

India

ADD (no change)

Consensus ratings*:	Buy 21	Hold 3	Sell 4
Current price:	Rs155		
Target price:	Rs190		
Previous target:	Rs190		
Up/downside:	22.6%		
InCred Research / Consensus:	9.7%		
Reuters:	ONGC.NS		
Bloomberg:	ONGC IN		
Market cap:	US\$26,134m		
	Rs1,945,540m		
Average daily turnover:	US\$44.4m		
	Rs3304.9m		
Current shares o/s:	12,580.1m		
Free float:	39.6%		

*Source: Bloomberg

Key changes in this note

- FY22F EPS increased by 41%
- FY23F EPS increased by 8.7%
- FY24F EPS increased by 8.5%



Source: Bloomberg

Price performance	1M	3M	12M
Absolute (%)	(5.4)	33.0	116.1
Relative (%)	(6.1)	20.2	54.4

Major shareholders	% held
Government of India	60.4
LIC	10.6
Indian Oil Corporation	7.8

Analyst(s)



Avadhoot SABNIS

T (91) 22 4161 1542
E avadhoot.sabnis@incredcapital.com

Oil & Natural Gas

Tax savings boost bottomline

- 2QFY22 operational earnings was 5% better than we expected due to lower costs. We raise FY22-24F EPS by 8-41% as ONGC moves to lower tax regime.
- Our Brent forecasts (US\$70/65/60 over FY22F/23F/24F) remain conservative. A US\$1/bbl change in Brent price would impact FY23F EPS by 2.2%.
- We maintain our Add rating and our SOP-based TP of Rs190. A sharp drop in oil price is the main risk to the rating.

ONGC has moved to a lower tax regime

2QFY22 standalone EBITDAX at Rs132bn was 5% better than our estimate due to lower lifting costs (US\$8.7/boe vs estimate of US\$9.4/boe). Exploration expense at Rs7.8bn was sharply lower than our estimate of Rs12bn resulting in pre-tax profit coming in 10% above our estimate. ONGC has moved to the lower tax regime (25-26% vs Rs33-34% earlier) resulting in a large, deferred tax writeback of Rs85bn boosting 2Q reported net profit. From Mar 2021 to Sep 2021, debt including lease liabilities dropped on a consolidated basis by Rs106bn to Rs1226bn as standalone debt was lower by Rs77bn to Rs178bn. We have made no material change to our pre-tax estimates over FY22-24F. Our production forecasts remain well below revised (lower) management guidance. For the 98/2 block, we estimate gas production at 1/5/10 mmscmd over FY22F/23F/24F and oil production at 10/30kbd over FY23F/24F. Our estimates imply a drop in standalone profit in 2HFY22 (relative to 1H, despite a 60% increase in gas price) as we have maintained our exploration expenses for FY22F at Rs69bn (Rs18bn in 1H) due to high volatility. We raise our EPS estimate by 41% for FY22F (incorporating the deferred tax writeback) and by 8-9% for FY23-24F (reflecting the lower tax rates). This does not impact our DCF-based valuation of domestic reserves since it mainly impacts the deferred tax charge. Our capex estimate of Rs320bn pa over FY22-24F is at the higher end of management forecasts.

Management commentary provided an update on operations

Standalone annual capex range will remain at Rs290bn-320bn over FY22-24F despite a rise in global oil/gas prices. ONGC has no reason to believe there will be any change in the current gas pricing formula (due to concerns the formula may change given the likely sharp jump from Apr 2022). Oil/gas production has been hit by Covid restrictions and other issues (cyclone, delay in rig mobilisation, etc.) and no firm guidance can now be provided on exact timing of production ramp-up from the 98/2 block. FY22F domestic oil/ gas production will now be a tad lower than FY21 actual (cut relative to earlier guidance).

Our oil/gas price assumptions are conservative

Our EPS estimates are based on Brent crude oil forecasts of US\$70/65/60 per barrel over FY22-24F and domestic gas price of US\$5/5/5 per mmbtu over FY23-24F. We believe these assumptions are conservative. Our FY23F EPS forecast will rise by 2.2% for every US\$1/bbl increase in Brent and by 3.7% for every US\$0.50/mmbtu increase in gas price. The strong dividend yield (6.5% for FY23F) is a key re-rating catalyst, in our view.

Financial Summary

	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Revenue (Rsm)	3,968,029	3,040,010	4,813,347	4,307,878	4,020,415
Operating EBITDA (Rsm)	563,102	494,661	683,346	788,870	752,649
Net Profit (Rsm)	109,072	162,488	370,056	353,525	320,194
Core EPS (Rs)	8.7	12.9	29.4	28.1	25.5
Core EPS Growth	(63.7%)	49.0%	127.7%	(4.5%)	(9.4%)
FD Core P/E (x)	17.84	11.97	5.26	5.50	6.08
DPS (Rs)	5.0	3.6	9.0	10.0	10.0
Dividend Yield	3.89%	2.33%	5.82%	6.47%	6.47%
EV/EBITDA (x)	4.66	5.23	3.79	3.11	3.11
P/FCFE (x)	79.83	(243.55)	15.57	20.30	16.20
Net Gearing	52.3%	49.7%	46.9%	39.4%	34.2%
P/BV (x)	0.94	0.88	0.79	0.72	0.67
ROE	5.1%	7.6%	15.8%	13.6%	11.4%
% Change In Core EPS Estimates			40.98%	8.66%	8.52%
InCred Research/Consensus EPS (x)			1.32	1.07	0.95

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS. PRICED AS AT 12 NOV 2021

Tax savings boost bottomline

Figure 1: ONGC's consolidated quarterly result trends

Rs bn	Sep'20	Dec'20	Mar'21	Jun'21	Sep'21	yoy %	qoq %
Net sales	836.2	1002.9	1141.7	1081.4	1220.3	45.9%	12.8%
EBITDAX	154.3	133.0	178.7	175.3	185.4	20.1%	5.7%
Exploration expenses	15.6	20.2	23.9	12.5	7.8	-49.8%	-37.1%
EBITDA	138.7	112.8	154.8	162.9	177.5	28.0%	9.0%
Interest	(10.5)	(10.3)	(11.2)	(14.4)	(13.8)	31.5%	-4.4%
DD&A	(68.6)	(64.9)	(54.2)	(64.2)	(62.3)	-9.2%	-3.0%
Other income	19.6	21.3	40.4	11.7	14.2	-27.7%	21.4%
Profit from associates/JVs	6.5	2.5	6.8	6.0	5.4	-17.2%	-11.0%
Profit before tax	85.7	61.4	136.6	101.9	121.0	41.2%	18.7%
Tax	(27.7)	(23.7)	(27.2)	(33.5)	66.5	-340.1%	-298.6%
Minority interest	(14.7)	(11.2)	(15.6)	(8.6)	(6.9)	-52.6%	-19.4%
Net profit	43.4	26.4	93.9	59.9	180.6	316.5%	201.7%
Quarterly EPS (Rs)	3.4	2.1	7.5	4.8	14.4	316.5%	201.7%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 2: ONGC's standalone quarterly result trends

Rs bn	Sep'20	Dec'20	Mar'21	Jun'21	Sep'21	yoy %	qoq %
Net sales	169.2	170.2	211.9	230.2	243.5	44.0%	5.8%
EBITDAX	84.4	83.5	101.2	121.5	132.3	56.8%	8.8%
Exploration expenses	14.5	18.4	19.7	11.5	7.0	-51.7%	-39.3%
EBITDA	69.9	65.1	81.5	110.0	125.3	79.2%	13.9%
Interest	(3.2)	(6.0)	(5.7)	(6.2)	(5.8)	82.5%	-6.6%
DD&A	(49.2)	(44.3)	(17.9)	(41.7)	(39.4)	-19.8%	-5.3%
Other income	22.4	12.2	31.3	5.3	31.5	40.8%	489.6%
Profit before tax	39.9	27.0	89.3	67.5	111.5	179.5%	65.2%
Total Tax	(11.1)	(14.4)	(21.9)	(24.2)	72.0	-747.0%	-397.9%
Net profit	28.8	12.6	67.3	43.3	183.5	537.6%	323.3%
Quarterly EPS (Rs)	2.3	1.0	5.4	3.4	14.6	537.6%	323.3%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 3: ONGC's standalone quarterly sales breakdown

Rs bn	Sep'20	Dec'20	Mar'21	Jun'21	Sep'21	yoy %	qoq %
<u>Crude oil</u>							
Own fields	100.7	106.2	142.6	158.2	164.3	63.2%	3.9%
JVs	15.5	20.3	23.6	26.3	28.3	82.2%	7.7%
Total crude oil	116.2	126.5	166.2	184.4	192.7	65.8%	4.5%
<u>Natural gas</u>							
Own fields	31.3	23.5	22.8	20.9	21.6	-31.0%	3.3%
JVs	1.8	2.5	3.2	3.4	4.8	172.3%	40.1%
Total natural gas	33.1	26.0	26.0	24.4	26.5	-20.1%	8.5%
Oil/gas products	21.3	21.0	25.2	28.2	31.7	48.6%	12.3%
Profit petroleum	-2.9	-4.1	-6.7	-8.0	-8.8	204.8%	10.2%
Total	169.2	170.2	211.9	230.2	243.5	44.0%	5.8%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 4: ONGC's standalone quarterly sales volume details

	Sep'20	Dec'20	Mar'21	Jun'21	Sep'21	yoy %	qoq %
<u>Crude oil (mmt)</u>							
Own fields	4.37	4.43	4.47	4.36	4.26	-2.7%	-2.3%
Other JVs	0.68	0.86	0.75	0.73	0.73	7.4%	0.4%
Total crude oil	5.06	5.29	5.22	5.09	4.99	-1.3%	-1.9%
<u>Natural gas (bcm)</u>							
Own fields	4.35	4.32	4.19	3.89	4.03	-7.3%	3.7%
JVs	0.20	0.20	0.20	0.20	0.22	7.9%	9.0%
Total natural gas	4.55	4.52	4.39	4.09	4.25	-6.7%	3.9%
<u>Oil/gas products (tmt)</u>							
LPG	253	245	236	229	223	-11.9%	-2.6%
Naphtha	254	229	213	244	244	-3.9%	0.0%
C2/C3	301	290	251	292	289	-4.0%	-1.0%
Others	28	20	26	19	21	-25.0%	10.5%
Total products	836	784	726	784	777	-7.1%	-0.9%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 5: ONGC's standalone quarterly oil & gas pricing

Rs bn	Sep'20	Dec'20	Mar'21	Jun'21	Sep'21	yoy %	qoq %
INR/USD	74.4	73.7	72.9	73.7	74.1	-0.4%	0.5%
Own domestic crude price US\$/bbl	41.4	43.2	58.1	65.6	69.4	67.6%	5.7%
Domestic gas price (US\$/mmbtu)	2.7	2.1	2.1	2.1	2.0	-24.8%	-0.8%
Cash lifting costs, incl forex (US\$/boe)	7.4	7.6	9.8	8.9	8.7	17.0%	-2.0%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 6: ONGC – key assumptions

Year to 31 Mar	2020	2021	2022F	2023F	2024F
Brent oil price (US\$/bbl)	61.0	44.9	70.0	65.0	60.0
Rupee US dollar average	70.9	74.2	75.0	75.0	75.0
Gas price for older fields (US\$/mmbtu)	3.8	2.3	2.6	5.5	5.0
Domestic opex (US\$/boe)	10.2	8.0	9.2	9.5	9.5
ONGC domestic upstream operations					
<u>Oil production (mt)</u>					
Own crude	20.63	20.18	19.36	19.46	20.05
Share from JVs	2.73	2.35	2.30	2.30	2.30
Total	23.35	22.53	21.65	21.75	22.35
<u>Gas production (bcm)</u>					
Own gas	23.75	21.87	20.77	21.86	23.29
Share from JVs	1.12	0.94	1.00	1.00	1.00
Total	24.86	22.82	21.77	22.86	24.29
<u>ONGC Videsh production</u>					
Oil production (mt)	9.76	8.51	8.47	7.99	7.01
Gas (bcm)	5.23	4.53	4.32	4.32	4.32
<u>HPCL</u>					
Consolidated refinery throughput (mmt)	43.33	37.97	41.79	52.53	55.03
Parent refinery GRM (US\$/bbl)	1.02	3.86	3.90	5.40	5.50
Auto fuel volumes (mmt)	24.95	22.47	24.51	25.35	26.20
Auto fuel margins (Rs/kl)	2,439	3,467	3,000	3,000	3,000
<u>MRPL</u>					
Refinery throughput (mmt)	13.95	11.48	15.90	16.30	16.30
Refinery GRM (US\$/bbl)	-0.23	3.71	4.00	5.00	6.00

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 7: ONGC's consolidated earnings (Rs bn)

Year to 31 Mar	2020	2021	2022F	2023F	2024F
Net sales	3,968.0	3,040.0	4,813.3	4,307.9	4,020.4
EBITDAX	653.3	566.0	754.4	856.9	823.7
Exploration expenses	90.2	71.4	71.0	68.0	71.0
EBITDA	563.1	494.7	683.3	788.9	752.6
Debt charges (incl exch losses)	-70.0	-50.8	-60.0	-73.7	-72.8
Depn, depltn, amrtsn (DD&A)	-363.1	-246.2	-261.2	-265.0	-281.4
Other income	50.1	93.2	68.3	71.7	74.8
Profit before tax	180.1	290.9	430.4	521.9	473.2
Taxation	-75.1	-87.7	-48.8	-154.7	-139.8
Profit after tax	105.1	203.2	381.6	367.1	333.4
Share in Associate/JVs	10.5	10.2	20.9	20.6	21.6
Minority interest	6.5	50.9	32.5	34.3	34.8
Group profit	109.1	162.5	370.1	353.5	320.2
FDEPS (Rs)	8.7	12.9	29.4	28.1	25.5

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 8: ONGC's standalone earnings (Rs bn)

Year to 31 Mar	2020	2021	2022F	2023F	2024F
Net sales	962.1	681.4	959.7	1,043.5	1,007.2
EBITDAX	492.9	328.1	516.2	591.5	563.6
Exploration expenses	86.8	63.9	69.0	66.0	69.0
EBITDA	406.0	264.3	447.2	525.5	494.6
Debt charges (incl exch losses)	-28.2	-22.1	-26.4	-26.1	-24.3
Depn, depltn, amrtsn (DD&A)	-235.2	-149.5	-163.4	-170.5	-179.0
Other income	61.1	71.4	72.3	59.4	61.3
Profit before tax	203.7	164.0	329.8	388.4	352.5
Taxation	-69.2	-51.6	0.3	-100.2	-90.9
Profit after tax	134.4	112.5	330.1	288.2	261.6
FDEPS (Rs)	10.7	8.9	26.2	22.9	20.8

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 9: HPCL's consolidated earnings (Rs bn)

Year to 31 Mar	2020	2021	2022F	2023F	2024F
EBITDA	55.3	160.0	114.7	135.3	142.4
Debt charges	-11.4	-9.6	-10.0	-24.1	-25.3
Depreciation	-33.7	-36.3	-40.9	-49.7	-55.8
Other income	8.1	26.4	16.9	17.5	18.2
Profit before tax	18.3	140.6	80.7	79.0	79.6
Taxation	12.6	-35.3	-19.7	-19.3	-19.4
Profit after tax	31.0	105.2	60.9	59.7	60.1
Associate/JV contribution	-4.6	1.4	6.0	8.2	9.5
Net profit	26.4	106.6	67.0	67.9	69.6
FDEPS (Rs)	17.3	70.6	47.0	47.9	49.1

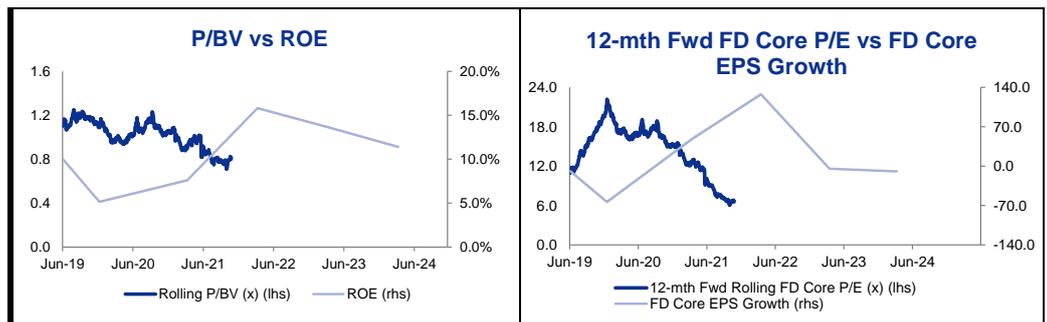
SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 10: ONGC's SOP valuation

	Valuation		per share Reserves Value		
	Rs m	US\$m	Rs	m boe	US\$/boe
Valuation of domestic P1 reserves	27,01,022	36,014	215	4,478	8.0
Valuation of overseas P1 reserves	4,46,610	5,955	36		
Subsidiary HPCL shares at 20% discount to market price	1,93,154	2,575	15		
Investments (IOC/GAIL/MRPL) at 20% discount to market price	2,54,807	3,397	20		
Net cash/(debt) (excluding abandonment deposits)	-12,02,266	-16,030	-96		
Target price			190		

SOURCES: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

BY THE NUMBERS



Profit & Loss

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Total Net Revenues	3,968,029	3,040,010	4,813,347	4,307,878	4,020,415
Gross Profit	653,337	566,016	754,350	856,874	823,653
Operating EBITDA	563,102	494,661	683,346	788,870	752,649
Depreciation And Amortisation	(363,098)	(246,197)	(261,222)	(264,991)	(281,396)
Operating EBIT	200,004	248,464	422,124	523,880	471,253
Financial Income/(Expense)	(69,998)	(50,790)	(59,977)	(73,742)	(72,843)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	50,131	93,230	68,255	71,733	74,775
Profit Before Tax (pre-EI)	180,137	290,904	430,403	521,870	473,185
Exceptional Items					
Pre-tax Profit	180,137	290,904	430,403	521,870	473,185
Taxation	(75,080)	(87,661)	(48,771)	(154,739)	(139,757)
Exceptional Income - post-tax					
Profit After Tax	105,057	203,243	381,631	367,131	333,428
Minority Interests	(6,530)	(50,948)	(32,523)	(34,251)	(34,812)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax	10,544	10,193	20,948	20,645	21,578
Net Profit	109,072	162,488	370,056	353,525	320,194
Recurring Net Profit	109,072	162,488	370,056	353,525	320,194
Fully Diluted Recurring Net Profit	109,072	162,488	370,056	353,525	320,194

Cash Flow

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
EBITDA	563,102	494,661	683,346	788,870	752,649
Cash Flow from Invt. & Assoc.	50,131	93,230	68,255	71,733	74,775
Change In Working Capital	56,587	44,365	(21,613)	54,473	23,938
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	(15,185)	(7,656)	(78,863)	7,244	6,336
Other Operating Cashflow	(144,237)	(16,216)	6,362	18,355	19,363
Net Interest (Paid)/Received	(69,998)	(50,790)	(59,977)	(73,742)	(72,843)
Tax Paid	(75,080)	(87,661)	(48,771)	(154,739)	(139,757)
Cashflow From Operations	365,321	469,933	548,740	712,193	664,462
Capex	(681,665)	(417,488)	(480,861)	(484,734)	(458,634)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments	124,346	(105,371)	(59,365)	(55,100)	(55,099)
Other Investing Cashflow					
Cash Flow From Investing	(557,320)	(522,859)	(540,227)	(539,834)	(513,733)
Debt Raised/(repaid)	216,586	44,938	116,420	(76,499)	(30,667)
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(84,351)	(22,015)	(119,513)	(123,916)	(125,803)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	132,235	22,922	(3,093)	(200,415)	(156,470)
Total Cash Generated	(59,764)	(30,004)	5,420	(28,056)	(5,741)
Free Cashflow To Equity	24,588	(7,988)	124,933	95,860	120,062
Free Cashflow To Firm	(122,001)	(2,136)	68,490	246,101	223,572

SOURCES: INCRED RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet					
(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Total Cash And Equivalents	110,490	126,099	185,520	208,463	256,723
Total Debtors	115,475	185,788	202,791	194,135	181,045
Inventories	330,512	445,733	446,481	428,198	414,148
Total Other Current Assets	502,813	426,147	445,728	462,883	480,197
Total Current Assets	1,059,290	1,183,767	1,280,519	1,293,679	1,332,112
Fixed Assets	2,880,540	3,026,350	3,189,343	3,355,339	3,475,753
Total Investments	675,790	781,161	840,526	895,627	950,726
Intangible Assets	142,367	135,386	135,386	135,386	135,386
Total Other Non-Current Assets					
Total Non-current Assets	3,698,696	3,942,897	4,165,256	4,386,352	4,561,865
Short-term Debt	315,745	306,576	339,983	229,732	217,813
Current Portion of Long-Term Debt					
Total Creditors	669,983	810,873	826,591	871,279	885,392
Other Current Liabilities					
Total Current Liabilities	985,729	1,117,449	1,166,573	1,101,011	1,103,205
Total Long-term Debt	971,187	1,025,294	1,108,307	1,142,059	1,123,311
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	971,187	1,025,294	1,108,307	1,142,059	1,123,311
Total Provisions	553,266	557,953	479,091	486,335	492,671
Total Liabilities	2,510,182	2,700,696	2,753,972	2,729,405	2,719,187
Shareholders Equity	2,069,677	2,209,811	2,471,656	2,708,855	2,910,835
Minority Interests	178,128	216,158	220,147	241,770	263,954
Total Equity	2,247,805	2,425,969	2,691,804	2,950,625	3,174,790

Key Ratios					
	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Revenue Growth	(5.9%)	(23.4%)	58.3%	(10.5%)	(6.7%)
Operating EBITDA Growth	(26.1%)	(12.2%)	38.1%	15.4%	(4.6%)
Operating EBITDA Margin	14.2%	16.3%	14.2%	18.3%	18.7%
Net Cash Per Share (Rs)	(93.51)	(95.85)	(100.38)	(92.47)	(86.20)
BVPS (Rs)	164.52	175.66	196.47	215.33	231.38
Gross Interest Cover	2.86	4.89	7.04	7.10	6.47
Effective Tax Rate	41.7%	30.1%	11.3%	29.7%	29.5%
Net Dividend Payout Ratio	69.4%	27.9%	30.6%	35.6%	39.3%
Accounts Receivables Days	13.34	18.09	14.73	16.82	17.03
Inventory Days	37.54	57.26	40.12	46.26	48.09
Accounts Payables Days	76.66	109.24	73.62	89.79	100.29
ROIC (%)	4.5%	5.5%	8.8%	10.6%	9.3%
ROCE (%)	6.4%	8.4%	11.3%	13.0%	11.4%
Return On Average Assets	3.6%	5.1%	8.5%	8.0%	7.1%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

DISCLAIMER

This report (including the views and opinions expressed therein, and the information comprised therein) has been prepared for and is distributed by CGS-CIMB, Incred Research Services Private Limited (formerly known as by Earnest Innovation Partners Private Limited (hereinafter referred to as "IRSPL") pursuant to an arrangement between IRSPL and CGS-CIMB. IRSPL is not an affiliate of CGS-CIMB. IRSPL is held 76% by InCred Capital Wealth Portfolio Managers Private Limited and 24% by EIP Holdings Private Limited. IRSPL is registered with SEBI as a Research Analyst vide Registration No. INH000007793. Pursuant to a trademark agreement, IRSPL has adopted "InCred Equities" as its trademark for use in this report.

The term "IRSPL" shall, unless the context otherwise requires, mean IRSPL and its affiliates, subsidiaries and related companies. The term "CGS-CIMB" shall denote, where appropriate, the relevant entity distributing or disseminating the report in the particular jurisdiction referenced below, or, in every other case except as otherwise stated herein, CGS-CIMB Securities International Pte. Ltd. and its affiliates, subsidiaries and related corporations. This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation and remains subject to the "Restrictions on Distribution" set out below. If your status has changed or the distribution restrictions set out below impact your ability to receive this report please contact your usual CGS-CIMB representative.

By accepting this report, the recipient hereof represents and warrants that he is entitled to receive such report in accordance with the restrictions set forth below and agrees to be bound by the limitations contained herein (including the "Restrictions on Distributions" set out below). Any failure to comply with these limitations may constitute a violation of law and limit our ability to provide reports to you.

This report is being supplied to you strictly on the basis that it will remain confidential. No part of this report may be (i) copied, photocopied, duplicated, stored or reproduced in any form by any means; or (ii) redistributed or passed on, directly or indirectly, to any other person in whole or in part, for any purpose without the prior written consent of IRSPL or CGS-CIMB.

The information contained in this report is prepared from data believed to be correct and reliable at the time of issue of this report.

Under the terms of the agreement between IRSPL and CGS-CIMB, IRSPL is not required to issue regular reports on the subject matter of this report at any frequency and it may cease to do so or change the periodicity of reports at any time. Neither IRSPL nor CGS-CIMB is under any obligation to update this report in the event of a material change to the information contained in this report. Neither IRSPL nor CGS-CIMB has any and will accept any, obligation to (i) check or ensure that the contents of this report remain current, reliable or relevant; (ii) ensure that the content of this report constitutes all the information a prospective investor may require; (iii) ensure the adequacy, accuracy, completeness, reliability or fairness of any views, opinions and information, and accordingly, IRSPL and its affiliates/group companies and/or CGS-CIMB, its affiliates and related persons including China Galaxy International Financial Holdings Limited ("CGIFHL") and CIMB Group Sdn. Bhd. ("CIMBG") and their respective related corporations (and their respective directors, associates, connected persons and/or employees) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof. In particular, CGS-CIMB disclaims all responsibility and liability for the views and opinions set out in this report.

Unless otherwise specified, this report is based upon reasonable sources. Such sources will, unless otherwise specified, for market data, be market data and prices available from the main stock exchange or market where the relevant security is listed, or, where appropriate, any other market. Information on the accounts and business of company(ies) will generally be based on published statements of the company(ies), information disseminated by regulatory information services, other publicly available information and information resulting from our research. Whilst every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Past performance is not a reliable indicator of future performance. The value of investments may go down as well as up and those investing may, depending on the investments in question, lose more than the initial investment. No report shall constitute an offer or an invitation by or on behalf of IRSPL and its affiliates/group companies and/or CGS-CIMB or their respective affiliates (including CGIFHL, CIMBG and their respective related corporations) or IRSPL and its affiliates/group companies, to any person to buy or sell any investments.

By IRSPL producing this report for CGS-CIMB, IRSPL has confirmed to CGS-CIMB that the opinions expressed are based on information it believes to be accurate and complete and obtained through reliable public or other non-confidential sources at the time made. (Information barriers and other arrangements may be established where necessary to prevent conflicts of interests arising. However, the analyst(s) may receive compensation that is based on his/their coverage of company(ies) in the performance of his/their duties or the performance of his/their recommendations. In reviewing this report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additional information is, subject to the duties of confidentiality, available on request.

The report is not a "prospectus" as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

IRSPL may have issued other reports (based on technical analysis, event specific, short term views etc.) that are inconsistent with and reach different conclusion from the information presented in this report.

Holding of Analysts/Relatives of Analysts, IRSPL and Associates of IRSPL in the covered securities, as on the date of publishing of this report

	Analyst/ Relative	Entity/ Associates
any financial interests in the company covered in this report (subject company) and nature of such financial interest	NO	NO
actual/beneficial ownership of 1% or more in securities of the subject company at the end of the month immediately preceding the date of publication of the research report or date of the public appearance;	NO	NO
any other material conflict of interest at the time of publication of the research report or at the time of public appearance	NO	NO
received any compensation from the subject company in the past twelve months for investment banking or merchant banking or brokerage services or investment advisory or depository or distribution from the subject company in the last twelve months for products/services other than investment banking or merchant banking or broker- age services or investment advisory or depository or distribution from the subject company in the last twelve months	NO	NO
managed or co-managed public offering of securities for the subject company in the last twelve months	NO	NO
received any compensation or other benefits from the subject company or third party in connection with the research report	NO	NO
served as an officer, director or employee of the subject company	NO	NO
been engaged in market making activity for the subject company	NO	NO

Analyst declaration

- The analyst responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously in an unbiased manner.
- No part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations(s) or view(s) in this report or based any specific investment banking transaction.
- The analyst(s) has(have) not had any serious disciplinary action taken against him/her(them).
- The analyst, strategist, or economist does not have any material conflict of interest at the time of publication of this report.
- The analyst(s) has(have) received compensation based upon various factors, including quality, accuracy and value of research, overall firm performance, client feedback and competitive factors.

CGS-CIMB DISCLOSURES

Country	CGS-CIMB Entity	Regulated by
Hong Kong	CGS-CIMB Securities (Hong Kong) Limited	Securities and Futures Commission Hong Kong
India	CGS-CIMB Securities (India) Private Limited	Securities and Exchange Board of India (SEBI)
Indonesia	PT CGS-CIMB Sekuritas Indonesia	Financial Services Authority of Indonesia
Malaysia	CGS-CIMB Securities Sdn. Bhd.	Securities Commission Malaysia
Singapore	CGS-CIMB Securities (Singapore) Pte. Ltd.	Monetary Authority of Singapore
South Korea	CGS-CIMB Securities (Hong Kong) Limited, Korea Branch	Financial Services Commission and Financial Supervisory Service
Thailand	CGS-CIMB Securities (Thailand) Co. Ltd.	Securities and Exchange Commission Thailand

Other Significant Financial Interests:

As of the end of 31st October 2021 immediately preceding the date of this report CGS-CIMB does not:

- have a proprietary position in the securities (which may include but not be limited to shares, warrants, call warrants and/or any other derivatives) in the company(ies) covered in this report except for the following:
 - Nil
- act as market maker or have assumed an underwriting commitment in securities of the company(ies) covered in this report except for the following:
 - Nil
- perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to the company(ies) covered in this report and/or solicit such investment, advisory or other services from the company(ies) covered in this report except for the following:
 - Nil

CGS-CIMB, its affiliates, related corporations (including CGIFHL, CIMBG and their respective related corporations) and/or their respective directors, associates, connected parties and/or employees and/or IRSPL and/or its affiliates and/or its Directors/employees may own or have positions in securities of the company(ies) covered in this report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities.

CGS-CIMB, its affiliates and related corporations (including CGIFHL, CIMBG and their respective related corporations) and/or IRSPL and/or its affiliates and/or its Directors/employees may do and seek to do business with the company(ies) covered in this research report and may from time to time (a) buy/sell the securities covered in this report, from time to time and/or (b) act as market maker or have assumed an underwriting commitment in securities of such company(ies), and/or (c) may sell them to or buy them from customers on a principal basis and/or (d) may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) and/or (e) solicit such investment, advisory or other services from any entity mentioned in this report and/or (f) act as a lender/borrower to such company and may earn brokerage or other compensation. However, Analysts are forbidden to acquire, on their own account or hold securities (physical or uncertificated, including derivatives) of companies in respect of which they are compiling and producing financial recommendations or in the result of which they play a key part

This report does not purport to contain all the information that a prospective investor may require. Neither CGS-CIMB nor any of its affiliates (including CGIFHL, CIMBG and their related corporations) make any guarantee, representation or warranty, express or implied, as to the adequacy, accuracy, completeness, reliability or fairness of any such information and opinion contained in this report. Neither CGS-CIMB nor any of its affiliates nor their related persons (including CGIFHL, CIMBG and their related corporations) shall be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof.

This report is general in nature and has been prepared for information purposes only. It is intended for circulation amongst CGS-CIMB's and its affiliates' (including CGIFHL's, CIMBG's and their respective related corporations') clients generally and does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. The information and opinions in this report are not and should not be construed or considered as an offer, recommendation or solicitation to buy or sell the subject securities, related investments or other financial instruments or any derivative instrument, or any rights pertaining thereto.

Investors are advised to make their own independent evaluation of the information contained in this report, consider their own individual investment objectives, financial situation and particular needs and consult their own professional and financial advisers as to the legal, business, financial, tax and other aspects before participating in any transaction in respect of the securities of company(ies) covered in this report. The securities of such company(ies) may not be eligible for sale in all jurisdictions or to all categories of investors.

The report is not a "prospectus" as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report

Restrictions on Distributions

Australia: Despite anything in this report to the contrary, this research is prepared for and provided in Australia by CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited. This research is only available in Australia to persons who are "wholesale clients" (within the meaning of the Corporations Act 2001 (Cth) and is supplied solely for the use of such wholesale clients and shall not be distributed or passed on to any other person. You represent and warrant that if you are in Australia, you are a "wholesale client". This research is of a general nature only and has been prepared without taking into account the objectives, financial situation or needs of the individual recipient. CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited do not hold, and are not required to hold an Australian financial services license. CGS-CIMB Securities (Singapore) Pte. Ltd. and CGS-CIMB Securities (Hong Kong) Limited rely on "passporting" exemptions for entities appropriately licensed by the Monetary Authority of Singapore (under ASIC Class Order 03/1102) and the Securities and Futures Commission in Hong Kong (under ASIC Class Order 03/1103).

Canada: This report has not been prepared in accordance with the disclosure requirements of Dealer Member Rule 3400 – Research Restrictions and Disclosure Requirements of the Investment Industry Regulatory Organization of Canada. For any research report distributed by CIBC, further disclosures related to CIBC conflicts of interest can be found at <https://researchcentral.cibcwm.com>.

China: For the purpose of this report, the People's Republic of China ("PRC") does not include the Hong Kong Special Administrative Region, the Macau Special Administrative Region or Taiwan. The distributor of this report has not been approved or licensed by the China Securities Regulatory Commission or any other relevant regulatory authority or governmental agency in the PRC. This report contains only marketing information. The distribution of this report is not an offer to buy or sell to any person within or outside PRC or a solicitation to any person within or outside of PRC to buy or sell any instruments described herein. This report is being issued outside the PRC to a limited number of institutional investors and may not be provided to any person other than the original recipient and may not be reproduced or used for any other purpose.

France: Only qualified investors within the meaning of French law shall have access to this report. This report shall not be considered as an offer to subscribe to, or used in connection with, any offer for subscription or sale or marketing or direct or indirect distribution of financial instruments and it is not intended as a solicitation for the purchase of any financial instrument.

Germany: This report is only directed at persons who are professional investors as defined in sec 31a(2) of the German Securities Trading Act (WpHG). This publication constitutes research of a non-binding nature on the market situation and the investment instruments cited here at the time of the publication of the information.

The current prices/yields in this issue are based upon closing prices from Bloomberg as of the day preceding publication. Please note that neither the German Federal Financial Supervisory Agency (BaFin), nor any other supervisory authority exercises any control over the content of this report.

Hong Kong: This report is prepared for and distributed in Hong Kong by CGS-CIMB Securities (Hong Kong) Limited ("CHK") which is licensed in Hong Kong by the Securities and Futures Commission for Type 1 (dealing in securities) and Type 4 (advising on securities) activities. Any investors wishing to purchase or otherwise deal in the securities covered in this report should contact the Head of Sales at CHK. The views and opinions in this report are our own as of the date hereof and are subject to change. If the Financial Services and Markets Act of the United Kingdom or the rules of the Financial Conduct Authority apply to a recipient, our obligations owed to such recipient therein are unaffected. CHK has no obligation to update its

opinion or the information in this report.

This publication is strictly confidential and is for private circulation only to clients of CHK.

India: This report is prepared by IRSPL for and distributed in India by IRSPL or CGS-CIMB Securities (India) Private Limited ("CGS-CIMB India"), as the case may be. CGS-CIMB India is a subsidiary of CGS-CIMB Securities International Pte. Ltd. which is in turn is a 50:50 joint venture company of CGIFHL and CIMBG. The details of the members of the group of companies of CGS-CIMB can be found at www.cgs-cimb.com, CGIFHL at www.chinastock.com.hk/en/ACG/ContactUs/index.aspx and CIMBG at www.cimb.com/en/who-we-are.html. CGS-CIMB India is registered with the National Stock Exchange of India Limited and BSE Limited as a trading and clearing member (under the Securities and Exchange Board of India (Stock Brokers and Sub-Brokers) Regulations, 1992). CGS-CIMB India is registered with SEBI (SEBI Registration Number: INZ000209135) as a Research Analyst (INH000000669) pursuant to the SEBI (Research Analysts) Regulations, 2014 ("Regulations").

By IRSPL producing this report for CGS-CIMB, IRSPL has confirmed to CGS-CIMB that the research analysts, strategists or economists principally responsible for the preparation of this report are segregated from the other activities of IRSPL and they have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues, client feedback and competitive factors. Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed or proposed to be performed by IRSPL, CGS-CIMB India or its affiliates.

This report does not take into account the particular investment objectives, financial situations, or needs of the recipients. It is not intended for and does not deal with prohibitions on investment due to law/jurisdiction issues etc. which may exist for certain persons/entities. Recipients should rely on their own investigations and take their own professional advice before investment.

CGS-CIMB India does not have actual / beneficial ownership of 1% or more securities of the subject company in this report, at the end of the month immediately preceding the date of publication of this report. However, since affiliates of CGS-CIMB India are engaged in the financial services business, they might have in their normal course of business financial interests or actual / beneficial ownership of one per cent or more in various companies including the subject company in this report.

CGS-CIMB India or its associates, may: (a) from time to time, have long or short position in, and buy or sell the securities of the subject company in this report; or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company in this report or act as an advisor or lender/borrower to such company or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

CGS-CIMB India and associates have not received any compensation for investment banking, merchant banking or brokerage services from the subject company mentioned in the report in the past 12 months.

CGS-CIMB India and associates have not managed or co-managed public offering of securities for the subject company mentioned in the report in the past 12 months.

Indonesia: This report is prepared for and distributed in Indonesia by PT CGS-CIMB Sekuritas Indonesia ("CGS-CIMB Indonesia"). The views and opinions in this report is prepared from data believed to be correct and reliable at the time of issue of this report and are subject to change. CGS-CIMB Indonesia has no obligation to update the opinion or the information in this report. This report is for private circulation only to clients of CGS-CIMB Indonesia. Neither this report nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable Indonesian capital market laws and regulations.

This report is not an offer of securities in Indonesia. The securities referred to in this report have not been registered with the Financial Services Authority (Otoritas Jasa Keuangan) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market law and regulations.

Ireland: CGS-CIMB is not an investment firm authorised in the Republic of Ireland and no part of this document should be construed as CGS-CIMB acting as, or otherwise claiming or representing to be, an investment firm authorised in the Republic of Ireland.

Malaysia: This report is prepared for and distributed in Malaysia by CGS-CIMB Securities Sdn. Bhd. ("CGS-CIMB Malaysia") solely for the benefit of and for the exclusive use of our clients. Recipients of this report are to contact CGS-CIMB Malaysia, at Level 29, Menara Bumiputra-Commerce, No. 11, Jalan Raja Laut, 50350 Kuala Lumpur, Malaysia, in respect of any matters arising from or in connection with this report. CGS-CIMB Malaysia has no obligation to update, revise or reaffirm the opinion or the information in this report after the date of this report.

New Zealand: In New Zealand, this report is for distribution only to persons who are wholesale clients pursuant to section 5C of the Financial Advisers Act 2008.

Singapore: This report is prepared for and distributed in Singapore by CGS-CIMB Securities (Singapore) Pte Ltd ("CGS-CIMB Singapore"). CGS-CIMB Singapore is a capital markets services licensee under the Securities and Futures Act (Chapter 289). Accordingly, it is exempted from the requirement to hold a financial adviser's licence under the Financial Advisers Act, Cap 110 ("FAA") for advising on investment products, by issuing or promulgating research analyses or reports, whether in electronic, print or other form. CGS-CIMB Singapore is subject to the applicable rules under the FAA unless it is able to avail itself to any prescribed exemptions.

Recipients of this report are to contact CGS-CIMB Singapore, 50 Raffles Place, #16-02 Singapore Land Tower, Singapore in respect of any matters arising from, or in connection with this report. CGS-CIMB Singapore has no obligation to update the opinion or the information in this report. This publication is strictly confidential and is for private circulation only. If you have not been sent this report by CGS-CIMB Singapore directly, you may not rely, use or disclose to anyone else this report or its contents.

If the recipient of this report is not an accredited investor, expert investor or institutional investor, CGS-CIMB Singapore accepts legal responsibility for the contents of the report without any disclaimer limiting or otherwise curtailing such legal responsibility. If the recipient is an accredited investor, expert investor or institutional investor, the recipient is deemed to acknowledge that CGS-CIMB Singapore is exempt from certain requirements under the FAA and its attendant regulations, and as such, is exempt from complying with the following:

- (a) Section 25 of the FAA (obligation to disclose product information);
- (b) Section 27 of the FAA (duty not to make recommendation with respect to any investment product without having a reasonable basis where you may be reasonably expected to rely on the recommendation);

- (c) MAS Notice on Information to Clients and Product Information Disclosure [Notice No. FAA-N03];
 (d) MAS Notice on Recommendation on Investment Products [Notice No. FAA-N16];
 (e) Section 36 of the FAA (obligation on disclosure of interest in specified products); and
 (f) any other laws, regulations, notices, directive, guidelines, circulars and practice notes which relates to the above, to the extent permitted by applicable laws, as may be amended from time to time, and any other laws, regulations, notices, directive, guidelines, circulars, and practice notes as we may notify you from time to time. In addition, the recipient who is an accredited investor, expert investor or institutional investor acknowledges that as CGS-CIMB Singapore is exempt from Section 27 of the FAA, the recipient will also not be able to file a civil claim against CGS-CIMB Singapore for any loss or damage arising from the recipient's reliance on any recommendation made by CGS-CIMB Singapore which would otherwise be a right that is available to the recipient under Section 27 of the FAA.

CGS-CIMB Singapore, its affiliates and related corporations, their directors, associates, connected parties and/or employees may own or have positions in specified products of the company(ies) covered in this report or any specified products related thereto and may from time to time add to or dispose of, or may be materially interested in, any such specified products. Further, CGS-CIMB Singapore, its affiliates and its related corporations do and seek to do business with the company(ies) covered in this report and may from time to time act as market maker or have assumed an underwriting commitment in specified products of such company(ies), may sell them to or buy them from customers on a principal basis and may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) as well as solicit such investment, advisory or other services from any entity mentioned in this report.

As of CGS-CIMB Singapore does not have a proprietary position in the recommended specified products in this report.

CGS-CIMB Singapore makes a market on the specified products.

CGS-CIMB Singapore does not make a market on other specified products mentioned in the report.

South Korea: This report is prepared for and distributed in South Korea by CGS-CIMB Securities (Hong Kong) Limited, Korea Branch ("CGS-CIMB Korea") which is licensed as a cash equity broker, and regulated by the Financial Services Commission and Financial Supervisory Service of Korea. In South Korea, this report is for distribution only to professional investors under Article 9(5) of the Financial Investment Services and Capital Market Act of Korea ("FSCMA").

Spain: This document is a research report and it is addressed to institutional investors only. The research report is of a general nature and not personalised and does not constitute investment advice so, as the case may be, the recipient must seek proper advice before adopting any investment decision. This document does not constitute a public offering of securities.

CGS-CIMB is not registered with the Spanish Comision Nacional del Mercado de Valores to provide investment services.

Sweden: This report contains only marketing information and has not been approved by the Swedish Financial Supervisory Authority. The distribution of this report is not an offer to sell to any person in Sweden or a solicitation to any person in Sweden to buy any instruments described herein and may not be forwarded to the public in Sweden.

Switzerland: This report has not been prepared in accordance with the recognized self-regulatory minimal standards for research reports of banks issued by the Swiss Bankers' Association (Directives on the Independence of Financial Research).

Thailand: This report is prepared for and distributed in Thailand by CGS-CIMB Securities (Thailand) Co. Ltd. ("CGS-CIMB Thailand") based upon sources believed to be reliable (but their accuracy, completeness or correctness is not guaranteed). The statements or expressions of opinion herein were arrived at after due and careful consideration for use as information for investment. Such opinions are subject to change without notice and CGS-CIMB Thailand has no obligation to update its opinion or the information in this report.

CGS-CIMB Thailand may act or acts as Market Maker, and issuer and offerer of Derivative Warrants and Structured Note which may have the following securities as its underlying securities. Investors should carefully read and study the details of the derivative warrants in the prospectus before making investment decisions.

AAV, ACE, ADVANC, AEONTS, AMATA, AOT, AP, BAM, BANPU, BBL, BCH, BCP, BCPG, BDMS, BEC, BEM, BGRIM, BH, BJC, BTS, CBG, CENTEL, CHG, CK, CKP, COM7, CPALL, CPF, CPN, CRC, DELTA, DOHOME, DTAC, EA, EGCO, ESSO, GLOBAL, GPSC, GULF, GUNKUL, HANA, HMPRO, ICHI, INTUCH, IRPC, IVL, JAS, JMART, JMT, KBANK, KCE, KKP, KTB, KTC, LH, MAJOR, MEGA, MINT, MTC, NRF, OR, ORI, OSP, PLANB, PRM, PSL, PTG, PTL, PTT, PTTEP, PTTGC, QH, RATCH, RBF, RS, SAWAD, SCB, SCC, SCGP, SINGER, SPALI, SPRC, STA, STEC, STGT, SUPER, SYNEX, TASCO, TCAP, THANI, TISCO, TKN, TOP, TQM, TRUE, TTB, TU, TVO, VGI, WHA

Corporate Governance Report:

The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date. CGS-CIMB Thailand does not confirm nor certify the accuracy of such survey result.

Score Range:	90 - 100	80 - 89	70 - 79	Below 70	No Survey Result
Description:	Excellent	Very Good	Good	N/A	N/A

United Arab Emirates: The distributor of this report has not been approved or licensed by the UAE Central Bank or any other relevant licensing authorities or governmental agencies in the United Arab Emirates. This report is strictly private and confidential and has not been reviewed by, deposited or registered with UAE Central Bank or any other licensing authority or governmental agencies in the United Arab Emirates. This report is being issued outside the United Arab Emirates to a limited number of institutional investors and must not be provided to any person other than the original recipient and may not be reproduced or used for any other purpose. Further, the information contained in this report is not intended to lead to the sale of investments under any subscription agreement or the conclusion of any other contract of whatsoever nature within the territory of the United Arab Emirates.

United Kingdom and European Economic Area (EEA): In the United Kingdom and European Economic Area, this material is prepared for and being distributed by CGS-CIMB Securities (UK) Limited ("CGS-CIMB UK"). CGS-CIMB UK is authorized and regulated by the Financial Conduct Authority and its registered office is at 27 Knightsbridge, London, SW1X7YB. The material distributed by CGS-CIMB UK has been prepared in accordance with CGS-CIMB's policies for managing conflicts of interest arising as a result of publication and distribution of this material. This material is for distribution only to, and is solely directed at, selected persons on the basis that those persons: (a) are eligible counterparties and professional clients of CGS-CIMB UK; (b) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended, the "Order"), (c) fall within Article 49(2)(a) to (d) ("high net worth companies, unincorporated associations etc") of the Order; (d) are outside the United Kingdom subject to relevant regulation in each jurisdiction, material (all such persons together being referred to as "relevant persons"). This material is directed only at relevant persons and must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this material relates is available only to relevant persons and will be engaged in only with relevant persons.

This material is categorised as non-independent for the purposes of CGS-CIMB UK and therefore does not provide an impartial or objective assessment of the subject matter and does not constitute independent research. Consequently, this material has not been prepared in accordance with legal requirements designed to promote the independence of research and will not be subject to any prohibition on dealing ahead of the dissemination of research. Therefore, this material is considered a marketing communication.

United States: This report is prepared for and distributed in the United States of America by CGS-CIMB Securities (USA) Inc, a U.S. registered broker-dealer and an affiliate of CGS-CIMB Securities Sdn. Bhd., CGS-CIMB Securities (Singapore) Pte Ltd, PT CGS-CIMB Sekuritas Indonesia, CGS-CIMB Securities (Thailand) Co. Ltd, CGS-CIMB Securities (Hong Kong) Limited and CGS-CIMB Securities (India) Private Limited, and is distributed solely to persons who qualify as "U.S. Institutional Investors" as defined in Rule 15a-6 under the Securities and Exchange Act of 1934. This communication is only for Institutional Investors whose ordinary business activities involve investing in shares, bonds, and associated securities and/or derivative securities and who have professional experience in such investments. Any person who is not a U.S. Institutional Investor or Major Institutional Investor must not rely on this communication. The delivery of this report to any person in the United States of America is not a recommendation to effect any transactions in the securities discussed herein, or an endorsement of any opinion expressed herein. CGS-CIMB Securities (USA) Inc, is a FINRA/SIPC member and takes responsibility for the content of this report. For further information or to place an order in any of the above-mentioned securities please contact a registered representative of CGS-CIMB Securities (USA) Inc.

CGS-CIMB Securities (USA) Inc. has managed or co-managed a public offering of securities in the past 12 months.

CGS-CIMB Securities (USA) Inc. has not managed or co-managed a public offering of any of the securities mentioned in the past 12 months.

CGS-CIMB Securities (USA) Inc. has received compensation for investment banking services in the past 12 months.

CGS-CIMB Securities (USA) Inc. has not received compensation for investment banking services from any of the company mentioned in the past 12 months.

CGS-CIMB Securities (USA) Inc. expects to receive or intend to seek compensation for investment banking services within the next 3 months.

CGS-CIMB Securities (USA) Inc. neither expects to receive nor intends to seek compensation for investment banking services from any of the company mentioned within the next 3 months.

As of the end of the month immediately preceding the date of publication of this report, CGS-CIMB Securities (USA) Inc. beneficially owns 1% or more of any class of common equity securities.

United States Third-Party Disclaimer: If this report is distributed in the United States of America by Raymond James & Associates, Inc ("RJA"), this report is third-party research prepared for and distributed in the United States of America by RJA pursuant to an arrangement between RJA and CGS-CIMB Securities International Pte. Ltd. ("CGS-CIMB"). CGS-CIMB is not an affiliate of RJA. This report is distributed solely to persons who qualify as "U.S. Institutional Investors" or as "Major U.S. Institutional Investors" as defined in Rule 15a-6 under the Securities and Exchange Act of 1934, as amended. This communication is only for U.S. Institutional Investors or Major U.S. Institutional Investor whose ordinary business activities involve investing in shares, bonds, and associated securities and/or derivative securities and who have professional experience in such investments. Any person who is not a U.S. Institutional Investor or Major U.S. Institutional Investor must not rely on this communication. The delivery of this report to any person in the U.S. is not a recommendation to effect any transactions in the securities discussed herein, or an endorsement of any opinion expressed herein. If you are receiving this report in the U.S from RJA, a FINRA/SIPC member, it takes responsibility for the content of this report. For further information or to place an order in any of the above-mentioned securities please contact a registered representative of CGS-CIMB Securities (USA) Inc. or RJA. <https://raymondjames.com/InternationalEquityDisclosures>

Other jurisdictions: In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is only for distribution to professional, institutional, or sophisticated investors as defined in the laws and regulations of such jurisdictions.

Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2021, Anti-Corruption 2021

ADVANC – Excellent, Certified, **AMATA** – Excellent, Certified, **ANAN** – Excellent, n/a, **AOT** – Excellent, n/a, **AP** – Excellent, Certified, **ASP** – Excellent, n/a, **AWC** – Excellent, Declared, **AU** – Good, n/a, **BAM** – Very Good, Certified, **BAY** – Excellent, Certified, **BBL** – Excellent, Certified, **BCH** – Very Good, Certified, **BCP** – Excellent, Certified, **BCPG** – Excellent, Certified, **BDMS** – Excellent, n/a, **BEAUTY** – Good, n/a, **BEM** – Excellent, n/a, **BH** – Good, n/a, **BJC** – Very Good, n/a, **BLA** – Very Good, Certified, **BTS** – Excellent, Certified, **CBG** – Very Good, n/a, **CGET** – n/a, n/a, **CENDEL** – Excellent, Certified, **CHAYO** – Very Good, n/a, **CHG** – Very Good, n/a, **CK** – Excellent, n/a, **COM7** – Excellent, Certified, **CPALL** – Excellent, Certified, **CPF** – Excellent, Certified, **CPN** – Excellent, Certified, **CPNREIT** – n/a, n/a, **CRC** – Excellent, Declared, **DELTA** – Excellent, Certified, **DDD** – Excellent, n/a, **DIF** – n/a, n/a, **DOHOME** – Very Good, Declared, **DREIT** – n/a, n/a, **DTAC** – Excellent, Certified, **ECL** – Excellent, Certified, **EGCO** – Excellent, Certified, **EPG** – Excellent, Certified, **ERW** – Very Good, Certified, **GFPT** – Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Excellent, n/a, **HANA** – Excellent, Certified, **HMPRO** – Excellent, Certified, **HUMAN** – Good, n/a, **ICHI** – Excellent, Certified, **III** – Excellent, Declared, **INTUCH** – Excellent, Certified, **IRPC** – Excellent, Certified, **ITD** – Very Good, n/a, **IVL** – Excellent, Certified, **JASIF** – n/a, n/a, **JKN** – n/a, Certified, **JMT** – Very Good, n/a, **KBANK** – Excellent, Certified, **KCE** – Excellent, Certified, **KEX** – Very Good, Declared, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** – Excellent, Certified, **KTC** – Excellent, Certified, **LH** – Excellent, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MAKRO** – Excellent, Certified, **MC** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** – Excellent, Certified, **MTC** – Excellent, Certified, **NETBAY** – Very Good, n/a, **NRF** – Very Good, Declared, **OR** – Excellent, n/a, **ORI** – Excellent, Certified, **OSP** – Excellent, n/a, **PLANB** – Excellent, Certified, **PRINC** – Very Good, Certified, **PR9** – Excellent, Declared, **PSH** – Excellent, Certified, **PTT** – Excellent, Certified, **PTTEP** – Excellent, n/a, **PTTGC** – Excellent, Certified, **QH** – Excellent, Certified, **RAM** – n/a, n/a, **RBF** – Very Good, n/a, **RS** – Excellent, Declared, **RSP** – Good, n/a, **S** – Excellent, n/a, **SAK** – Very Good, Declared, **SAPPE** – Very Good, Certified, **SAWAD** – Very Good, n/a, **SCB** – Excellent, Certified, **SCC** – Excellent, Certified, **SCGP** – Excellent, Declared, **SECURE** – n/a, n/a, **SHR** – Excellent, n/a, **SIRI** – Excellent, Certified, **SPA** – Very Good, n/a, **SPALI** – Excellent, Certified, **SPRC** – Excellent, Certified, **SSP** – Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Very Good, Certified, **TCAP** – Excellent, Certified, **THANI** – Excellent, Certified, **TIDLOR** – n/a, Certified, **TISCO** – Excellent, Certified, **TKN** – Very Good, n/a, **TOP** – Excellent, Certified, **TRUE** – Excellent, Certified, **TTB** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Excellent, Certified, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – n/a, n/a, **WICE** – Excellent, Certified, **WORK** – Good, n/a.

- CG Score 2021 from Thai Institute of Directors Association (IOD)

- Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of August 5, 2021) are categorised into: companies that have declared their intention to join CAC, and companies certified by CAC.

Recommendation Framework

Stock Ratings

Definition:

- Add** The stock's total return is expected to exceed 10% over the next 12 months.
- Hold** The stock's total return is expected to be between 0% and positive 10% over the next 12 months.
- Reduce** The stock's total return is expected to fall below 0% or more over the next 12 months.

The total expected return of a stock is defined as the sum of the: (i) percentage difference between the target price and the current price and (ii) the forward net dividend yields of the stock. Stock price targets have an investment horizon of 12 months.

Sector Ratings

Definition:

- Overweight** An Overweight rating means stocks in the sector have, on a market cap-weighted basis, a positive absolute recommendation.
- Neutral** A Neutral rating means stocks in the sector have, on a market cap-weighted basis, a neutral absolute recommendation.
- Underweight** An Underweight rating means stocks in the sector have, on a market cap-weighted basis, a negative absolute recommendation.

Country Ratings

Definition:

- Overweight** An Overweight rating means investors should be positioned with an above-market weight in this country relative to benchmark.
- Neutral** A Neutral rating means investors should be positioned with a neutral weight in this country relative to benchmark.
- Underweight** An Underweight rating means investors should be positioned with a below-market weight in this country relative to benchmark.