



South Korea Country Insights and Commodity Report Q3 2022



South Korea

Q3 2022

South Korea's economic growth this year is expected to come in at 2.6%, slowing to 2.3% next year, as it loses momentum, according to the recent International Monetary Fund (IMF) update. Recent trade data reported by the Korea Customs Service point towards weakening indicators for the second half of the year, as spiking energy costs and the depreciation of the won against the dollar exacerbate inflationary pressures. Inflation for the full-year 2022 is anticipated to hit 5.2% and drop to 3.16% next year.

Q2 2022 saw the ninth consecutive construction industry contraction, with a year-on-year decline of 0.3%, as escalating energy costs, inflationary pressures and supply chain disruptions caused by the current geopolitical climate impacted. For the full 2022 year, a moderate contraction of 0.5% is expected, before growth returns for the coming years, as renewables and transport infrastructure come into focus.



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Lumber

Despite a marginal increase in prices in Q3 2022 as a result of a seasonal increase in demand, tight supply and higher logistical costs, lumber prices are expected to fall in the final quarter of this year. Weighing on prices in Q4 2022 will be a reduction in demand from the construction industry as activity slows.



Cement and aggregates

A substantial, sustained rise in bituminous coal prices (120% year-on-year as of end of Q3), which is used to fire South Korea's cement kilns, is expected to drive an increase in prices in the second half of this year. Korean cement producers Sampo Cement and Hanil Cement increased their prices by 11.7% and 15.0% respectively from September 2022, citing the rise in raw material costs, and this increase is expected to be passed on by ready-mix producers. An expected downturn in construction activity will weigh on cement demand in the coming quarters, but this is not expected to be sufficient to see cement prices fall.



Concrete blocks and bricks

Construction activity in Korea slowed to a contraction of 1.5% year-on-year in H1 2022, recording a ninth successive contraction in Q2 2022. With construction activity slowing, brick and concrete block demand is expected to moderate. An expected rise in cement prices in Q4 2022 on the back of rising input costs, is anticipated to lead to a slight increase in concrete prices, which will see concrete block prices rise marginally as a result.



Steel (rebar and structural)

A fall in raw material costs, weaker domestic demand and the slowing of global economic growth are expected to contribute to a weaker steel market. Supply disruptions and strike action at two of Korea's largest steel producers, POSCO and Hyundai Steel, will, however, exert upwards pressure on prices in the final quarter of this year, keeping steel prices at relatively elevated levels.



Copper

Slowing global economic growth, weak industrial production in Europe, rising energy costs and an increasingly strong US dollar have resulted in a significant fall in global copper prices in recent months. Some upwards pressure on copper prices may be generated as infrastructure construction in China ramps up towards the end of the year, though this is unlikely to be sufficient to generate a return to copper's prior highs. In the longer term, copper demand in Korea is expected to strengthen substantially, driven by demand from its prominent EV battery manufacturing industry.


South Korea - Commodity Report



	Q4 2022 (f)	Q4 2021 – Q4 2022 (f)	Q2 2022 – Q3 2022 (e)	
Materials	KRW	KRW	2021-22* % change	% change
Copper (KRW/MT)	10,208,386	10,491,201	-2.70% ↓	-12.3% ↓ ●
Steel rebar (KRW/MT)	1,048,085	1,040,667	0.71% ↑	-3.5% ↓ ■
Steel flat (KRW/MT)	994,704	947,526	4.98% ↑	-0.8% ↓ ■
Lumber (KRW/M3)	354,600	330,000	7.45% ↑	4.0% ↑ ●
Asphalt (KRW/MT)	66,730	57,913	15.22% ↑	0% ↔ ■
Limestone (KRW/MT)	969,737	974,857	-0.53% ↓	0% ↔ ■
Cement (KRW/MT)	379,853	311,684	21.87% ↑	0.5% ↑ ■
Concrete (KRW/M3)	145,804	118,677	22.86% ↑	1.0% ↑ ●
Welded mesh (KRW/unit)	9,024	8,297	8.75% ↑	-3.5% ↓ ●
Bricks (KRW/000 unit)	646,750	596,048	8.51% ↑	0% ↔ ■
Plasterboard (KRW/unit)	4,104	3,916	4.81% ↑	0% ↔ ■
Diesel (KRW/litre)	1,722	1,860	-7.43% ↓	-18.2% ↓ ●

(a) 100x200cm, dia.-5mm
(b) 90x180x1.2cm (LxWxT)

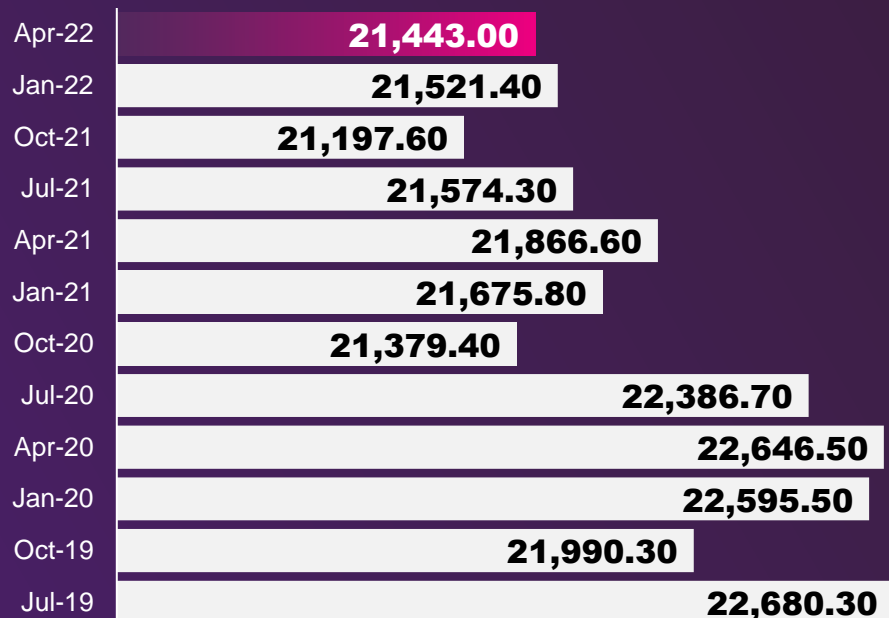
● Q2 to Q3 2022 % change greater than estimation in our Q2 report
■ Q2 to Q3 2022 % change less than estimation in our Q2 report

Material	% change Q3 – Q4 2022 (f)	Level of impact of pricing on construction procurement and supply chain *	
 Copper	-1.4% ↓	 Moderate	Copper prices are expected to moderate in the second half of this year due to slower economic growth in China and decreasing demand for copper in Europe, as industrial output softens as a result of the energy crisis. Concerns over the potential for a global recession has significantly reduced demand for the metal, which is reflected in the declining price of copper. Further weighing on copper demand in the second half of this year will be the recent slowing of industrial production in South Korea.
 Steel prices - Steel rebar - Flat steel	-2.3% ↓ -0.4% ↓	 Moderate	Rising interest rates, increasing economic headwinds and softening external demand have hampered steel demand in the Korean construction and industrial sectors, which is expected to weigh on prices in the second half of this year. However, as a result of limited output at large, steel producers and increases to contract prices, it is anticipated that the decline in the price of steel will be less sharp in the final quarter of this year.
 Cement Concrete	+0.8% ↑ +1.1% ↑	 Moderate	An increase in raw material costs, particularly of bituminous coal, is expected to have kept cement and concrete prices high in Q3 2022, and this is expected to continue into the final quarter of this year. While some downwards pressure on prices will be generated by the slowing of global economic growth and the tightening of policy by the Bank of Korea, which will weigh on construction demand, it will likely not be sufficient to generate a decline in prices in the short term.
 Asphalt	+0.8% ↑	 Moderate	The global price of crude oil guides the movement in asphalt prices. It is anticipated that the price of asphalt will stay high in the near future as OPEC+ production cuts increase crude oil prices.
 Limestone	+0.5% ↑	 Moderate	Higher production and transportation costs owing to increased fuel costs have been the primary factors buttressing limestone prices at elevated levels. A moderation in fuel costs stabilised limestone prices in Q3 2022. However, limestone prices are expected to remain high given elevated costs.

South Korea - Commodity Report



GDP from construction in KRW billions 2019-2022

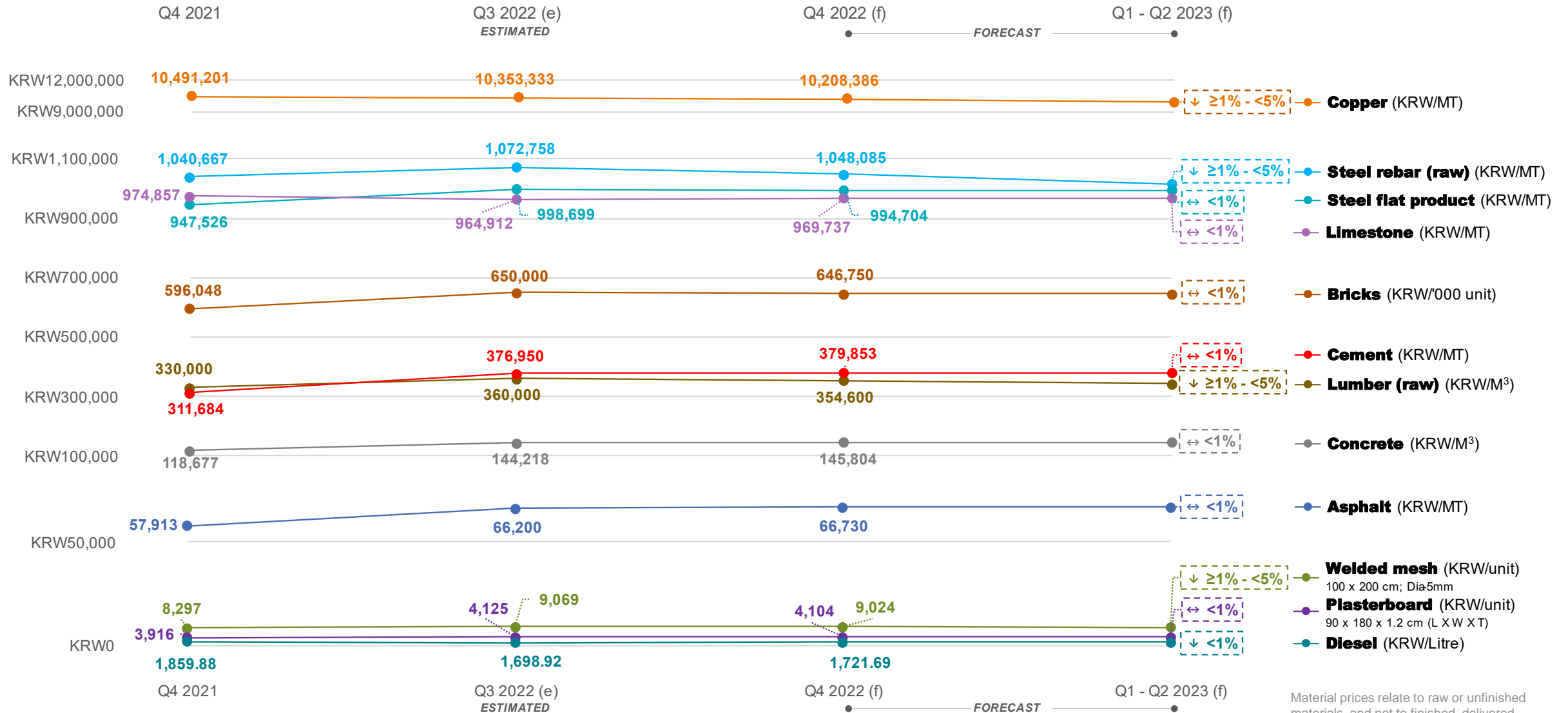


Material	% change Q3 – Q4 2022 (f)	Level of impact of pricing on construction procurement and supply chain *	
 Lumber	-1.5% ↓	 High	In Q3 2022, lumber prices are expected to have increased by approximately 1.5% on a quarterly basis, primarily as a result of a seasonal rise in demand and a shortage of supply. The pressure on domestic supply chains is, however, projected to ease by the final quarter of this year, which will result in a marginal fall in prices. Into 2023, prices are expected to be relatively stable, with risk weighted to the downside as tighter monetary policy softens demand for lumber in the residential sector.
 Welded mesh	-0.5% ↓	 Moderate	As a result of the expected decline in the price of steel, the price of welded mesh is expected to fall in the coming quarters.
 Bricks	-0.5% ↓	 Low	On a quarterly basis, brick prices remained stable in Q3 2022. However, owing to an expected decrease in demand from the construction industry as building activity slows, brick prices are expected to moderate in the final quarter of this year.
 Plasterboard	-0.5% ↓	 Low	Plasterboard prices have been stable in recent quarters, and with weaker demand being offset by high production costs, prices are not expected to move significantly.
 Diesel	+1.3% ↑	 High	Diesel prices in South Korea are expected to follow movements in international crude oil prices. With oil prices expected to rise in the final quarter of this year, due to the recent decision by OPEC+ to reduce oil output, it is anticipated that diesel prices will remain high, with supply-side pressures being offset by a moderation in demand.

* 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.

South Korea - Construction Materials Pricing (2021-2022)



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

South Korea - Macroeconomic overview



Economic indicators



2.6%

GDP growth in 2022 (f)
and **4.02%** in 2021



5.2%

inflation rate in 2022 (f)
and **2.5%** for 2021



28.4M

people employed
in 2022 (f) and
28.3M in 2021



2.4%

unemployment rate
for 2022 (f) and
3.5% in 2021



103.95

Consumer Price Index in
Sept 2022 and **108.93** in
Oct 2021



120.12

Producer Price Index in
Aug 2022 and **111.27** in
Oct 2021

National holidays



12 public holidays







in South Korea each year

- New Year's Day (1 January)
- Seollal (31 January to 2 February)
- March 1st Movement Day (1 March)
- Children's Day (5 May)
- Buddha's Birthday (8 May)
- Memorial Day (6 June)
- Liberation Day (15 August)
- Chuseok (9 to 12 September)
- National Foundation Day (3 October)
- Hangeul Day (9 October)
- Hangeul Day Holiday (10 October)
- Christmas Day (25 December)

South Korea - Macroeconomic overview



Output 2021 and 2022 (in KRW millions)

	Total 2021	Total 2022 (f)	% change
Commercial 	57,535,097	57,380,800	-0.3%
Energy and utilities 	11,378,514	10,900,450	-4.2%
Industrial 	46,266,366	46,368,563	0.2%
Infrastructure 	47,053,026	44,758,315	-4.9%
Institutional 	20,698,917	20,672,437	-0.1%
Residential 	115,941,589	117,424,735	1.3%

Long-lead equipment (LLE) and Supply Chain narrative

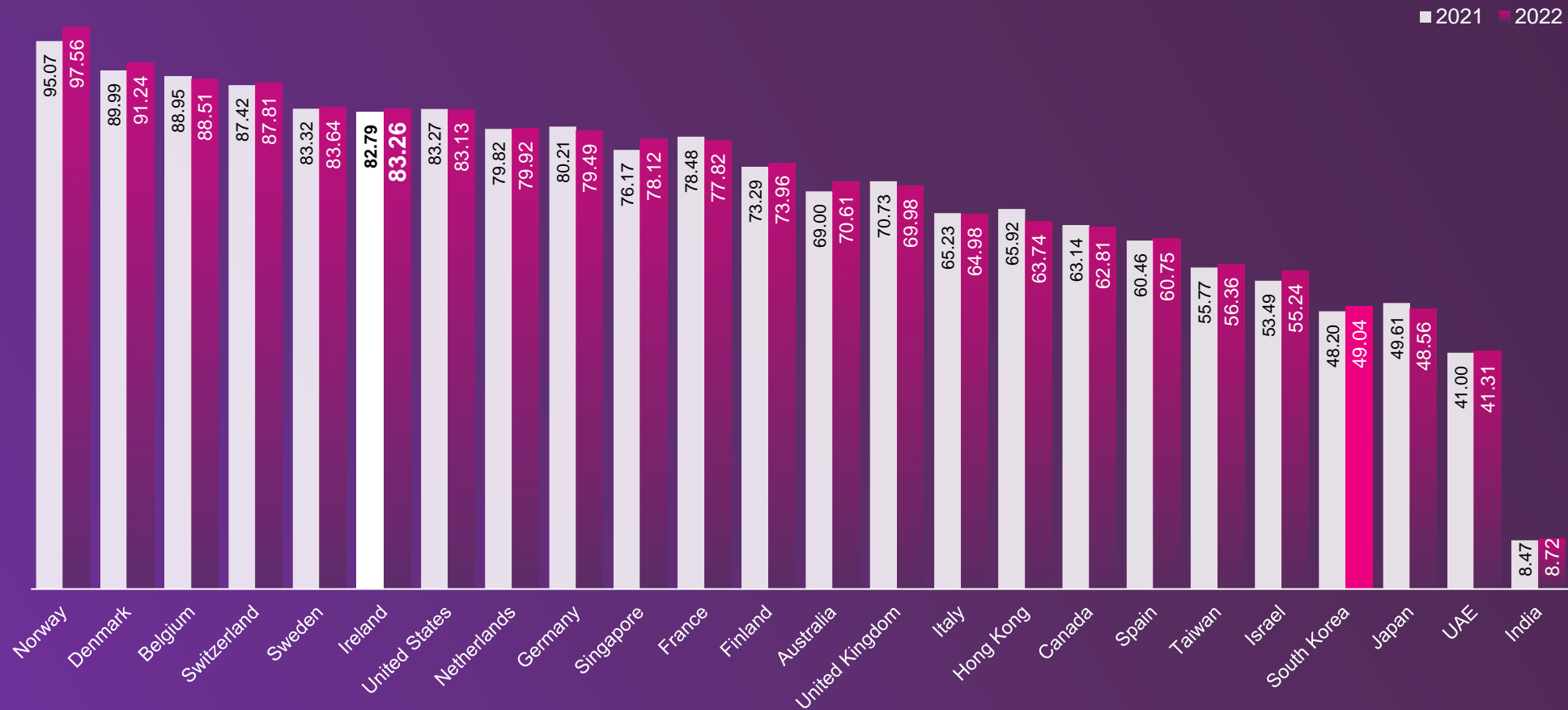
Long-lead equipment (LLE) lead times have changed drastically since the start of 2022. Suppliers have seen the implications of material shortages, delays and price hikes throughout the supply chain, which is leading to extended lead times and reduced commitment from suppliers for new projects. The key areas in focus are:

- Demand:** The demand for long-lead equipment in the data centre sector has continued to increase in Q3 2022. More data centre and crypto mining providers are joining the market, and this continued demand far outweighs the capacity of the supply chain. Entry onto the production line remains a significant challenge, with suppliers reporting fully booked capacity until Q2 2024. There has been some growth in the development of Tier 2 and Tier 3 suppliers to support this demand. However, it will take time to build an extended supply chain. There has also been no sign of a decline in demand yet in early Q4 2022.
- Material shortage:** Just as material availability started to improve, the further threat of escalation with the Russia-Ukraine conflict has cast further uncertainties of future material stocks and reserves. The supply chain has continued to seek alternative sources of raw materials, and although this has been with partial success, market lead times remain conservative.
- Freight durations and costs:** Heightened by the increase in fuel costs, and compounded by the instability of labour and container availability, freight durations have been particularly volatile in recent times. Early indications from Q4 2022 suggest some stabilization in shipping durations is returning to the market, but the associated costs remain volatile due to the global fuel crisis. As clients consider alternative solutions, it almost becomes cost prohibitive to use quicker forms of transport, such as air freight, due to these increasing fuel costs.

South Korea - Macroeconomic overview



Labour productivity



Labour productivity per hour worked in 2021 international dollars, converted using Purchasing Power Parities

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. A more comprehensive list of sources is included below.

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 – South Korea

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

- IMF
- The Korean Statistical Information System (KOSIS)
- Bank of Korea
- Statistics Korea
- Korea Customs Service
- GlobalData's Construction Intelligence Center (CIC)

