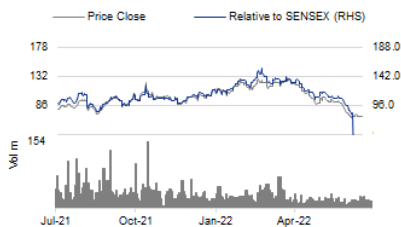


India

**ADD** (previously **REDUCE**)

Consensus ratings*:	Buy 7	Hold 1	Sell 2
Current price:	Rs70		
Target price:	Rs103 ▲		
Previous target:	Rs60		
Up/downside:	47.1%		
InCred Research / Consensus:	-5.0%		
Reuters:			
Bloomberg:	NACL IN		
Market cap:	US\$1,759m		
	Rs127,738m		
Average daily turnover:	US\$35.5m		
	Rs2579.5m		
Current shares o/s:	0.0m		
Free float:	48.7%		
*Source: Bloomberg			



Source: Bloomberg

<b>Price performance</b>	1M	3M	12M
Absolute (%)	(24.6)	(44.6)	(14.6)
Relative (%)	(21.0)	(37.9)	(15.0)

<b>Major shareholders</b>	% held
Promoter & Promoter Group	51.3
Bharat 22 ETF	3.4
Mirae Asset Arbitrage Fund	1.7

Analyst(s)

**Satish KUMAR**  
T (91) 22 4161 1562  
E satish.kumar@incredcapital.com

**Shaily RUPARELIA**  
T (91) 22 4161 1556  
E shaily.ruparelia@incredcapital.com

# National Aluminium Co Ltd

## Excessive pessimism - upgrade to Add

- Like steel, aluminium is also witnessing a destocking-led price collapse. We believe aluminium prices are unlikely to sustain their levels below US\$2,400/t.
- We are bullish on the energy sector and thus don't see a big collapse in natural gas or coal prices soon. Hence, Indian integrated smelters stand to benefit.
- We have valued Nalco at 10x FY24F EPS to arrive at our new TP of Rs103.

### Like all commodities, aluminium also faces supply chain destocking

As per the International Aluminium Institute or IAI, global aluminium consumption in CY21 was at 69mt (primary aluminium) and production stood at 67.5mt. In CY21, global consumers bought 7% higher aluminum yoy (highest growth since CY10). The user industry of aluminium (for example, automobile and aerospace) grew nowhere near 7%, which means there was hoarding of aluminium because of supply chain uncertainty. Naturally, 2022 is witnessing channel destocking as global demand is reeling under high energy cost which shows no signs of coming down (LNG, diesel, and coal).

### The good part is production is declining in response to destocking

As per IAI data, in the five months of this calendar year, production already declined by 3.5% and so, in effect, the destocking is being managed. However, as it always happens, destocking happens fast (say within two-to-three months) while production response can happen only over a period (closure and restarting an aluminium smelter in a short interval is a nightmare) and hence, prices are collapsing. As of now, barring hydro powered smelters, hardly any aluminium smelter will be viable. However, as we have seen across commodities, equilibrium and cost curves don't matter in the short term.

### Given current energy prices, aluminium price should be ~ US\$3,000/t

Assuming current energy prices will sustain for two-to-three years (which is our base case), the fair value of aluminium is around US\$3,000/t. Indian aluminium makers like National Aluminium Company Ltd (Nalco) and Hindalco are backward integrated to a large extent and hence, rising aluminium prices are good for their P&L and balance sheet. Current equity value of Nalco is building in extreme pessimism. In effect, they build in a scenario of US\$2,400/t aluminium price with energy price remaining at current levels. Both cannot happen together in the long term. Buy companies which are long on aluminium.

### Upgrade our rating on Nalco to Add from Reduce

Nalco has the benefit of lower coal cost as it gets linkage coal from Mahanadi coalfield, and it is also likely to start captive coal block mining from FY24F. The company has been allocated two coal mines – Utkal D and E, with total capacity of 4mt, at its peak. Nalco plans to start mining coal from them in FY24F. Hence, cost will remain in control. We build in US\$2,400/t aluminium price for our earnings calculation. Upgrade our rating on Nalco to Add from Reduce. We have valued the stock at 10x FY24F EPS to arrive at our new target price of Rs103 (Rs60 earlier). Further fall in aluminium prices is a downside risk.

Financial Summary	Mar-21A	Mar-22A	Mar-23F	Mar-24F	Mar-25F
Revenue (Rsm)	89,558	141,808	128,852	128,920	129,019
Operating EBITDA (Rsm)	17,828	45,172	32,129	30,412	28,696
Net Profit (Rsm)	12,995	29,520	21,698	19,097	17,888
Core EPS (Rs)	7.0	15.8	11.6	10.2	9.6
Core EPS Growth	840.3%	127.2%	(26.5%)	(12.0%)	(6.3%)
FD Core P/E (x)	9.98	4.39	5.98	6.79	7.25
DPS (Rs)	2.5	6.2	6.2	6.2	6.2
Dividend Yield	3.59%	8.91%	8.91%	8.91%	8.91%
EV/EBITDA (x)	6.18	2.04	3.91	4.01	4.16
P/FCFE (x)	15.71	9.91	11.64	8.49	9.16
Net Gearing	(18.3%)	(29.9%)	(4.0%)	(7.1%)	(8.9%)
P/BV (x)	1.21	1.03	1.26	1.18	1.11
ROE	12.6%	25.4%	19.0%	17.9%	15.8%
% Change In Core EPS Estimates			69.31%	3.79%	
InCred Research/Consensus EPS (x)					

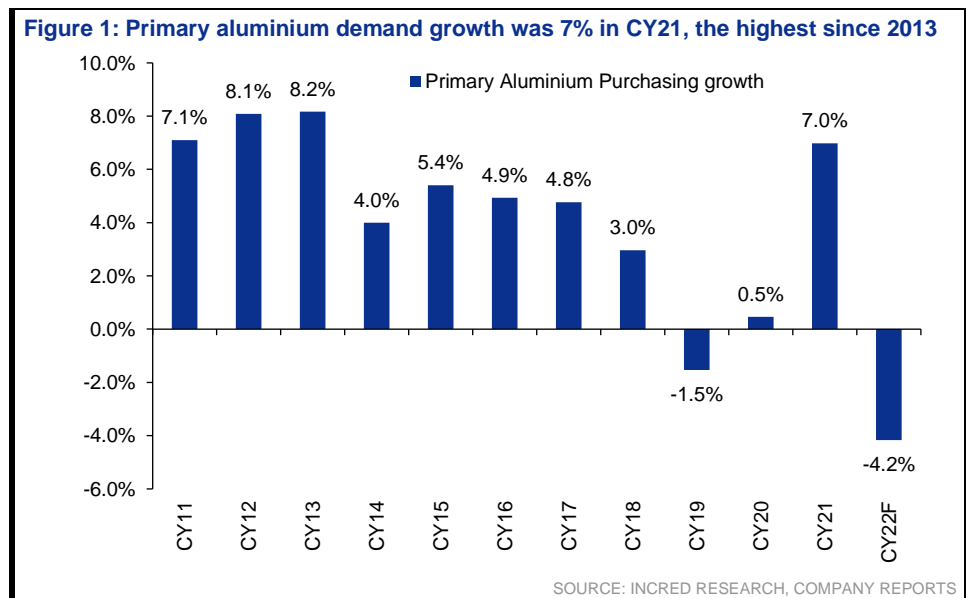
SOURCE: INCRED RESEARCH, COMPANY REPORTS

## Excessive pessimism- upgrade to Add

### Aluminium prices will bounce back to US\$3,000/t

As per the International Aluminium Institute or IAI, global aluminium consumption in CY21 was at 69mt (primary aluminium) and production stood at 67.5mt. In CY21, global consumers bought 7% higher aluminium yoy (highest growth since CY10). The user industry of aluminium (for example, automobile and aerospace) grew nowhere near 7%, which means there was hoarding of aluminium because of supply chain uncertainty. Naturally, 2022 is witnessing channel destocking as global demand is reeling under high energy cost which shows no signs of coming down (liquefied natural gas or LNG, diesel, and coal). The current situation cannot continue in the medium-to-long term and aluminium prices must bounce back to US\$3,000/t.

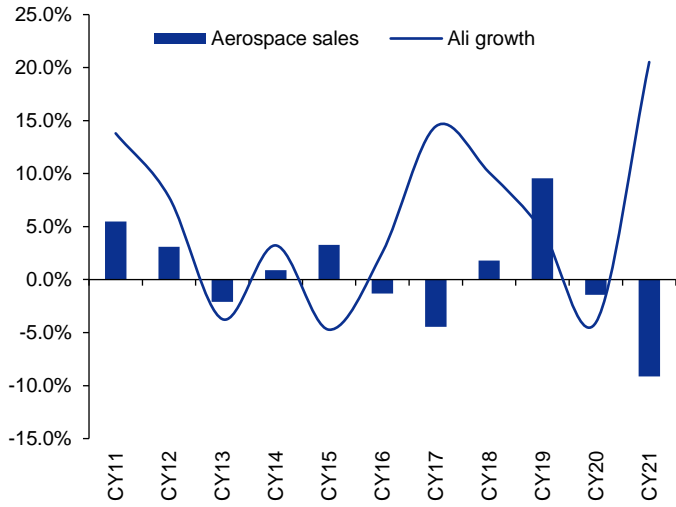
### Global aluminium demand rose 7% yoy in CY21, the highest since 2013 ➤



### However, global end-product demand was not in line, as shown by auto and global industrial production index ➤

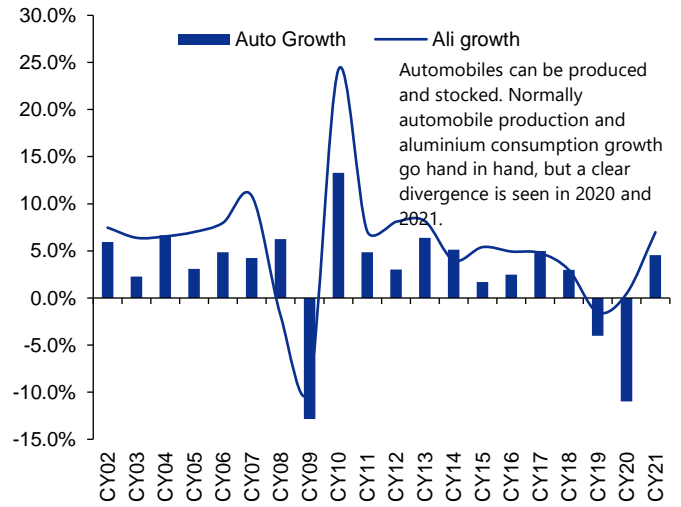
To a large extent, global Index of Industrial Production or IIP was also determined by the propensity to accumulate the inventory and hence, IIP may not be the right metric to look at in order to determine inventory accumulation in the supply chain.

**Figure 2: Aerospace industry sales and aluminium prices \*; volume completely diverges in CY21, indicating non-usage of purchased material**



SOURCE: COMPANY REPORTS, INCRED RESEARCH

**Figure 3: Automobile production is one of the clearest indicators that aluminium was stocked in the supply chain**



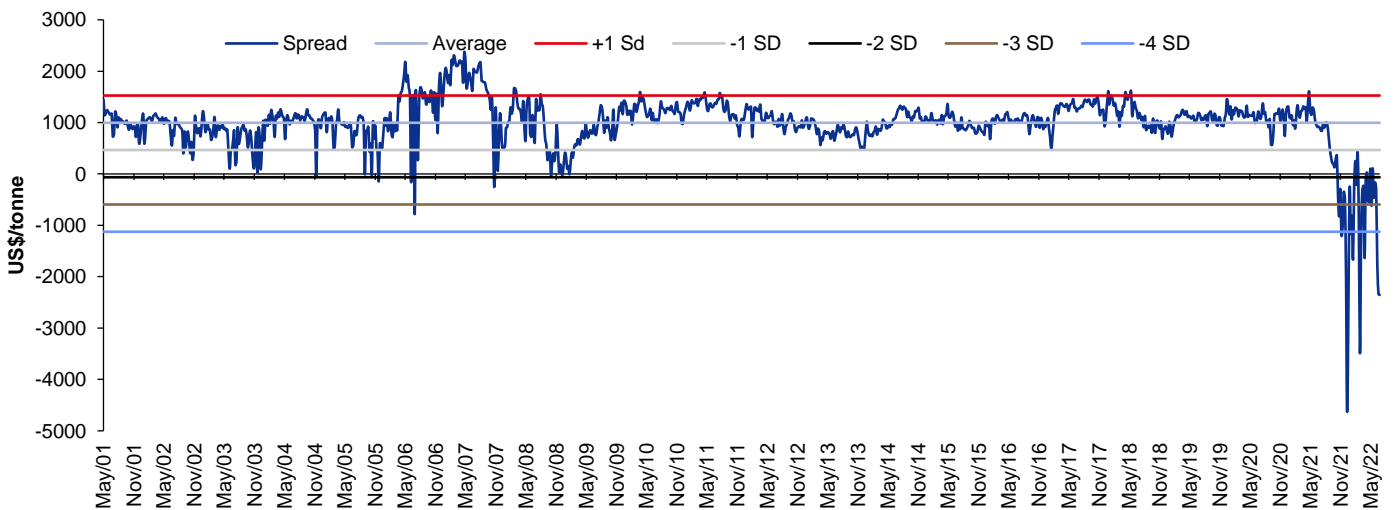
SOURCE: COMPANY REPORTS, INCRED RESEARCH

**As of now, everyone is fearing a recession and so all are selling excess inventory ➤**

While in early 2021 everyone was worried about raw material security, the situation has reversed and now the fear is regarding demand. Like last year, its being overdone on the other side now, and aluminium spreads over energy are near their all-time low.

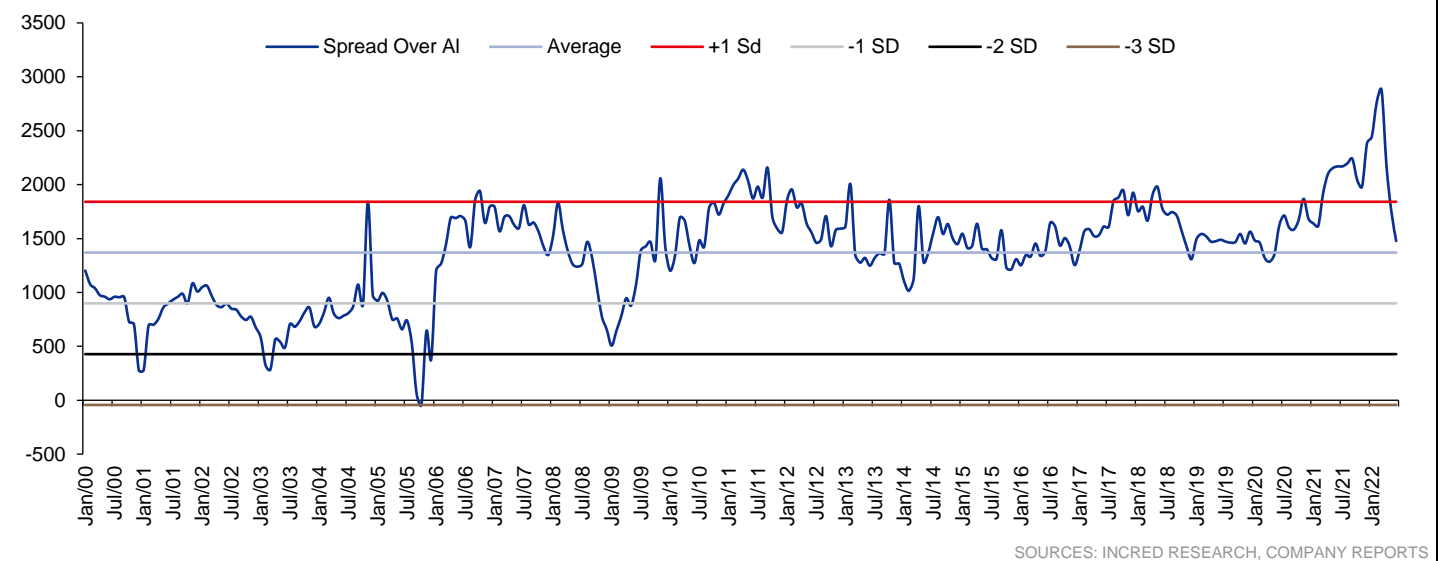
**As of now, either aluminium prices have to go up or energy prices have to fall, and the former is most likely ➤**

**Figure 4: Current scenario for European smelters is unprecedented by any stretch of imagination - they are unviable and will have to close**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

**Figure 5: On the other hand, North American smelters are in an awesome position; it's Europe's pain which will turn into a gain for all**



### **We believe US\$2,400/t is the bottom price for aluminium»**

All signs indicate that US\$2,400/t is the bottom price, and that once destocking is over, aluminium will rally fast. We are long on pure aluminium makers and more so if they are integrated.

### **Nalco is the best play on aluminium price recovery**

Nalco, being long on aluminium and alumina, is the best play on aluminium price recovery, in our view. We have built in US\$2,400/t in our base price calculation and increased coal cost by 15% over FY22. We have built in alumina at 15% of aluminium realization.

### **Nalco is highly leveraged to aluminium price - US\$100/t rise will increase EPS by 10% »**

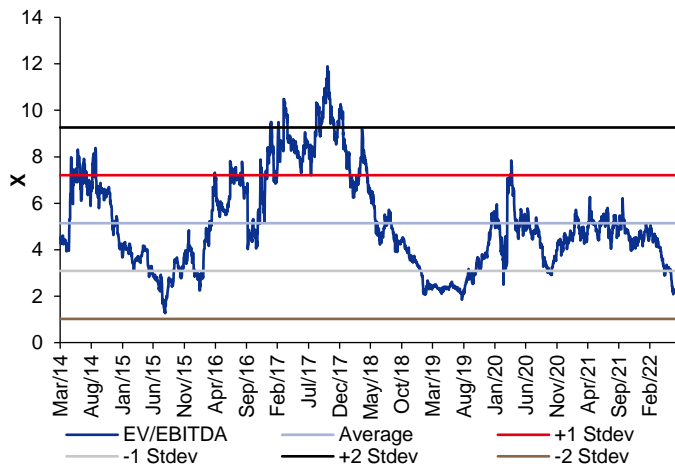
Nalco is highly leveraged to aluminium price and a 5% rise in US\$ terms or US\$100/t from our base assumption will lead to EPS growth by 10%.

### **We expect alumina to trade at 15% of aluminium price»**

Normally, alumina trades at 15-17% of aluminium price and we expect the same in the coming future. Australia's refusal to export alumina to Russia had flooded the RoW market with alumina, but as things stabilize alumina will trade only higher.

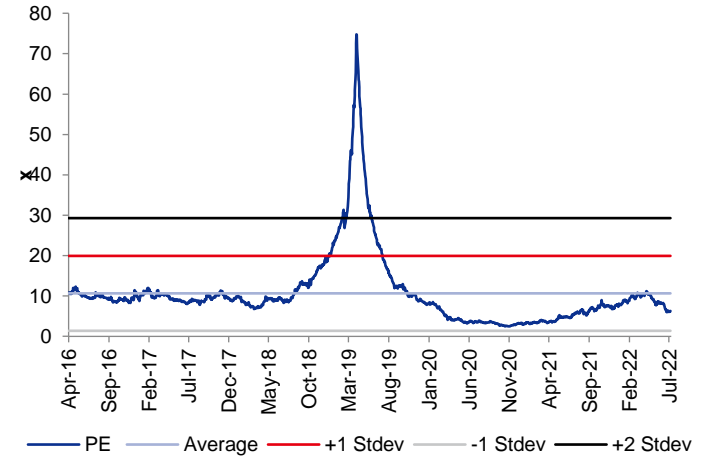
**Valuations are undemanding ➔**

**Figure 6: On P/E basis, Nalco trades near its multi-year bottom**



SOURCE: INCRED RESEARCH, COMPANY REPORTS

**Figure 7: Similarly, on EV/EBITDA basis, Nalco is near its 2008 lows**



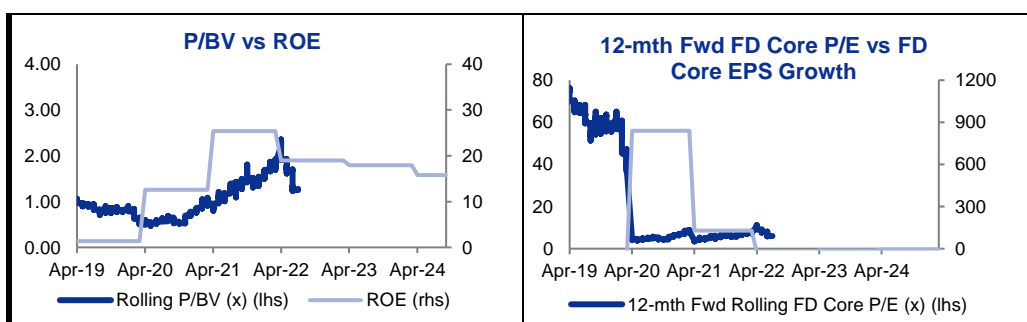
SOURCE: INCRED RESEARCH, COMPANY REPORTS

**Figure 8: On P/BV basis, Nalco trades at higher than its historical bottom but given our view that US\$2,400/t is the bottom for aluminum price, we believe it's the right time to buy aluminium stocks**



SOURCE: COMPANY REPORTS, INCRED RESEARCH

## BY THE NUMBERS



### Profit & Loss

(Rs mn)	Mar-21A	Mar-22A	Mar-23F	Mar-24F	Mar-25F
<b>Total Net Revenues</b>	<b>89,558</b>	<b>141,808</b>	<b>128,852</b>	<b>128,920</b>	<b>129,019</b>
<b>Gross Profit</b>	<b>76,461</b>	<b>123,265</b>	<b>110,191</b>	<b>110,282</b>	<b>110,389</b>
<b>Operating EBITDA</b>	<b>17,828</b>	<b>45,172</b>	<b>32,129</b>	<b>30,412</b>	<b>28,696</b>
Depreciation And Amortisation	(6,058)	(8,366)	(6,088)	(6,171)	(6,253)
<b>Operating EBIT</b>	<b>11,770</b>	<b>36,806</b>	<b>26,041</b>	<b>24,241</b>	<b>22,443</b>
Financial Income/(Expense)	(71)	(231)	(19)	(19)	(19)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	1,466	2,974	2,908	1,241	1,426
<b>Profit Before Tax (pre-EI)</b>	<b>13,165</b>	<b>39,549</b>	<b>28,930</b>	<b>25,463</b>	<b>23,851</b>
Exceptional Items					
<b>Pre-tax Profit</b>	<b>13,165</b>	<b>39,549</b>	<b>28,930</b>	<b>25,463</b>	<b>23,851</b>
Taxation	(170)	(10,029)	(7,233)	(6,366)	(5,963)
Exceptional Income - post-tax					
<b>Profit After Tax</b>	<b>12,995</b>	<b>29,520</b>	<b>21,698</b>	<b>19,097</b>	<b>17,888</b>
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
<b>Net Profit</b>	<b>12,995</b>	<b>29,520</b>	<b>21,698</b>	<b>19,097</b>	<b>17,888</b>
Recurring Net Profit	12,995	29,520	21,698	19,097	17,888
<b>Fully Diluted Recurring Net Profit</b>	<b>12,995</b>	<b>29,520</b>	<b>21,698</b>	<b>19,097</b>	<b>17,888</b>

### Cash Flow

(Rs mn)	Mar-21A	Mar-22A	Mar-23F	Mar-24F	Mar-25F
<b>EBITDA</b>	<b>17,828</b>	<b>45,172</b>	<b>32,129</b>	<b>30,412</b>	<b>28,696</b>
Cash Flow from Invt. & Assoc.					
Change In Working Capital	4,228	661	(6,658)	(5)	(7)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	507	10,604			
Other Operating Cashflow	473	(9,066)	1,042	1,043	1,043
Net Interest (Paid)/Received	(71)	(231)	(19)	(19)	(19)
Tax Paid	(975)	(7,555)	(7,233)	(6,366)	(5,963)
<b>Cashflow From Operations</b>	<b>21,990</b>	<b>39,584</b>	<b>19,262</b>	<b>25,065</b>	<b>23,751</b>
Capex	(11,726)	(9,265)	(10,000)	(10,000)	(10,000)
Disposals Of FAs/subsidiaries	324	2,364			
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(2,635)	(19,291)	1,885	217	402
<b>Cash Flow From Investing</b>	<b>(14,037)</b>	<b>(26,192)</b>	<b>(8,115)</b>	<b>(9,783)</b>	<b>(9,598)</b>
Debt Raised/(repaid)	303	(297)			
Proceeds From Issue Of Shares	(1,701)				
Shares Repurchased					
Dividends Paid	(4,606)	(11,020)	(11,563)	(11,563)	(11,563)
Preferred Dividends					
Other Financing Cashflow	2	(82)	(19)	(19)	(19)
<b>Cash Flow From Financing</b>	<b>(6,002)</b>	<b>(11,398)</b>	<b>(11,582)</b>	<b>(11,582)</b>	<b>(11,582)</b>
Total Cash Generated	1,951	1,993	(435)	3,700	2,571
<b>Free Cashflow To Equity</b>	<b>8,256</b>	<b>13,095</b>	<b>11,147</b>	<b>15,282</b>	<b>14,153</b>
<b>Free Cashflow To Firm</b>	<b>8,024</b>	<b>13,622</b>	<b>11,166</b>	<b>15,301</b>	<b>14,172</b>

SOURCES: INCRED RESEARCH, COMPANY REPORTS

## BY THE NUMBERS...cont'd

<b>Balance Sheet</b>					
<b>(Rs mn)</b>	<b>Mar-21A</b>	<b>Mar-22A</b>	<b>Mar-23F</b>	<b>Mar-24F</b>	<b>Mar-25F</b>
Total Cash And Equivalents	19,982	37,701	4,333	8,034	10,605
Total Debtors	1,474	753	2,121	2,122	2,123
Inventories	14,763	16,462	21,241	21,252	21,268
Total Other Current Assets	6,828	9,935	9,935	9,935	9,935
<b>Total Current Assets</b>	<b>43,046</b>	<b>64,850</b>	<b>37,630</b>	<b>41,342</b>	<b>43,932</b>
Fixed Assets	92,359	95,780	99,692	103,521	107,268
Total Investments	3,133	3,133	3,133	3,133	3,133
Intangible Assets					
Total Other Non-Current Assets	8,551	9,015	9,015	9,015	9,015
<b>Total Non-current Assets</b>	<b>104,043</b>	<b>107,928</b>	<b>111,839</b>	<b>115,669</b>	<b>119,415</b>
Short-term Debt	461	207	207	207	207
Current Portion of Long-Term Debt					
Total Creditors	9,772	14,571	14,060	14,068	14,078
Other Current Liabilities	11,003	16,214	16,214	16,214	16,214
<b>Total Current Liabilities</b>	<b>21,236</b>	<b>30,991</b>	<b>30,480</b>	<b>30,488</b>	<b>30,499</b>
Total Long-term Debt					
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	4,153	4,949	4,949	4,949	4,949
<b>Total Non-current Liabilities</b>	<b>4,153</b>	<b>4,949</b>	<b>4,949</b>	<b>4,949</b>	<b>4,949</b>
Total Provisions	14,893	11,292	11,292	11,292	11,292
<b>Total Liabilities</b>	<b>40,282</b>	<b>47,232</b>	<b>46,721</b>	<b>46,728</b>	<b>46,739</b>
Shareholders Equity	106,807	125,546	102,748	110,283	116,608
Minority Interests					
<b>Total Equity</b>	<b>106,807</b>	<b>125,546</b>	<b>102,748</b>	<b>110,283</b>	<b>116,608</b>

<b>Key Ratios</b>					
	<b>Mar-21A</b>	<b>Mar-22A</b>	<b>Mar-23F</b>	<b>Mar-24F</b>	<b>Mar-25F</b>
Revenue Growth	5.7%	58.3%	(9.1%)	0.1%	0.1%
Operating EBITDA Growth	264.4%	153.4%	(28.9%)	(5.3%)	(5.6%)
Operating EBITDA Margin	19.9%	31.9%	24.9%	23.6%	22.2%
Net Cash Per Share (Rs)	10.47	20.10	2.21	4.20	5.58
BVPS (Rs)	57.27	67.32	55.09	59.13	62.52
Gross Interest Cover	166.24	159.19	1,399.81	1,303.09	1,206.41
Effective Tax Rate	1.3%	25.4%	25.0%	25.0%	25.0%
Net Dividend Payout Ratio	35.9%	39.2%	53.3%	60.5%	64.6%
Accounts Receivables Days	5.86	2.87	4.07	6.01	6.00
Inventory Days	442.18	307.32	368.72	416.07	416.54
Accounts Payables Days	243.88	239.59	280.00	275.41	275.72
ROIC (%)	12.2%	26.6%	19.3%	16.3%	14.6%
ROCE (%)	10.4%	29.4%	21.2%	21.0%	18.3%
Return On Average Assets	8.9%	18.6%	13.5%	12.5%	11.2%

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 30th June 2022 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](http://www.cgs-cimb.com), CGIFHL at [www.chinastock.com.hk/en/ACG/ContactUs/index.aspx](http://www.chinastock.com.hk/en/ACG/ContactUs/index.aspx) and CIMBG at [www.cimb.com/en/who-we-are.html](http://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 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 its opinion or the information in this research report after the date of this report. CGS-CIMB Malaysia may act or acts as a market maker in the capital market products of the following companies:

UEM EDGENTA BERHAD, EASTERN & ORIENTAL BERHAD, UEM SUNRISE BERHAD, AXIATA GROUP BERHAD, KERJAYA PROSPEK GROUP BERHAD, RANHILL UTILITIES BERHAD, TELEKOM MALAYSIA BERHAD, MATRIX CONCEPTS HOLDINGS BERHAD, SPORTS TOTO BERHAD, KAWAN FOOD BERHAD, DRB-HICOM BERHAD, TALIWORKS CORPORATION BERHAD, ASTRO MALAYSIA HOLDINGS BERHAD, TENAGA NASIONAL BERHAD, MALAYAN BANKING BERHAD, IOI CORPORATION BERHAD, GENTING BERHAD, UNISEM (M) BERHAD, FGV HOLDINGS BERHAD, YINSON HOLDINGS BERHAD

**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, 10 Marina Boulevard, Marina Bay Financial Centre Tower 2, #09-01, Singapore 018983 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.

<b>Score Range:</b>	90 - 100	80 - 89	70 - 79	Below 70	No Survey Result
<b>Description:</b>	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.