

CONSTRUCTION MARKET UPDATE

RIDER LEVETT BUCKNALL SINGAPORE AND REGIONAL REPORT

JUNE 2022

2022
H1

RLB

Rider
Levett
Bucknall

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INTRODUCTION

General Market

Global gross domestic product (GDP) grew by an estimated 5.7% in 2021, after an historically deep recession the previous year. The global economy is projected to moderate to 2.9% in 2022, largely reflecting forecast markdowns in the two largest economies and economic damage from the conflict in Ukraine. The rapid increase in fuel and food prices add to inflation, triggering central banks to hike interest rates aggressively to counter inflationary pressures, which in turn could trigger other global ramifications.

Compared to 2021, more countries have eased border restrictions and protocols, transiting to an endemic phase of COVID-19. Fiscal and monetary policy support provided during the pandemic are further pared back with the recovery from COVID-induced economic setbacks.

Construction Industry

In comparison to the world economy, the construction industry continues to suffer from the impacts of the COVID-19 pandemic, on top of the effects of the conflict in Ukraine.

Worldwide, construction material prices are driven by both the increase in demand and lack of supply. Dry bulk carriers remain in short supply as demand remain elevated and ports congested. The combined effect, together with a stronger greenback, is that of a continued upward pressure on prices of imported goods.

Global prices for copper, aluminium and structural steel remain more than 50% above pre-COVID prices, despite the recent softening of costs in May 2022. Sanctions and import bans imposed on Russia reduced global crude oil supply, driving oil prices above US\$100/barrel for the first time since 2014. Given that long term demand is expected to sustain, prices are likely to remain high in the near term.

Despite the easing of international border restrictions, the imbalance in labour supply and demand in countries that rely heavily on imported labourers are not corrected. This is in part due to a surge in demand for the same pool of workers in several countries.

Elevated construction prices are likely to persist throughout the year on the back of high construction material prices and labour costs for the cities covered in this report.

HIGHLIGHTS

	TPI Movement (%) Y-o-Y		Material Costs	Labour Costs
	1Q 2022	2022 (f)	4Q'21 to 1Q'22	
Singapore	8.1	3.0 to 10.0	▲	▲
Ho Chi Minh City	9.0	5.0	▲	▲
Jakarta	n/p	5.0	▲	▲
Kuala Lumpur	5.0	7.0	▲	▲
Phnom Penh	5.9	6.2	▲	◄►
Yangon	10.0	5.0	▲	▼
Manila	2.0	2.7	▲	◄►
Tokyo	-0.3	2.0 to 7.0	▲	▲

n/p: not published
f: forecast

Legend:

- ▲ Increased
- ◄► Remained
- ▼ Decreased



New Phnom Penh International Airport, Cambodia

SINGAPORE

Construction Market



\$29b to \$32b
Construction output forecast
for 2022
\$26.2b (32.5% Y-o-Y) in 2021



3% - 10%
TPI forecast 2022
8.1% Y-o-Y as at 1Q 2022



**Price movement
from 4Q 2021 to 1Q
2022**

- Construction material ▲
- Labour ▲



\$27b to \$32b
Construction demand
forecast for 2022
\$29.9b (42.2% Y-o-Y) in 2021

Economy Indicators



3% - 5%
GDP 2022 forecast
3.7% Y-o-Y growth in
1Q 2022



4.5% to 5.5%
Inflation 2022 forecast
4.6% Y-o-Y growth
in 1Q 2022



2.2%
Unemployment rate
1Q 2022
2.7% in 2021



COVID-19 (Temporary Measures) Act 2020

- Part 2 and Part 8B on co-sharing of cost: relief period ended on 28 Feb 2022
- Part 10A on addressing foreign manpower cost increases in respect to work permit holders: relief period ended on 30 Jun 2022



Key policies introduced

- Built Environment Transformation GFA Incentive Scheme in place from 24 Nov 2021 to 23 Nov 2026
- Enhancements to Code of Practice and regulations to accelerate adoption of DfMA from 30 Apr 2022
- New CONQUAS 2022 standard from 1 Jun 2022



Tender prices remain on upward trend

- Material and labour costs expected to remain elevated in the near term
- More private employers considering price fluctuation adjustments for specific materials to manage risks
- Productivity reportedly taken a hit with inflow of less skilled workers and outflow of higher-skilled workers

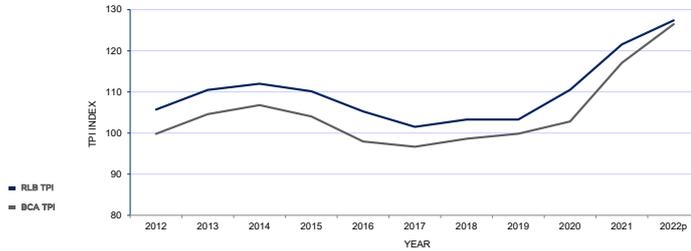


Residential property market cooling measures

- Prices expected to continue increasing in the near term due to rising construction costs, inflation and interest rates

SINGAPORE

BUILDING TENDER PRICE INDICES

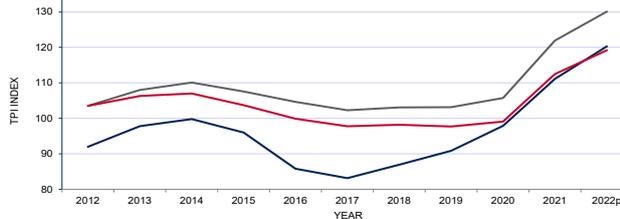


	ANNUAL CHANGE 2022	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022p
RLB TPI	4.8% ↑	105.7	110.5	112.0	110.2	105.3	101.5	103.3	103.3	110.5	121.6	127.4
BCA TPI	8.1% ↑	99.8	104.6	106.8	104.0	98.0	96.7	98.6	99.9	102.8	117.1	126.5

Data Sources: BCA, RLB
p: preliminary

Note: Variances between the RLB and BCA Tender Price Index arise from the differences in index derivation methodology, the basket of items and weightages used for each index and the variety of building projects utilised. The index basket here excludes piling works and Mechanical & Electrical services. Base Year 2010 = 100

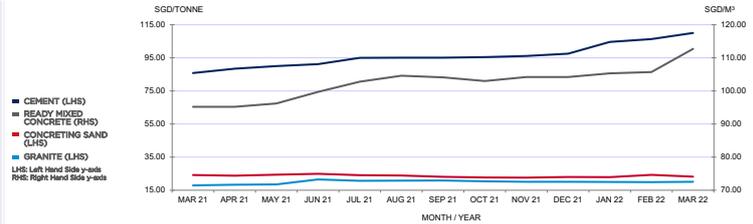
BCA TENDER PRICE INDICES



	ANNUAL CHANGE 2022	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022p
HDB Flats	8.3% ↑	92.0	97.8	99.8	96.0	85.8	83.2	86.9	90.9	97.9	111.1	120.3
Private Non-Landed	6.7% ↑	103.5	108.0	110.1	107.6	104.7	102.3	103.1	103.2	105.7	121.9	130.1
Commercial Office	6.0% ↑	103.5	106.3	107.0	103.7	99.9	97.8	98.2	97.7	99.1	112.5	119.2

Data Source: BCA
p: preliminary

BASIC CONSTRUCTION MATERIALS



	AVG 1Q'22/4Q'21 CHANGE	MAR 21	APR 21	MAY 21	JUN 21	JUL 21	AUG 21	SEP 21	OCT 21	NOV 21	DEC 21	JAN 22	FEB 22	MAR 22
CEMENT	11.0% ↑	85.80	88.40	90.00	91.20	95.00	95.10	95.10	95.40	96.10	97.50	104.60	106.30	110.00
READY MIXED CONCRETE	3.9% ↑	95.20	95.20	96.20	99.70	102.80	104.60	104.10	103.00	104.20	104.20	105.30	105.70	112.70
CONCRETING SAND	3.1% ↑	24.20	23.80	24.40	24.90	24.10	23.90	23.10	22.70	22.60	23.00	22.90	24.30	23.20
GRANITE	-1.0% ↓	17.90	18.30	18.50	21.50	20.70	20.80	20.90	20.40	20.10	20.10	20.00	19.90	20.10

Data Source: BCA

Note:

- Prices of granite and concreting sand excluded local delivery charges to concrete batching plants.
- The market prices of ready mixed concrete are based on contracts with non-fixed price, fixed price and market retail price for Grade 40 pump.
- Exchange rate assumption (1Q2022): 1 USD = 1.35 SGD

CAMBODIA

Construction Market



8.8%
Construction sector growth
2022 forecast
6.5% Y-o-Y in 2021



6.2%
TPI forecast 2022
5.9% Y-o-Y as at 1Q
2022 (Phnom Penh)



**Price movement
from 4Q 2021 to
1Q 2022**
Construction material ▲
Labour ◀▶
(Phnom Penh)

Economy Indicators



5.3%
GDP 2022 forecast
3.0% Y-o-Y growth
in 2021



4.7%
Inflation 2022 forecast
2.9% Y-o-Y growth
in 2021



2.0%
Unemployment
rate 2022 forecast
0.6% in 2021



Key Prakas issued

- National Council for Building Technical Regulations set up to study and develop effective sustainable regulations
- All constructions that require permits must be inspected and certified prior to occupation from Jan 2022



Foreign direct investments lagging behind reopening of border

- Value of construction projects in the first five months of 2022 about 60% less than the same period in 2021
- Varying degrees of reopening regionally and rising costs of imported construction materials likely curbed investments in large projects
- Inflows expected to improve in the near term



Steady real estate market growth expected for 2022

- Anticipated influx of fully vaccinated tourists accelerated demand for retail space
- Domestic demand for affordable and mid-range landed properties propped up property market

CAMBODIA

CONSTRUCTION MATERIAL PRICES

MATERIAL	UNIT	AVERAGE SUPPLY RATE (KHR)		
		3Q2021	4Q2021	1Q2022
Concreting Sand	m ³	31,595	31,940	31,545
Stone Aggregate (20mm)	m ³	81,573	71,547	72,915
Ordinary Portland Cement	kg	402	383	408
Reinforced Concrete (Grade 30 MPA)	m ³	305,612	296,043	265,219
Reinforced Concrete (Grade 40 MPA)	m ³	317,676	312,154	293,349
High Tensile Steel Bars (10-32mm)	kg	3,137	3,142	3,416
Mild Steel Round Bars (10-25mm)	kg	3,137	2,940	3,416
Structural Steelwork (U-beam, stanchions)	tonne	6,031,818	6,041,687	7,233,255
Plywood Formwork (2,400x1,200x12mm)	m ²	23,736	21,677	28,604
Clay Bricks (100mm thick brickwall)	m ²	13,632	22,302	22,250

Data Source: Market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Tax Expenses (VAT)

Notes: All supply prices stated above are only applicable for building construction projects in Phnom Penh. Specific cost consultancy should be sought for your particular factual situation prior to utilising this information.

Exchange rate assumption (1Q2022): 1 USD = 4,018 KHR

LABOUR PRICES

SELECTED OCCUPATIONS	UNIT	AVERAGE LABOUR RATE (KHR)		
		3Q 2021	4Q2021	1Q2022
General Worker	Day	96,500	96,700	96,400
Concretor (Skilled - Local)	Day	112,600	112,800	112,500
Brick Layer (Skilled - Local)	Day	122,200	122,400	122,200
Plasterer (Skilled - Local)	Day	160,800	161,100	160,700
Tiler (Skilled - Local)	Day	128,700	128,900	128,600
Steel Bar Worker (Skilled - Local)	Day	144,800	145,000	144,700
Carpenter (Formwork) (Skilled - Local)	Day	193,000	193,300	192,900
Carpenter (Joinery) (Skilled - Local)	Day	193,000	193,300	192,900
Roofer (Skilled - Local)	Day	122,200	122,400	122,200
Structural Steel Worker (Skilled - Local)	Day	144,800	145,000	144,700
General Welder (Skilled - Local)	Day	193,000	193,300	192,900
Plumber (Skilled - Local)	Day	160,800	161,100	160,700
Painter (Skilled - Local)	Day	160,800	161,100	160,700
Scaffolder (Skilled - Local)	Day	96,500	96,700	96,400
Electrician (Semi-skilled - Local)	Day	144,800	145,000	144,700

Data Sources: Market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Import Tax • Value Added Tax (VAT)

Notes: All labour rates stated above are only applicable for building construction projects in Phnom Penh.

INDONESIA

Construction Market



Rp 365.0t
Construction
demand forecast
for 2022
Rp 350.0t in 2021



5.0%
TPI forecast 2022
7.0% in 2021
(Jakarta)



**Price movement
from 4Q 2021 to
1Q 2022**
Construction material ▲
Labour ▲
(Jakarta)



Construction market expected to continue growth in 2022

- Annual average of 5.2% growth expected between 2022 and 2025
- Growth to be driven by residential and industrial sectors
- Other sectors expected to post positive growth compared to 2021



Public expenditure to support market in medium term

- Large-scale infrastructure projects under the National Medium-Term Development Plan 2020-2024 (RPJMN)
- Energy and utilities projects under Electricity Business Plan 2021-2030 (RUPTL)



Real estate market poised for rebound

- Large supply of office space and expectations of economy recovery to keep rental prices competitive
- Easing of border restrictions likely to improve hospitality sector's occupancy rate
- Demand in industrial sector expected to increase, with logistics and data centres demand particularly robust

Economy Indicators



5.5%
GDP 2022 forecast
5.0% Y-o-Y growth
in 1Q 2022



3.0%
Inflation 2022
forecast
2.6% Y-o-Y growth
in 1Q 2022



5.8%
Unemployment rate
1Q 2022
6.5% in 1Q 2021

INDONESIA

CONSTRUCTION MATERIAL PRICES

MATERIAL	UNIT	AVERAGE SUPPLY RATE (IDR)			
		2Q2021	3Q2021	4Q2021	1Q2022
Concreting Sand	m ³	248,000	260,000	260,000	260,000
Stone Aggregate (20mm)	m ³	227,000	227,000	227,000	227,000
Ordinary Portland Cement	bag	68,000	68,000	68,000	71,000
Reinforced Concrete (Grade 30 MPA)	m ³	750,000	757,000	757,000	765,000
Reinforced Concrete (Grade 40 MPA)	m ³	800,000	807,000	807,000	810,000
High Tensile Steel Bars (10 - 40mm)	kg	10,300	10,800	10,800	11,150
Mild Steel Round Bars (6 - 20mm)	kg	10,500	11,000	11,000	11,700
Structural Steelwork (U-beam, stanchions)	tonne	16,495,000	18,000,000	18,000,000	18,540,000
Timber Sawn Formwork	m ²	184,000	184,000	184,000	185,000
Clay Bricks (100mm thick brickwall)	m ²	120,000	130,000	130,000	130,000

Data Source: Market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Tax Expenses (VAT)

Notes: All supply prices stated above are only applicable for building construction projects in Jakarta. Specific cost consultancy should be sought for your particular factual situation prior to utilising this information.

Exchange rate assumption (1Q2022): 1 USD = 14,337 IDR

LABOUR PRICES

SELECTED OCCUPATIONS	UNIT	AVERAGE LABOUR RATE (IDR)			
		2Q2021	3Q2021	4Q2021	1Q2022
General Workers	Day	115,000	115,000	115,000	120,000
Carpenter (General)	Day	170,000	170,000	170,000	180,000
Tiler	m ²	70,000	70,000	70,000	75,000
Concretor	m ³	110,000	110,000	110,000	120,000
Steel bar worker	Kg	2,500	2,500	2,500	2,700
Formworker	m ²	85,000	85,000	85,000	85,000
Bricker Layer	m ²	45,000	45,000	45,000	48,000
Plasterer	m ²	55,000	55,000	55,000	55,000
Painter	m ²	30,000	30,000	30,000	30,000
Glazer	m ²	250,000	250,000	250,000	270,000
Plumber	Day	190,000	190,000	190,000	195,000
Electrician	Day	190,000	190,000	190,000	195,000

Data Sources: Public Works Department Indonesia (Jakarta), market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Import Tax • Value Added Tax (VAT)

Notes: All supply prices and labour rates stated above are only applicable for building construction projects in **Jabodetabek. (Jakarta Bogor Depok Tangerang Bekasi)**

MALAYSIA

Construction Market



6.0%
Construction output
forecast for 2022
-5.0% Y-o-Y in 2021
-6.1 Y-o-Y as at 1Q
2022



7.0%
TPI forecast 2022
5.0% Y-o-Y as at
1Q 2022
(Kuala Lumpur)



**Price movement
from 4Q 2021 to
1Q 2022**
Construction material ▲
Labour ▲
(Kuala Lumpur)

Economy Indicators



5.5%
GDP 2022 forecast
5% Y-o-Y growth in
1Q 2021



2.2% to 3.2%
Inflation 2022 forecast
2.2% Y-o-Y
growth in 1Q 2022



4.1%
Unemployment rate
1Q 2022
4.7% in 2021



Uptick in construction activities as nation transitions out of COVID-19 pandemic

- Construction industry witnessing robust recovery following lifting of restrictions in May 2022
- High demand for small/medium industrial buildings, factories, infrastructure and housing projects
- Projects put on hold between 2020 and 2021 are revived



Tender prices expected to increase steadily throughout 2022

- Supply chain still a concern due to high global demand and disruptions in China
- Tight competition with neighbouring countries for similar pool of foreign labour causing shortage
- Construction prices expected to peak and stabilise leading into 2023



Market volatility dampening contractors' risk appetites but investors undeterred

- Hike in material prices due to the conflict in Ukraine just as prices were stabilising
- Concurrent surge in regional demand for labour coupled with weakening of the Ringgit add to hiring challenges
- Foreign investment in manufacturing and related service operations hit record amount in 1Q 2022

CONSTRUCTION MATERIAL PRICES

MATERIAL	UNIT	AVERAGE SUPPLY RATE (MYR)			
		2Q 2021	3Q 2021	4Q 2021	1Q 2022
Concreting Sand	tonne	53.90	53.90	53.90	53.90
Stone Aggregate (20mm)	tonne	33.20	33.20	33.20	33.20
Ordinary Portland Cement	kg	17.95	17.95	17.95	18.85
Reinforced Concrete (Grade 30 MPA)	m ³	190.00	195.00	195.00	200.00
Reinforced Concrete (Grade 40 MPA)	m ³	215.00	220.00	220.00	225.00
High Tensile Steel Bars (10 - 32mm)	kg	3.20	3.50	3.50	3.50
Mild Steel Round Bars (10 - 25mm)	kg	3.20	3.50	3.50	3.50
Structural Steelwork (200 x 200mm U-beam)	tonne	4,000.00	4,500.00	4,500.00	4,500.00
Plywood Formwork (4000x8000x12mm)	pc	60.00	60.00	60.00	60.00
Clay Bricks (100mm thick brickwall)	pc	0.44	0.44	0.44	0.44

Data Source: Market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Import Tax • Goods and Services Tax (GST)

Notes: All supply prices stated above are only applicable for building construction projects in Kuala Lumpur. Specific cost consultancy should be sought for your particular factual situation prior to utilising this information.

Exchange rate assumption (1Q2022): 1 USD = 4.19 MYR

LABOUR PRICES

SELECTED OCCUPATIONS	UNIT	AVERAGE LABOUR RATE (MYR)			
		2Q 2021	3Q 2021	4Q 2021	1Q 2022
General Worker (Foreign)	Day	72.00	72.00	85.00	95.00
Concretor (Skilled - Local)	Day	127.00	127.00	127.00	127.00
Brick Layer (Skilled - Local)	Day	130.00	130.00	130.00	130.00
Plasterer (Skilled - Local)	Day	132.00	132.00	132.00	132.00
Tiler (Skilled - Local)	Day	153.00	153.00	153.00	153.00
Steel Bar Worker (Skilled - Local)	Day	129.00	129.00	129.00	129.00
Carpenter (Formwork) (Skilled - Local)	Day	144.00	144.00	144.00	144.00
Carpenter (Joinery) (Skilled - Local)	Day	145.00	145.00	145.00	145.00
Roofer (Skilled - Local)	Day	127.00	127.00	127.00	127.00
Structural Steel Worker (Skilled - Local)	Day	127.00	127.00	127.00	127.00
General Welder (Skilled - Local)	Day	160.00	160.00	160.00	160.00
Plumber (Skilled - Local)	Day	140.00	140.00	140.00	140.00
Painter (Skilled - Local)	Day	133.00	133.00	133.00	133.00
Scaffolder (Skilled - Local)	Day	124.00	124.00	124.00	124.00
Electrician (Semi-skilled - Local)	Day	124.00	124.00	124.00	124.00

Data Sources: Construction Industry Development Board (CIDB) and market sources.

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Import Tax • Value Added Tax (GST)

Notes: All labour rates stated above are only applicable for building construction projects in Kuala Lumpur.

MYANMAR

Construction Market



2.3%
Construction output
forecast for 2022
-7.7% Y-o-Y in 2021



5.0%
TPI forecast 2022
10.0% Y-o-Y as at
1Q 2022
(Yangon)



**Price movement
from 4Q 2021 to
1Q 2022**
Construction material ▲
Labour ▼
(Yangon)

Economy Indicators



-0.3%
GDP 2022 forecast
-18.4% Y-o-Y
contraction in 2021



8.0%
Inflation
2022 forecast
3.6% Y-o-Y
growth in 2021



1.8%
Unemployment
rate 2022 forecast
2.2% in 2021



Factors impacting the economy in 2022

- Political unrest resulting in sanctions imposed and loss of foreign investments
- Low vaccination rate for COVID-19, increasing vulnerability to infections
- Increasing prices, declining consumption
- Intensifying of energy crisis as power lines were compromised following the 2021 coup and planned investments cancelled



Challenges the industry is facing

- Increase in price of imported building materials due to shortage and weakening of the Myanmar Kyat
- Decline in employment opportunities as major projects remain suspended
- Electrical outages further reducing reliability of power sources



Signs signalling stability and recovery

- Mobility for retail, recreation and transport recovered to pre-coup levels, 30% below pre-COVID levels
- Manufacturing grew for the first time in 20 months in Apr 2022, while rate of contraction continue to ease from the low in Jul 2021

MYANMAR

CONSTRUCTION MATERIAL PRICES

MATERIAL	UNIT	AVERAGE SUPPLY RATE (MMK)				
		3Q2020	4Q2020	2Q2021 [^]	3Q2021	1Q2021 ^{^^}
Concreting Sand	m ³	3,974	3,945	4,475	4,003	5,004
Stone Aggregate (20mm)	m ³	22,077	22,042	21,783	19,428	22,724
Ordinary Portland Cement	kg	99	101	125	125	146
Reinforced Concrete (Grade 30 MPA)	m ³	90,367	89,033	92,650	90,150	116,050
Reinforced Concrete (Grade 40 MPA)	m ³	101,250	100,250	108,000	103,000	134,000
High Tensile Steel Bars (10 - 32mm)	kg	699	777	1,161	1,232	1,701
Mild Steel Round Bars (6 - 25mm)	kg	656	774	866	1,240	1,705
Structural Steelwork (U-beam)	tonne	872,500	942,500	1,280,000	1,550,000	1,970,000
Plywood Formwork (2438x1219x20mm)	pc	32,963	34,074	32,222	33,056	37,500
Clay Bricks (100mm thick brickwall)	pc	116	110	124	124	127

Data Source: Market sources

[^] In view of business disruption due to political turmoil, no data is available for 1Q2021

^{^^} No data is available for 4Q2021

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Preliminaries • Withholding Tax • Commercial Tax

Notes: All supply prices stated above are only applicable for building construction projects in Yangon. Specific cost consultancy should be sought for your particular factual situation prior to utilising this information.

Exchange rate assumption (1Q2022): 1 USD = 1,759 MMK

VIETNAM

Construction Market



5.0%
Construction output forecast
for 2022
1.6% Y-o-Y in 2021
2.4% Y-o-Y as at 1Q 2022



7.6%
Construction demand forecast
for 2022
6.4% Y-o-Y in 2021
6.4% Y-o-Y as at 1Q 2022



5.0%
TPI forecast 2022
9.0% Y-o-Y as at 1Q 2022
(Ho Chi Minh City)



**Price movement
from 4Q 2021 to 1Q
2022**

- Construction material ▲
- Labour ▲

(Ho Chi Minh City)

Economy Indicators



6.0% - 6.5%
GDP 2022 forecast
5.0% Y-o-Y growth in 1Q
2022



4.0%
Inflation 2022
forecast
0.8% Y-o-Y growth
in 1Q 2022



2.5%
Unemployment rate
1Q 2022
3.2% in 2021



Notable regulations introduced in 1H 2022

- Sanctioning of administrative violations related to construction work commencement



Construction sector shows strong future growth

- Industry grew 7.1% in 1Q 2022 Y-o-Y, higher than the 6.4% growth registered in the same period in 2021
- Lifting of majority of restrictions due to high vaccination rates a positive effect on recovery of the industry
- Business sentiments for 1H 2022 generally upbeat



Escalating construction costs

- Major material prices increased between 12% and 33% compared to 2021
- Labour cost increased 10% to 15% compared to 2021 but expected to stabilise towards end 2022
- Logistical challenges due to supply chain disruptions and high freight costs

CONSTRUCTION MATERIAL PRICES

MATERIAL	UNIT	AVERAGE SUPPLY RATE (VND)				
		1Q2021	2Q2021	3Q2021	4Q2021	1Q2022
Concreting Sand	m ³	370,000	370,000	370,000	370,000	370,000
Stone Aggregate (20mm)	m ³	300,00	305,000	310,000	310,000	310,000
Ordinary Portland Cement (PCB40)	kg	1,600	1,650	1,650	1,650	1,650
Reinforced Concrete (Grade 30 MPA)	m ³	1,200,000	1,250,000	1,300,000	1,300,000	1,300,000
Reinforced Concrete (Grade 40 MPA)	m ³	1,310,000	1,360,000	1,360,000	1,360,000	1,360,000
High Tensile Steel Bars (10 - 40mm)	kg	15,073	19,000	19,000	19,000	19,500
Mild Steel Round Bars (6 - 20mm)	kg	14,913	19,2000	19,200	19,200	19,700
Structural Steelwork (U-beam, stanchions)	tonne	20,225	26,000	26,000	26,700	26,700
Timber Sawn Formwork	m ²	155,000	160,000	165,000	165,000	165,000
Clay Bricks (100mm thick brickwall)	m ²	105,000	115,000	115,000	115,000	115,000

Data Source: Ho Chi Minh City Construction Department, market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Tax Expenses (VAT)

Notes: All supply prices stated above are only applicable for building construction projects in Ho Chi Minh City. Specific cost consultancy should be sought for your particular factual situation prior to utilising this information.

Exchange rate assumption (1Q2022): 1 USD = 22,765 VND

PHILIPPINES

Construction Market



30.0%

Construction output forecast for 2022
29.8% Y-o-Y in 2021
3.0% Y-o-Y as at 1Q 2022



2.7%
TPI forecast 2022
2.0% Y-o-Y as at 1Q 2022
(Manila)



Price movement from 4Q 2021 to 1Q 2022

- Construction material ▲
- Labour ◀▶

(Manila)



5.8%
Construction demand forecast for 2022
21.9% Y-o-Y in 2021
14.9% Y-o-Y as at 1Q 2022

Economy Indicators



5.5%
GDP 2022 forecast
7.8% Y-o-Y growth in 1Q 2022



4.5%
Inflation 2022 forecast
3.1% Y-o-Y growth in 1Q 2022



6.2%
Unemployment rate 1Q 2022
7.8% in 2021



New construction sector policies

- More flexible Health & Safety protocols at project sites – vaccination cards in lieu of COVID-19 tests
- Application of building permits online to minimise spread of COVID-19



Construction tender prices remain elevated

- Additional cost due to COVID-19 EHS requirements
- Material and labour costs



Other COVID-19 related impacts

- Competitive consultancy fees despite the unpredictable climate
- Inclusion of clauses to address pandemic related issues and compliance to EHS in tender contracts the "new normal"
- Contractors claiming for COVID-19 related claims for ongoing projects
- Some developers resumed projects despite COVID-19 risks



Optimism in property market abounds

- Business and consumer confidence rise, along with economic recovery
- Gradual recovery in rents and prices projected to extend beyond 2022

PHILIPPINES

CONSTRUCTION MATERIAL PRICES

MATERIAL	UNIT	AVERAGE SUPPLY RATE (PHP)			
		2Q2021	3Q2021	4Q2021	1Q2022
Concreting Sand	m ³	850	1,041	1,041	900
Stone Aggregate (20mm)	m ³	1,150	1,400	1,400	1,400
Ordinary Portland Cement	kg	265	268	268	246
Reinforced Concrete (Grade 30 MPA)	m ³	5,500	5,130	5,130	5,000
Reinforced Concrete (Grade 40 MPA)	m ³	5,670	5,520	5,520	5,180
High Tensile Steel Bars (10 - 32mm)	kg	47	47	49	50
Mild Steel Round Bars (10 - 25mm)	kg	46	46	48	49
Structural Steelwork	tonne	62,080	60,000	60,000	73,450
Plywood Formwork (2438x1219x20mm)	pc	1,374	1,850	1,850	1,779
Clay Bricks (100mm thick brickwall)	pc	32	33	33	35

Data Source: Market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Tax Expenses (VAT)

Notes: All supply prices stated above are only applicable for building construction projects in Manila. Specific cost consultancy should be sought for your particular factual situation prior to utilising this information.

Exchange rate assumption (1Q2022): 1 USD = 51.53 PHP

LABOUR PRICES

SELECTED OCCUPATIONS	UNIT	AVERAGE LABOUR RATE (PHP)			
		2Q2021	3Q2021	4Q2021	1Q2022
Concretor (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Brick Layer (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Plasterer (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Tiler (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Steel Bar Worker (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Carpenter (Formwork) (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Carpenter (Joinery) (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Roofer (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Structural Steel Worker (Skilled - Local)	Day	1,320	1,320	1,320	1,325
General Welder (Skilled - Local)	Day	1,470	1,470	1,470	1,476
Plumber (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Painter (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Scaffolder (Skilled - Local)	Day	1,320	1,320	1,320	1,325
Electrician (Semi-skilled - Local)	Day	1,208	1,208	1,208	1,212

Data Sources: Market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Import Tax • Value Added Tax (VAT)

Notes: All labour rates stated above are only applicable for building construction projects in Manila.

JAPAN

Construction Market



0.5%

Construction output forecast for 2022
1.2% Y-o-Y in 2021
-0.9% Y-o-Y as at 1Q 2022



2.0% - 7.0%
TPI forecast 2022
-0.3% Y-o-Y as at 1Q 2022
(Tokyo)



Price movement from 4Q 2021 to 1Q 2022

- Construction material ▲
 - Labour ▲
- (Tokyo)



0.7%

Construction demand forecast for 2022
7.5% Y-o-Y in 2021
0.8% Y-o-Y as at 1Q 2022

Economy Indicators



2.0%
GDP 2022 forecast
0.5% Y-o-Y growth in 1Q 2022



2.0%
Inflation 2022 forecast
0.3% Y-o-Y growth in 1Q 2022



2.5%
Unemployment rate
Y-o-Y in 1Q 2022
2.5% Y-o-Y in 2021



Gradual increase in construction demand

- Building Construction Orders increased 0.5% Y-o-Y in Apr 2022
- Building construction market to be driven by private sector projects



Current construction trends

- Number and volume of construction and infrastructure projects gradually increase as COVID-19 infections decrease
- More projects expected to re-commence with recovery from the pandemic and demand arising from economic recovery
- Construction material prices increased 29 index points from Apr 2020 to Apr 2022



Property market expected to rebound in 2H 2022

- Pace of rise in office vacancy expected to abate in 2022 as economy recovers
- Hard-hit hospitality sector set to benefit from the reopening of borders and influx of international tourists
- High demand for logistics sector expected to sustain for the next few years

CONSTRUCTION MATERIAL PRICES

MATERIAL	UNIT	AVERAGE SUPPLY RATE (JPY)			
		2Q2021	3Q2021	4Q2021	1Q2022
Concreting Sand	m ³	4,850	4,850	4,850	4,850
Stone Aggregate (20mm)	m ³	4,550	4,550	4,550	4,550
Ordinary Portland Cement	kg	11,000	11,000	11,000	11,000
Reinforced Concrete (Grade 30 MPA)	m ³	15,550	15,550	15,550	15,550
Reinforced Concrete (Grade 40 MPA)	m ³	18,400	18,400	18,400	18,400
Reinforcing Steel (SD295A D16)	tonne	79,000	89,000	89,000	96,000
Reinforcing Steel (SD345A D32)	tonne	83,000	93,000	93,000	100,000
Structural Steelwork	tonne	83,000	102,000	102,000	109,000
Plywood Formwork (1800x900x12mm)	pc	1,440	1,500	1,710	1,900
Bricks (230x76x25mm)	m ²	7,200	7,200	7,200	7,200

Data Source: Market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Tax Expenses (VAT)

Notes: All supply prices stated above are only applicable for building construction projects in Tokyo.

Specific cost consultancy should be sought for your particular factual situation prior to utilising this information.

Exchange rate assumption (1Q2022): 1 USD = 116 JPY

LABOUR PRICES

SELECTED OCCUPATIONS	UNIT	AVERAGE LABOUR RATE (JPY)			
		2Q2021	3Q2021	4Q2021	1Q2022
General Worker (Foreign)	Day	21,600	21,600	21,600	21,600
Brick Layer (Skilled - Local)	Day	25,300	25,300	25,300	25,300
Plasterer (Skilled - Local)	Day	27,700	27,700	27,700	27,700
Steel Bar Worker (Skilled - Local)	Day	27,600	27,600	27,600	27,600
Carpenter (Formwork) (Skilled - Local)	Day	26,300	26,300	26,300	26,300
Carpenter (Joinery) (Skilled - Local)	Day	24,300	24,300	24,300	24,300
Structural Steel Worker (Skilled - Local)	Day	25,700	25,700	25,700	25,700
General Welder (Skilled - Local)	Day	31,300	31,300	31,300	31,300
Plumber (Skilled - Local)	Day	23,500	23,500	23,500	23,500
Painter (Skilled - Local)	Day	29,200	29,200	29,200	29,200
Scaffolder (Skilled - Local)	Day	27,900	27,900	27,900	27,900
Electrician (Semi-skilled - Local)	Day	25,700	25,700	25,700	25,700

Data Sources: Market sources

Exclusions: • Plant and Equipment • Transport • Wastage • Overheads and Profit • Import Tax • Value Added Tax (VAT)

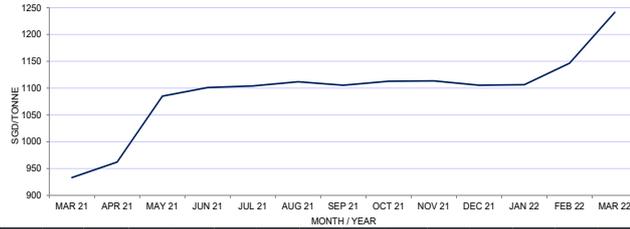
Notes: All labour rates stated above are only applicable for building construction projects in Tokyo.



Dyson Headquarters, Singapore

COMMODITY PRICE TRENDS

STEEL REINFORCEMENT (16 - 32MM HIGH TENSILE) SUPPLY PRICES



AVG 1Q'22/ 4Q'21 CHANGE	MAR 21	APR 21	MAY 21	JUN 21	JUL 21	AUG 21	SEP 21	OCT 21	NOV 21	DEC 21	JAN 22	FEB 22	MAR 22
4.9%	933	962	1085	1101	1104	1112	1105	1113	1113	1106	1106	1146	1242

Steel	4.9%	↑											
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Data Source: BCA
 Note: Prices of rebar other than 16-32mm dimensions may be subject to surcharge.
 With effect from Jan 2015, the market prices of rebar (without cut & bend) are based on fixed price supply contracts with contract period 1 year or less.

CRUDE OIL PRICES

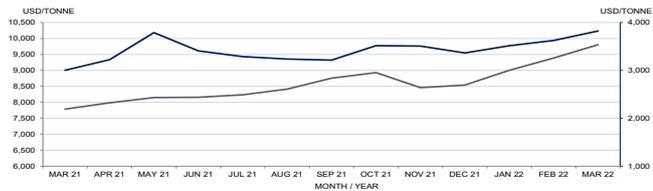


AVG 1Q'22/ 4Q'21 CHANGE	MAR 21	APR 21	MAY 21	JUN 21	JUL 21	AUG 21	SEP 21	OCT 21	NOV 21	DEC 21	JAN 22	FEB 22	MAR 22
23.4%	64	63	66	72	73	69	73	82	80	73	84	94	112

Crude Oil	23.4%	↑											
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Data Source: IndexMundi

METAL PRICES



AVG 1Q'22/ 4Q'21 CHANGE	MAR 21	APR 21	MAY 21	JUN 21	JUL 21	AUG 21	SEP 21	OCT 21	NOV 21	DEC 21	JAN 22	FEB 22	MAR 22
3.0%	9005	9336	10184	9612	9434	9357	9323	9776	9764	9548	9773	9939	10236

Copper	3.0%	↑											
Aluminium	18.2%	↑											

Data Source: London Metal Exchange (LME)

CURRENCY EXCHANGE RATES

CURRENCY	UNITS PER USD							
	UNIT	OCT 21	NOV 21	DEC 21	JAN 22	FEB 22	MAR 22	
Singapore Dollar	\$ SGD	1.35	1.36	1.37	1.35	1.35	1.36	
Euro	€ EUR	0.86	0.88	0.88	0.88	0.88	0.91	
U.K. Pound Sterling	£ GBP	1.073	0.74	0.75	0.74	0.74	0.76	
Australian Dollar	\$ AUD	1.35	1.37	1.40	1.39	1.40	1.36	
Chinese Yuan	¥ CNY	6.41	6.39	6.37	6.36	6.34	6.34	
Malaysian Ringgit	RM MYR	4.16	4.17	4.22	4.19	4.19	4.20	
Philippine Peso	₱ PHP	50.76	50.53	50.22	51.24	51.28	52.07	
Japanese Yen	¥ JPY	100	113	114	114	115	119	
Myanmar Kyat	₹ MMK	1,000	1.87	1.77	1.76	1.76	1.76	
Cambodian Riel	ₛ KHR	1,000	4.03	4.02	4.03	4.03	4.01	
Indonesian Rupiah	₹ IDR	1,000	14.18	14.27	14.36	14.32	14.34	
Vietnamese Dong	₫ VND	1,000	22.73	22.65	22.91	22.71	22.85	

Data Sources: IMF, Oanda
 Note: Exchange rates above are expressed in terms of currency units per US Dollar; averaged monthly from daily unit rates.

CONSTRUCTION PRICES IN THE REGION

DEVELOPMENT TYPE	Singapore		Ho Chi Minh City	Jakarta	Kuala Lumpur	Yangon	Manila	Tokyo
	SGD/m2 CFA	SGD/m2 GFA	VND ('000)/m2	IDR ('000)/m2	MYR/m2	MMK ('000)/m2	PHP/m2	JPY ('00)/m2
OFFICE								
Good Quality, 10 to 25 storeys	2,400 - 3,900	3,180 - 4,850	25,360 - 27,760	10,570 - 10,920	1,900 - 2,600	1,720 - 2,450	27,530 - 47,830	3,670 - 6,030
Good Quality, 26 to 40 storeys	3,200 - 4,550	4,240 - 5,660	26,600 - 25,310	12,740 - 13,160	2,300 - 3,400	1,800 - 2,570	34,600 - 54,210	3,790 - 6,730
Prestige, 10 to 25 storeys	3,350 - 4,150	4,430 - 5,190	27,570 - 30,150	15,690 - 16,210	2,700 - 3,700	2,320 - 2,950	54,690 - 79,600	2,230 - 3,520
Prestige, 26 to 40 storeys	3,400 - 4,700	4,760 - 6,120	28,930 - 30,630	18,790 - 19,410	3,000 - 4,200	2,440 - 3,100	74,330 - 136,360	2,340 - 3,690
HOTEL								
(including FF&E)				(including FF&E)			(including FF&E)	
Three Star	3,950 - 4,400	4,860 - 5,710	27,250 - 32,030	15,060 - 15,560	2,700 - 3,900	2,890 - 3,910	67,630 - 82,720	3,080 - 3,810
Four Star	4,300 - 5,350	5,680 - 7,030	34,900 - 37,610	22,010 - 22,730	4,000 - 5,400	3,320 - 4,450	83,230 - 108,120	3,910 - 4,740
Five Star	5,150 - 6,650	6,510 - 8,830	38,780 - 42,290	22,800 - 23,550	5,500 - 8,500	3,910 - 4,940	109,140 - 256,020	5,600 - 7,730
COMMERCIAL								
Retail/ Shopping Mall	2,400 - 4,050	3,730 - 5,580	22,470 - 26,420	12,080 - 12,480	2,500 - 3,800	2,810 - 3,260	45,190 - 61,510	2,420 - 4,070
RESIDENTIAL								
Good Quality Condominium	3,050 - 3,850	4,070 - 5,270	17,370 - 18,360	12,920 - 13,350	2,000 - 3,200	2,050 - 2,790	38,310 - 49,650	2,070 - 3,100
Luxury Condominium	3,850 - 5,300	5,270 - 7,440	18,830 - 23,250	17,820 - 18,410	2,800 - 4,800	2,220 - 3,010	61,810 - 106,080	3,410 - 4,800
INDUSTRIAL								
Warehouse	1,400 - 2,050	NA	7,210 - 8,980	6,010 - 6,530	1,200 - 1,900	690 - 800	49,570 - 133,620	1,240 - 2,270
Factory	1,750 - 2,400	NA	7,550 - 9,360	6,520 - 7,200	1,400 - 2,500	720 - 880	52,220 - 191,760	2,400 - 4,430
CAR PARK								
Multi Storey	880 - 1,550	NA	8,930 - 13,750	5,460 - 5,640	800 - 1,300	770 - 1,090	28,560 - 40,700	1,160 - 2,140
Basement, outside CBD	1,800 - 2,650	NA	16,540 - 23,720	8,420 - 8,700	1,400 - 3,000	1,480 - 1,880	32,330 - 63,040	NA
Basement, CBD	1,830 - 2,700	NA	18,350 - 25,850	9,030 - 9,340	1,800 - 4,000	1,650 - 2,080	32,330 - 63,040	NA

Source: RLB and its affiliates

Notes

Construction Floor Area (CFA) - The area of all building enclosed covered spaces measured to the outside face of external walls including covered basement and above ground car park areas.

Rates are in local currency per square metre of CFA as described above unless otherwise stated.

All construction prices stated herein are as at 1st Quarter 2022, and include a general allowance for foundation, car park, external works and preliminaries. The price ranges herein are indicative and due consideration should be given to the impact of varying design, specifications, size, location and nature of each project when utilising this information. Prices described here may not fully reflect the extent of current market forces and tendering conditions on any specific project.

Phnom Penh construction prices are not available in this issue.

Separate construction prices for external works within project development for Malaysia: 350,000-550,000 MYR/acre

Construction prices for Tokyo has been advised by courtesy of Sato Facilities Consultants, Inc., Japan. Enquiries can be directed to Takayoshi SATO at askstfc@sfc-net.co.jp

Exclusions:

• Land cost • Legal and professional fees • Development charges • Authority fees • Finance costs • Loose furniture, fittings and works of art (unless otherwise stated) • Tenancy work • Site infrastructure work in master development • Diversion of existing services • Green Mark/ LEED/ green building cost premiums • Resident site staff cost • Models and prototypes • Future cost escalation • Service Provider Fees • Taxes, including Goods and Services Tax/ Value Added Tax (VAT)/ Import Tax

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The Grand Ho Tram, Vietnam

PROFESSIONAL SERVICES

RIDER LEVETT BUCKNALL (RLB) is an independent, global property and construction practice with over 4,000 people in more than 140 offices across Asia, Oceania, Europe, Middle East, Africa and the Americas. RLB serve major local and international clientele in Singapore and regionally. Our global expertise and significant project experience provide comprehensive services and solutions to the development and construction of the built environment, extending to building and civil infrastructure, commercial, residential and hospitality buildings, healthcare, industrial and civil engineering projects.

As a multi-disciplinary group, RLB offers a full range of services required by clients in the property and construction industry, ranging from cost consultancy and quantity surveying, project management, advisory services and market research. RLB Research's expertise in economic and market studies, industry participation and research publications position us as the choice consultant for research advice on construction cost trends and market updates for the Singapore and regional construction markets. The extensive range of professional consultancy provided by RLB covers the following core services:

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