

28 DECEMBER 2021

SPOTLIGHT ON THAILAND

World news

- CDC shortens recommended Covid-19 isolation and quarantine time
- The latest on coronavirus pandemic and Omicron variant
- France announces tighter Covid restrictions amid Omicron surge
- No new Covid rules in England before new year – Javid
- Covid flight cancellations delay holiday travel
- Estimate of the effective reproduction rate (R) of COVID-19
- The reproduction rate represents the average number of new infections caused by a single infected individual. *(If the rate is greater than 1, the infection is able to spread in the population. If it is below 1, the number of cases occurring in the population will gradually decrease to zero.)*
- Covid-19 by variant
- Weekly new hospital admission for Covid-19 per million people

Economics

- COVID-19 cases as of Dec globally reaches 281,062,283 with new 429,360 cases and 3,428 new deaths. There are 24,959,457 currently infected patients, with 88,469 (0.4%) cases in serious condition.
- Health officials outline likely scenarios as Omicron spreads, New cases projected at 10,000-30,000 a day, with 70-180 deaths
- Indonesia building medical tourism hospital in Bali
- Commerce Ministry puts 2022 export growth at 3-4%
- Work-from-home policy continues amid Omicron
- Tourism fears mount over Omicron, State says cases could reach 30,000 a day
- Minister suggests arrivals unlikely to meet forecast

Corporate News

- Sales tax seen hitting SET liquidity
- Electric motorcycle trial gets underway, Taxi drivers conduct test of Egat's EVs
- Bitcoin mining entry triggers a 6,700% surge in Thai tech stock
- Global M&A Activity Likely to Remain Strong in 2022
- US retail sales up 8.5% this holiday season

Indices	Index as of 27-Dec-21	Change -1D (%)	Change YTD (%)	Net Foreign YTD (USD m)
Thailand SET	1,637	(0.0)	12.9	(2,098)
China SHCOMP	3,616	(0.1)	4.1	
Hong Kong HSI	Closed	0.1	(14.7)	
India SENSEX	57,420	0.5	20.2	3,836
Indonesia JCI	6,575	0.2	10.0	2,653
Korea KOSPI	3,000	(0.4)	4.4	(22,784)
MY FBMKLCI	1,534	1.2	(5.7)	
PH PCOMP	7,255	1.0	1.6	(18)
SG FSSTI	3,104	(0.1)	9.2	
Taiwan TWSE	18,049	0.5	22.5	(17,383)
VN VNINDEX	1,489	0.8	34.9	(2,758)
MSCI Emerging	Closed	0.1	(5.5)	
Nikkei 225	28,676	(0.4)	4.5	
FTSE 100	Closed	(0.0)	14.1	
CAC 40	7,140	0.8	28.6	
DAX	15,835	0.5	15.4	
Dow Jones	36,302	1.0	18.6	
Nasdaq	15,871	1.4	23.1	
S&P 500	4,791	1.4	27.6	
Brent	78.82	3.5	52.2	
Dubai	73.60	(0.7)	46.5	
WTI	75.84	2.8	56.3	
GOLD	1,811.34	0.1	(4.6)	

Trade data	Buy	Sell	Net	Share (%)
(THB m)	(THB m)	(THB m)	(THB m)	(THB m)
Foreign	20,789	19,387	1,402	39
Retail	21,804	21,409	395	42
Prop Trade	5,923	5,827	95	11
Local Institution	2,964	4,857	(1,893)	8
Total Trade	51,480	51,480	0	100

Rates	Last close 12/27/2021	1M ago 11/29/2021	End last yr 12/31/2020	1yr ago 12/28/2020
THB/USD	33.58	33.68	29.95	30.17
Inflation *	2.71	2.38	(0.27)	(0.41)
MLR **	5.31	5.31	5.31	5.31
1Y Fixed *	0.43	0.43	0.49	0.49
Govt bond 10Y	1.94	1.93	1.32	1.34

Commodity	Last close 12/24/2021	1M ago 11/26/2021	End last yr 12/31/2020	1yr ago 12/24/2020
(USD/bbl)				
Brent	76.14	72.72	51.80	51.29
Dubai	74.12	76.04	50.23	50.57
WTI	73.79	68.15	48.52	48.23
Gold	1,810	1,785	1,898	1,874
Baltic Dry	2,219	2,767	1,366	1,366
(USD/ton)	24-Dec-21	17-Dec-21	25-Dec-20	25-Dec-20
Coal	195.29	185.21	84.45	84.45
% change	5.4	24.0	131.2	131.2

* chg y-y% last at end of most recent month end; *** Avg of 4 major banks;

Sources: Bloomberg, except coal from BANPU

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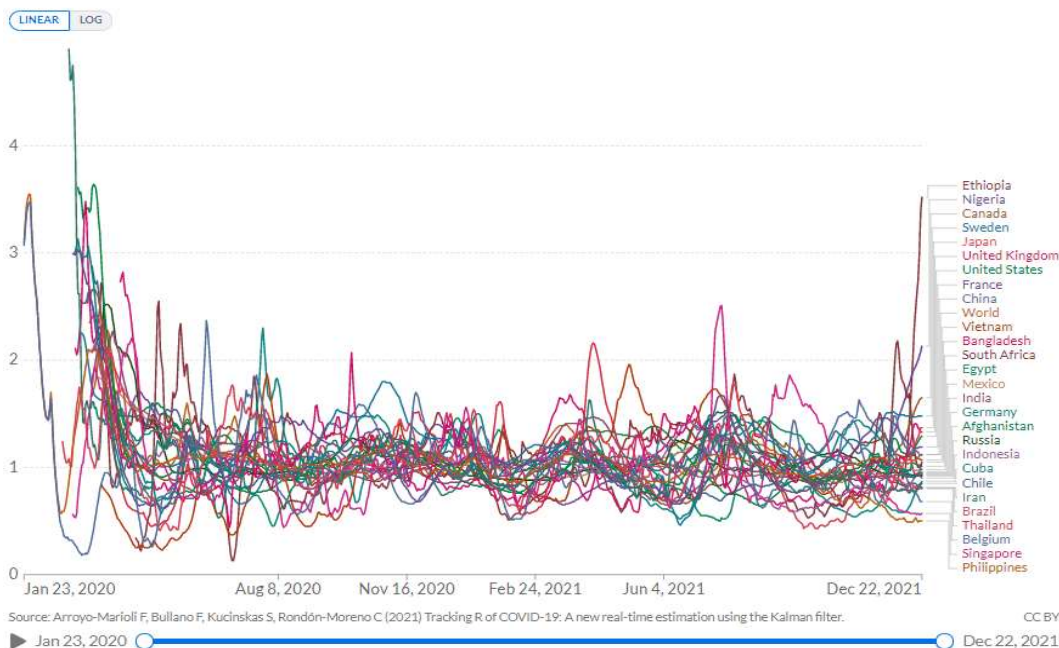
World News

- CDC shortens recommended Covid-19 isolation and quarantine time** CNN: The US Centers for Disease Control and Prevention on Monday shortened the recommended times that people should isolate when they've tested positive for Covid-19 from 10 days to five days if they don't have symptoms -- and if they wear a mask around others for at least five more days. "The change is motivated by science demonstrating that the majority of SARS-CoV-2 transmission occurs early in the course of illness, generally in the 1-2 days prior to onset of symptoms and the 2-3 days after. Therefore, people who test positive should isolate for five days and, if asymptomatic at that time, they may leave isolation if they can continue to mask for five days to minimize the risk of infecting others."
- The latest on coronavirus pandemic and Omicron variant** CNN Live update: - The US Centers for Disease Control and Prevention shortened its recommended isolation time for those who test positive to Covid-19 from 10 days to 5 days if they don't have symptoms. More than 2,000 flights have been canceled globally today as more airline staff and crew are calling out sick as the Omicron variant spreads. Meanwhile, Chinese authorities are disinfecting an entire city of 13 million people as Covid-19 cases continue to rise. CDC data shows that fully vaccinated: 61.8% of the total US population (all ages) – more than 205 million people. Not vaccinated: 22.4% of the eligible population (age 5+) have not received any dose of Covid-19 vaccine – at least 66 million people. About 66 million people have received an additional dose, or booster
- France announces tighter Covid restrictions amid Omicron surge** BBC: France has announced tighter Covid restrictions amid concerns over the Omicron variant. From 3 January, remote working will become compulsory for those who can and public gatherings will be limited to 2,000 people for indoor events. The news comes as France recorded more than 100,000 new infections on Saturday - the highest number reported in the country since the pandemic began. But the prime minister stopped short of implementing a New Year's Eve curfew.
- No new Covid rules in England before new year – Javid** There will be no further Covid restrictions in England before the new year, Sajid Javid has said. But the health secretary said people should "remain cautious" and celebrate outside on New Year's Eve if possible. Prime Minister Boris Johnson said ministers would continue to monitor the data and urged people to get their "first, second or booster jab without delay". Meanwhile, both England and Scotland reported record cases over Christmas. Some 113,628 new infections were reported in England on 25 December, 103,558 on 26 December and 98,515 on 27 December. Provisional data for Scotland for the same three days showed there were 8,252 cases on Christmas Day, with 11,030 the following day and 10,562 on Monday. Only partial Covid data for the UK has been published over the Christmas period, and full figures will be released later this month.
- Covid flight cancellations delay holiday travel** BBC: There have been more Covid-related flight cancellations globally as the week starts, capping off a miserable festive period for thousands of people. More than 2,200 flights have been scrapped on Monday, with Chinese and US destinations being the worst hit, the FlightAware data tracking website says. US airlines say the disruption is due to crews testing positive or isolating. Hong Kong is banning all South Korea's Korean Air flights for two weeks, after positive cases among some arrivals. In all, more than 8,000 flights have been grounded over the long Christmas weekend that began on Friday. Although the number of cancellations is a small percentage of the total, it is higher than normal and comes at a time of year when many are travelling to spend time with family and friends. In a separate development, US authorities are monitoring dozens of cruise ships hit by Covid cases while sailing in the country's waters, with several of them reportedly denied port in the Caribbean, AFP news agency reports.

Estimate of the effective reproduction rate (R) of COVID-19

The reproduction rate represents the average number of new infections caused by a single infected individual. If the rate is greater than 1, the infection is able to spread in the population. If it is below 1, the number of cases occurring in the population will gradually decrease to zero.

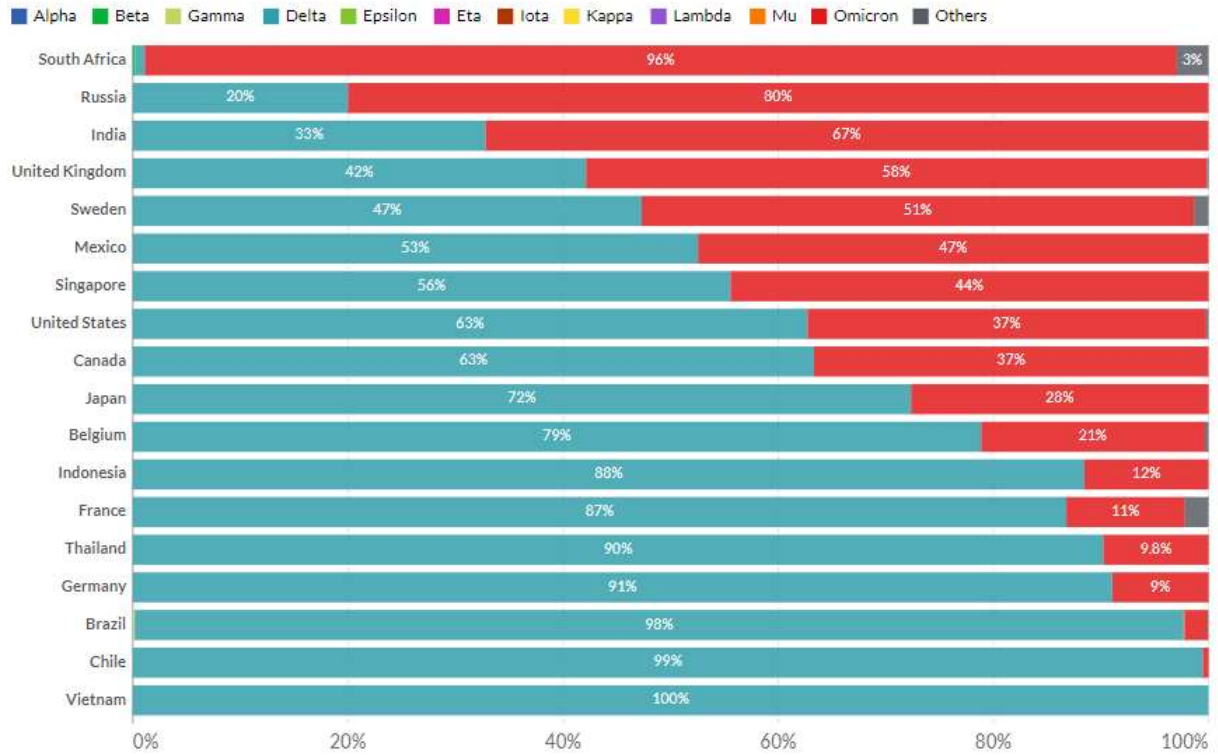
Our World
in Data



SARS-CoV-2 sequences by variant, Dec 27, 2021

The share of analyzed sequences in the preceding two weeks that correspond to each variant group.

Our World in Data



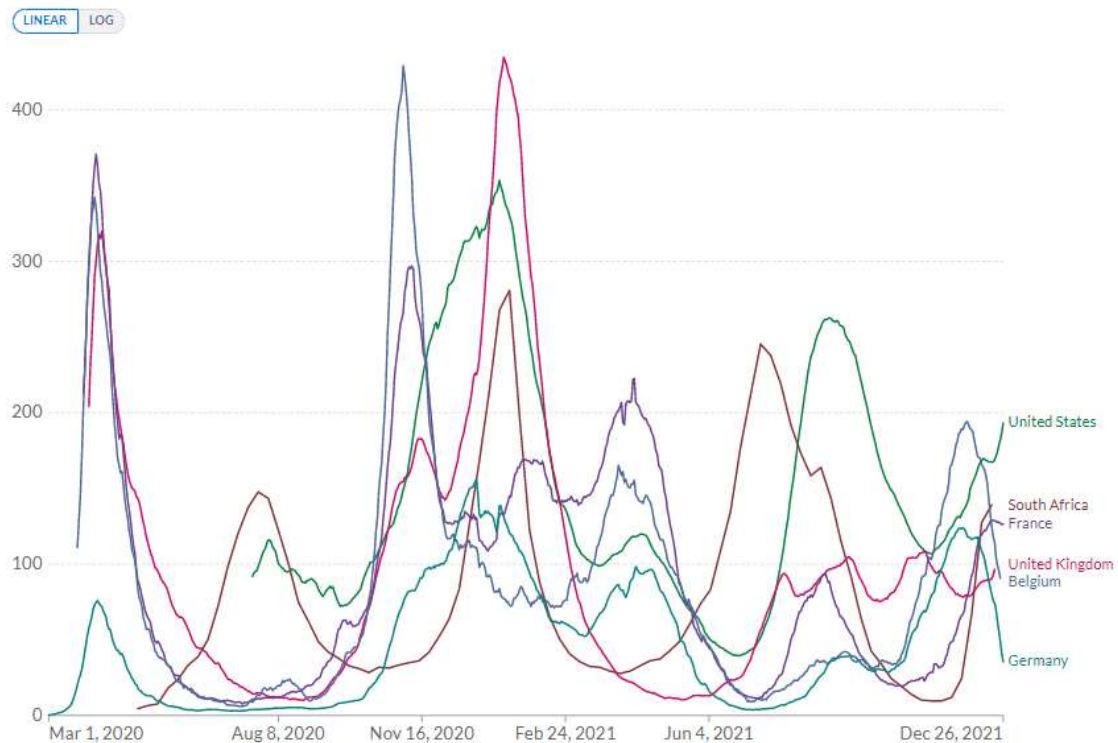
Source: CoVariants.org and GISAID
 Note: This share may not reflect the complete breakdown of cases, since only a fraction of all cases are sequenced. Recently-discovered or actively-monitored variants may be overrepresented, as suspected cases of these variants are likely to be sequenced preferentially or faster than other cases.

May 11, 2020 Dec 27, 2021

Weekly new hospital admissions for COVID-19 per million people

Weekly admissions refer to the cumulative number of new admissions over the previous week.

Our World in Data



Source: Official data collated by Our World in Data

Mar 1, 2020 Dec 26, 2021

Economic news

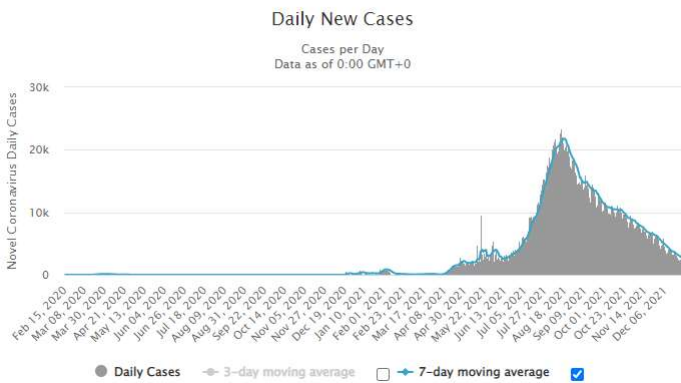
- COVID-19 cases as of Dec globally reaches **281,062,283** with new 429,360 cases and 3,428 new deaths. There are 24,959,457 currently infected patients, with 88,469 (0.4%) cases in serious condition.

Exhibit 1: Top 25 countries by new cases

Country	Total Cases	New Cases	Total Deaths	New Deaths
World	281,062,283	429,360	5,420,352	3,428
1 UK	12,209,991	98,515	148,003	143
2 USA	53,357,090	75,822	838,123	109
3 Italy	5,678,112	30,810	136,753	142
4 Turkey	9,333,223	26,099	81,733	157
5 Russia	10,415,230	23,210	305,155	937
6 Germany	7,027,008	17,374	111,291	210
7 Denmark	715,133	15,525	3,217	7
8 Vietnam	1,666,545	14,872	31,418	204
9 Netherlands	3,076,442	11,432	20,728	12
10 Australia	312,086	10,126	2,197	7
11 Greece	1,084,153	9,284	20,496	67
12 Hungary	1,245,319	7,989	38,743	436
13 Ireland	722,461	6,735	5,890	
14 Portugal	1,286,119	6,334	18,890	16
15 India	34,799,241	5,908	480,018	21
16 Poland	4,054,865	5,029	94,365	38
17 Switzerland	1,257,306	4,678	12,189	7
18 S. Korea	611,670	4,207	5,300	55
19 South Africa	3,417,318	3,778	90,829	15
20 Finland	234,041	3,649	1,523	16
21 Malaysia	2,743,936	2,757	31,369	35
22 Thailand	2,212,407	2,437	21,598	18
23 Jordan	1,054,892	2,024	12,518	31
24 Czechia	2,447,758	2,011	35,805	22
25 Iran	6,186,729	1,967	131,434	34

Source: worldometers.info

Daily New Cases in Thailand



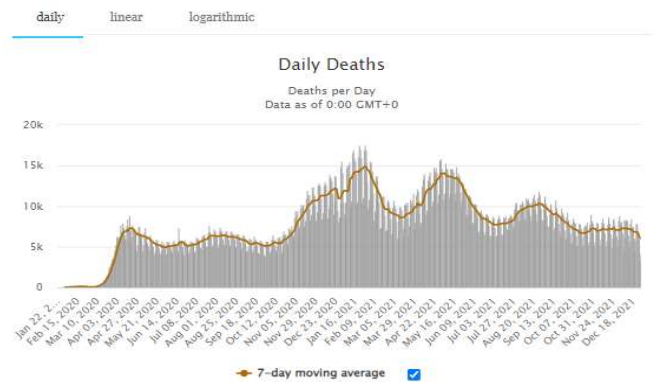
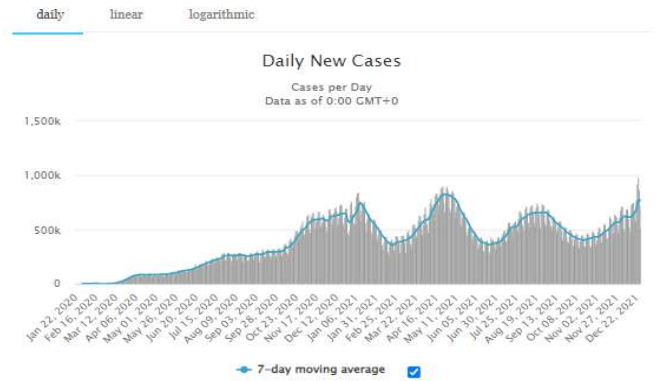
สรุปข้อมูลการฉีดวัคซีนโควิด-19 ของไทย
ณ วันที่ 26 ธันวาคม 2564

เข็มที่	จำนวน	% ประชากร
เข็มที่ 1	51,016,858 โดส	77.1
เข็มที่ 2	45,379,446 โดส	68.6
เข็มที่ 3	6,165,027 โดส	9.3

ฉีดวัคซีนแล้ว 102,561,331 โดส

Chart or other exhibit

Exhibit 2: Global by new cases and deaths



Source: worldometers.info

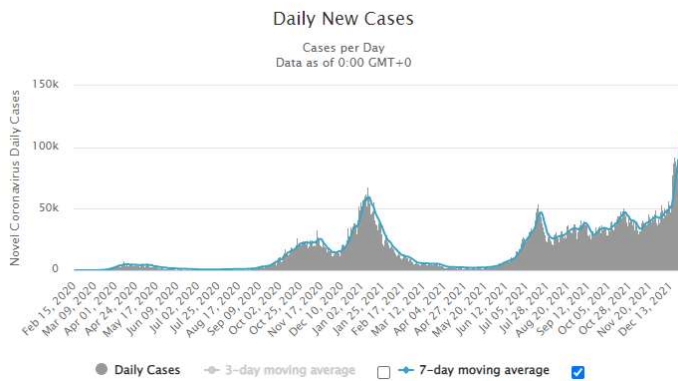
Daily New Deaths in Thailand



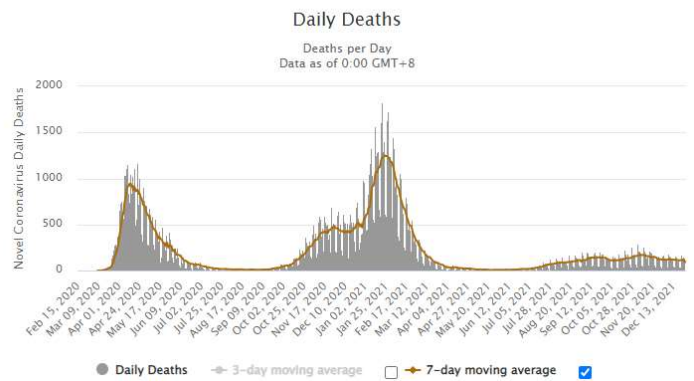
แผนจัดหาและสั่งมอบวัคซีน

Sinovac (ส่งมอบแล้ว 30.5 ล้านโดส) Sinopharm (ส่งมอบแล้ว 21 ล้านโดส)
 Sinovac และ Sinopharm (2.7 ล้านโดส)
 AstraZeneca 61 ล้านโดส (ส่งมอบแล้ว 4.73 ล้านโดส)
 ภูมิจนุวัคซีน AZ (2.04 ล้านโดส) UK วัคซีน AZ (0.42 ล้านโดส)
 เทกซ์โก้ วัคซีน AZ (0.47 ล้านโดส) ภูฏาน วัคซีน AZ (ส่งมอบแล้ว 0.15 ล้านโดส)
 ลอว์รี่ วัคซีน AZ (0.12 ล้านโดส) เวียดนาม วัคซีน AZ (0.35 ล้านโดส)
 สเปน ซิโด AZ (0.61 ล้านโดส) สิงคโปร์ ซิโด AZ (0.4 ล้านโดส)
 โดสนัด วัคซีน PF (0.1 ล้านโดส)
 USA วัคซีน Pfizer (1.5 ล้านโดส) Moderna (1 ล้านโดส) | J&J 5 ล้านโดส
 Pfizer 30 ล้านโดส (ส่งมอบแล้ว 20 ล้านโดส) | Moderna 5 ล้านโดส (2 ล้านโดส)
 ภัณฑาคารวัคซีนที่กระทรวงสาธารณสุขจัดซื้อไว้รวมทั้งหมด 120 ล้านโดสภายในปี 65

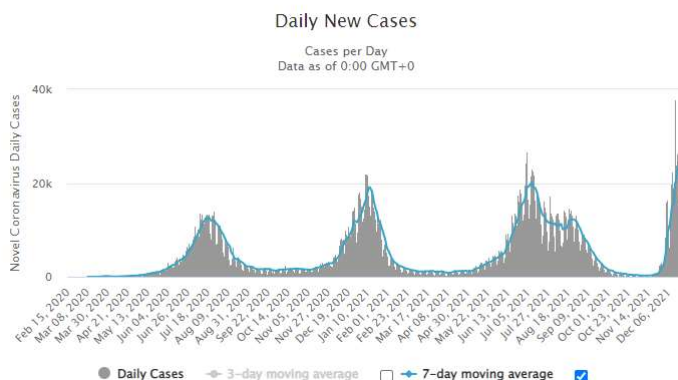
Daily New Cases in the United Kingdom



Daily New Deaths in the United Kingdom



Daily New Cases in South Africa



Daily New Deaths in South Africa

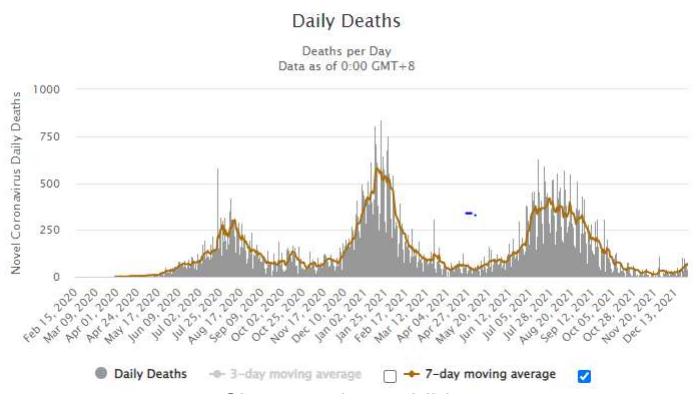


Chart or other exhibit

- Health officials outline likely scenarios as Omicron spreads, New cases projected at 10,000-30,000 a day, with 70-180 deaths** BANGKOK POST: New Covid-19 infections could surge to 10,000 or even 30,000 cases a day early next year, driven by the highly contagious Omicron variant, a senior Public Health Ministry official said on Monday. The warning was issued as the number of new Omicron cases soared five-fold, from 104 on Tuesday to 514 on Sunday. The ministry has drawn up three possible scenarios, permanent health secretary Kiattiphum Wongrajit said. In the best-case scenario, the country could be looking at 10,000 new patients and 70 fatalities a day as early as late January, and 15,000 new cases and 100 deaths in the second-best projection. In the worst-case scenario, the figures could jump to 30,000 new cases and 180 deaths a day if Omicron infections quickly spike. Graphs presented at the briefing showed the daily tally of new Omicron infections peaking in late January or early February in the best and second-best scenarios.
- Indonesia building medical tourism hospital in Bali** BANGKOK POST: Indonesia is building a hospital that will be run in partnership with US-based Mayo Clinic as part of a bid to recoup \$7 billion in outbound medical tourism. President Joko Widodo seeks to bring in wealthy Indonesians and foreign visitors to the Bali International Hospital, which will start operating in mid-2023, he said at the groundbreaking event on Monday. The facility is being built in the Sanur area known for its white sand beaches. About 2 million Indonesians travel to countries such as Singapore, Malaysia, Japan and the US for medical treatment each year due to a lack of trust and limited capacity in the local health system. That results in 97 trillion rupiah (\$7 billion) of annual losses for the country, said Jokowi, as the president's known. The hospital will be part of his broader bid to reduce imports of drugs, raw pharmaceutical material, as well as health equipment and services.
- Commerce Ministry puts 2022 export growth at 3-4%** BANGKOK POST: The Commerce Ministry has set the export growth target at only 3-4% for next year, slightly lower than projections by private organisations, citing a spate of persistent risk factors such as prolonged Covid-19 outbreaks, stiffer measures for public health and the environment and a shortage of labour and semiconductors. Commerce Minister Jurin Laksanawisit said the 3-4% growth target for next year from an estimated US\$268.3 billion this year, up 16% from a year before, is based on a warning by the Organisation for Economic Co-operation and Development (OECD) that a renewed wave of the pandemic threatens to add to the existing pressure on the world economy from persistently high levels of inflation. The Paris-based organisation said if the Omicron variant takes a more severe turn, it could also force governments to reimpose tighter mobility restrictions, hurting demand for goods and services, leading to a sharp fall in economic activity and lower inflation, similar to the earliest phase of the pandemic. The OECD predicted in its updated economic outlook the world's economy will expand by 5.6% this year, down from an earlier forecast of 5.7%. Its forecast for 2022 remains unchanged at 4.5%, but the report was released only days after Omicron was detected.
- Work-from-home policy continues amid Omicron** BANGKOK POST: Businesses have decided to postpone a plan to lift their work-from-home policy due to the surge in Covid-19 infections linked with the Omicron variant, says the Federation of Thai Industries (FTI). About 16% of new infections in Thailand were proven to be cases of the Omicron coronavirus, said the

Public Health Ministry over the weekend, referring to the latest random sample. Some companies resumed 100% work at offices while others adopted a hybrid approach with employees told to work at home on some weekdays. The federation expects this highly infectious variant not to seriously affect the export sector, currently a major engine driving GDP. It believes exports will continue to grow next year as exporters still receive new orders. The Thai National Shippers' Council earlier predicted exports may grow by up to 8% next year, driven by an economic recovery in partner trading countries.

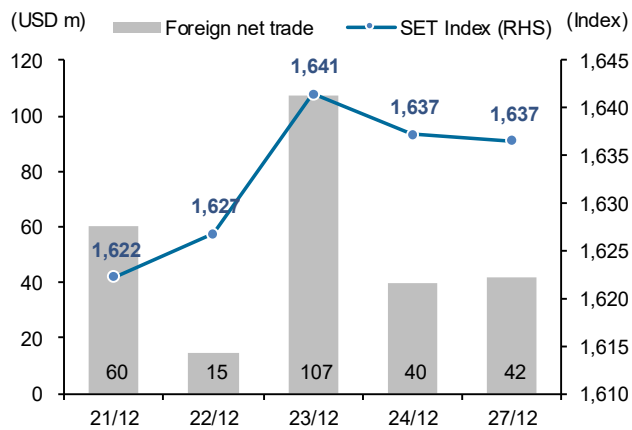
- **Tourism fears mount over Omicron, State says cases could reach 30,000 a day** BANGKOK POST: Tourism operators are losing hope in both the New Year and Chinese New Year holidays as the Public Health Ministry forecasts a worst-case scenario of over 30,000 Omicron infections per day in the first quarter. Mr Sisdivachr said the new scenario means the tourism industry is unlikely to reap benefits from the Chinese New Year holiday, which next year will start in early February. According to the Public Health Ministry, if the Covid-19 variant spreads widely and rapidly, the best-case scenario might see 10,000 new cases on average by mid-February, but in the worst-case scenario, the number of cases might reach over 30,000 per day. The viral situation in Thailand, when Delta was the dominant strain, peaked in August with a record daily high of 23,418 infections.
- **Minister suggests arrivals unlikely to meet forecast** BANGKOK POST: The number of international tourists next year might be lower than the Finance Ministry's forecast because of the impact of the Omicron coronavirus variant, said Finance Minister Arkhom Termpittayapaisith. The ministry projects seven million foreign tourist arrivals next year, up from the forecast of 200,000 for this year. There were around 40 million tourist arrivals in 2019. Last week the Bank of Thailand's Monetary Policy Committee said it reduced its foreign tourist arrival outlook for 2022 from 6 million to 5.6 million, in line with the central bank's existing assessment regarding downside risks for tourism amid higher uncertainties for an outbreak. Arrivals should gradually improve in the second half of next year.

Corporate news

- **Sales tax seen hitting SET liquidity** BANGKOK POST: Concerns are being expressed that market competitiveness will be a casualty of the planned taxation on share sales, write Nuntawun Polkuamdee and Wichit Chantanusornsiri. The planned taxation on share sales may cost the Stock Exchange of Thailand (SET) the title of the most liquid stock market in Asean next year as it will greatly decrease the market's competitiveness, said Paiboon Nalinthrangkurn, chairman of the Federation of Thai Capital Market Organizations (Fetco). The tax will raise both transaction costs for investors and fundraising costs for Thai companies, and consequently propel investors to seek higher returns in other markets, he said. Mr Paiboon said the taxation rate of 0.1% is quite high as it is equal to the stock trading commission fee. When combined, the total cost of stock trading will edge close to 0.2% of transaction value and may drive speculative and short-term investors, including investors with high frequency trading that are mostly foreign investors who trade with programs to seek other markets with lower costs. The migration of these foreign investors and speculators will cause the Thai bourse's daily turnover to decline from the current level which now stands at 90 billion baht per day.
- **Electric motorcycle trial gets underway, Taxi drivers conduct test of Egat's EVs** BANGKOK POST: The state-owned Electricity Generating Authority of Thailand (Egat) has begun piloting its electric motorcycles among motorcycle taxi drivers in a fresh move to help the government reduce carbon dioxide emissions in the country. Officials yesterday handed over 51 motorcycles, each with a replaceable 3-kilowatt battery, to motorcycle taxi drivers at nine motorcycle taxi ranks located near Egat's headquarters in Nonthaburi. Egat has spent 21 million baht on rolling out the electric motorcycle project. Each motorcycle costs 84,000 baht, with a battery worth 40,000 baht. The electric motorcycle trial will be conducted for one year in cooperation with King Mongkut's University of Technology North Bangkok, said Egat governor Boonyanit Wongrukmit.
- **Bitcoin mining entry triggers a 6,700% surge in Thai tech stock** BANGKOK POST: A world-beating share rally by a Thai technology company after it unveiled an expansion into Bitcoin mining has surprised even the firm's chairman. Jasmine Technology Solution Plc stock has more than tripled since the plan was announced in late July, although the cryptocurrency project has yet to generate significant earnings for the firm. Year-to-date, the share surge is nearly 7,000%, most among global tech companies with a market value of at least \$2 billion, according to data compiled by Bloomberg. "The strong response from investors has exceeded our expectations," Chairman Soraj Asavaprapha said in an interview. "There's bullish optimism toward our new direction even though this is just the beginning." Jasmine Technology is just one of many Thai firms diversifying into the digital-asset arena. Consumer-appliance maker AJ Advance Technology Plc this month announced its inaugural investment in Bitcoin mining. Siam Commercial Bank Plc and Kasikornbank Plc have also taken stakes in cryptocurrency startups. Jasmine Technology has generated only eight Bitcoins from its 325 mining machines since operations were started a few months ago. Mr Soraj expects next year to be much more active, driven by plans to invest about 3.3 billion baht in as many as new 7,000 devices. Revenue from the mining business will account for about 80% of the company's total turnover by late 2022, he said.
- **Global M&A Activity Likely to Remain Strong in 2022** BANGKOK POST: Deal making in 2021 hit record levels, fueled by low interest rates, private fundraising and revamped corporate strategies; advisers see few factors to slow the pace in the new year - Companies are gearing up for another banner year for deal making. Mergers and acquisitions hit a record in 2021, fueled by low interest rates, a surge in private-equity fundraising and companies' efforts to respond to broader shifts in their industries. The total value of global M&A transactions through Dec. 21 was \$5.7 trillion, up 64% from the same period a year before, according to Refinitiv, a data provider. The total number of deals, meanwhile, rose 22% during that period, to 59,748, it said. Many of the factors that propelled deal making in 2021 are expected to continue into next year, M&A lawyers and advisers said.

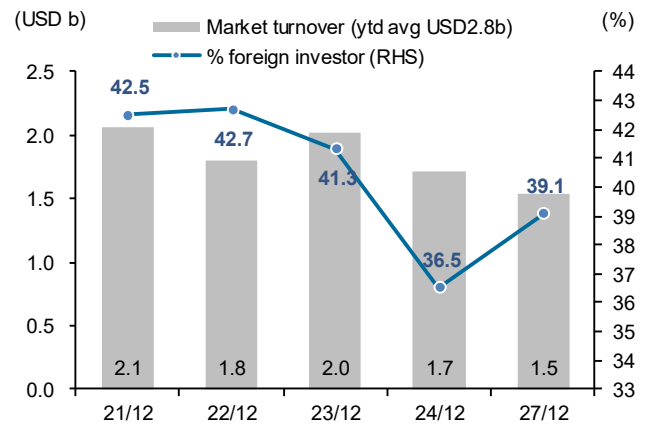
- **US retail sales up 8.5% this holiday season** BANGKOK POST: WASHINGTON - US consumers were in the mood to spend this holiday season, with retail sales soaring 8.5% over last year, a study released Sunday showed. Online sales were up 11% and in-store sales up 8.1% between Nov 1 and Christmas Eve, according to the Mastercard SpendingPulse study. The increase, which was the strongest in 17 years, does not reflect automobile sales. "Consumers splurged throughout the season," said Steve Sadove, senior advisor for Mastercard and former CEO of Saks Incorporated. The boom saw "apparel and department stores experiencing strong growth as shoppers sought to put their best dressed foot forward," he said.

Exhibit 3: Foreign fund flow and SET Index



Source: Bloomberg

Exhibit 4: Foreign participation



Source: Bloomberg

Exhibit 5: Index performance

	SET Index		Index performance (% change)									
	Index	(%chg)	Energy	Bank	Comu	Commerce	Food	Property	Construct	Transport	Petrochem	
% of SET Index			22%	9%	9%	10%	6%	6%	4%	8%	3%	
Current	1,636.50	(0.0)	0.3	(0.2)	(0.0)	(0.9)	(0.1)	(0.1)	(0.3)	(0.5)	(0.5)	
-5D	1,615.80	1.3	2.0	0.6	3.7	(2.2)	0.8	1.2	0.7	0.8	0.5	
-1M	1,610.61	1.6	3.9	0.3	7.3	(3.0)	(0.5)	3.1	(2.0)	(2.6)	2.0	
-3M	1,616.50	1.2	0.5	3.8	13.1	(4.2)	(4.6)	5.0	(5.7)	(4.2)	(5.1)	
-6M	1,579.17	3.6	3.3	15.2	32.4	0.2	(5.2)	5.4	(6.7)	(4.3)	1.2	
-1Y	1,452.67	12.7	7.9	19.2	37.2	9.0	9.2	14.3	6.8	0.2	10.3	
WTD	1,637.22	(0.0)	0.3	(0.2)	(0.0)	(0.9)	(0.1)	(0.1)	(0.3)	(0.5)	(0.5)	
MTD	1,568.69	4.3	7.0	4.9	8.4	(0.4)	2.6	5.8	1.4	1.6	5.3	
QTD	1,605.68	1.9	1.8	5.0	14.5	(4.7)	(3.9)	4.9	(5.4)	(3.0)	(5.0)	
End of 2020	1,449.35	12.9	6.8	19.0	38.6	9.1	8.8	15.2	5.5	(0.4)	9.1	

Source: Bloomberg

Exhibit 6: Trade by investor types

	SET Index		Exchange rate (USD:THB)	SET Index		Equity trading / Net position				Bond Net foreign (USD m)
	Index	Change (y-y%)		Average daily turnover (THB m)	(USD m)	Foreign (USD m)	Retail (USD m)	PropTrade (USD m)	Local Inst (USD m)	
2018	1,563.88	(10.8)	32.32	56,370	1,744	(8,913)	3,571	(478)	5,799	8,855
2019	1,579.84	1.0	31.06	52,468	1,689	(1,496)	(662)	477	1,681	(502)
2020	1,449.35	(8.3)	31.29	67,335	2,152	(8,287)	6,873	459	953	(1,005)
2021YTD	1,636.50	12.9	31.98	88,632	2,771	(2,098)	3,967	462	(2,269)	6,619
1Q21	1,587.21	41.0	30.26	93,653	3,095	(987)	1,622	129	(764)	128
2Q21	1,587.79	18.6	31.36	94,016	2,998	(1,482)	1,973	85	(574)	2,442
3Q21	1,605.68	29.8	32.92	86,406	2,625	(8)	(178)	189	97	632
4Q21	1,636.50	12.9	33.39	79,800	2,390	379	550	59	(1,028)	3,417
Jan-21	1,466.98	(3.1)	30.00	98,584	3,286	(365)	928	(31)	(533)	5
Feb-21	1,496.78	11.7	29.99	90,860	3,029	(621)	1,010	82	(470)	(154)
Mar-21	1,587.21	41.0	30.78	91,515	2,973	(1)	(316)	78	238	277
Apr-21	1,583.13	21.6	31.33	87,668	2,798	(107)	573	(12)	(453)	1,050
May-21	1,593.59	18.7	31.30	103,240	3,299	(1,061)	1,094	(42)	10	6
Jun-21	1,587.79	18.6	31.46	91,139	2,897	(314)	307	139	(131)	1,385
Jul-21	1,521.92	14.6	32.61	77,785	2,385	(522)	542	89	(110)	282
Aug-21	1,638.75	25.0	33.10	86,818	2,623	175	(798)	58	666	1,447
Sep-21	1,605.68	29.8	33.05	94,614	2,863	338	79	42	(459)	(1,097)
Oct-21	1,623.43	35.9	33.49	81,653	2,438	474	(106)	175	(542)	305
Nov-21	1,568.69	11.4	33.10	86,676	2,619	(324)	826	(214)	(288)	1,429
Dec-21	1,636.50	12.9	33.57	71,070	2,117	229	(170)	98	(198)	1,683
2021YTD	1,636.50	12.9	31.98	88,632	2,771	(2,098)	3,967	462	(2,269)	6,619
21/12/2021	1,622.25		33.68	69,245	2,056	60	(35)	8	(33)	410
22/12/2021	1,626.79		33.77	60,938	1,805	15	(13)	6	(8)	55
23/12/2021	1,641.47		33.56	67,593	2,014	107	(104)	(4)	1	29
24/12/2021	1,637.22		33.45	57,272	1,712	40	(41)	39	(37)	n/a
27/12/2021	1,636.50		33.58	51,480	1,533	42	12	3	(56)	n/a

Source: Bloomberg

Exhibit 7: Upcoming events

Date Time	Event		Survey	Actual	Prior
12/28/2021 23:00	Mfg Production Index ISIC NSA YoY	Nov	2.80%	--	2.91%
12/28/2021 23:00	Capacity Utilization ISIC	Nov	--	--	64.07
12/30/2021 02:00	BoP Current Account Balance	Nov	-\$825m	--	-\$1058m
12/30/2021 02:30	Exports YoY	Nov	--	--	17.00%
12/30/2021 02:30	Exports	Nov	--	--	\$22577m
12/30/2021 02:30	Imports YoY	Nov	--	--	20.10%
12/30/2021 02:30	Imports	Nov	--	--	\$18773m
12/30/2021 02:30	Trade Balance	Nov	--	--	\$3804m
12/30/2021 02:30	BoP Overall Balance	Nov	--	--	\$1230m
12/30/2021 02:30	Foreign Reserves	24-Dec	--	--	\$242.8b
12/30/2021 02:30	Forward Contracts	24-Dec	--	--	\$34.8b
01/03/2022 19:30	Markit Thailand PMI Mfg	Dec	--	--	50.6
01/03/2022 01/09	Consumer Confidence	Dec	--	--	44.9
01/03/2022 01/09	Consumer Confidence Economic	Dec	--	--	38.8
01/04/2022 02:30	Business Sentiment Index	Dec	--	--	48.4
01/17/2022 01/24	Car Sales	Dec	--	--	71716

Source: Bloomberg

Exhibit 8: Management trading

Company	Management	Securities	Transaction	Shares	Price (THB)	Action	Value (THBm)
Gunkul Engineering (GUNKUL)	Gunkul Dhumrongpiyawut	Common Shares	12/24/2021	95,238,000	5.25	Sell	500.00
CalComp Electronics (CCET)	Shyhyong Shen	Common Shares	12/24/2021	400,000	3.30	Buy	1.32
Charoong Thai Wire & Cable (CTW)	Mr. Hsiao-Chun Chang	Common Shares	12/23/2021	2,700	8.80	Sell	0.02
Charoong Thai Wire & Cable (CTW)	Mr. Hsiao-Chun Chang	Common Shares	12/24/2021	10,500	8.95	Sell	0.09
Jutha Maritime (JUTHA)	Sarun Phenjati	Common Shares	12/22/2021	30,100	0.78	Sell	0.02
Jutha Maritime (JUTHA)	Sarun Phenjati	Common Shares	12/23/2021	169,900	0.68	Sell	0.12
Jaymart (JMART)	Adisak Sukhumwittaya	Common Shares	12/24/2021	8,771,900	57.00	Sell	500.00
JWD Infologistics (JWD)	Nattapume Pavaratn	Common Shares	12/27/2021	100,000	20.20	Sell	2.02
Sanko Diecasting (Thailand) (SANKO)	Masami Katsumoto	Common Shares	12/24/2021	1,552,800	1.91	Sell	2.97
Demco (DEMCO)	Raksa Saranakomkul	Common Shares	12/24/2021	5,000	3.70	Sell	0.02
The Platinum Group (PLAT)	Punjaborn Chotjurangkool	Common Shares	12/24/2021	10,000,000	2.80	Buy	28.00
TKS Technologies (TKS)	Supant Mongkolsuthree	Common Shares	12/20/2021	180,000	13.60	Buy	2.45
TKS Technologies (TKS)	Supant Mongkolsuthree	Common Shares	12/23/2021	30,000	13.80	Buy	0.41
TKS Technologies (TKS)	Supant Mongkolsuthree	Common Shares	12/23/2021	120,000	15.67	Buy	1.88
Thai Rung Union Car (TRU)	Pranee Pha-Oenchoke	Common Shares	12/24/2021	250,000	5.00	Buy	1.25
Britania (BRI)	Trithip Sivakriskul	Common Shares	12/21/2021	147,000	11.00	Sell	1.62
Prime Road Power (PRIME)	Somprasong Panjalak	Common Shares	12/24/2021	53,000,000	1.90	Sell	100.70
Multibax (MBAX)	Pisut Lertwilai	Common Shares	12/24/2021	10,000	5.14	Buy	0.05
Chularat Hospital (CHG)	Kumpol Plussind	Common Shares	12/24/2021	1,000,000	3.60	Buy	3.60
Wow Factor (W)	Sirutt Ratanapaitoon	Common Shares	12/23/2021	2,790,000	3.60	Sell	10.04
Saksiam Leasing (SAK)	Woranuchanan Phongsurang	Common Shares	12/24/2021	30,000	9.70	Buy	0.29
Sirakorn (SK)	Kovit Hanhirun	Common Shares	12/27/2021	100,000	1.27	Buy	0.13
Sabuy Technology (SABUY)	Taswan Boonanan	Common Shares	12/24/2021	30,000	20.93	Sell	0.63
Siam Makro (MAKRO)	Kannika Ngamsopee	Common Shares	12/24/2021	16,000	43.50	Buy	0.70
Eastern Power Group (EP)	Yuth Chinpakkul	Common Shares	12/23/2021	257,700	5.62	Buy	1.45
Ekachai Medical Care (EKH)	Suthipong Tangsajjapoj	Common Shares	12/24/2021	10,000	7.20	Buy	0.07
Ekachai Medical Care (EKH)	Suthipong Tangsajjapoj	Warrant	12/24/2021	10,000	1.74	Buy	0.02

Source: SEC

Exhibit 9: Upcoming XM

Symbol	X-Date	Announce Date	Meeting Date	Type of Meeting	Agenda	Venue
DREIT	28/12/2021	14/12/2021	27/01/2022	EGM	To consider and approve the disposition of asset of Dusit Thani Freehold and Leasehold Real Estate Investment Trust (DREIT) in the part of Dusit D2 Chiangmai Hotel	Via Electronic Meeting (E-Meeting)
JKN	29/12/2021	16/12/2021	28/01/2022	EGM	The increase in the amount for issuance and offering of the Company's debentures	Via Electronic Meeting (E-Meeting)
HUMAN	30/12/2021	15/12/2021	01/03/2022	EGM	Capital increase,Acquisition and disposition of assets,Connected transaction, Appointment new 1 director	Via Electronic Meeting (E-Meeting)
EFORL	04/01/2022	20/12/2021	09/02/2022	EGM	Capital increase,The issuance of convertible securities,Change of par value	Via Electronic Meeting (E-Meeting)
JTS	04/01/2022	21/12/2021	22/02/2022	EGM	Acquisition and disposition of assets, Connected transaction	Via Electronic Meeting (E-Meeting)
PROEN	04/01/2022	21/12/2021	26/01/2022	EGM	The issuing and offering of debentures within the line of not exceeding 2,000 million Baht., the amendment of the objective and the amendment to Clause 3 of the Company's Memorandum of Association	At Ballroom 1, 3rd floor, the Emerald Hotel, 99/1 Ratchadaphisek Rd., Din Daeng, Huai Khwang, Bangkok 10400
GRAND	06/01/2022	20/12/2021	03/02/2022	EGM	Capital increase,The issuance of convertible securities,Change of par value	Via Electronic Meeting (E-Meeting)
7UP-W4	10/01/2022	22/12/2021	25/01/2022	Others	To consider the amendment of terms and conditions governing the rights and obligations of the issuer and holders of the warrants representing rights to purchase the ordinary shares of Seven Utilities and Power Public Company Limited No. 4 (7UP-W4)	Via Electronic Meeting (E-Meeting)
ZIGA	10/01/2022	27/12/2021	31/01/2022	EGM	The issuance of debentures	Ziga Innovation Public Company Limited 999/9,10,11 MOO 9 NAIKLONGBANGPLAKOD, PHASAMUDJADEE, SAMUDPRAKARN 10290
AJA	13/01/2022	13/12/2021	03/02/2022	EGM	Capital increase,The issuance of convertible securities	Meeting Room, 3rd floor, AJ Advance Technology PCL., No. 427/2, Rama 2 Rd., Samaedam, Bangkhunthian, Bangkok 10150

Source: SET

Exhibit 10: Upcoming XR

Symbol	X-Date	Announce Date	Rights for	Subscription Price	Unit	Subscription Ratio (Holding:New)	Subscription Period	Allotted Shares (Shares)
GRAND	28/12/2021	24/02/2021	Common	0.56	Baht	6 : 1	17/01/2022 - 21/01/2022	602654994
UBIS	04/01/2022	19/10/2021	Common	4	Baht	4 : 1	14/02/2022 - 21/02/2022	56999997
UBIS	04/01/2022	19/10/2021	Warrants	-	Baht	2 : 1	-	113999995
AIT	07/01/2022	09/11/2021	Warrants	-	Baht	2 : 1	-	515802242
AJA	13/01/2022	13/12/2021	Common	0.2	Baht	20 : 1	-	-
AJA	13/01/2022	13/12/2021	Warrants	-	Baht	1 : 2	-	-
TBSP	14/01/2022	29/11/2021	Common	10	Baht	5 : 1	26/01/2022 - 01/02/2022	40844072
EE	04/02/2022	15/11/2021	Warrants	-	Baht	2 : 1	-	1390000000
YGG	11/02/2022	15/11/2021	Warrants	-	Baht	4 : 1	-	90000000
YGG	11/02/2022	15/11/2021	Common	0.5	Baht	1 : 2	02/03/2022 - 08/03/2022	360000000
EVER	17/02/2022	15/11/2021	Warrants	-	Baht	3 : 1	-	1618261515
EFORL	18/02/2022	20/12/2021	Warrants	0.4	Baht	5 : 1	-	799572989
EFORL	18/02/2022	20/12/2021	Warrants	-	Baht	2 : 1	-	399786494

Source: SET

Exhibit 11: Upcoming XD

Symbol	X-Date	Announce Date	Dividend (per Share)	Unit	Operation Period	Source of Dividend	Payment Date	Par
SVH	30/12/2021	20/12/2021	6	Baht	01/01/2021 - 30/09/2021	NP	19/01/2022	10
UAC	04/01/2022	20/12/2021	0.08	Baht	01/01/2021 - 30/09/2021	NP	17/01/2022	0.5
TTT	06/01/2022	23/12/2021	0.5	Baht	01/04/2021 - 30/09/2021	Both	21/01/2022	10
WFX	06/01/2022	24/12/2021	0.22	Baht	01/01/2021 - 30/09/2021	NP	19/01/2022	1
ADB	07/01/2022	09/11/2021	0.00556	Baht	-	RE	21/01/2022	0.5
ADB	07/01/2022	09/11/2021	10 : 1	Share	-	RE	21/01/2022	0.5
CHAYO	07/01/2022	11/11/2021	30 : 1	Share	-	RE	-	0.5
CHAYO	07/01/2022	11/11/2021	0.0018519	Baht	-	RE	-	0.5
KTIS	28/01/2022	29/11/2021	0.1	Baht	-	RE	14/02/2022	1
TSC	03/02/2022	23/11/2021	0.6	Baht	01/10/2020 - 30/09/2021	NP	-	1
IRC	08/02/2022	24/11/2021	0.8845	Baht	01/10/2020 - 30/09/2021	NP	28/02/2022	1
METCO	09/02/2022	26/11/2021	14	Baht	-	RE	-	10
YGG	11/02/2022	15/11/2021	2.90323 : 1	Share	01/01/2021 - 30/09/2021	Both	03/03/2022	0.5

Source: SET

Exhibit 12: New securities

Warrants	Trade Date	Underlying	Market	Maturity Date	Initial Price (Baht)	Exercise Price (Baht)	
ANAN-W1	28/12/2021	ANAN	SET	15/12/2023	-	1.65	
Derivative Warrants	Trade Date	Underlying	Issuer	DW Type	Market	Maturity Date	Exercise Price (Baht)
BABA28C2203B	28/12/2021	BABA	MACQ	Call	SET	5/4/2022	140
BEM13C2205A	28/12/2021	BEM	KGI	Call	SET	31/05/2022	10.9
GPSC19C2205B	28/12/2021	GPSC	YUANTA	Call	SET	12/5/2022	115
GPSC19P2205A	28/12/2021	GPSC	YUANTA	Put	SET	12/5/2022	57.5
GRE28C2203B	28/12/2021	GREATW	MACQ	Call	SET	5/4/2022	33
HSI28C2202E	28/12/2021	HSI	MACQ	Call	SET	3/3/2022	22,800.00
HSI28P2202E	28/12/2021	HSI	MACQ	Put	SET	3/3/2022	19,600.00
HSTE28C2202A	28/12/2021	HSTECH	MACQ	Call	SET	3/3/2022	4,800.00
HSTE28C2202B	28/12/2021	HSTECH	MACQ	Call	SET	3/3/2022	5,400.00
HSTE28C2202C	28/12/2021	HSTECH	MACQ	Call	SET	3/3/2022	6,000.00
HSTE28C2202D	28/12/2021	HSTECH	MACQ	Call	SET	3/3/2022	6,600.00
HSTE28P2202A	28/12/2021	HSTECH	MACQ	Put	SET	3/3/2022	6,300.00
HSTE28P2202B	28/12/2021	HSTECH	MACQ	Put	SET	3/3/2022	5,700.00
HSTE28P2202C	28/12/2021	HSTECH	MACQ	Put	SET	3/3/2022	5,100.00
HSTE28P2202D	28/12/2021	HSTECH	MACQ	Put	SET	3/3/2022	4,500.00
JMT19C2205A	28/12/2021	JMT	YUANTA	Call	SET	12/5/2022	90
MEIT28C2203B	28/12/2021	MEITUA	MACQ	Call	SET	5/4/2022	280
MINT13P2205A	28/12/2021	MINT	KGI	Put	SET	11/5/2022	20.4
SCC19C2205A	28/12/2021	SCC	YUANTA	Call	SET	12/5/2022	505

Source: SET