facility (RRF), supported by the EU was introduced to finance large-scale residential building renovations and was a key driver in improving the performance of the residential sector. However, a slowdown is expected in 2023 due to delays in the delivery of residential schemes, economic uncertainty, high inflation, and rising interest rates. Nonetheless, the industry is expected to recover in 2024-26, with an average annual growth of 2.1% led by investments in the transportation, electricity, and housing sectors.



John O'Sullivan Project Director john.osullivan@linesight.com



#### Lumber

High production and transportation costs, as well as strong demand from the residential construction sector have helped to keep lumber prices high. The share of wood in construction in Italy is relatively low compared to other markets in Europe, but the Italian city of Trento is one of seven Early Adopter Cities under the EU's 'Build-in-Wood' project to increase the use of wood as a building material.



#### **Cement and aggregates**

There has been a surge in concrete and cement prices in recent quarters, driven by the sharp rise in energy costs. Demand levels have also been high, while production levels have fallen owing to the impact of high production costs on producer profits.



#### **Concrete blocks and bricks**

Brick prices have remained high, with producers passing on their higher production costs. Prices are expected to stay close to current levels, with an easing of pressure on the demand side containing further price rises.



### Steel (rebar and structural)

Steel prices have trended downwards amid weaker demand. With producers struggling to pass on high production costs to buyers, output levels have been cut. Prices will remain under downward pressure in the short term given the weaker demand outlook.



#### Copper

Copper prices will remain volatile given the competing forces of weak demand and the potential for supply-side shocks in the short term. However, demand over the long term will be strengthened by investments in renewable energy projects and electric vehicle manufacturing.



# Italy - Commodity Report



Materials Copper (€/MT) Steel rebar (€/MT)	<b>€</b> 7,925	€ 8,939	2022-23 % change	% change
Copper (€/MT) Steel rebar			% change	% change
(€/MT) Steel rebar	7,925	8 030		70 Change
		0,939	-11.3% ↓	1.6% 个 •
	902	828	8.9% ↑	-5.7% ↓ •
Stainless steel (€/MT)	881	1,003	-12.2% ↓	0.1% ↑ ■
Steel flat (€/MT)	3,825	NA	NA	NA
<b>Lumber</b> (€/M3)	101	118	-14.5% ↓	-5.3% ↓ •
<b>Asphalt</b> (€/MT)	104.0	96.0	8.3% ↑	-0.8% ↓ ■
<b>Limestone</b> (€/MT)	59.4	46.5	27.8% 个	11.8% 个
Cement (€/MT)	222	148	50.3% ↑	6.8% ↑
Concrete (€/M3)	155	139	11.6% 个	4.7% 个
<b>Welded mesh</b> (€/unit)	46.3	43.0	7.6% ↑	-5.7% ↓ •
<b>Bricks</b> (€/'000 unit)	875	690	26.8% 个	11.8% 个 •
<b>Plasterboard</b> (€/unit)	13.4	10.2	31.2% ↑	4.2% 个
<b>Diesel</b> (€/litre)	1.6	1.8	-9.9% ↓	-12.4% ↓ •
(f) Forecast (e) Es	stimated			
Q3 to Q4 2022 % Q3 to Q4 2022 %				

	Material	% change Q4 – Q1 2023 (f)	Level of i	mpact of pricing on construction procurement and supply chain *
	Copper	+1.0% ↑	o0 ██ Moderate	Copper prices picked up in November and December and are set to edge higher in Q1 2023. The reopening of China's economy has provided optimism for renewed demand growth, despite the country's real estate crisis. Political disruption in South America is also adding to price pressures. Although the global economic outlook is gloomy, copper demand will be bolstered by investment in energy transition projects.
B	Steel prices - Steel rebar - Flat steel	-1.0% <b>↓</b> -1.3% <b>↓</b>	o	Steel prices continued on a general downward trend during the final few months of 2022. Prices had soared earlier in the year as a result of rising energy costs. However, prices will continue to decline in the coming quarters due to decreased demand and less expensive imports from producers outside of Europe. Given the challenging operating environment, local manufacturers have cut production levels.
	Stainless st	eel +1.5% ↑	•0000 Low	As a result of high raw materials prices, including nickel, stainless steel prices are predicted to remain high in the coming quarters.
	Lumber	+2.0% ↑	• 0 0 0 0 Low	Lumber prices have been at a relatively high level over the past year amid the surge in residential construction works and high energy costs. Demand levels are expected to ease, which will contain price pressures.
A	Asphalt	-1.0% ↓	• 0 0 0 0 Low	With crude oil prices falling from mid-2022 highs, asphalt prices have eased back down. Utilising reclaimed asphalt will help to limit future price increases.
0000	Limestone	-1.0% ↓	•0000 Low	High energy prices have driven up production costs, which has resulted in limestone prices remaining elevated.

## Italy - Commodity Report





Material	% change Q4 – Q1 2023 (f)	Level of ir	npact of pricing on construction procurement and supply chain *
Cement Concrete	-1.0% ↓ -1.0% ↓	oOOO High	Cement prices continued on an upward trend in late 2022, primarily driven by high production costs. In November, the producer price index for cement manufacturing was up by 67% year on year, and facing such high costs, producers have cut output levels. Ready-mixed concrete prices have also risen sharply in recent quarters. Residential construction has also been booming, and this has contributed to solid demand growth. Although expected to ease back, prices will remain elevated.
Welded mes	sh -0.5% <b>√</b>	o	Prices for welded mesh have been falling in line with the decline in steel rebar. Due to the outlook for weaker market demand, prices are anticipated to drop.
Bricks	-1.0% ↓	o 0 ■	Due to increased production costs, brick prices have remained at a high level. In November, the producer price index for brick manufacturing was 63% higher than in November 2021. Although inflationary pressures will ease amid a slowdown in demand, prices are expected to remain close to current highs in the coming quarters.
Plasterboar	d +1.1% ↑	o D D D Moderate	Prices have continued to increase as a result of higher production costs and continued high demand in the residential sector. Although residential construction output has fallen back from recent highs, activity levels are still much higher than in previous years.
Diesel	-0.5% ↓	•0000 Low	Due to the decreased demand and government financial assistance, diesel prices are anticipated to continue to fall in the first quarter of 2023. However, prices will remain volatile, with OPEC+'s production cuts preventing a marked fall in diesel prices.

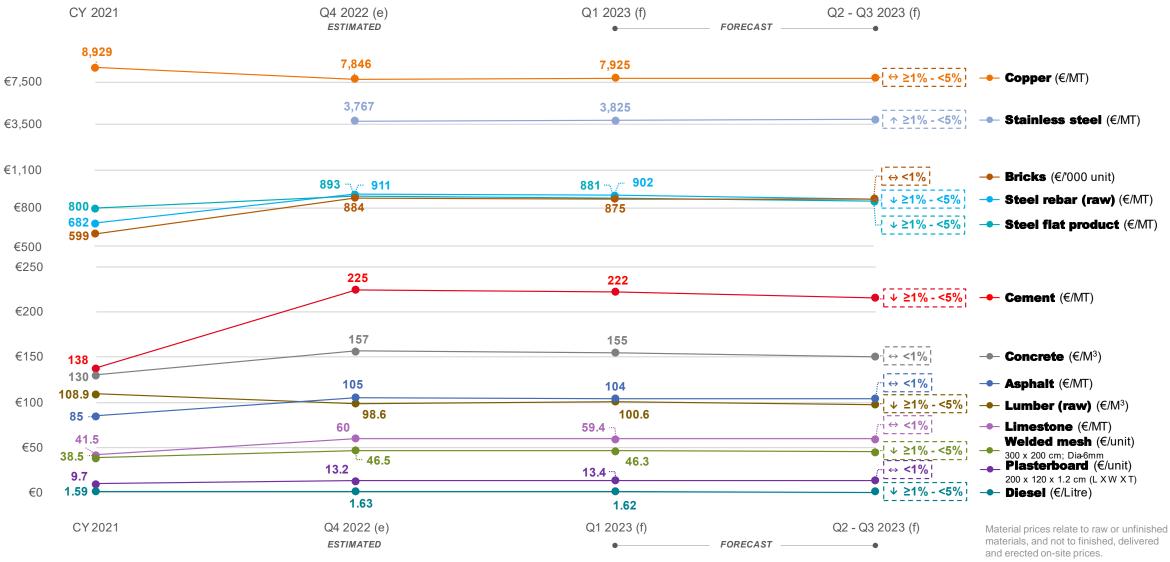
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# **Italy** – Construction Materials Pricing (2021-2023)





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- IMF
- ISTAT
- Eurostat
- GlobalData's Construction Intelligence Center (CIC)









## Netherlands Q4 2022

The Netherlands' economic trend points to a slowdown in the coming years as a result of the Russia-Ukraine conflict, high inflation, and unfavourable energy prices. GDP growth in 2022 is estimated to be around 4.3%, with marginal growth rates of around 0.8% forecast for 2023 and 1.1% in 2024. In Q4 2022, the inflation rate was 15.4%, bringing the year average to close to 11.6%. However, it is expected to moderate by the end of 2024, at roughly 3.9%.

The Dutch construction industry is estimated to grow at 2.5% in real terms in 2022, which is slightly higher than the growth of 2.1% recorded in 2021. However, industry growth is forecast to reduce to 0.4% in 2023, amid high energy costs and inflationary pressures on material prices. The industry will also be impacted by the recent Council of State announcement to revoke the validity of building activity exemptions for nitrogen emissions, which could have an impact on the infrastructure sector. Despite short-term challenges, medium to long-term growth looks reasonable, with the government's continued investment in the renewable and housing sectors.



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#### Lumber

Lumber prices have stayed relatively high in the Netherlands, reflecting high-cost levels. Residential construction demand will be constrained as investment levels will be impacted by rising interest rates, but government commitments to boost housing will provide some support. The Netherlands has a relatively high share of wood products used in construction compared to others in the region, behind only Finland, Sweden and Austria.



#### **Cement and aggregates**

Cement and aggregate prices have been pushed up by high production costs. Despite weakening demand, growth in the construction industry materials prices will remain elevated until energy prices fall back to levels seen prior to the surge in the first half of 2022.



#### **Concrete blocks and bricks**

Although brick production in the Netherlands is relatively efficient in terms of energy use, producers have faced increased costs that have been passed on to buyers. However, upward pressure will ease as demand weakens.



#### Steel (rebar and structural)

Steel prices will continue to trend downwards from the highs of mid-2022, when supply disruptions and soaring energy costs resulted in a sharp jump in prices. Demand will be buoyed by government investment in infrastructure projects, preventing a steep drop in prices when production costs ease.



#### Copper

Global supply disruptions and concerns over potential tight supplies have been a factor contributing to copper price volatility. Although the weak global economic outlook would typically result in a decline in copper prices, there is scope for demand to build in line with investment in renewable energy projects and electric vehicle manufacturing.



# Netherlands - Commodity Report



•	Q1 2023 (f)	Q1 2022 -	- Q1 2023 (f)	Q3 – Q4 2022 (e)
			2022-23*	
Materials	€	€	% change	% change
Copper (€/MT)	9,579	8,814	8.7% ↑	1.9% 个
Steel rebar (€/MT)	802	762	5.2% ↑	-5.0% ↓
Steel flat (€/MT)	859	817	5.2% 个	-5.0% ↓
Stainless steel (€/MT)	3,719	NA	NA	NA
<b>Lumber</b> (€/M3)	106	100	6.5% ↑	-0.2% ↓
<b>Asphalt</b> (€/MT)	95.3	81.6	<b>16.8%</b> ↑	6.9% ↑
<b>Limestone</b> (€/MT)	90.8	86.6	4.9% ↑	0.2% ↑
Cement (€/MT)	171	157	8.9% ↑	1.5% ↑
Concrete (€/M3)	171	150	13.9% ↑	4.6% ↑
Welded mesh (€/unit)	77.9	75.4	3.4% ↑	-4.0% ↓
<b>Bricks</b> (€/'000 unit)	568	538	5.5% ↑	0.5% ↑
<b>Plasterboard</b> (€/unit)	10.9	10.8	<b>1.6%</b> ↑	6.2% ↑
<b>Diesel</b> (€/litre)	1.8	1.8	-2.6% ↑	-4.8% ↓
(f) Forecast (e) Est	imated			
<ul><li>Q3 to Q4 2022 % (</li><li>Q3 to Q4 2022 % (</li></ul>				

	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Copper	+1.0% ↑	o 0 <b>1</b>	Copper prices regained ground in late 2022, despite growing concerns over the global economic outlook. The recent upturn has reflected supply disruptions and expectations of a possible demand boost following the relaxation of COVID restrictions in China. Despite the global economic slowdown, copper prices will remain relatively high reflecting short-term supply tightness, while demand linked to energy transition investment will also be a factor.
	Steel prices - Steel rebar - Flat steel	-1.0% <b>↓</b> -1.0% <b>↓</b>	o 0 █ █ █ Moderate	Reflecting a decline in demand, steel prices have fallen in recent months, despite producers still facing high costs. There will be efforts by producers to try to push up prices in the coming quarters, but insufficient demand could result in production cuts if prices do not reach a level to cover costs.
	Stainless ste	eel +0.5% ↑	o	Stainless steel prices are expected to edge up further stemming from the increase in the prices for key raw materials, such as nickel.
	Lumber	-0.5% ↓	o 0 █	On a quarterly average basis lumber prices stayed relatively high in Q4 2022, owing to high production costs. However, prices are expected to edge downward into 2023. This decline reflects weakness in residential construction, as indicated by the decreasing number of residential building permits recently.
<u>A</u>	Asphalt	+1.0% ↑	00 ██ Moderate	Asphalt prices have been fairly volatile in recent months. Oil prices are expected to remain close to current levels of around \$80 per barrel, and asphalt demand will be stimulated by the government's infrastructure investment plans. To reduce the increasing pressure on roads, rail, airports, and waterways, the government plans to invest €25 billion to construct new roads and to resolve bottlenecks up to 2028.
(°°°)	Limestone	+0.4% ↑	•••	Despite weaker construction demand, higher production and

transportation costs have kept limestone prices at recent high levels.

## Netherlands - Commodity Report



# New dwellings; input price indices building costs (2015-2022)



Note: new dwellings; input price indices building costs 2015=100, \*(p): provisional

Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Cement Concrete	-0.5% <b>↓</b> -0.5% <b>↓</b>	o 0 █ Û Û Moderate	Although the pace of growth in Dutch construction output has been declining steadily, high energy prices have continued to push up costs for energy-intensive materials such as concrete and cement. In November the producer price index for ready-mixed concrete was up by 22% year-on-year. Prices are expected to remain elevated in the coming quarters.
Welded mes	sh -0.5% <b>↓</b>	o	Welded mesh prices fell back in Q4 2022, reflecting general trends in rebar prices. This trend is expected to continue in the coming quarters, as demand weakens.
Bricks	-0.3% ↓	o 0	Given the energy-intensive process of brick production, brick prices have remained high in recent months. The producer price index for bricks was up by 12% year-on-year to November 2022 reflecting the impact of high energy costs, which have largely been passed on to buyers.
Plasterboard	d -0.2% <b>↓</b>	o 0 █ ∭ Moderate	Plasterboard prices stayed high in Q4 2022, with production costs being passed on to buyers. However, with weaker demand growth, price pressure will dissipate.
Diesel	-6.3% ↓	o () () () High	Diesel prices edged up to over €2.1 / litre in October but dropped back to below €1.8 by the end of the year. Prices will remain around this level in the coming quarters, with OPEC+ production cuts keeping crude oil prices elevated despite weakening demand.

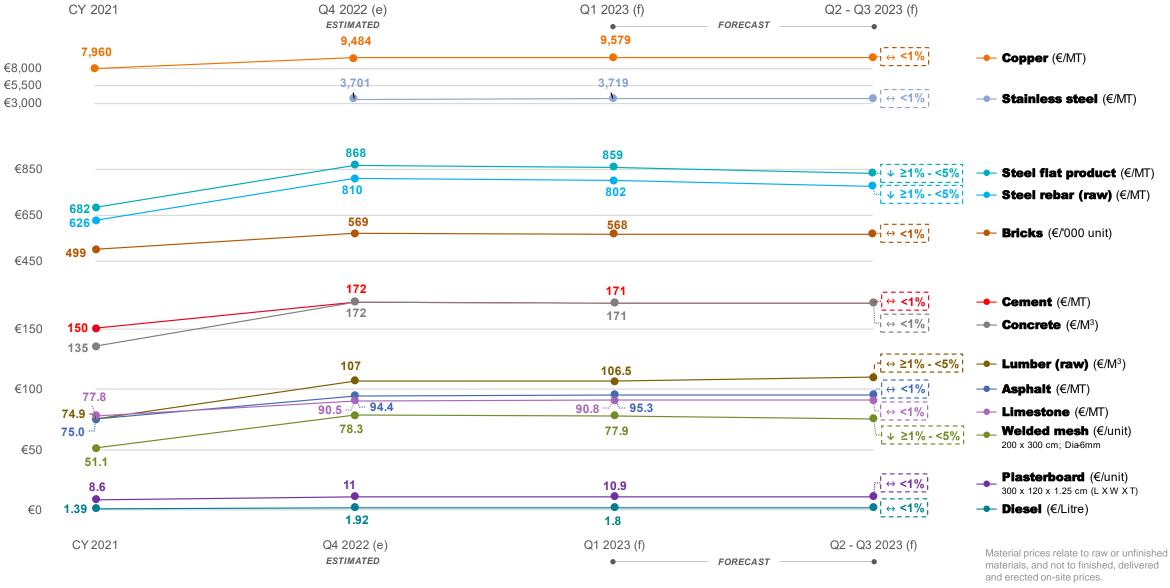
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Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

# **Netherlands** – Construction Materials Pricing (2021-2023)







## Netherlands – Report methodology



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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.

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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 – Netherlands**

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

- IMF
- Statistics Netherlands (CBS)
- Organisation for Economic Co-operation and Development (OECD)
- GlobalData's Construction Intelligence Center (CIC)







# **Norway** Q4 2022

The GDP growth rate of Norway in 2022 is expected to remain at 2.9%, while slipping to 0.7% in 2023 before partially recovering to 1.3% in 2024. Inflation rates continue to remain relatively high at around 5.8% in 2022 and expected to drop slightly to 4.5% in 2023 before easing out at a healthy rate of 2.4% in 2024. As energy prices stabilise, domestic demand will increase helping the economy to recover.

The construction industry in Norway is expected to grow at an annual rate of 2.3% between 2023 and 2026, aided by investments in transportation and renewable energy. Rising inflation rates, high construction material costs, and a labour shortage are the industry's main challenges. The annual average year-on-year rate of increase in the construction cost index for residential buildings in Norway was 9% over the last two years in 2021 and 2022, up from 3% from 2016 to 2020.



Niall Greene Senior Director - Europe niall.greene@linesight.com



#### Lumber

High demand for wooden housing has driven demand for lumber and other wood-based sustainable building materials in recent years as Norway increasingly transitions toward a circular economy. The city of Trondheim has been an early adopter of the 'Build-in-Wood' initiative funded by the EU to promote greater usage of timber-based construction. This will continue to support long-term demand for lumber in Norway. However, the competitive nature of lumber market will cause prices to fluctuate over the short to medium term owing to slowing economic growth and a decline in demand for housing amid rising interest rates.



### **Cement and aggregates**

Despite following an upward trend in 2022, concrete and cement prices are expected to stabilise in 2023. Weakening demand owing to slowing economic growth will offset further upward pressure on production costs. Prices are likely to remain elevated however, due to the impact of high energy costs and the lack of competition in the domestic market which will delay the adjustment of prices.

Norcem, a subsidiary of HeidelbergCement, is the sole producer of cement in Norway.



#### **Concrete blocks and bricks**

Owing to strong demand in the first half of 2022 and rising production costs, concrete block and brick prices rose significantly in 2022.

However, despite production and transportation costs remaining high

due to elevated energy costs, declining demand for new housing amid rising interest rates will, in turn, weaken demand for bricks. As a result of competing supply and demand pressures, prices are expected to remain high but stable over the coming quarters.



#### **Steel (rebar and structural)**

As a marginal net exporter of steel, Norway has been relatively well-positioned to cope with global supply shortages resulting from the conflict in Ukraine. However, falling steel prices globally amid weakening demand and an increase in supply from Asian exporters will cause domestic prices to fall over the coming quarters. However, domestic long-term demand for steel is expected to be driven by the Norwegian government's plan to develop transport infrastructure. Under the new National Transport Plan 2022–2033, the government increased its allocation for railway infrastructure by 23.2%.



#### Copper

Despite the prospect of a global recession in 2023, a resurgence in China's economy could renew upward pressure on prices, which exposes prices to significant levels of volatility in the coming quarters. Over the longer term, greater investment in renewable energy and electrification will drive demand for copper in Norway. To help meet this demand domestically and in a sustainable manner, Norway is planning to build a new copper mine that will be powered by renewable sources. This may be delayed as environmental impact assessments are undertaken to review concerns raised by environmental groups



# Norway - Commodity Report



•	Q1 2023 (f)	Q1 2022 -	- Q1 2023 (f)	Q3 – Q4 2022 (e)
			2022-23	
Materials	NOK	NOK	% change	% change
Copper (NOK/MT)	79,845	88,455	-9.7% ↓	2.7% 个 •
Steel rebar (NOK/MT)	10,291	8,389	22.7% ↑	-0.6% ↓ ■
Steel flat (NOK/MT)	9,119	9,603	-5.0% ↓	-3.0% ↓ •
Stainless steel (NOK/MT)	39,787	NA	NA	NA
Lumber (NOK/M3)	441	525	-16.0% ↓	-7.3% ↓ •
<b>Asphalt</b> (NOK/MT)	1,132	974	16.2% ↑	<b>4.3%</b> ↑ •
Limestone (NOK/MT)	606	480	26.2% 个	1.4% 个 •
Cement (NOK/MT)	4,505	3,880	16.1% 个	-4.7% ↓ •
Concrete (NOK/M3)	1,705	1,486	<b>14.7%</b> ↑	0.4% ↑ ■
Welded mesh (NOK/unit)	207	164	26.2% 个	0.0% ↔ ■
Bricks (NOK/'000 unit)	10,950	9,444	15.9% ↑	6.8% 个 •
Plasterboard (NOK/unit)	178	131	35.4% ↑	1.6% 个 •
<b>Diesel</b> (NOK/litre)	23.1	19.3	19.6% 个	2.5% 个 •
(f) Forecast (e) Est	imated			

■ Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 120 x 240cm, dia.-5mm Plasterboard: 240 x 120 x 1.25cm (L x W x T)

	Material (	% change Q4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+1.0% ↑	o	Due to low global stocks and reasonably resilient demand, copper prices have remained high in recent quarters. Additionally, the continued growth in investment in alternative energy sources and electric vehicles, and projections that China may experience an economic resurgence, means that there will likely continue to be long-term upward pressure on copper prices.
	Steel prices - Steel rebar - Flat steel	-1.0% <b>↓</b> -1.0% <b>↓</b>	• OO OO Low	Due to low consumer demand, high energy costs in the EU, and declining fixed capital investment levels owing to rising interest rates, it is anticipated that Norway's steel consumption will continue to decline in the coming quarters. Weak demand, coupled with rising steel export volumes from Asia, is expected to cause prices to decline.
	Stainless ste	el +1.5% ↑	•0000 Low	Due to the rise in the prices of nickel and other key alloying materials, stainless steel prices are anticipated to increase in the coming quarters.
	Lumber	-1.0% ↓	• O O O O	Lumber prices are expected to remain relatively stable over coming quarters as a result of decreased construction demand and supply-side pressures caused by increased production and shipping costs.
	Asphalt	-1.0% ↓	• O O O O	Recent drops in crude oil prices have relieved pressure on asphalt prices, which had slightly decreased in Q4 2022. In 2023, worldwide demand for crude oil is expected to decline as a result of slower economic growth, offsetting supply-side disruptions in the crude oil market and assisting the easing of asphalt prices over the coming quarters.
0000	Limestone	+1.0% ↑	•00∭ Low	Demand for limestone is likely to decline in the coming quarters, but producers will continue to pass on high production and shipping costs to developers, keeping prices stable but high.



# Norway - Commodity Report





Material	% change Q4 – Q1 2023 (f)	Level of in	mpact of pricing on construction procurement and supply chain *
Cement Concrete	+1.0% ↑ +1.0% ↑	o	Cement and concrete prices generally followed an upward trend in 2022 due to relatively high demand and increasing pressure on production costs. However, it is unlikely that this trend will continue in the coming quarters. Demand is expected to fall as a result of slowing levels of construction activity, which will reduce upward pressure on prices, despite high energy costs continuing to keep prices elevated.
Welded me	e <b>sh</b> -1.0% <b>↓</b>	•0000 Low	The price of welded mesh increased in Q2 and remained elevated in Q3 However, prices may decline in the coming quarters due to the anticipated drop in steel prices.
Bricks	+1.0% 个	•0000 Low	Brick prices have increased significantly as a result of high levels of construction activity in first two quarters of 2022. With elevated production costs in the recent months, prices remain near to current highs despite weaker demand in coming quarters.
Plasterboa	rd +1.0% 个	o D	Plasterboard prices rose significantly in 2022 owing to high energy and raw material costs. Nevertheless, prices have begun to stabilise in recer months as a result of declining demand and a limited increase in the cos of energy and raw materials. Over the coming quarters, plasterboard prices are predicted to hold steady at high levels.
Diesel	-1.0% ↓	•0000 Low	Declining crude oil prices have eased pressure on diesel prices in recen quarters. Due to declining demand for crude oil amid slowing worldwide economic growth, diesel prices are expected to fall slightly over the coming quarters. However, supply-side disruptions stemming from

sanctions on Russian oil and potential OPEC+ supply cuts will keep

prices relatively elevated and volatile over the medium term.

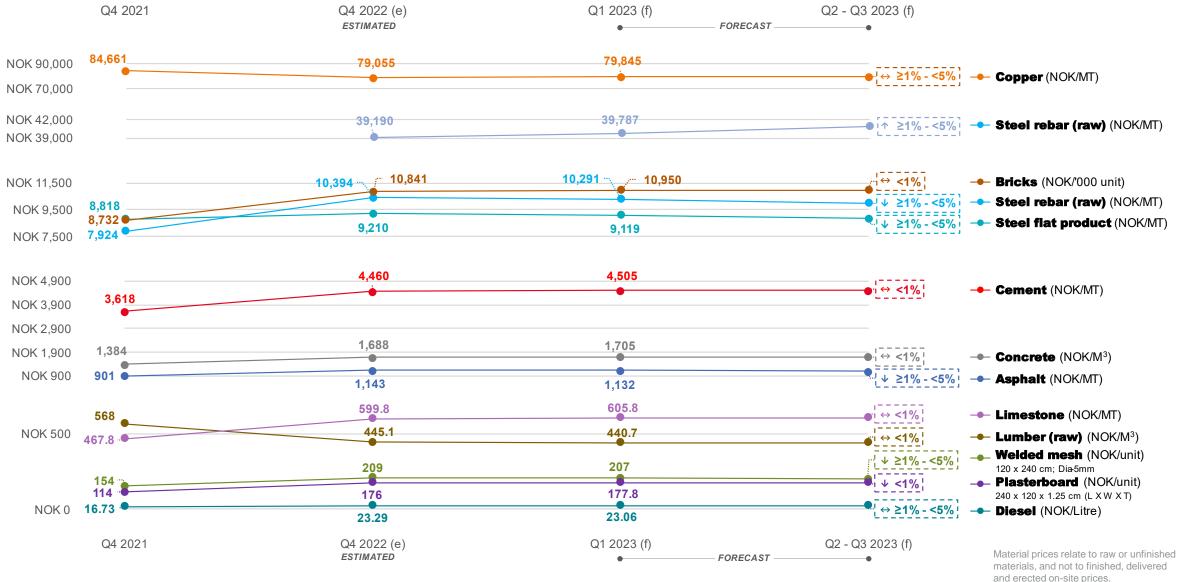
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# Norway – Construction Materials Pricing (2021-2023)







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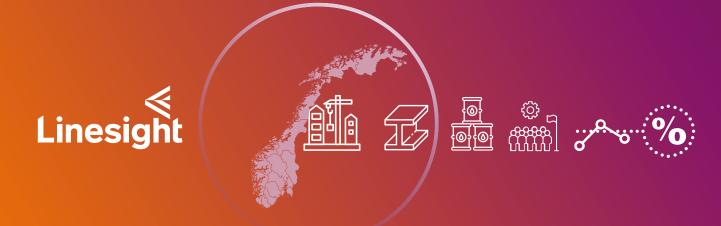
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## **Sample sources - Norway**

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

- IMF
- · Statistics Norway
- GlobalData's Construction Intelligence Center (CIC)
- Statistisk Sentralbyrå (SSB)







# **Spain** Q4 2022

According to a latest update by INE, Spain's GDP rose at a rate of 5.5% in 2022. Economic growth has been attributed to labour market recovery and robust performance in the services sector, however this has been slightly offset by rising energy prices. Yet, consumer price inflation decreased to 5.6% in December 2022, down from 6.8% the previous month.

Despite contractions in the last two years, Spain's construction industry is anticipated to rise by 3.5% in real terms in 2022. It is largely backed by investments in energy and transportation infrastructure, as well as government funding through the NextGenerationEU (NGEU) Recovery Fund. Given the ongoing energy crisis, high inflation and interest rates, the industry is expected to contract by 0.3% in 2023; but, with pledged government investments, the industry is expected to rebound in the following years.



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#### Lumber

Spain's construction industry will weaken as high interest rates and a slowing economy impact on new residential investment. Demand-side pressures on lumber prices will therefore ease, but production and transportation costs will still be a factor in keeping prices relatively high.



#### **Cement and aggregates**

Although consumption picked up in late 2022, demand in the year as a whole was sluggish, and Spain's cement exporters have also struggled to generate sales growth given the availability of cheaper products from other sources. Therefore, despite high production costs, price inflation has been contained.



#### **Concrete blocks and bricks**

Brick prices have remained stable as producers have been unable to fully pass on higher production costs to buyers owing to weak demand, and this will remain the case in the coming quarters given the negative outlook for the growth in demand of residential and commercial buildings.



#### Steel (rebar and structural)

Steel makers in Spain face ongoing challenges, with high production costs, weak demand and low prices. ArcelorMittal decided to delay the restart of its Acería Compacta de Bizkaia (ACB) plant after maintenance in August 2022, citing difficult market conditions and the availability of cheaper imports. Producers have sought to push up the price of flat products, with demand from the automotive sector picking up.



#### Copper

Copper prices will be volatile given concerns over supply-side constraints and weakening global economic growth. Demand will be sustained to some extent by the expansion in investment in renewable energy facilities and electric vehicle production.



# Spain - Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
			2022-23	
Materials	€	€	% change	% change
Copper (€/MT)	8,095	8,897	-9.0% ↓	4.4% <b>↑</b> •
Steel rebar (€/MT)	760	719	5.7% 个	-8.6% ↓ •
Steel flat (€/MT)	690	890	-22.5% ↓	-27.6% <b>↓</b> •
Stainless steel (€/MT)	3,717	NA	NA	NA
<b>Lumber</b> (€/M3)	146	135	8.2% 个	1.0% ↑ ■
<b>Asphalt</b> (€/MT)	97.1	95.0	2.2% ↑	-0.9% ↓ ■
<b>Limestone</b> (€/MT)	61.5	53.0	16.0% 个	8.0% 个 •
Cement (€/MT)	142	132	7.7% ↑	0.0% ↔ ■
Concrete (€/M3)	137	130	5.7% 个	1.4% 个 •
<b>Welded mesh</b> (€/unit)	93.3	83.0	12.5% 个	-5.5% <b>↓</b> •
<b>Bricks</b> (€/'000 unit)	854	790	8.1% ↑	0.0% ↔ ■
<b>Plasterboard</b> (€/unit)	4.4	3.6	23.2% ↑	11.6% 个 •
<b>Diesel</b> (€/litre)	1.7	1.5	9.1% ↑	-3.1% ↓ ■
(f) Forecast (e) Es	timated			
<ul><li>Q3 to Q4 2022 %</li></ul>	change greater t	han estimatio	n in our Q3 report	
Q3 to Q4 2022 %				

	Material	% change Q4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+1.0% ↑	o	Copper prices picked up in late 2022, but still remain below the highs reached in April 2022. Additionally, tightened supply from major copper producer Peru, as well as the reopening of China's economy has put upward pressures on the prices. However, further price inflation will be contained by the slowdown in the global economy in the short term.
	Steel prices - Steel rebar - Flat steel	-1.5% <b>↓</b> -1.0% <b>↓</b>	o0 ██ Moderate	Steel prices have weakened in recent months, reflecting sluggish demand. Elevated energy prices have squeezed profit margins, with producers cutting down output levels as a result. Prices will continue to trend downwards in the short term given the expected decline in construction industry output.
	Stainless ste	eel +1.5%↑	•0000 Low	Stainless steel prices are expected to rise owing to increased raw material costs, notably nickel. Demand from the construction industry is expected to weaken though.
	Lumber	+1.0% ↓	•0000 Low	Lumber prices edged slightly upward in Q4 2022. However, sluggish demand from construction sector is expected to offset the impact of continued high production and transportation costs.
	Asphalt	-0.5% ↓	•0000 Low	With international crude oil prices stabilising at a lower level in recent months, asphalt price inflation has eased. Prices will edge downwards in the coming quarters, but with infrastructure spending set to pick up, prices will remain close to current highs.
0000	Limestone	+0.8% ↑	•0000 Low	Sluggish demand in buildings construction due to increased interest rates and slowing economic growth will result in weaker demand for limestone. However, elevated production costs will keep prices relatively high.



# **Spain** – Commodity Report



Construction cost index for residential buildings (Q12020-Q3-2022)				
Q3 2022	129.6			
Q2 (p) 2022	128.9			
Q1 2022	121.3			
Q4 2021	116.7			
Q3 2021	114.7			
Q2 (p) 2021	110.9			
Q1 (p) 2021	107.0			
Q4 2020	104.3			
Q3 2020	102.8			
Q2 2020	102.5			
Q1 2020	104.7			
	*(p) - Provisional			

	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	-1.0% <b>↓</b> -0.8% <b>↓</b>	o () () () High	Cement prices have remained stable at a high level in recent quarters, reflecting high production costs. However, producers have not been able to fully pass on these higher production costs to buyers, given weak demand. In the first 11 months of 2022, domestic consumption was flat compared to the same period in 2021. Spain's cement exports have also fallen, which has helped to contain domestic price pressures.
	Welded mes	sh -1.0% <b>↓</b>	o	Welded mesh prices have followed the trend of steel rebar prices, dropping back in Q4 2022. With steel rebar prices set to decline further, welded mesh prices are expected to edge slightly downward in the near future.
盘	Bricks	+0.5% ↑	00 <b>I</b> ∭ Moderate	Despite sluggish demand from construction industry, elevated energy prices will keep brick prices close to current high levels in the forthcoming quarters.
	Plasterboar	d +0.5% ↑	o0 █ █ █ Moderate	Plasterboard prices rose higher in Q4 2022, with producers passing on higher costs. Despite an easing in demand-side pressures, higher production costs will continue to keep prices elevated.
	Diesel	-8.3% ↓	•0000 Low	With international crude oil prices having fallen from mid-2022 highs, the price for diesel has continued on a downward trend. Prices will be volatile in the coming quarters, as international supply-side issues including OPEC+ production cuts will offset the impact of weakening global

economic growth.

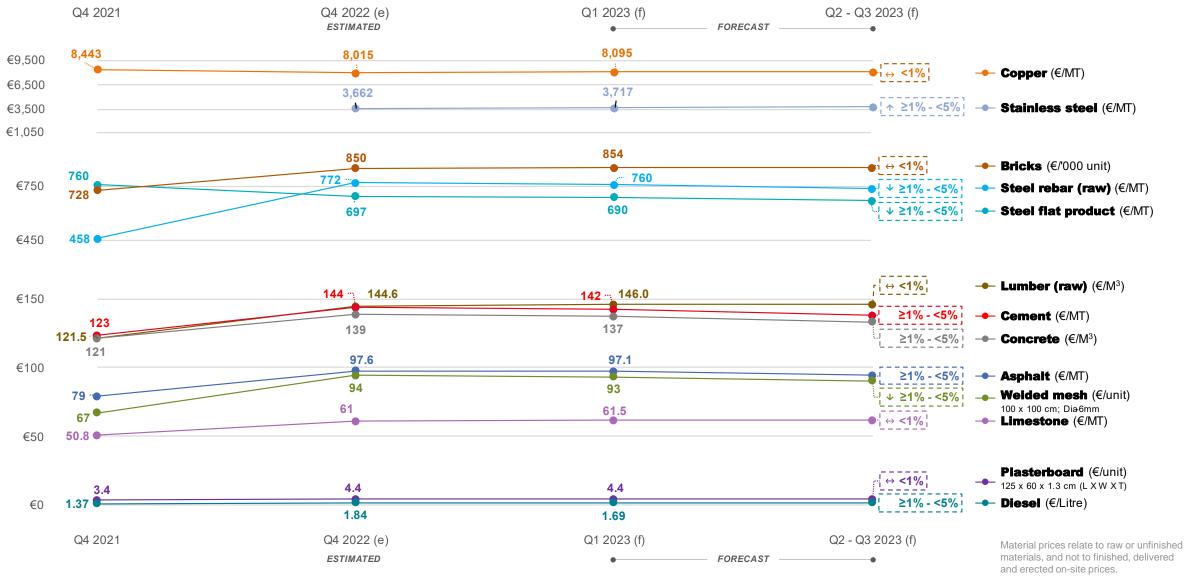
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## **Spain** – Construction Materials Pricing (2021-2022)







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## **Sample sources – Spain**

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

- IMF
- National Statistics Institute(INE)
- · International Labour Organization
- Eurostat
- GlobalData's Construction Intelligence Center (CIC)







## **Sweden** Q4 2022

Sweden's strong GDP growth rate in the first half of 2022 has been somewhat dampened by the average performance in the second half, bringing the year average close to 2.4%. This is primarily due to high inflation, a troubled household sector and rising unemployment. These are expected to persist in 2023, resulting in a modest GDP drop before showing a minor increase in 2024. Inflation remained as high as 10.2% for 2022, and expected to stay pinching at 6.5% in 2023, before easing out to around 2% in 2024.

The Swedish construction industry is expected to grow at a rate of 2.1% in 2022. The overall economic activity in the industry is on the rise with building permits increasing by around 18% in 2022 as compared to the previous year. However, due to the global economic downturn, growth is expected to remain below 1% in 2023. Nonetheless, given the government's investments in transportation and energy infrastructure, the industry is expected to regain momentum in 2024 to 2026, growing at an annual rate of 2.6%.



Paul Butler Senior Director - Europe paul.butler@linesight.com



#### Lumber

Sweden is Europe's second-largest consumer of lumber as a building material and hence, demand for lumber is generally high, with the residential sector driving most of it. Sweden is largely self-sufficient in meeting domestic demand and is positioned as Europe's largest timber export market, and thus well protected from global supply shocks. Nonetheless, rising global and domestic demand for sustainable construction materials, including lumber, is likely to keep lumber prices rising in the long run, with an expected increase in demand domestically and from major export markets weighing on Sweden's timber stocks. However, declining demand in the short-term will ease pressure on lumber price



#### **Cement and aggregates**

Sweden's domestic market for cement, concrete, and limestone faces much less uncertainty in 2023, following the resolution of an environmental dispute over mining activities at one of Sweden's largest limestone quarries. Cementa, which provides 75% of Sweden's domestic cement usage, will be allowed to continue mining limestone at the quarry for another four years following the Supreme Administrative Court ruling in December 2022. With a greater degree of certainty in the market, prices are expected to decline over the medium term as demand weakens and energy prices begin to normalise.



#### **Concrete blocks and bricks**

Slowing economic growth in 2023 is expected to ease upward pressure on concrete block and brick prices, despite production and

transportation costs remaining elevated. Weaker demand in the construction sector, particularly in the homebuilding sector, will reduce producers' ability to pass on higher costs to consumers which will cause prices to fall in the medium term.



#### Steel (rebar and structural)

Sweden is a net exporter of steel, which helps to mitigate the impact of supply chain disruptions on domestic users. Despite the fact that shortages have been less of an issue in Sweden, rising input costs, driven by higher energy and raw material prices, have resulted in relatively volatile domestic prices over the past year. Steel prices are expected to fall in the coming quarters as demand falls and global production rises, relieving pressure on domestic producers and making imported steel more appealing. Domestic steel demand will be boosted in the medium to long term by a high-value pipeline of infrastructure projects.



#### Copper

Over the long term, demand for copper will be driven by investment in renewable energy and electric vehicles. In the shorter term, global copper prices are expected to remain volatile owing to competing pressures on the supply and demand sides. Economic recovery in China, the world's largest copper consumer, has the potential to partly offset the fall in demand from other large copper consumers, increasing upward pressure on prices. However, a planned increase in domestic production for 2023, announced by Copperstone Resources, which intends to reopen the Viscaria copper mine in Kiruna, will help to ease supply-side pressures.



# **Sweden** – Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
		\ \	2022-23	
Materials	SEK	SEK	% change	% change
Copper (SEK/MT)	88,336	93,268	-5.3% ↓	<b>4.3% ↑ •</b>
Steel rebar (SEK/MT)	7,524	8,224	-8.5% ↓	-11.6% <b>↓</b> •
Steel flat (SEK/MT)	7,091	7,751	-8.5% ↓	-11.6% <b>↓</b> •
Stainless steel (SEK/MT)	42,071	NA	NA	NA
Lumber (SEK/M3)	736	850	-13.4% ↓	-12.5% <b>↓</b> •
Asphalt (SEK/MT)	969	806	20.1% ↑	1.2% ↑ ■
Limestone (SEK/MT)	642	517	24.3% ↑	3.6% 个 •
Cement (SEK/MT)	2,724	1,938	40.6% ↑	3.8% ↑ •
Concrete (SEK/M3)	1,468	1,240	18.3% ↑	6.1% <b>↑</b> •
Welded mesh (SEK/unit)	822	677	21.5% ↑	-10.6% <b>↓</b> •
Bricks (SEK/'000 unit)	9,189	8,000	14.9% ↑	3.7% ↑ •
Plasterboard (SEK/unit)	97.7	87.2	<b>12.0%</b> ↑	<b>4.9%</b> ↑ •
<b>Diesel</b> (SEK/litre)	23.2	22.3	3.8% 个	3.0% ↑ •

(f) Forecast	(a) Estimated
(II) FUIECASI	ie) Esiillaieu

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 500 x 230cm, dia.-6mm Plasterboard: 250 x 90 x 1.25cm (L x W x T)

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	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Copper	+2.8% ↑	•0000 Low	Although copper prices fell from record highs in Q3 2022, they are expected to rise again in Q4 2022 due to an anticipated increase in demand from China. Low global stockpiles are also increasing pressure on the supply side, while Europe's expected economic slowdown will offset some of this pressure. Nonetheless, rising demand from the renewable energy drive, will keep prices high in the long run.
	Steel prices - Steel rebar - Flat steel	-1.0% <b>↓</b> -1.0% <b>↓</b>	•0000 Low	Steel prices have eased in recent quarters following a surge in prices in Q2 resulting from increase in energy and raw materials costs. Despite production costs remaining relatively high in Europe, supply-side pressures have eased recently due to an increase in production in major Asian exporting countries. In addition, weakening demand in Europe will support a further decline in steel prices over the coming quarters.
	Stainless ste	eel +2.0% ↑	•0000 Low	The price of stainless steel has recently increased due to an increase in the price of nickel, a key alloying material, and is expected to rise slightly in the coming quarters.
	Lumber	-0.9% ↓	• Q Q Q Q Low	Lumber prices declined in the second half of 2022, primarily due to weakening demand. A cooling residential sector is expected to keep demand subdued over the coming quarters, leading to a further decline in prices. Nevertheless, underlying demand will remain resilient due to the popularity of lumber as a construction material in Sweden, coupled with rising global demand for sustainable construction materials.
	Asphalt	-3.5% ↓	•0000 Low	Despite asphalt prices rising marginally in Q4 2022, prices are set to fall over the coming quarters, in line with global crude oil prices. Although supply-side pressures remain in the global oil market, prices are expected to remain elevated compared to historical levels.
000	Limestone	-1.0% ↓	•0000 Low	Previously at risk of a severe supply shock, the limestone market in Sweden faces much less uncertainty following the resolution of a dispute over mining activities at Cementa's limestone quarries. As a result, prices are expected to be stable over the coming quarters, with some downward

residential sector.

pressure due to declining levels of construction activity, particularly in the

# **Sweden** – Commodity Report





	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+1.0% ↑ +3.0% ↑	o 0 <b>0</b>	Sweden's high degree of self-reliance in cement production will help to keep prices relatively stable in the coming months, and with Cementa securing its supplies for limestone, supply side pressures have eased slightly. Nevertheless, elevated energy costs are expected to sustain upward pressure on cement prices over the coming quarters. However, weakening demand in the construction industry is likely to limit further upward pressure on prices.
	Welded mes	sh -1.0% <b>↓</b>	•0000 Low	Owing to easing prices in the global steel market stemming from rising levels of production and weakening demand in the manufacturing and construction sectors, the price of welded mesh is expected to fall in the coming quarters.
##	Bricks	+1.0% ↑	•0000 Low	Brick prices have continued to rise in recent quarters due to high production and transportation costs, despite government support to limit the increase in energy prices. However, with weakening demand in the construction sector driven by a slowdown in the real estate market, prices are expected to stabilise before falling in the coming quarters. Nevertheless, high production costs will continue to keep brick prices elevated.
	Plasterboar	d +1.0% ↑	o	High production costs owing to elevated raw material and energy prices have exerted upward pressure on plasterboard prices in recent quarters. However, weakening demand stemming from a decline in housebuilding activity will contain further upward pressure.
	Diesel	-8.8% ↓	•0000 Low	The expected decline in global crude oil prices, owing to weakening demand amid slowing economic growth, will put downward pressure on diesel prices over the coming quarters. Moreover, the implementation of further tax reductions on petrol and diesel by the Swedish government in December 2022 will reduce prices further.

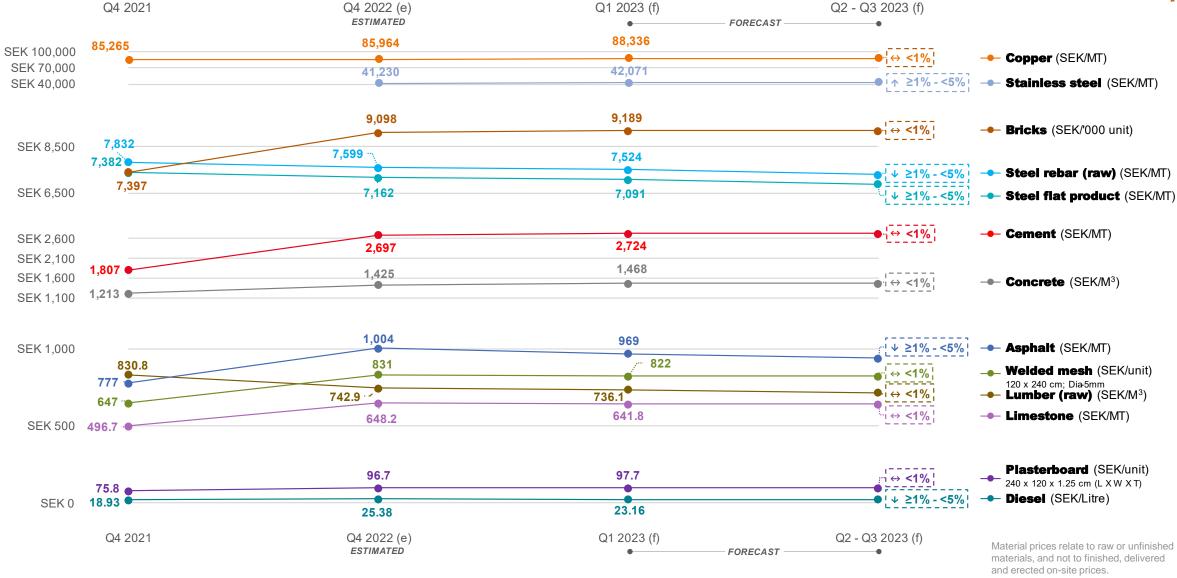
Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

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.



# **Sweden** – Construction Materials Pricing (2021-2022)







### **Sweden** – 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 - Sweden

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

- IMF
- Mynak
- Statistics Sweden
- Organisation for Economic Co-operation and Development (OECD)
- GlobalData's Construction Intelligence Center (CIC)







# **Switzerland** Q4 2022

According to a recent update by SECO, Swiss GDP grew by 0.2% in Q3 2022, following a slight increase of 0.1% in Q2 2022. The growth of the economy in Q3 2022 is largely driven by domestic consumption supported by service sector growth. Amid high energy prices, the inflation rate is anticipated to remain at 2.9% in 2022, followed by a drop to 2.2% in 2023, and the economy is expected to be dampened by current global macro-economic factors, growing at a below average rate of 1% in 2023.

The Swiss construction industry is expected to contract by 3.6% in 2022, because of surging energy prices, high inflation and interest rates, and labour shortages. The industry's contraction is expected to continue in 2023, with the industry shrinking at 1.5%, but it is expected to recover in the period 2024-26, with an average annual growth rate of 1.7%. The government's planned investments in transportation and renewable energy sectors are likely to provide the industry with much needed impetus.



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#### Lumber

Lumber suppliers have reported relatively strong inventories and some sawmills have been cutting production in response to lower demand. Demand in the residential construction sector has waned in recent months due to higher interest rates and falling real incomes. However, energy price hikes have caused a spike in demand for firewood and increased competition in hardwood plantations.



#### **Cement and aggregates**

Switzerland is relatively self-sufficient with regard to cement production, and its rich limestone deposits has enabled cement supply to remain relatively buoyant. However, cost-push pressures stemming from the energy crisis have put upward pressure on prices. The demand for cement is slowing, with Q4 2022 cement orders down by 6% from the previous year and rising interest rates have caused many firms in the construction industry to scale back operations.



#### **Concrete blocks and bricks**

Price increases have been in large part due to the energy crisis, with suppliers in 2022 noting extremely high gas prices, resulting in many kilns shutting down. The supply of core inputs such as clay has remained more predictable; domestic supply from local clay deposits has been unimpeded by external shocks. However, high energy costs remain a key factor in imposing a tight squeeze on margins.





#### Steel (rebar and structural)

Switzerland is heavily dependent on steel imports and exposed to fluctuations in global supply. Energy costs are still very much elevated, but demand has weakened. The decarbonisation effort will contribute to higher production costs further ahead.



#### Copper

Switzerland is heavily dependent on imported copper, with the majority of copper imports sourced from Zambia which is then reexported by Swiss-based traders. Copper prices have been volatile. Supply shocks in Chile and Peru, have limited supply and inventories have fallen moderately. In addition, further upward pressure from the re-opening of the Chinese economy and the energy transition will keep prices elevated in the short to medium term. However, the global economic downturn due to monetary tightening in major economies will limit price increases.



# Switzerland - Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	CHF	CHF	2022-23 % change	% change
Copper (CHF/MT)	7,876	8,942	-11.9% ↓	2.4% 个(
Steel rebar (CHF/MT)	944	1,140	-17.2% ↓	-8.8% ↓ (
Steel flat (CHF/MT)	821	920	-10.7% ↓	-11.1% ↓
<b>Stainless stee</b> (CHF/MT)	3,743	NA	NA	NA
<b>Lumber</b> (CHF/M3)	95.7	87.3	9.6% 个	0.7% 个 1
<b>Asphalt</b> (CHF/MT)	120.1	96.1	25.0% 个	0.3% 个 □
<b>Limestone</b> (CHF/MT)	41.9	35.9	16.7% 个	1.1% 个
Cement (CHF/MT)	200	170	17.5% ↑	1.1% 个
Concrete (CHF/M3)	154	132	<b>17.3%</b> ↑	1.8% 个
Welded mesh (CHF/unit)	101	93	8.0% 个	-8.1% ↓
Bricks (CHF/'000 unit)	1,040	805	29.2% ↑	2.0% 个
Plasterboard (CHF/unit)	6.4	4.7	36.5% ↑	1.2% 个
<b>Diesel</b> (CHF/litre)	2.0	1.8	10.1% 个	-5.5% ↓ (

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

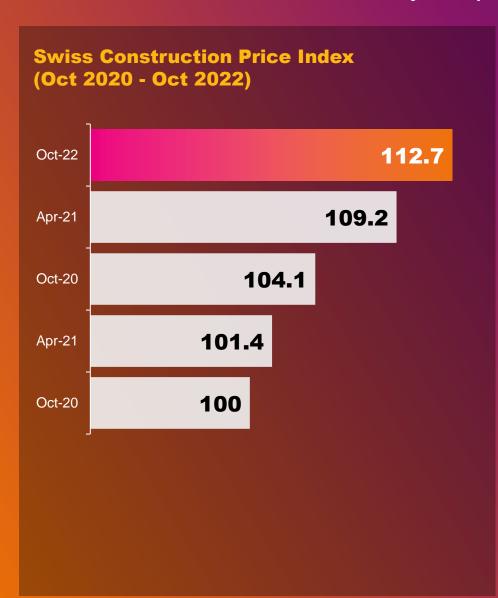
Welded mesh: 150 x 300cm, dia.-5mm Plasterboard: 200 x 60 x 1.25cm (L x W x T)

	Material	% change Q4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+2.7% ↑	•QQQ Low	Copper prices picked up in late Q4 2022, reflecting pressures stemming from lower inventory and supply concerns from Peru and anticipated demand from China, following the reopening of its economy. With interest rate hikes and a slowdown in the global economy, copper price inflation will be contained, but demand from investment in renewable energy projects and electric vehicle manufacturing will pick up.
	Steel prices - Steel rebar - Flat steel	-2.2% ↓ -0.1% ↓	•0000 Low	Steel prices continued to fall in late 2022 from the highs reached in the first half of the year. Steel prices are expected to decline further, given a weakening in demand. However, Swiss Steel expects the energy price to remain at a high level, which will continue to squeeze margins and prevent a much sharper drop in prices in the coming quarters.
	Stainless sto	eel +1.0% ↑	• 0 0 0 0 Low	Stainless steel prices are expected to remain relatively high given the importance of alloying materials such as nickel and chromium, prices for which remain high.
	Lumber	-1.0% ↓	•0000 Low	Lumber prices have edged downwards, and this trend is expected to continue reflecting the slowdown in domestic demand. Residential construction in particular has been in decline, and although interest rates are still quite low, they are set to rise, and this will dampen investment growth.
A	Asphalt	-1.0% 个	• 0 0 0 0 Low	Asphalt prices remained high in Q4 2022, but upward pressure has diminished, and prices will fall back from recent highs in the coming quarters.
0000	Limestone	<b>+1.0% ↑</b>	•0000 Low	Although production costs remain high due to elevated energy costs, weakening demand in the construction industry is expected to contain price increases.



### **Switzerland** – Commodity Report





Material	% change Q4 – Q1 2023 (f)	Level of in	mpact of pricing on construction procurement and supply chain *
Cement Concrete	+1.0%   ተ +1.0%   ተ	o 0 ■	Cement and concrete prices increased in the second half of 2022 owing to high electricity prices. Higher production costs have forced cement producers to pass on price increases to customers and with high costs expected to run into Q1 2023, prices are expected to remain high despite weakening demand.
Welded me	sh -1.0% <b>↓</b>	•0000 Low	The price of welded mesh declined because of the overall drop in the price of steel reinforcement bars. The slowdown in demand and adequate supply is expected to result in a decline in the price of welded mesh over medium term, however, short-run cost increases will hold prices higher over the next couple of months.
Bricks	+1.0% 个	• 0 0 0 0 Low	Brick prices continued to increase in late 2022, primarily due to the high cost of energy. However, weakened demand amid slowing economic growth in early 2023 will contain further inflationary pressures.
Plasterboa	rd +1.0% 个	•0000 Low	Plasterboard prices showed a marginal increase in late 2022 owing to high production costs. With demand easing, prices are expected to flatter in the coming months.
<b>Diesel</b>	-9.0% ↓	•0000 Low	The price of diesel declined in Q4 2022 owing to a drop in international crude oil prices and a slowdown in demand. The outlook for crude oil prices is mixed, given supply constraints stemming from OPEC+ production cuts on one hand, and weaker demand on the other. However, the worsening global economic outlook looks to be the dominant narrative

and is likely to push prices down further over the next quarter.

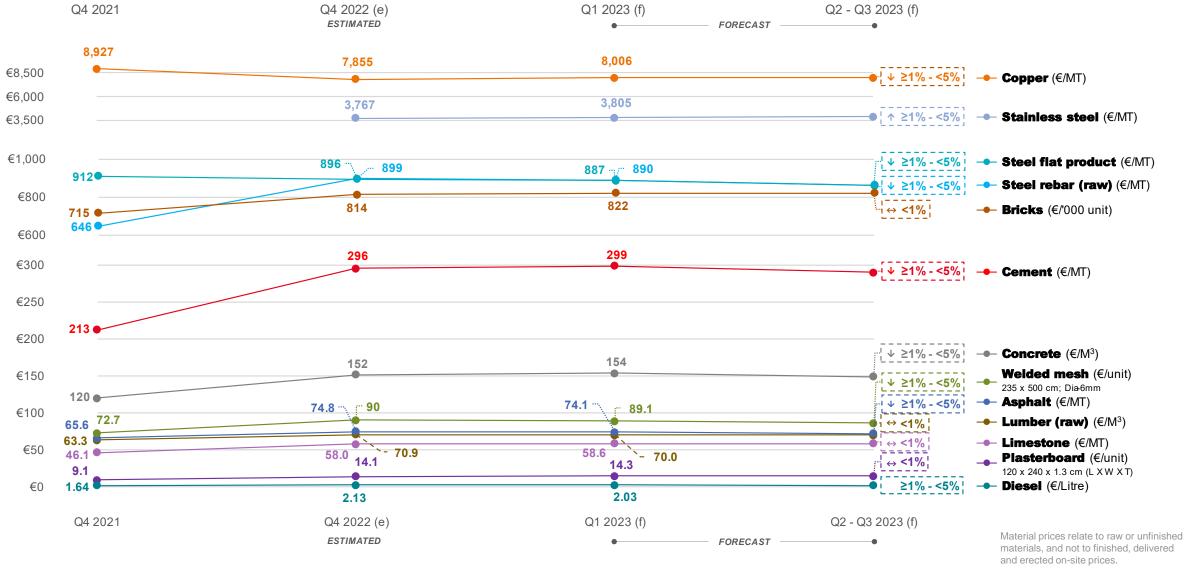
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### **Switzerland** – Construction Materials Pricing (2021-2022)







### **Switzerland** – Report methodology



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### **Primary and secondary research**

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### **Sample sources - Switzerland**

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

- IMF
- BFS
- Swiss Federal Statistic Office
- GlobalData's Construction Intelligence Center (CIC)
- OECD







### **United Kingdom** Q4 2022

The outlook for the UK economy remains gloomy for 2023 with a recovery unlikely before 2024. While the Office for National Statistics reported that the economy grew by 0.1% and 0.5% in October and November 2022, respectively, the Bank of England predicts that the economy will remain in recession for an extended period of time, owing to the high cost of living. The BoE's monetary tightening appears to be continuing in the near term, with inflation remaining high at 10.5% in December 2022, albeit slightly down from 10.7% in November 2022.

The outlook for the construction sector is similarly tough and is expected to contract by 1.9% with output being negatively affected by rising interest rates, high energy prices and uncertain global conditions. With material price hyperinflation largely behind us, it is expected that for the most part prices will either continue to moderate or drop back throughout 2023. Sectors such as residential, commercial and industrial are forecast to slow sharply but 'mission critical' sectors such as data centres and life sciences will see continued high demand. However, a continued shortage of labour and specialist skills, high energy prices, contractor capacity and funding challenges remain a concern. Relationship-based supply chain management continues to be a key strategy to mitigate such risks.



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#### Lumber

Although construction activity has held up well amid wider economic weakness, lumber prices have dropped from recent highs. Strong domestic stock levels has eased price pressures and has also resulted in a drop off in imports. With the residential construction sector facing a downturn as recent interest rate hikes impact on investment, lumber prices will fall further in the coming quarters. However, demand for lumber will be maintained in the longer term, with lumber offering a solution for low carbon building projects.



#### **Cement and aggregates**

Cement prices stabilised at a high level in late 2022, having risen steadily throughout the year - by October cement prices were up by 17% year-on-year, while ready-mixed concrete was up by 18.5%. Solid demand in the construction sector has driven this trend along with high production costs. Aggregates prices have been more stable, coming down marginally from mid-2022 highs. However, longer-term concerns persist over risks of insufficient supply.



#### **Concrete blocks and bricks**

Brick production levels stayed high in late 2022, and the downward trend in stocks had slowed. Prices have continued to rise, pushed up mainly by high production costs. In its most recent trading update, Forterra Group revealed that its revenue was up 23% year-on-year in January to October, bolstered by price hikes during the year (the latest being a 16.5% increase effective October 1<sup>st</sup>). It noted further prices increases planned for Q1 2023 to account for cost inflation.



#### Steel (rebar and structural)

Steel prices have fallen from recent highs. However, the UK steel industry is facing significant challenges, with two of British Steel's blast furnaces facing closure. With the pressures of rising energy costs and weakening demand, the company has stated that it requires approximately £100 million to offset the financial impact of carbon permits issued under the government's emissions trading scheme. At the same time, the company is negotiating a financial assistance package with the government.



#### Copper

Copper prices edged higher in late 2022, and there is an expectation of price volatility in the coming quarters, with potential supply-side disruption offsetting the impact of weakening global demand in the short term.



# **United Kingdom** – Commodity Report



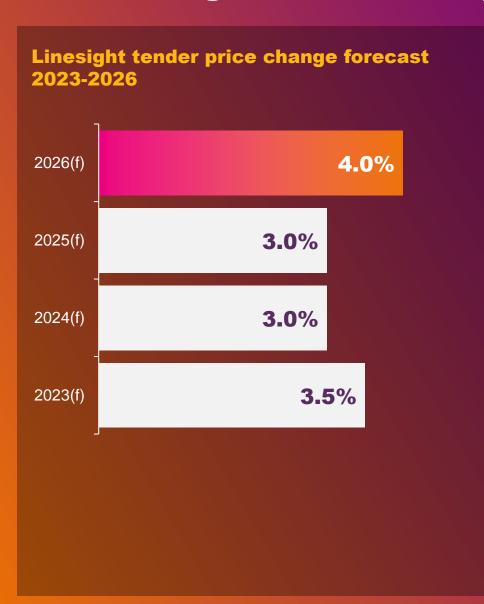
•	1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
		\ \	2022-23	
Materials	£	£	% change	% change
Copper (£/MT)	6,840	7,458	-8.3% ↓	3.3% ↑
Steel rebar (£/MT)	619	588	5.1% ↑	-9.9% ↓
Steel flat (£/MT)	724	706	2.6% 个	-9.3% ↓
Stainless steel (£/MT)	2,073	NA	NA	NA
<b>Lumber</b> (£/M3)	55.7	61.8	-9.9% ↓	-14.1% ↓
<b>Asphalt</b> (£/MT)	581	531	9.4% ↑	8.7% 个
<b>Limestone</b> (£/MT)	40.0	45.0	-11.2% ↓	0.7% 个
Cement (£/MT)	219	195	<b>12.4%</b> ↑	0.7% 个
Concrete (£/M3)	144	122	18.3% ↑	2.3% 个
Welded mesh (£/unit)	43.5	35.5	22.5% ↑	-5.3% ↓
Bricks (£/'000 unit)	1,338	981	36.5% ↑	10.2% 个
Plasterboard (£/unit)	10.5	7.9	31.9% ↑	1.2% 个
<b>Diesel</b> (£/litre)	1.8	1.6	15.8% ↑	-2.2% ↓
(f) Forecast (e) Estim	ated			

Welded mesh: 240 x 480cm, dia.-6mm Plasterboard: 240 x 120 x 1.25cm (L x W x T)

	Material	% change – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+0.50% ↑	00 <b>I</b>	Copper prices faced some upward pressure towards the end of 2022. Supply disruptions in Peru, impacted by political unrest, have been a factor driving recent trends, and the relaxation in China's zero COVID policy has lifted investor confidence. The outlook is mixed, with concerns over a global economic downturn on one hand being offset by projections of a global supply deficit in copper.
	Steel prices - Steel rebar - Flat steel	-0.5% <b>↓</b> -0.5% <b>↓</b>	00 <b>I</b> ∭ Moderate	Steel prices continued on a downward trend in Q4 2022, dropping at a faster rate than previously anticipated. This is despite steel production levels being hit by high energy costs, which has led to temporary shutdowns of production plants. Although prices were down from the highs reached in Q2 2022, prices are still high compared to year-earlier levels.
	Stainless steel	+0.6% ↑	•0000 Low	Stainless steel prices are expected to remain elevated due to the increase in the prices for key raw materials, such as nickel.
	Lumber	-1.0% ↓	00 <b>0 0 0 0 0 0 0 0 0 </b>	Lumber prices have declined further, reflecting mainly a healthy stock level. Construction activity has held up well in recent quarters, including new residential works and refurbishment. Import volumes have also been on a downward trend. Prices are set to weaken further given the expectation of a drop-off in construction work.
A	Asphalt	-1.0% ↓	00 <b>I</b>	Asphalt prices picked up in the fourth quarter of 2022 having been fairly stable in the preceding few quarters. Demand for material for road repairs has been high, and the value of new orders for road construction rose by 20% year-on-year in the first three quarters of the year. Although global crude oil prices have fallen from the highs of the second quarter, prices are expected to remain around \$80 per barrel.
	Limestone	+0.8% ↑	• 0 0 0 0 Low	Limestone prices have been relatively stable compared to other materials. Prices are expected to remain close to current levels, as weaker demand will be offset by still high production and transport costs.

### **United Kingdom** – Commodity Report





	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+1.0% <b>↑</b> +1.0% <b>↑</b>	o	Concrete and cement prices have continued to trend upwards in recent months, with solid demand and high energy costs being key factors. Although prices will remain elevated in the short term, a decline in construction activity and easing upward pressure on energy prices will result in concrete and cement prices coming down from recent highs.
	Welded mes	sh -0.4% <b>↓</b>	o D D D High	Welded mesh prices have eased back from recent high levels, a trend that reflects movement in rebar prices.
盘	Bricks	+11.5% <b>↑</b>	o	Brick prices have recorded a further jump in recent months, driven primarily by high production costs being passed on to buyers. Prices are set to remain elevated in the coming quarters, based on indications from producers of further increases to come, despite emerging weakness on the demand side.
	Plasterboar	d +10.0% 个	•0000 Low	Plasterboard prices edged higher in Q4 2022 and are set for further increases in the coming quarters, with manufacturers and distributors indicating forthcoming price rises.
	Diesel	-1.7% ↓	o O O O O	Diesel prices have fallen back from the high levels of close to £2 per litre reached in July 2022, but in late 2022 were still around 20% higher than

in late 2021. Crude oil prices are expected to remain above \$80 per barrel in 2023, which will keep pressure on diesel prices. There is also a possibility of a hike in fuel duty in March 2023, according to recent forecasts made by the Office for Budget Responsibility. Duty could rise

by 23%, which would add 12p per litre on fuel prices.

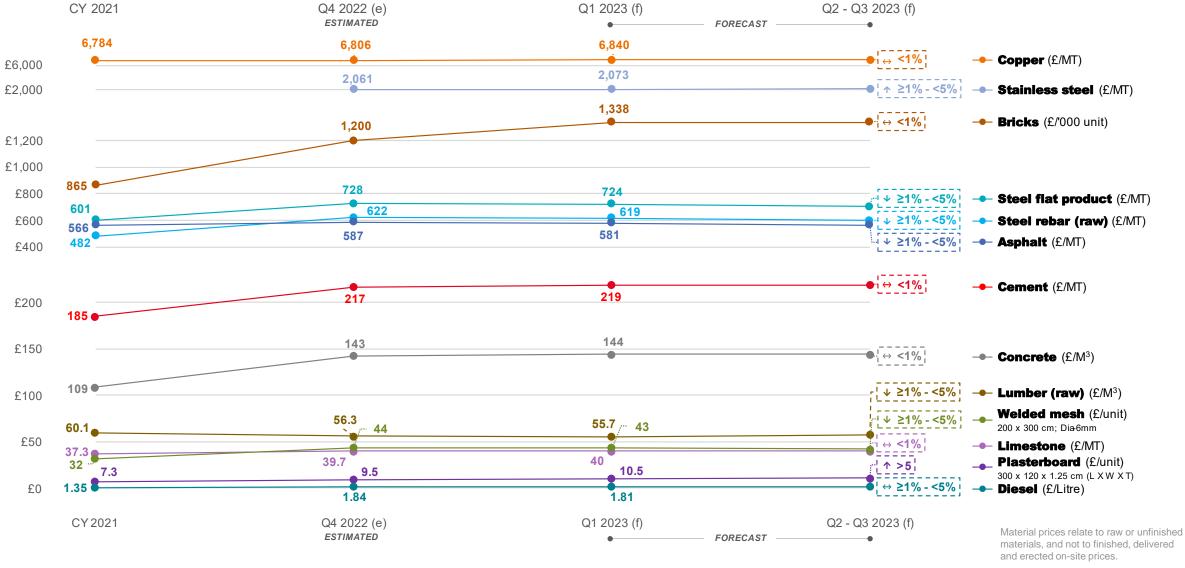
Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

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.



# **United Kingdom** – Construction Materials Pricing (2021-2023)







### **United Kingdom** – 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 – United Kingdom**

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

- IMF
- ONS
- Gov.uk
- GlobalData's Construction Intelligence Center (CIC)
- BCIS



**Linesight** 



















## Australia Q4 2022

Amid a bleak global economic outlook, IMF estimated a slowing of Australia's economic growth rate from 3.6% in 2022 to 1.6% in 2023, in its most recent statement. While the actual inflation figures are awaited, the forecast for December 2022 had been raised from 7.75% to 8% earlier last year, due to an increase in retail energy and food prices caused by the recent extreme weather events.

The Australian construction industry is predicted to have realterm declines of 0.4% and 2.7% in 2022 and 2023 respectively as a result of supply chain disruptions, rising interest rates and inflation, and prolonged difficulties in the residential construction sector. The industry is also experiencing a labour crunch, which is causing cost overruns and project delays. However, from 2024 to 2026, the industry is anticipated to recover at an average annual growth rate of 3.1%, helped by the government's sustained emphasis on infrastructure development.



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#### Lumber

Residential construction is expected to slow in 2023, given the recent declines in dwelling approvals and new residential commencements. However, demand in the short term will persist given that dwellings under construction remain relatively high. Tariffs on imported lumber from Russia and Belarus will also exert sufficient upward pressure to maintain prices around current levels. The Government's commitment to invest AUD300 million to support the forestry industry will to some extent ease price and supply pressures in the longer term.



#### **Cement and aggregates**

With construction activity expected to moderate in the first half of 2023 and input costs falling as a result of a government cap on domestic prices of natural gas and thermal coal, cement prices are expected to decline in the coming quarters. The energy consumed by Australian cement producers is predominantly generated by thermal coal, which accounted for approximately 57% of the industry's energy use in 2020-21, according to the Cement Industry Federation. Some upwards pressure on cement prices will be generated by the commencement of works on a number of large civil engineering projects in Q1 2023, including the Sydney Metro West project and the North East Link Road development, but this is likely to be more than offset by an expected fall in demand from the residential construction sector.



#### **Concrete blocks and bricks**

Demand for bricks and concrete blocks is expected to ease in the coming quarters, as new residential construction slows, and energy costs fall.



Brick kilns in Australia are predominantly fired using natural gas, which has been capped by the government at AUD12 per gigajoule until December 2023, less than half its average price in Q3 2022.



#### Steel (rebar and structural)

Steel demand is expected to continue to slow in Q1 2023, and prices are expected to decline as a result. Weighing on demand will be a weakening of global economic growth, which is expected to lead to a moderation of both manufacturing production and construction activity. However, with global crude steel production falling, down 5.4% YoY in H1 2022, and construction works on a number of major civil engineering projects in Australia expected to begin in early 2023, the fall in steel prices is expected to be moderate. A potential easing of China's import ban on Australian coking coal, which is used in the manufacture of steel, will further soften the expected decline in steel prices.



#### Copper

Copper prices are expected to remain relatively stable in the coming quarters, though risks to the price outlook are weighted heavily to the upside. Factors influencing price reduction include weakening industrial activity in Europe and the United States, reduced monetary support and reduced demand as a result of elevated inflation. Counter factors include increased demand from China, driven by significant infrastructure investment. In Australia, the Government's 'Rewiring the nation' plan has made AUD20 billion available to fund improvements to the transmission infrastructure, and AUD7.8 billion investment in critical transmission projects in December 2022. In the long term, copper prices are expected to rise substantially, mainly driven by increased demand from electric vehicle manufacturing and rising investment in renewable energy generation.



# Australia - Commodity Report



	Q1 2023 (f)	Q1 202	2 – Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	AU\$	AU\$	2022-23 % change	% change
Copper (AU\$/MT)	12,376	13,968	-11.4% ↓	8.2% 个 •
Steel rebar (AU\$/MT)	783	1,048	-25.3% ↓	-6.4% ↓ •
Steel flat (AU\$/MT)	811	1,087	-25.4% ↓	<b>-2.5%</b> ↓ •
<b>Stainless steel</b> (AU\$/MT)	2,102	NA	NA	NA
<b>Lumber</b> (AU\$/M3)	141	129	8.9% ↑	2.0% ↑ ■
Asphalt (AU\$/MT)	1,661	1,310	26.8% ↑	2.7% 个 •
<b>Limestone</b> (AU\$/MT)	50.3	60.0	-16.3% ↓	0.0% ↔ ■
Cement (AU\$/MT)	548	518	5.9% ↑	5.7% 个 •
Concrete (AU\$/M3)	331	320	3.4% ↑	1.2% 个 •
Welded mesh (AU\$/unit)	122	97	26.2% ↑	0.0% ↔ ■
Bricks (AU\$/'000 unit)	1,640	1,661	-1.3% ↓	-3.0% ↓ •
Plasterboard (AU\$/unit)	36.3	35.2	3.1% ↑	0.0% ↔ ■
<b>Diesel</b> (AU\$/litre)	2.3	1.8	26.5% 个	-2.1% <b>↓</b> •

(f) Forecast	(6)	Fetimated
(I) I UI CCast		, Louimateu

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 600 x 240cm, dia.-6mm Plasterboard: 300 x 120 x 1cm (L x W x T)

	Material Q	% change 4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+0.4% ↑	•OOD Low	Despite unfavourable conditions, copper prices began to rise toward the end of 2022. The increase in international copper markets is primarily due to anticipated demand from China following the relaxation of China's zero COVID policy; however, with the expectation of a global economic downturn, prices are likely to remain relatively flat. An increase in demand from the civil engineering sector will put upward pressure on copper prices in Australia, though this will be mitigated by a decrease in demand from the residential construction sector.
	Steel prices - Steel rebar - Flat steel	-1.3% <b>↓</b> +1.1% <b>↑</b>	•OOO Low	Steel Rebar and Flat Steel prices registered a decline of 6.4% and 2.5% respectively in Q4 2022 from Q3 prices. This is primarily due to weakening industrial output globally and falling demand in the construction sector. As demand weakens further, steel prices are expected to continue falling in coming quarters though marginally, as Japanese and European steel producers cut production due to increasing energy costs and ramping up Chinese domestic demand. However, rising iron ore prices will partly offset the impact of falling demand on Australian prices in Q1 2023.
	Stainless Stee	<b>≱I</b> +1.0% ↑	• D D Low	Stainless steel prices have shown an upward trend mainly driven by increasing raw material prices and elevated energy costs.
	Lumber	+0.5% ↑	o 0	Lumber prices have edged up slightly from their Q3 2022 levels, mainly driven by tight demand and limited availability of imported wood. However, with interest rates rising and residential building approvals falling, demand from the construction sector is expected to soften in the short term.
A	Asphalt	+0.5% ↑	• O O O O	Asphalt prices have increased moderately from their Q3 2022 levels, increasing by a relatively marginal 0.5% in Q4 2022. There is likely to be further pressure on asphalt prices in early 2023 as a result of the Australian cap of \$60/barrel on Russian seaborne crude oil and the subsequent Russian ban on exports from Australia.
0000	Limestone	+0.5% ↑	•0000 Low	Limestone price have not shown any notable changes and remained stable at their Q3 2022 levels. Rising inflation and a softening of demand from the Australian construction sector is expected to maintain limestone prices close to their current levels in Q1 2023.

Australia Country Report Q4 2022 - Commodities

### Australia - Commodity Report



### AIQS Building Cost Index 2019-2023(f)



Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Cement Concrete	-1.0% ↓ -0.4% ↓	o D	Cement prices are expected to have risen marginally in Q4 2022 due to rising input costs and elevated energy prices; this increase has resulted in a rise in concrete prices. However, with the Australian senate recently introducing a cap on domestic energy prices at AUD125 per metric ton of coal and AUD12 per gigajoule of gas, cement prices are expected to decline from their current levels in Q1 2023.
Welded mes	sh -0.1% <b>↓</b>	•ODD Low	Welded mesh prices have remained stable and have not exhibited any notable change from their Q3 2022 levels. With steel rebar prices expected to fall in Q1 2023, welded mesh prices are expected to decline from their current levels.
Bricks	-0.3% ↓	o D	Brick prices are estimated to have declined by approximately 3% from their Q3 2022 levels. The decrease in price is mainly due to a softening of demand from the residential construction industry. Building approvals in Australia fell by 6% on a monthly basis in October 2022, while private sector house approvals, which make up the bulk of residential construction in Australia, fell by 2.2%. Brick prices are expected to continue to decline in Q1 2023.
Plasterboar	d -0.7% <b>↓</b>	•0000 Low	Plasterboard prices remain stable and have recorded no notable change from their Q3 2022 price. Due to reduced demand from the construction sector, especially residential construction, plasterboard prices are expected to decline marginally in Q1 2023.
Diesel	-0.3% ↓	•0000 Low	Diesel prices edged downward by approximately 2% from their Q3 2022 average in Q4 2022. The decrease was mainly due to falling international crude oil prices. Having declined further in December 2022, the price for diesel is expected to decline marginally in Q1 2023. However, with Australia having decided to cap Russian seaborne crude oil to \$60 a barrel and Russia in retaliation having decided not to sell under this cap, tighter supply may exert some upward pressure on diesel prices in the coming quarters.

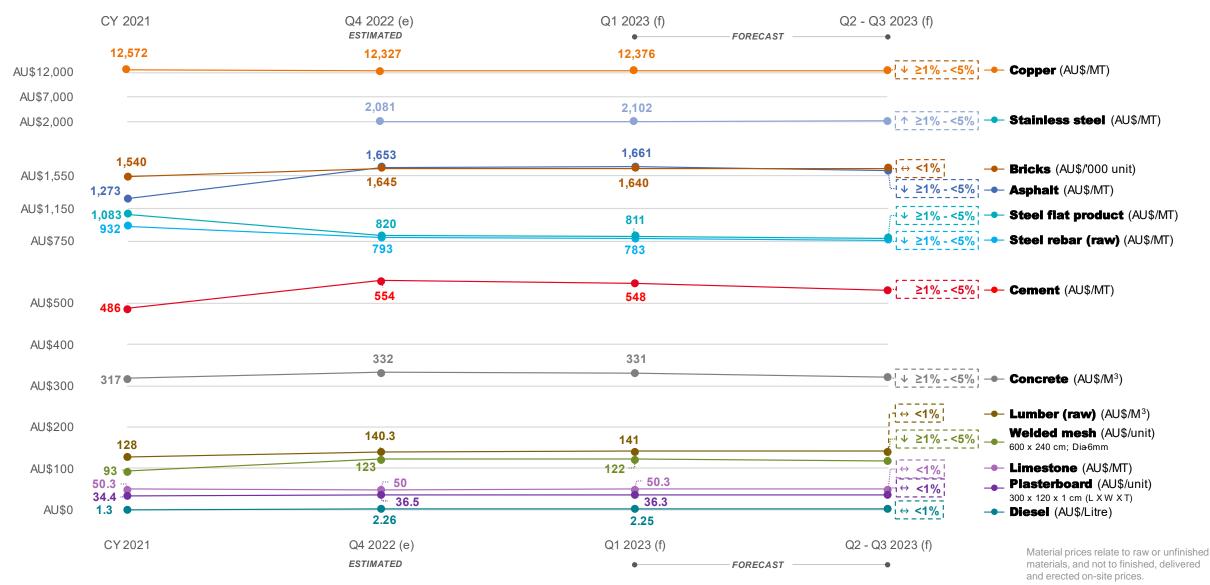
Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

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.



### **Australia** – Construction Materials Pricing (2021-2023)







### Australia – 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.

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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 – Australia

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

- IMF
- ABS
- AIQS
- RBA
- Safe Work Australia
- GlobalData's Construction Intelligence Center (CIC)







### Hong Kong Q4 2022

The sharp decline in Hong Kong's economy in recent quarters, has led its GDP to decline by 3.2% in 2022. This is primarily driven by increased interest rates and Hong Kong's declining exports, as a result of supply chain issues and weakening global demand. However, with the reopening of trade with mainland China and the government's support to increase domestic consumption, it is anticipated that the GDP will grow in coming quarters. Inflation remained at c.1.9% for the year 2022, forecasted to be c.2.2% for 2023.

The construction industry in Hong Kong picked up well in H1 2022. According to Hong Kong Census and Statistics Department, gross value of the construction works performed by the main contractors in H1 2022 was 21% higher than that in the same period in 2021, however in Q3 2022 it was projected to grow at 1.2% as compared to Q3 2021. The industry is currently dealing with various challenges including supply-chain issues, inflation, rising energy costs and labour shortage. However, with Investments in the transport, electricity, housing and industrial sectors, the industry is expected to grow at an average annual rate of 2% during 2023-26.



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#### Lumber

Lumber demand is expected to remain relatively weak in the short term, due to sluggish economic activity and high interest rates. However, in 2023, lumber demand will be supported by the government's focus on increasing the housing supply. Between 2023 and 2028, the government plan to construct approximately 127,700 housing units, of which, approximately 82,600 will be subsidised.



#### **Cement and aggregates**

Cement output continued to fall in the final quarters of 2022, with demand declining as the real estate downturn in China showed no signs of abating. Declining production volumes, exacerbated by rising energy costs, have kept cement prices elevated in Hong Kong, despite demand softening as construction output weakened.



#### **Concrete blocks and bricks**

Elevated thermal coal costs and relatively strong construction demand in the first half of 2022 saw brick prices peak in Q2 2022. However, with construction output weakening in the second half of the year, a glut of supply and a softening of demand the prices have started to drop back.



#### Steel (rebar and structural)

Steel prices in Hong Kong are expected to have continued to decline in the final quarter of last year, reflecting the slowing of global manufacturing activity and the downturn in China's real estate sector. Steel prices in China are rising as demand for infrastructure construction accelerates. The prices are expected to remain stable in 2023 as steel prices in China rise and infrastructure investment in Hong Kong increases.



#### Copper

Expectations of renewed demand in China following the easing of its zero COVID policies contributed to the increase in copper prices in Q4 2022. However, with the rebound in economic activity being far weaker than expected, due to the significant wave of COVID-19 cases, inflation is expected to slow substantially in the first quarter of 2023. Domestic copper demand will be supported by the commencement of construction works on large civil engineering projects in Q1 2023, including the \$8.0 billion Northern Link Express Rail development.



# **Hong Kong** – Commodity Report



	Q1 2023 (f)	Q1 2022 -	Q1 2023 (f)	Q3 2022 - Q4 2022 (e)
Materials	нк\$	нк\$	2022-23 % change	% change
Copper (HK\$/MT)	60,801	72,000	-15.6% ↓	7.8% <b>↑</b> •
Steel rebar (HK\$/MT)	5,687	6,543	-13.1% ↓	-1.0% ↓ ■
Steel Flat (HK\$/MT)	6,847	8,366	-18.2% ↓	-12.0% <b>↓</b> •
Stainless Steel (HK\$/MT)	9,585	NA	NA	NA
Lumber (HK\$/M3)	7,725	7,061	9.4% ↑	-1.0% ↓ •
<b>Asphalt</b> (HK\$/MT)	9,667	9,076	6.5% ↑	0.7% ↑ ■
<b>Limestone</b> (HK\$/MT)	73.6	68.7	7.0% ↑	-2.0% <b>↓ •</b>
Cement (HK\$/MT)	938	854	9.9% ↑	-0.1% ↓ ■
Concrete (HK\$/M3)	1,150	1,273	-9.7% ↓	7.8% <b>↑</b> •
Welded mesh (HK\$/unit)	70.9	77.4	-8.4% ↓	-1.0% ↓ ■
Bricks (HK\$/'000 unit)	3,325	3,189	<b>4.3</b> % ↑	-0.8% ↓ ■
Plasterboard (HK\$/unit)	100.2	70.7	<b>41.7%</b> ↑	0.0% ↔ ■
<b>Diesel</b> (HK\$/litre)	18.0	15.1	18.8% 个	0.5% ↑ ■

(f) Forecast	(a) Estimated
(I) FUICLASL I	e, Esiiiiaieu

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 100 x 100cm, dia.-6mm Plasterboard: 122 x 244 x 1.2cm (L x W x T)

	Material (	% change Q4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+1.3% ↑	• O O O O	Copper prices are expected to remain elevated in the near term, with an expectation that demand from China strengthens as its reopening progresses. However, slowing global economic growth and weak manufacturing activity will contain price inflation in the coming quarters.
	Steel prices - Steel rebar - Flat steel	+0.7% ↑ +0.0% ↔	•OOD Low	Slowing residential construction activity and civil engineering works, and a reduced global demand as manufacturing activity softened, saw steel prices fall in the second half of 2022. In early 2023, prices will hold up by increased demand in China as works on its infrastructure construction drive picks up and the possibility of steel mills reducing output in response to high energy and input costs.
	Stainless ste	el +1.3% 个	•0000 Low	Due to elevated nickel costs, stainless steel prices are expected to rise in the short term.
	Lumber	-1.0% ↓	00 <b>I</b>	Easing supply chain pressures and weak residential construction demand saw lumber prices fall slightly in the final quarter of last year. In Q1 2023, lumber prices are anticipated to fall marginally amid sluggish residential construction activity.
	Asphalt	-0.5% ↓	• O O O O	Since Q3 2022, asphalt prices have been relatively steady, recording only a marginal rise in the final quarter of last year. In early 2023, prices are expected to be supported around their current level by firming domestic demand and stabilising global crude oil prices.
0000	Limestone	-0.5% ↓	•0000 Low	Limestone prices are expected to remain stable in the coming quarters, with weak demand offset by high production and transportation costs.

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.

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### **Hong Kong** – Commodity Report



# **Construction cost index 2015-2022** Sep-22 1,684.9 1,539.1 2021 1,357.3 2020 1,378.6 2019 1,387.0 2018 1,302.9 2017 2016 1,196.9 1,168.0 2015

,	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
/ /	Cement Concrete	+0.8% ↑ +0.6% ↑	00 <b>I</b> II Moderate	Cement prices remained stable in the final quarter of last year, with slowing demand growth from the residential and civil engineering sectors offset by increased production costs as energy prices rose. Demand from the building sector will remain sluggish in the first quarter of 2023, but infrastructure investment in China and high production costs will contribute to keeping cement prices elevated. Concrete prices are expected to exhibit a similar trend.
	Welded mes	h +0.7% ተ	o 🛮 📗 Moderate	Welded mesh prices fell marginally in the final quarter of last year, following the trend of steel rebar prices. In Q1 2023, mesh prices are anticipated to rise in line with the expected increase in steel rebar prices.
	Bricks	-0.3% ↓	• 0 0 0 Low	Brick prices fell in Q4 2022, weighed down by soft demand from the residential construction sector. However, high production costs will keep prices relatively high.
	Plasterboard	I +0.2% 个	•0000 Low	Plasterboard prices are expected to remain stable in the short term, with high production costs being offset by fairly weak demand.
	Diesel	-1.0% ↓	o 🛮 📗 Moderate	Diesel prices are anticipated decrease slightly from their current levels in Q1 2023, though the recent announcement by OPEC+ to reduce oil supply will exert upwards pressure on prices.

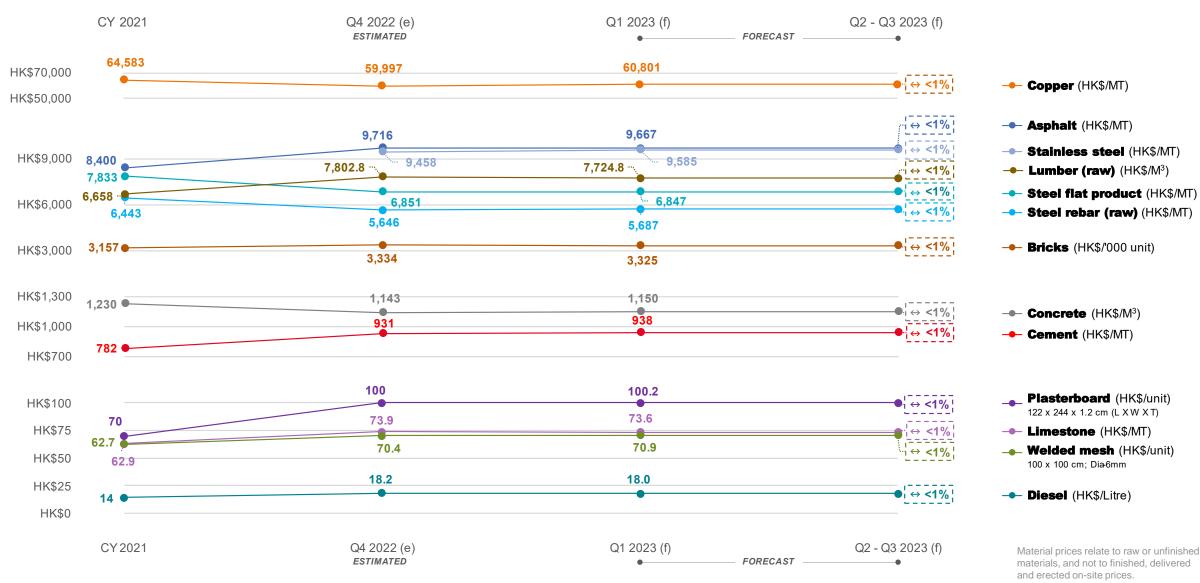
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# **Hong Kong** – Construction Materials Pricing (2021-2023)







### **Hong Kong** – Report methodology



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### **Primary and secondary research**

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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.

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### **Sample sources – Hong Kong**

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

- IMF
- Civil Engineering and Development Department The Government of the Hong Kong Special Administrative Region
- The Census and Statistics Department
- GlobalData's Construction Intelligence Center (CIC)









# **India** Q4 2022

In its latest update, World Bank retained India's GDP growth at 6.9% for the fiscal year 2022-23. The World Bank has revised its GDP forecast for India from 6.5% (in October 2022) to 6.9% in December 2022, citing the Indian economy's resilience to global shocks and strong macroeconomic fundamentals. Inflation has also decreased to an eleven-month low of 5.88%, falling within the Reserve Bank of India's 2-6% tolerance band.

The Indian construction industry is expected to grow at a 6.6% annual rate in 2022, up from a 5.8% annual rate previously predicted. While the government is committed to spending on infrastructure, the real estate sector has seen considerable upswing this year. Indeed, critical sectors such as warehousing, and data centers are expected to expand significantly in the coming years. Many global data center operators are establishing hyperscaler operations in the country. The government's recent announcement of plans to launch product-linked incentives for the manufacturing of IT hardware and computer servers will also benefit the hi-tech industry as well. Commodity prices are likely to remain stable in the short term.



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#### Lumber

Lumber prices are expected to rise, although marginally in early 2023, despite an easing for supply chain disruption and reduced global demand for lumber. Robust demand from the Indian construction sector, particularly the commercial and residential construction sectors, is expected to be the primary driver of price growth in early 2023.



#### **Cement and aggregates**

Despite falling in Q3 2022, predominantly due to a seasonal moderation in construction activity during the monsoon season, cement prices are rising and are expected to continue to increase into the first half of 2023. Due to an unseasonably long monsoon season, that stretched through October 2022, many cement producers were unable to push up their asking prices, despite an increase in input costs. With demand strengthening as construction activity picks up and works on a number of large civil engineering projects commencing, cement producers will begin to pass on these costs to buyers.



#### **Concrete blocks and bricks**

Concrete block and brick prices are expected to have risen marginally in the final quarter of 2022, as construction activity rebounded following its slump during the monsoon season. With construction activity expected to continue to strengthen in early 2023 and thermal coal





#### Steel (rebar and structural)

Steel prices are expected to increase in the coming quarters as a result of the removal of export duty on steel products, which came into effect in November 2022 and an acceleration of construction activity. An increase in coking coal and iron ore prices, increased demand from China to supply its infrastructure construction drive, and work on India's \$1.4 trillion National Infrastructure Pipeline will drive the price momentum in early 2023. Further upwards pressure on domestic steel prices will be generated by the government's inclusion of steel products in the RoDTEP Scheme (Remission of Duties and Taxes on Exported Products) from December 15, 2022.



#### Copper

Copper prices have picked up following the decline in Q3 2022, with prices expected to have recorded a quarterly increase of 2.9% in Q4 2022. While there will be downward pressure on copper prices in the short term due to slowing global economic growth and declining industrial production, domestic prices will stay relatively high. Copper demand in India will be driven by an expansion of domestic manufacturing activity, supported by robust car sales, with India surpassing Japan as the third largest auto market globally in 2022. Further domestic price pressure will come from India's investment in expanding renewable energy capacity.



# India - Commodity Report



	Q1 2023 (f)	Q1 2022 -	Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	INR	INR	2022-23 % change	% change
Copper (INR/MT)	740,243	821,492	-9.9% ↓	2.9% 个
Steel rebar (INR/MT)	55,741	64,180	-13.1% ↓	-6.1% ↓
Steel flat (INR/MT)	57,283	67,383	-15.0% ↓	-6.2% ↓
Stainless steel (INR/MT)	191,919	NA	NA	NA
Lumber (INR/M3)	12,942	10,938	18.3% 个	0.8% 个
Asphalt (INR/MT)	61,130	53,810	13.6% 个	12.1% 个
<b>Limestone</b> (INR/MT)	480	450	6.6% 个	0.0% ↔
Cement (INR/MT)	8,306	7,640	8.7% ↑	3.7% 个
Concrete (INR/M3)	4,545	4,100	10.9% 个	0.0% ↔
Welded mesh (INR/unit)	296	350	-15.3% ↓	-6.1% ↓
Bricks (INR/'000 unit)	9,225	9,000	2.5% 个	0.7% ↑
<b>Plasterboard</b> (INR/unit)	361	350	3.2% ↑	-0.7% ↓
<b>Diesel</b> (INR/litre)	88.7	87.6	1.3% ↑	0.0% ↔
	imated			

	Material	% change Q4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+1.2% ↑	o 0	Copper prices rose during November and December 2022, primarily driven by the weakening of the Indian rupee against the US dollar and growing domestic demand. With economic growth in India expected to be a considerable 7.0% in FY2023, according to the National Statistical Office of India, domestic demand for copper is expected to remain robust, keeping prices relatively high in the coming quarters.
B	Steel prices - Steel rebar - Flat steel	+0.6% 个 +2.0% 个	o 0	Steel prices are expected to fall in Q4 2022 on a quarterly average basis, with the export duty on steel products limiting the price setting power of steel producers and depressing local prices. However, with the export duty removed on November 19th 2022, an ensuing pick up in exports will reduce domestic product availability, and combined with solid demand from the housing and infrastructure sector, domestic prices of steel products are expected to increase in the coming quarters.
	Stainless st	<b>eel</b> +1.0% ↑	•0000 Low	India is not dependent on nickel imports from Russia and as a result the global raw material price has had a limited impact on the stainless steel price in India. India's stainless steel demand is nearly 4 million tonnes annually and the demand is met through domestic production.
	Lumber	<b>+1.2% ↑</b>	•0000 Low	Lumber prices are expected to rise marginally further as demand from the commercial and residential sectors strengthens.
A	Asphalt	+6.8% ↑	•0000 Low	Given an increase in international crude prices, leading Indian oil companies increased the price of bitumen in both November and December 2022. The depreciation of the rupee against the US dollar was also an important factor driving the increase in the price of bitumen in India.
	Limestone	<b>+1.0% ↑</b>	• D O O O Low	Owing to robust demand from the Indian construction sector, limestone prices are expected to remain stable, with elevated energy costs further buttressing prices at their current high levels.

# India - Commodity Report





	Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+2.1% ↑ +1.0% ↑	o O O O O O	Cement prices increased in the last quarter of 2022, primarily due to the increase in fuel and petroleum coke prices. Cement prices are expected to increase further in Q1 2023, with demand from the construction and civil engineering sectors expected to remain substantial. Elevated logistical costs and raw material prices will also continue to contribute to the increase in price. Concrete prices are expected to reflect the price trend of cement.
	Welded mes	sh +1.3% ↑	o <b>0                                   </b>	Welded mesh prices are expected to have moderated in Q4 2022, similar to steel rebar prices, and to rise marginally in the following quarters.
盘	Bricks	+1.0% <b>个</b>	•0000	No significant change is expected in the price of bricks, though prices are expected to have marginally increased due to the increase in construction activity. Prices are expected to continue to rise into H1 2023, driven by elevated logistical and energy costs, and strengthening demand from the construction sector.
	Plasterboar	d +1.0% 个	•0000 Low	No notable change is expected in the price of plasterboard, though prices are expected to continue to increase marginally as construction activity strengthens.
	Diesel	-1.0% ↓	• O D D Low	There is expected to have been no significant change in the price of diesel in India in Q4 2022. Petroleum prices are decided by Oil Marketing Companies, which have kept prices unchanged over the last 6 months.

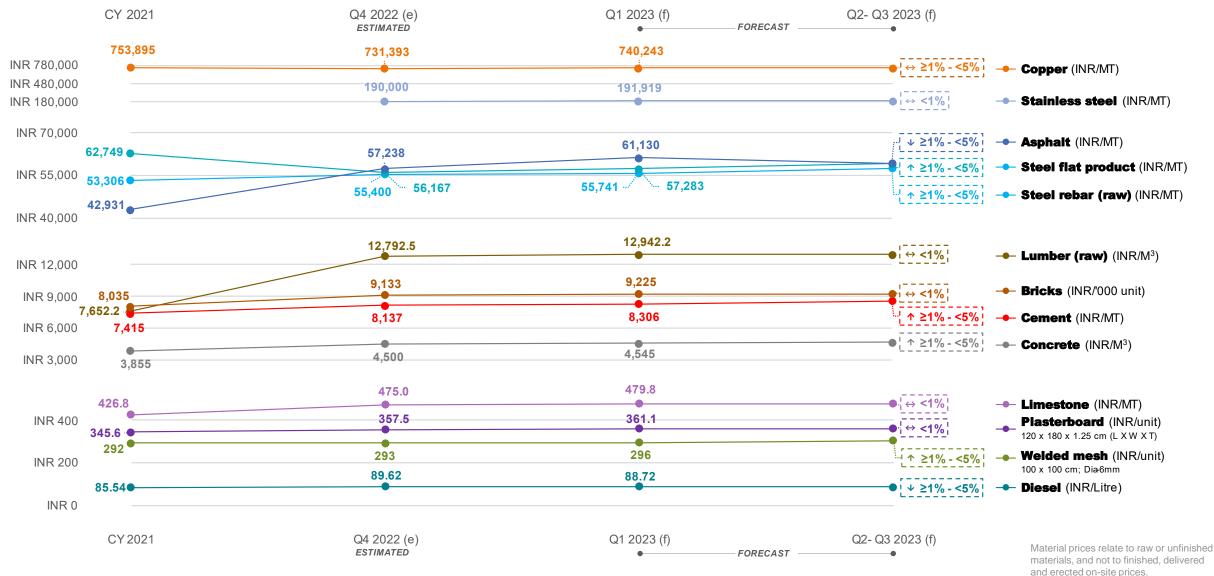
Please note that commodity prices are based on representative materials available in the respective countries, and as these materials may not be standard across all markets, cross-country comparisons on prices can be ineffective. For example, asphalt types can vary between hot, cold or a bitumen price,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



<sup>\*</sup> 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.

## India – Construction Materials Pricing (2021-2023)







## India – 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**

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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 - India

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

- World Bank
- · Reserve Bank of India
- Ministry of Statistics and Programme Implementation
- ILO
- Construction Industry Development Council (CIDC)
- GlobalData's Construction Intelligence Center (CIC)







# **Japan** Q4 2022

The Japanese economy's GDP growth rate is estimated to remain at an unremarkable level of around 1.4% in 2022. Going forward, growth is forecasted at 1.8% and 0.9% in 2023 and 2024, respectively, as per a recent update by IMF. This is primarily due to waning confidence in the household sector and reduced economic activities, resulting in low disposable income. A new economic package by the government is expected to address some of these concerns. For years, inflation in Japan had been held in check. But core consumer prices in December 2022 rose 4% from a year earlier, exceeding the Bank of Japan's (BOJ) target and hitting a high not seen in four decades. For its part, the BOJ raised the long-term interest rate cap to around 0.5% from the previous 0.25%. The result was a further strengthening of the yen, which had been on the rise since October.

Like many other countries, the Japanese construction sector faces ongoing challenges presented by weak investor sentiment, ongoing COVID waves, and inflationary pressures. With sluggish demand from the construction sector, commodity prices are expected to level off in the coming quarters. The government's commitment to the energy and infrastructure sectors, combined with demand in the healthcare and commercial sectors, are positive steps to stimulate the construction sector in 2023.



**Garvan Barry**Director
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### Lumber

Lumber prices in Japan are expected to continue to rise in the coming quarters, though price increases are expected to slow from the 2% rise seen in Q4 2022. While Japan's reliance on imported timber has eased in recent years, imported wood products still account for approximately 60% of domestic lumber demand. Although the yen began to recover in Q4 2022 after a brief decline, it will remain relatively weak compared to levels in 2021, and the ban on Russian timber will contribute to challenges on the supply side.



### **Cement and aggregates**

While the upward pressure on prices seen in Q4 2022 is expected to ease in early 2023, rising input costs including energy and transportation costs, will continue to drive up cement and concrete prices. Relatively weak public investment through the first three quarters of 2022 will soften demand for cement and concrete, though this is not expected to be significant enough to drive down the prices.



### **Concrete blocks and bricks**

The prices of brick and concrete blocks are estimated to rise marginally in the coming quarters, with elevated energy costs driving this price growth. However, import cost pressures will ease as the yen picks up from recent lows.



### Steel (rebar and structural)

Steel prices are projected to rise in the coming quarters, though marginally. The prices are likely to witness downward pressure with weakening global demand, as manufacturing activity in Europe and United States contracts and a downturn is seen in the Chinese residential sector. However, this downward pressure is expected to be outweighed by increased demand from China, caused by its infrastructure construction drive. Also offsetting downward pressure on prices are increasing input costs, such as for energy and transportation, and a reduction in global steel output



### Copper

Copper prices rose in Q4 2022, with the expected ramp up of demand post easing of China's zero COVID restrictions, driving an increase in speculative buying. However, the rise in copper prices is expected to slow in the coming quarters due to a drop in global demand amid economic difficulties and the impact of high inflation rates on consumer demand.



## Japan - Commodity Report



	Q1 2023 (f)	Q1 2022 –	Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	JPY	JPY	2021-22 % change	% change
Copper (JPY/MT)	1,199,272	1,209,910	-0.9% ↓	6.2% <b>↑</b> •
Steel rebar (JPY/MT)	115,938	99,967	16.0% ↑	-1.7% ↓ •
Steel flat (JPY/MT)	149,776	137,350	9.0% ↑	1.1% ↑ ■
Stainless steel (JPY/MT)	192,280	NA	NA	NA
Lumber (JPY/M3)	75,110	66,667	<b>12.7</b> % ↑	2.3% 个 •
Asphalt (JPY/MT)	116,487	95,333	22.2% ↑	-5.6% ↓ •
<b>Limestone</b> (JPY/MT)	82,075	90,722	-9.5% ↓	-10.0% ↓ •
Cement (JPY/MT)	14,957	12,800	16.9% 个	8.0% 个 •
Concrete (JPY/M3)	17,544	15,000	17.0% 个	13.2% 个 •
Welded mesh (JPY/unit)	661	631	4.6% ↑	-0.5% ↓ ■
Bricks (JPY/'000 unit)	135,952	126,360	7.6% ↑	<b>4.0% ↑ •</b>
Plasterboard (JPY/unit)	1,543	1,474	<b>4.7</b> % ↑	0.0% ↔ ■
<b>Diesel</b> (JPY/litre)	149	151	-1.3% ↓	-1.3% ↓ •

(f) Forecast (e) Estimate														
	M	ante	m	411	==	١c	12	6	~~	ra	-	_	Ŧ١	1

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 100 x 200cm, dia.-5mm Plasterboard: 182 x 91 x 0.95cm (L x W x T)

	Material	% change - Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Copper	+0.5% ↑	• O O O O	Copper prices increased sharply in Q4 2022, increasing by 6% over the previous quarter. The price recovery was primarily driven by increased demand in China as restrictions were lifted. However, the price is likely to level off in the coming months as a result of the global slowdown on the one hand and China reopening and working on its infrastructure development projects.
	Steel prices - Steel rebar - Flat steel	+1.5% ↑ +1.2% ↑	• O D D Low	Steel rebar prices are expected to have declined slightly in Q4 2022, in comparison to Q3 2022 prices. In contrast, flat steel prices are estimated to have risen marginally. As the global steel demand weakens, the steel prices will continue to fall. Domestically, however, an improvement in demand from the automotive sector has seen a marginal increase in flat steel prices.
	Stainless Steel	+1.2% ↑	o <b>0                                   </b>	Stainless steel prices have increased due to higher nickel prices, and this trend is expected to continue in the short term. Japan is a major importer of nickel.
	Lumber	+1.5% ↑	o D	Lumber prices rose moderately in Q4 2022, registering an increase in excess of 2% in comparison to Q3 2022 prices. Supply chain disruptions and a mismatch in supply and demand has tightened lumber supply globally. Although Japan has increased its domestic production of timber, its demand is still met by the import of foreign products. The rise in imported timber prices, has fuelled demand for domestic timber, pushing domestic timber prices upward.
A	Asphalt	+1.0% ↑	• O O O O	Asphalt prices have remained stable and have not shown any notable change from Q3 2022. Stabilising international crude oil prices and steady domestic demand will buttress prices around their current price level.
	Limestone	+0.5% ↑	• O O O	Limestone prices are expected to have fallen by approximately 10% in Q4 2022, in comparison to their Q3 2022 levels, primarily because of sluggish demand and a glut of supply. Japan is domestically self-sufficient in limestone production. However, an improvement in demand from the

levels in the short term.

**Linesight** 

construction sector is expected to keep limestone prices at their current

## Japan – Commodity Report



### **Construction material (general)** price index 2019-2022 Nov-22 138.4 Oct-22 137 Sep-22 134.3 133.8 Aug-22 Jul-22 133.1 131.9 Jun-22 130.1 May-22 128 Apr-22 126.7 Mar-22 126.2 Feb-22 Jan-22 125.4 115.4 2021 108.2 2020 2019 108.2

Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Cement Concrete	+2.5% ↑ +2.0% ↑	o 0 <b>0</b>	The price of cement recorded a rise of more than 5% in Q4 2022, in comparison to Q3 2022, primarily driven by an increase in energy costs. During the same period, ready mixed concrete prices recorded a sharp increase of around 13%. While domestic cement suppliers are negotiating with buyers over price increases, ready mix concrete suppliers have already increased their prices to reflect this increase in cement prices. The prices of cement and related products are expected to increase slightly in the coming quarters.
Welded me	esh -1.0% <b>V</b>	• O D D Low	Welded mesh prices have declined slightly in the past quarter. With steel rebar prices expected to increase marginally in the short term, mesh prices are expected to reflect this.
Bricks	+1.0% <b>ተ</b>	o D	Brick prices are estimated to have increased by approximately 4% in Q4 2022, in comparison to Q3 2022 prices. The weakening of the yen during much of 2022 and increased energy costs put upward pressure on brick prices, but prices will stabilise in the coming quarters given the expectation of a slight strenghtening in the yen and slowing energy inflation.
Plasterboa	ard +0.2% 个	•0000 Low	Plasterboard prices are expected to have remained stable in Q3 2022 and will stay close to current levels into 2023.
Diesel	+0.5% 个	• OOD Low	With the Japanese government providing subsidies to wholesale fuel retailers to limit the impact of oil price rises on consumers, the price of diesel fell to a national average of 148.3 yen in December 2022. The price of diesel is expected to remain stable around its current price level, with the Japanese government extending its current subsidy program to September 2023.

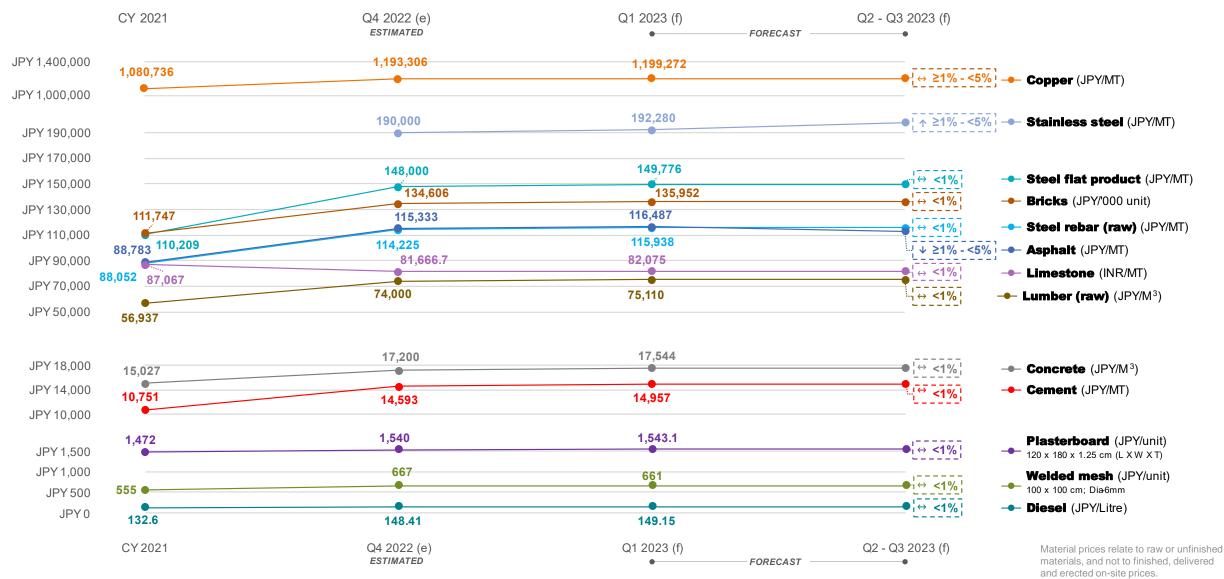
Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

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.



## Japan – Construction Materials Pricing (2021-2023)







## Japan – Report methodology



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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.

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### **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







# Singapore Q4 2022

According to recent advance estimates from the Ministry of Trade and Industry, Singapore's economy is expected to grow at 3.8% in 2022, up 30 basis points from previous projections. Core inflation was constant at roughly 5.1% in November 2022 and is anticipated to stay high for the ensuing few quarters. In coming quarters Singapore being a trade-reliant economy is likely to face more challenges as the world economy slows.

The construction sector in Singapore is now anticipated to rise by 5.1% in real terms in 2022, up from an earlier forecast of a 3.5% growth. The recommencement of halted infrastructure projects and the government's commitment to complete all delayed housing projects by H1 2025 are driving this revision.



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### Lumber

Despite a marginal fall in the final quarter of this year as residential construction softened and a further decline expected in Q1 2023, lumber prices are expected to begin to increase as construction activity strengthens through 2023. A possible drop in housing prices in 2023, with private residential property prices only increasing by 0.2% quarter on quarter in Q4 2022 due to rising borrowing costs, may deter new residential investments, weighing on lumber demand. However, demand for lumber from public residential construction is likely to compensate.



### **Cement and aggregates**

Elevated production costs are expected to drive cement and concrete price growth in the coming quarters, with cement producers passing on these costs to buyers. With Singapore reliant on imports, predominantly from Malaysia and China, increased transport and logistical costs and disruption due to the COVID-19 outbreak in China are expected to generate further upwards pressure on prices in early 2023.



### **Concrete blocks and bricks**

With construction output expected to strengthen in 2023 and energy costs likely to remain elevated, brick and concrete prices are expected to record marginal price growth in the first half of 2023.



### Steel (rebar and structural)

Steel prices are expected to continue to moderate in early 2023, as global demand slows on weaker economic growth and contracting industrial activity. Through 2023, upwards pressures on prices will be generated by increased input costs as coking coal and iron ore prices rise, and strengthening demand for steel in China. Further upwards pressure will be driven by an expected improvement in construction activity through 2023, with works on a number of large civil engineering projects due to commence.



### Copper

Global copper demand is expected to strengthen in early 2023, with China easing its zero COVID restrictions in November 2022 and investing significantly in infrastructure construction in the second half of 2022. In the longer term, domestic copper prices are expected to rise considerably, driven by works on Singapore's Green Plan 2030, for which the government plan to issue SGD35 billion of green bonds to finance green public infrastructure development.



## Singapore – Commodity Report



	Q1 2023 (f)	Q1 2022	– Q1 2023 (f)	Q3 – Q4 2022 (e)
Materials	S\$	S\$	2022-23 % change	% change
Copper (S\$/MT)	12,464	13,503	-7.7% ↓	13.8% ↑ •
Steel rebar (S\$/MT)	1,031	1,165	-11.5% ↓	-7.2% <b>↓ •</b>
Steel flat (S\$/MT)	1,365	1,271	<b>7.4</b> % ↑	-1.7% ↓ ■
Stainless steel (S\$/MT)	3,579	NA	NA	NA
Lumber (S\$/M3)	121	114	6.2% 个	-0.2% ↓ ■
Asphalt (S\$/MT)	463	407	13.9% 个	-4.1% ↓ •
<b>Limestone</b> (S\$/MT)	42.3	39.2	7.8% ↑	0.7% ↑ •
Cement (S\$/MT)	119	107	11.5% 个	-0.1% ↓ ■
Concrete (S\$/M3)	119	108	10.2% 个	0.1% ↑ ■
Welded mesh (S\$/unit)	14.0	14.3	-2.2% ↓	-4.4% <b>↓ •</b>
Bricks (S\$/'000 unit)	3,418	3,558	-3.9% ↓	1.3% ↑ •
Plasterboard (S\$/unit)	9.4	9.4	0.2% ↑	0.0% ↔ ■
<b>Diesel</b> (S\$/litre)	2.7	2.4	13.9% ↑	-4.1% ↓ •

(f) Forecast	(a) Estimated
(II) FOIECasi	le) Estimateu

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

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

	Material G	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
	Copper	+1.0% ↑	o D █ ∭ Moderate	Following a substantial decline in Q3 2022, copper prices were volatile in Q4 2022, rising sharply in November before dropping back in December. A strengthening of copper demand in China and a weakening of the Singapore dollar against the US dollar are expected to keep prices high in early 2023.
B	Steel prices - Steel rebar - Flat steel	-1.0% ↓ -1.0% ↓	o O D D High	Weak residential construction and soft infrastructure output is expected to drive down steel prices in the final quarter of 2022. This trend is expected to continue into Q1 2023, although an improvement in construction activity and rising iron ore and coking coal prices pose considerable upside risk to the price outlook.
	Stainless Ste	el +0.5% 个	o	The price of stainless steel is expected to increase due to high energy costs and increased raw material prices.
	Lumber	-0.8% ↓	oΩΩΩ High	Weak demand in residential construction is expected to have driven a marginal decline in lumber prices in Q4 2022 and a further fall in price is projected in Q1 2023. However, with Singapore's Housing and Development Board (HDB) committed to completing all delayed build-to-order projects by the latest H1 2025 and plan to construct up to 23,000 apartments in 2023, prices are expected to begin to rise from Q2 2023.
A	Asphalt	-1.0% ↓	o D	A moderation of oil prices resulted in a decline in asphalt prices in Q4 2022. In early 2023, assuming a further decline in oil prices, asphalt prices are expected to continue to decline.
	Limestone	+0.5% 个	•0000 Low	Limestone prices remained relatively stable in Q4 2022, recording a marginal quarterly increase of 0.7%. A similar marginal rise is expected in Q1 2023 and into Q2 2023. As Singapore imports much of its limestone, elevated transport costs and an increase in demand is expected to drive price growth.



## **Singapore** – Commodity Report



Tender price index 2015 – Q3 2022					
Q3 2022		132.1			
Q2 2022		130.3			
Q1 2022		126.5			
2021	1	17.1			
2020	102.8				
2019	99.9				
2018	98.6				
2017	96.7				
2016	98				
2015	104	1			

	Material	% change Q4 – Q1 2023(f)	Level of in	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+0.3% ተ +0.3% ተ	00 <b>I</b> ∭ Moderate	Cement and concrete prices remained stable in Q4 2022, with no notable change recorded. An improvement in construction activity in 2023 and an expected rise in thermal coal prices will see prices record marginal growth in the first half of 2023.
	Welded mes	sh -1.0% <b>↓</b>	o () () High	Reflecting the expectation of a continued downtrend in the price of steel, the price of welded mesh is also expected to fall in the first half of 2023.
盘	Bricks	+0.8% ↑	o	Brick demand will improve as construction activity strengthens and higher energy prices will push up production costs, causing brick prices to trend upwards in the coming quarters.
	Plasterboar	d +0.2% <b>ተ</b>	•0000 Low	Plasterboard prices remained stable in Q4 2022, and as construction activity strengthens in the first half of 2023, plasterboard prices will rise marginally.
	Diesel	-1.0% ↓	00 <b>I</b>	Diesel prices continued to moderate in Q4 2022, recording a quarterly decline of 4.1%. Although the trend is expected to continue in the first half of 2023, prices will remain high compared to 2021 levels.

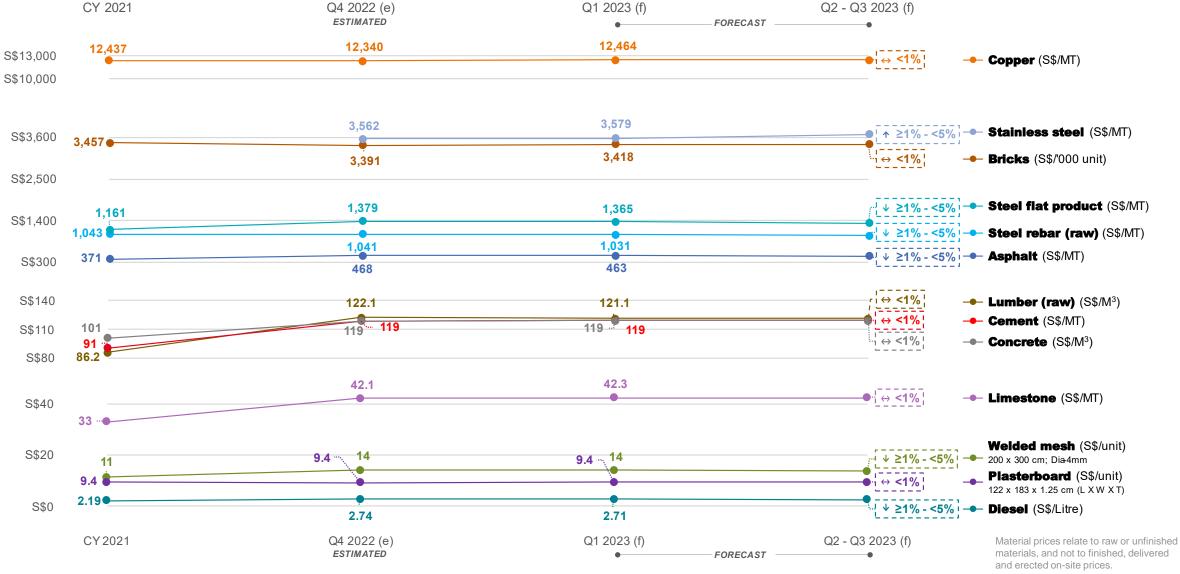
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## **Singapore** – Construction Materials Pricing (2021-2023)







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### **Sample sources - Singapore**

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

- IMF
- Ministry of Trade and Industry
- · Singapore Institute of Surveyors and Valuers
- BCA
- GlobalData's Construction Intelligence Center (CIC)







## South Korea Q4 2022

According to the Bank of Korea's recent advance estimates, the South Korean economy is expected to grow by 2.6% in 2022 but will slow to less than 1.7% in 2023. Prolonged interest rate hikes in major countries, global energy crisis, and weakening of the pent-up demand post COVID is impacting the economy. The economy is expected to recover in the second half of 2023 as the Information Technology (IT) sector recovers. Inflation remained high at 5% in December 2022, but it is expected to be in the mid-3% range this year.

Following contractions of 2.6% in 2021 and 1.3% in 2020, the South Korean construction industry is expected to contract by 0.5% in 2022. The key factors affecting the industry are rising construction costs, high inflation, and supply chain disruptions. However, with government investments in infrastructure and financial and regulatory support for the semiconductor industry, construction sector is expected to grow at a 4.1% average annual rate between 2024 and 2026.



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### Lumber

Lumber prices rose in Q4 2022, due to tight supply, disruption following the truck drivers' strike and increased logistical costs. In 2023, prices are expected to decline as the Bank of Korea's hawkish policy stance and slowing economic growth weighs on new residential investment and construction activity, a key driver of lumber demand.



### **Cement and aggregates**

Major cement producers are set to further increase wholesale prices as bituminous coal costs, which account for approximately 40% of production costs, rise. Ssangyong C&E and Halla Cement, two of Korea's largest cement producers, have stated that they plan to increase cement prices from February 2023.



### **Concrete blocks and bricks**

While brick demand weakened as activity in the Korean construction industry was relatively muted in recent months, elevated thermal coal prices and increased logistical costs have kept brick prices relatively high. This trend is expected to continue in Q1 2023.



### Steel (rebar and structural)

While input costs such as iron ore and coking coal have risen, weaker domestic demand as construction and manufacturing activity slows has seen steel prices decline recently. With demand, both global and domestic, expected to remain soft in the first quarter of this year, steel prices are expected to continue to fall. Prices may begin to firm, however, as the year progresses, and demand in China accelerates to feed its infrastructure construction drive.



### Copper

Copper prices rose on the back of China's easing of its zero COVID restrictions, creating expectations of renewed copper demand. However, with macroeconomic headwinds mounting, price growth is expected to be more moderate in the coming quarters. In the long term, copper demand and prices are expected to appreciate substantially, driven by Korea's net-zero transition and demand from its sizeable EV battery manufacturing industry.



## South Korea - Commodity Report



	Q1 2023 (f)	Q1 2022 - 0	Q1 2023 (f)	Q3 2022 – Q4 2022 (e)
Materials	KRW	KRW	2022-23 % change	% change
Copper (KRW/MT)	10,848,159	11,020,169	-1.6% ↓	3.4% 个
Steel rebar (KRW/MT)	923,914	1,045,000	-11.6% ↓	-2.4% ↓ •
Steel flat (KRW/MT)	988,023	965,994	2.3% 个	-1.0% ↓ •
<b>Stainless steel</b> (KRW/MT)	1,840,083	NA	NA	NA
<b>Lumber</b> (KRW/M3)	380,813	328,000	16.1% ↑	3.0% 个(
<b>Asphalt</b> (KRW/MT)	66,531	60,705	9.6% ↑	0.0% ↔ □
<b>Limestone</b> (KRW/MT)	862,625	960,088	-10.2% ↓	-11.0% ↓ •
Cement (KRW/MT)	425,705	369,375	15.3% ↑	5.5% 个(
Concrete (KRW/M3)	167,430	140,612	19.1% ↑	8.5% 个(
Welded mesh (KRW/unit)	7,850	8,876	-11.6% ↓	-2.4% ↓ •
Bricks (KRW/'000 unit)	649,350	643,681	0.9% 个	0.0% ↔ □
<b>Plasterboard</b> (KRW/unit)	4,104	3,948	4.0% 个	0.0% ↔ □
<b>Diesel</b> (KRW/litre)	1,567	1,955	-19.8% ↓	-8.7% ↓ •

(f) Forecast	(a) Estimated
TITE FUIECASE	iei Esiiiiaieu

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 100 x 200cm, dia.-5mm Plasterboard: 90 x 180 x 1.2cm (L x W x T)

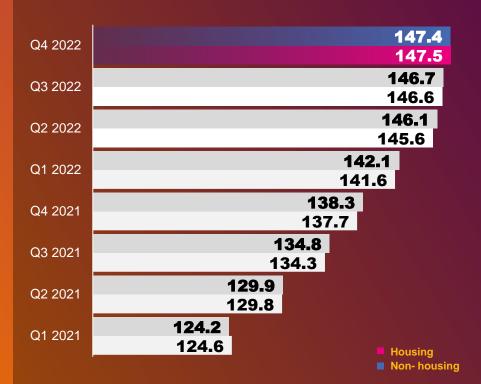
	Material G	% change 24 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+1.0% ↑	•OOOO	Copper prices appreciated in Q4 2022, with an increase in speculative demand following China's easing of its zero-COVID policy. Fears of recession in Europe and the US combined with increased interest rates will soften demand. Copper prices are expected to remain elevated amic concerns over tight supplies.
	Steel prices - Steel rebar - Flat steel	-1.0% ↓ -0.1% ↓	o <b>0</b>	Steel prices have declined from their Q3 2022 levels as a result of weaker demand. Rising input costs due to the weak Korean won and falling prices have impacted the profitability of steel mills. POSCO's operating profit in 2022, for example, reportedly fell by 33%.
	Stainless stee	el +0.6% 个	•0000 Low	The increase in raw material prices for the manufacturing of stainless steel is exerting upwards pressure on prices. Increasing nickel prices at elevated energy costs will drive-up stainless steel prices in the short term.
	Lumber	+2.7% 个	00 <b>I</b>	Lumber prices picked up again in Q4 2022. A mismatch in demand and supply along with supply-chain disruptions has tightened lumber supply Elevated interest rates, slowing domestic economic growth and rising unemployment are expected to impact on housing demand in the short term, softening demand for lumber and exerting downwards pressure or prices.
A	Asphalt	+0.5% 个	• D D D Low	Asphalt prices have remained stable in recent months. Asphalt prices a primarily driven by crude oil prices, and with global crude oil prices stabilising, the price for asphalt is expected to remain around its current levels in Q1 2023.
	Limestone	+0.5% 个	•0000 Low	Limestone prices have trended downwards, with reduced demand from the construction sector being the primary driver of this decline.



## **South Korea** – Commodity Report



## Average Construction Cost Index – Building Construction (Q1 2021 - Q4 2022)



Housing and Non-housing construction cost Indices are sub-indices of Building Construction and repair Index which is a sub-category of Construction Cost Index (CCI) published by Korea Institute of Civil Engineering and Building Technology (KICT). This is a statistical data based on Korea Producer Price Index, Bank-of-Korea Inter-Industry relation table, and the construction sector's market wages of the construction association of Korea. CCI measures the price change of direct construction cost of resources such as material, labour, equipment etc. The base year of the current index is 2015, and it is revised every 5 years to reflect changes in the economic structure to the index. The index is calculated by fixing it and linking it with the producer price index.

	Material	% change Q4 – Q1 2023 (f)	Level of ir	npact of pricing on construction procurement and supply chain *
	Cement Concrete	+7.0% ↑ +7.0% ↑	00 <b>I</b> ∭ Moderate	Cement prices have been driven by up further by high energy costs, and cement manufacturers are pushing on with decisions to further increase in prices. Ready-mixed concrete suppliers have also already increased prices to account for the rise in cement costs.
	Welded mes	sh -0.5% <b>↓</b>	• O O O	With steel rebar prices expected to decline in Q1 2023, the price of welded mesh is expected to edge down slightly from current levels.
盘	Bricks	-0.1% ↓	• D D D Low	Brick prices have remained stable at a relatively high level. Increasing energy costs will exert upward pressure on brick prices, but this will be offset by weakening demand.
	Plasterboar	'd -0.5% <b>↓</b>	•0000 Low	Soft demand from the construction sector will drive down the price of plasterboard in Q1 2023 from recent highs.
	Diesel	+1.0% ↑	•OOD Low	Diesel prices registered a quarterly decline of approximately 9% in Q4 2022. The drop in price is mainly due to the stabilising of international crude oil prices, in addition to the subsidiary provided by the government to contain the increase of diesel prices. However, with government planning to reduce the subsidy from January 2023, diesel prices are expected to increase slightly from their current levels in Q1 2023.

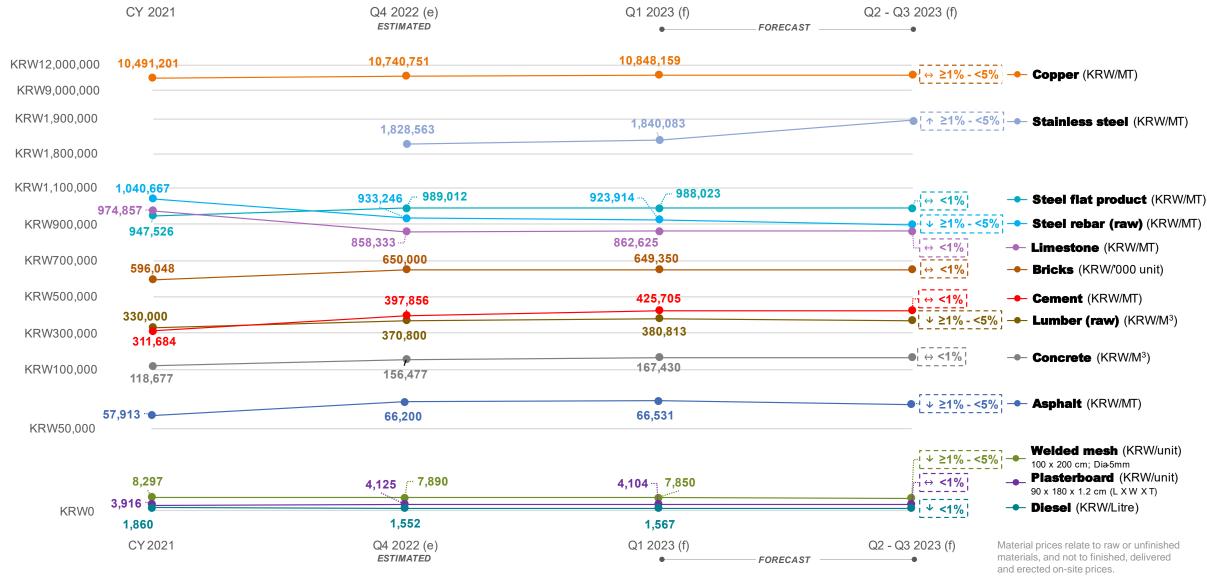
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Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

## **South Korea** – Construction Materials Pricing (2021-2023)







## South Korea - 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.

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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 - South Korea

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

- IMF
- · Statistics Korea
- The Korean Statistical Information System (KOSIS)
- · Bank of Korea
- Korea Institute of Civil Engineering and Building Technology (KICT)
- GlobalData's Construction Intelligence Center (CIC)







## **Taiwan**

Q4 2022

Taiwan's GDP grew at a rate of 2.43% in 2022, down from the predicted level of 3.06%, primarily due to lower export volumes as a result of weakening technology demand, according to Directorate General of Budget, Accounting and Statistics (DGBAS). Domestic inflationary pressures appear to be easing, with core consumer prices rising by 2.71% year on year in December 2022, slightly less than the previous month's rate of around 2.86%.

In 2022, the Taiwanese construction sector is predicted to rise by 2.5% in real terms. Foreign direct investments, increasing investor confidence, and the loosening of COVID-19 related restrictions have all contributed to the industry's growth. However, due to declining exports, deteriorating demand, and rising inflation, the industry is expected to grow at a 1.1% annual rate in 2023. From 2018 to 2020, the construction price index increased at a moderate rate of 1% to 3%, but in 2021 and 2022, it registered a sharp hike and increased by 11% and 7%, respectively. Nonetheless, the industry is likely to regain speed, with an annual growth rate of 3.4% projected from 2024 to 2026, due to investments in the transportation, electrical, and industrial sectors.



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#### Lumber

Although down from recent highs, lumber is still relatively expensive compared to levels in 2021. Price inflation is expected to be contained by cheaper imports and slightly weaker demand in residential construction.



### **Cement and aggregates**

Cement prices have remained high in recent quarters, a trend that reflects high production costs and a fall in production levels in China.



### Concrete blocks and bricks

Taiwan is reliant on imports from China and Vietnam to meet demand given the steady reduction in domestic production since 2013. Prices have stayed relatively high given the rise in energy costs.



### Steel (rebar and structural)

Steel prices were stable in Q4 2022 having fallen from the highs reached earlier in the year. High inventories and weaker demand contributed to this trend, with China Steel Corp, the largest integrated steel maker in Taiwan, indicating that it would lower prices on this basis, and it has also revealed further downward price adjustments in Q1 2023. In the year ahead, however, demand of steel in 2023 is expected to improve not only driven by the Forward-looking Infrastructure Development Program, but also the solid demand for office development and factories in 2023.



### Copper

Copper prices recovered ground in late 2022 having fallen during Q3. The copper market is expected to remain volatile. While there will be global economy weakness in the coming quarters as a result of increased costs due primarily to interest rate increases, there is also likely to be supply shortages combined with an increase in demand, primarily from the renewable energy and electric vehicles sectors.



## Taiwan - Commodity Report



	Q1 2023 (f)	Q1 2022 -	- Q1 2023 (f)	Q3 2022 – Q4 2022 (e)
Materials	NT\$	NT\$	2022-23 % change	% change
Copper (NT\$/MT)	256,950	271,721	-5.4% ↓	8.3% 个
Steel rebar (NT\$/MT)	19,679	22,544	-12.7% ↓	-2.9% ↓
Steel flat (NT\$/MT)	31,271	31,547	-0.9% ↓	-5.9% ↓
Stainless steel (NT\$/MT)	36,492	NA	NA	NA
Lumber (NT\$/M3)	6,822	6,668	2.3% ↑	-0.2% ↓
Asphalt (NT\$/MT)	13,084	13,979	-6.4% ↓	0.1% ↑
<b>Limestone</b> (NT\$/MT)	1,857	1,725	7.6% ↑	-0.2% ↓
Cement (NT\$/MT)	3,840	3,377	13.7% ↑	0.0% ↔
Concrete (NT\$/M3)	1,711	1,599	7.0% ↑	1.5% ↑
Welded mesh (NT\$/unit)	358	328	9.1% ↑	0.0% ↔
Bricks (NT\$/'000 unit)	17,467	17,153	1.8% 个	-0.2% ↓
Plasterboard (NT\$/unit)	251	232	7.8% ↑	0.0% ↔
<b>Diesel</b> (NT\$/litre)	26.9	28.7	-6.3% ↓	0.2% ↑

(f) Forecast	(a) Estimated
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- Q3 to Q4 2022 % change greater than estimation in our Q3 report
- Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 150 x 300cm, dia.-5mm Plasterboard: 183 x 122 x 1.2cm (L x W x T)

	Material	% change – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+2.6% ↑	•QQQ Low	Copper prices have recovered ground, picking up in late 2022 having previously slipped from the record high reached in March. The rise in price can be attributed in part to China's easing of COVID restrictions as well as concerns over supply shortages. Although a downturn in the global economy would typically see copper prices drop, demand in Taiwan will remain relatively healthy, and global demand for copper will be buoyed by investment in renewable energy and electric vehicles.
B	Steel prices - Steel rebar - Flat steel	-1.0% ↓ -1.5% ↓	•QQQ Low	After dropping sharply in Q3, steel prices were relatively stable in Q4, but are expected to fall further in early 2023, based on indicative pricing from China Steel Corp. An easing in production costs will help to contain inflationary pressure. However, steel demand in the longer term in Taiwan will be bolstered by infrastructure construction works. In August 2022, the government proposed spending of TWD210 billion (\$7.3 billion) for the fourth phase of the Forward-looking Infrastructure Development Program over the next two years.
	Stainless Steel	+1.0% ↑	•OOOO	The price of stainless steel increased in Q4 as a result of an increase in prices for key raw materials, such as nickel. With the ongoing Russia-Ukraine conflict the price of nickel increased by more than 10% in Q4 2022. Owing to low availability, the price will edge up in the short term, but demand pressures will ease.
	Lumber	+0.2% 个	o <b>0</b>	Lumber prices have been stable in recent months, reflecting improvements in the supply chain. Demand in the short term will be impacted by weaker growth in the residential building sector amid the tightening in monetary policy.
A	Asphalt	-0.5% ↓	•0000 Low	Asphalt prices have fallen reflecting trends in crude oil prices, and will remain close to current levels in the coming quarters with demand from road infrastructure investment remaining healthy.
	Limestone	+0.2% ↑	•0000 Low	Limestone prices were relatively stable in Q4 2022, but with overall construction industry output edging up in 2023, prices will remain elevated in the coming quarters.



## Taiwan - Commodity Report



## **Construction cost index 2015-2022** 2022 130.69 121.72 2021 2020 109.73 2019 108.19 2018 105.84 2017 102.4 2016 100 2015 101.71

	Material	% change Q4 – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Cement Concrete	+0.8% ↑ +0.8% ↑	o	Cement prices have stabilised at a high level in recent quarters, reflecting high production costs and solid demand in the construction industry. However, ready-mixed concrete prices have risen further, surpassing previous record highs and ending 2022 at a level that was 17% higher than at the end of 2021. Prices are expected to remain close to these high levels in the coming quarters, with demand in the overall construction industry holding up.
	Welded mes	sh -0.5% <b>↓</b>	• O O O O	In line with rebar prices, welded mesh prices will edge downwards in the coming quarter but will remain relatively high given still solid demand in the construction industry.
#	Bricks	-0.5% ↓	o 0	Brick prices have remained high in recent quarters, given high production costs and as well as continued steady expansion in construction output. Residential construction will weaken slightly, which will offset upward pressure from production costs.
	Plasterboard	d +0.2% 个	•0000 Low	Although residential building construction growth will ease, overall levels of demand for building materials will stay relatively high in the coming quarters, which will contribute to continued high prices for plasterboard.
	Diesel	-0.4% ↓	•0000 Low	Diesel prices have remained relatively high and will remain close to current levels in Q1 2023, with the main distributors announcing that the price of premium diesel is to drop NT\$0.1 per litre in early January. Price inflation has been contained by the price stabilisation mechanism, with

neighbouring markets.

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.

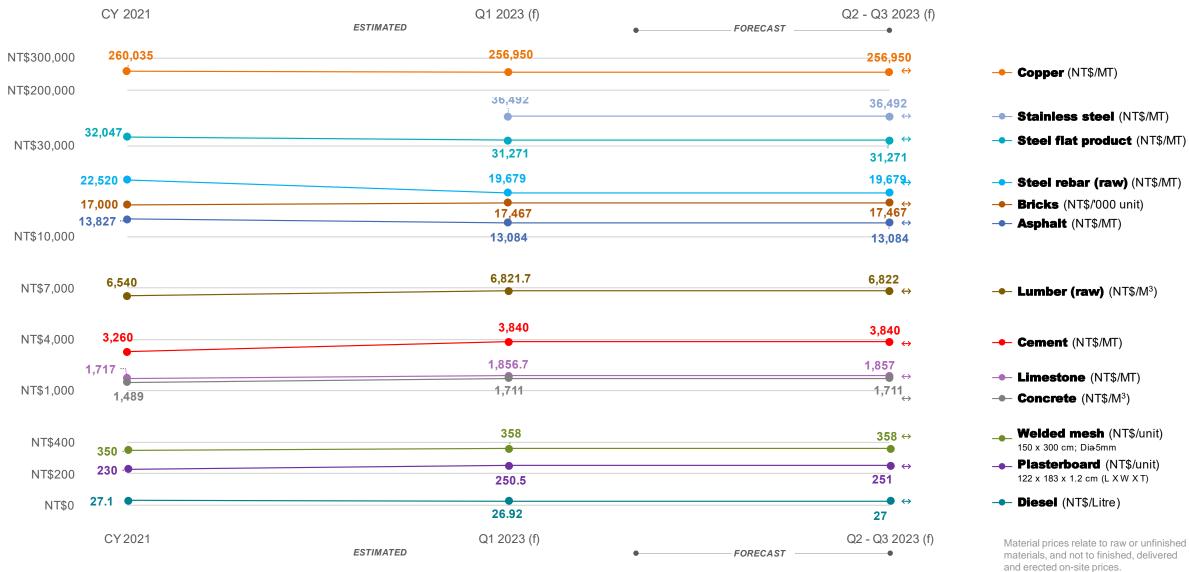


state-owned CPC Corp absorbing part of the crude oil price increases in support of a government policy to keep domestic fuel prices lower than in

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.

## **Taiwan** – Construction Materials Pricing (2021-2023)







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### **Sample sources – Taiwan**

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- IMF
- · National Statistics
- Directorate General of Budget, Accounting and Statistics (DGBAS)
- GlobalData's Construction Intelligence Center (CIC)







# **UAE**Q4 2022

The UAE's economic performance in 2022 is expected to fall short of initial projections of 6.5%, with a GDP growth rate of slightly more than 5.9%. Given the pressures from the global economy, general economic slowdown and geopolitical conditions, the outlook for 2023 GDP growth is expected to be around 4.1%. It is expected that the Dubai World Expo and robust expansion of the non-oil economy will help divert critical dependency on oil. Inflation continues to be a challenge at close to 5% in 2022, but it is expected to moderate in 2023.

In 2022, the construction sector is expected to grow by 2% in real terms, which is 1.8% less than previous projections. The downward revision is attributed to supply chain disruptions, higher labour costs, and higher interest rates. The sector is expected to rebound with a 3.3% growth in 2023, fuelled by investments in the energy sector and growth in economy buoyed by higher oil prices.



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### Lumber

Lumber demand will be sustained by continued expansion in the construction industry. However, upward pressure on prices will be contained by the decline in prices in major source markets, including North America.



### **Cement and aggregates**

With investment in infrastructure and major buildings projects, demand for cement and aggregates will remain strong. The UAE has sufficient capacity to meet domestic consumption needs, but production costs will remain elevated. Prices are therefore set to remain around current high levels.



### Concrete blocks and bricks

High demand and rising production costs have contributed to upward pressure on prices for concrete blocks. No major change is expected in market dynamics and prices are expected to remain at elevated levels in the coming quarters.



### Steel (rebar and structural)

Having come down sharply from the highs of April 2022, steel prices are again coming under some upward pressure, as producers seek to pass on higher production costs, such as energy and transportation costs to buyers. In late December, the UAE's largest public steel company, Emirates Steel Arkan, announced rebar price increases of \$33 per ton, a 5% increase over the previous month, due to higher production costs.



### Copper

Global copper prices dropped significantly in Q3 2022 due to weak global demand. However, the prices picked up marginally in late 2022, and are set to be volatile in the coming quarters given the opposing impacts of weak global economic demand and supply tightness. Demand over the longer term will be bolstered by the importance of the metal in the energy transition drive.



## **UAE** – Commodity Report



	Q1 2023 (f)	Q1 2022	Q3 2022 - Q4 2022 (e)	
Materials	AED	AED	2022-23 % change	% change
Copper (AED/MT)	27,972	36,749	-23.9% ↓	<b>4.2</b> % ↑
Steel rebar (AED/MT)	2,350	2,681	-12.3% ↓	-6.2% ↓
Steel flat (AED/MT)	2,307	3,287	-29.8% ↓	-11.1% ↓
Stainless steel (AED/MT)	4,481	NA	NA	NA
<b>Lumber</b> (AED/M3)	653	620	5.4% 个	0.0% ↔
<b>Asphalt</b> (AED/MT)	1,778	1,818	-2.2% ↓	-5.0% ↓
<b>Limestone</b> (AED/MT)	455	445	2.3% ↑	0.9% 个
Cement (AED/MT)	223	214	4.0% ↑	0.9% ↑
Concrete blocks (AED/M3)	232	205	13.3% ↑	0.0% ↔
Welded mesh (AED/unit)	84.8	82.5	2.8% ↑	0.0% ↔
Bricks (AED/'000 unit)	1,818	1,500	21.2% ↑	5.9% 个
Plasterboard (AED/unit)	14.0	13.5	3.8% ↑	0.0% ↔
<b>Diesel</b> (AED/litre)	3.8	2.9	30.7% ↑	-9.9% ↓

- Q3 to Q4 2022 % change greater than estimation in our Q3 report
   Q3 to Q4 2022 % change less than estimation in our Q3 report

Welded mesh: 244 x 488cm, dia.-6mm Plasterboard: 122 x 244 x 1.2cm (L x W x T)

	Material	% change – Q1 2023 (f)	Level of im	pact of pricing on construction procurement and supply chain *
	Copper	+1.0% ↑	• O O O	Copper prices picked up again in Q4 2022 having dropped from the April 2022 highs. However, increased interest rates and global economic weakness will weigh on prices, but this will be offset by concerns over supply tightness, along with the potential recovery in Chinese demand.
	Steel prices - Steel rebar - Flat steel	+5.5% ↑ +6.0% ↑	•0000 Low	Although steel prices have fallen sharply in the second half of 2022, steel prices are facing renewed upward pressure with local producers signalling price hikes in the short-term owing to high production costs. Demand is also picking up given the outlook for continued growth in the construction industry in the UAE.
	Stainless Steel	+3.0% ↑	• D D D Low	With increased input costs, the price for stainless steel is expected to rise further from recent levels.
	Lumber	+0.5% ↑	o 0	Lumber prices have been stable in recent quarters. Prices are expected to remain close to current levels, with improving supply chains helping to offset demand-side pressures.
A	Asphalt	-0.5% ↓	• O O O	Asphalt prices have fallen moderately in line with the decline in prices for petroleum and related products. Prices will remain stable on a quarterly average basis, but there could be renewed volatility in global crude oil prices.
	Limestone	+0.5% 个	•0000 Low	Prices for limestone have been stable in recent quarters, with little change expected in the short term. Demand will be healthy, and this will be met primarily through domestic production.



## **UAE** – Commodity Report



### **Construction cost index 2019-2021** Q2 2021 96.5 95.2 Q1 2021 94.2 Q4 2020 Q3 2020 92.7 92.9 Q2 2020 98.2 Q1 2020 Q4 2019 98.4 Q3 2019 97.9 Q2 2019 98 98 Q1 2019

Material	% change Q4 – Q1 2023 (f)	Level of in	npact of pricing on construction procurement and supply chain *
Cement Concrete	+1.5% <b>ተ</b> +1.0% <b>ተ</b>	00 <b>I</b> ∭ Moderate	With steady demand from the construction sector driven by infrastructure projects, the demand for cement and concrete is expected to remain strong in the short term. Prices are therefore expected to remain close to current highs, propped up by high production costs.
Welded mes	sh +1.0% ↑	•0000 Low	Having been stable in recent months, welded mesh prices will edge slightly higher in the short term, in line with trends in steel rebar.
Concrete blocks	+1.0% <b>个</b>	o0 <b>0</b> ∭ Moderate	Prices for concrete blocks picked up in Q4 2022, with solid demand from the construction sector. Prices are expected to remain elevated in the coming quarters, reflecting still high prices for concrete, and demand stemming from investment in housebuilding programs.
Plasterboar	d +1.0% ↑	•0000 Low	Plasterboard price have remained stable. The region has abundant gypsum resources, which will help to contain inflationary pressure.
Diesel	-2.0% ↓	•0000 Low	Diesel prices have continued to fall steadily having reached close to AED4.8 per litre in July. In line with trends in global crude oil prices, the price of diesel is expected to remain close to current levels in the coming quarters, but there will be a degree of volatility.

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.



<sup>\*</sup> 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.

## **UAE** – Construction Materials Pricing (2021-2022)







### **UAE** – Report methodology



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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 – UAE**

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

- World Bank
- · National Bureau of Statistics (United Arab Emirates)
- Dubai Statistics Center
- Statistics Center Abu Dhabi
- GlobalData's Construction Intelligence Center (CIC)
- Central Bank of UAE



