Tata Chemicals

09 April 2021

Company Update

Reuters: TTCH.NS; Bloomberg: TTCH IN

Downgrade to sell on rich valuation post 2.5x rally

We are cutting Tata Chemicals (TTCH) from Accumulate to Sell with the stock expected to witness 31.3% downside from CMP based on our new target price (TP) of Rs563 post the 63.9%/252% rally in the last 3 months/12 months. The stock trades at rich PE of 38.9x/22.1x on FY22E/FY23E EPS, which prices in the improving fundamentals over FY21E-23E ~ our FY23E EBITDA is the highest in 15 years. The stock's valuation looks stretched as it implies a 143%/35% premium to the 5-year median/SD+1 readings on 12-month rolling PE of 9.1x/16.4x vs EPS CAGR of 5.4% over FY20-FY23E, which is more relevant than the 43.3% CAGR on the beaten down FY21E as base. This premium is likely due to bullish expectations on EV battery business pending clarity and chemical earnings.

The upside risk to our sell call: (a) higher-than-expected volume and margin in the Chemicals business, especially in the US and (b) visibility on Lithium Battery business plan materially adding to earnings by FY23E/FY24E.

We have raised TP by 20.8% based on (i) increased EV/E multiple from 6x-7x on FY23E for Chemical EBITDA (ii) trimmed FY22E/FY23E earnings by 7.6%/1.5% to build on tempered margin assumptions due to the recent rise in global commodity prices/freight rates. But, we have raised FY21E by 20.2% to align our numbers with the YTD run-rate (iii) the potential upside in standalone Specialty segment value of Rs26/share. We see limited room for disappointment in results in the next 3-4 quarters as the stock's current valuation post the recent surge is building in (a) excessive optimism about the core Chemicals business and (b) perhaps also adding upside from the Lithium battery/actives business even as the project is still on the drawing board.

US, EU markets may take time to recover from COVID impact: We are trimming our basic chemistry segment (chemical) volume in soda ash by 3.8%/0.8%/3.0% for FY21E/FY22E/FY23E to 2.942/3.394/3.548mn tonnes vs. FY15-21 avg. volume of 3.72mn tonnes/annum and high of 3.858mn tonnes in FY18. Global Soda Ash companies Ciner and Genesis are cautiously optimistic about the revival of soda ash demand by the end of CY21. They expect the growth momentum to pick up in CY22. There could be some headwinds on margins, especially in 1HFY22E due to the lag in passing on the likely increase in freight and energy costs. Indian soda ash industry believes these costs will get passed on by 2HFY22.

India may recover ahead of overseas markets: We see soda ash and bicarb expansion benefits supporting growth in 2HFY22, with the full benefits likely during FY23E-24E. Growth in premium medical grade bicarb post 40% expansion and detergent market for soda ash (40% of Indian pie), along with likely traction in auto/real estate sectors could help TTCH revive its India business ahead of other regions.

Surge in global Covid cases and fresh lockdowns could hurt volumes and margins in 1QFY22:

This is likely due to the gross contribution value lagging fixed costs at lower volumes. The US is particularly vulnerable to dip in volumes due to higher fixed costs – especially manpower and freight costs (50% of volumes depend on export movement) and other fixed expenses.

PAT growth of 16.7%/76.1% in FY22E/FY23E on beaten down FY21E: The three-year CAGR in EPS dwindles to 5.4% using FY20 as the base vs. the 43.3% CAGR over two years using FY21E as the base, which is likely to be down 43% from FY20. Revenue growth will likely improve in FY22E/FY23E to 7.2%/12.5% with EBITDA margin also remaining healthy at 16.4%/19.3% vs 5-year avg. of 18.3%.

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Revenues	1,03,367	1,03,568	1,01,681	1,08,626	1,22,344
EBITDA	**17,804**	**19,492**	**17,065**	**17,862**	**23,585**
Consol. Net Profit Adjusted*	**10,856**	**8,066**	**4,604**	**5,373**	**9,462**
EPS (Rs)	**33.8**	**31.7**	**18.1**	**21.1**	**37.1**
EPS gr (%)	***-29.7***	***-6.4***	***-42.9***	***16.7***	***76.1***
EBITDA Margin (%)	*17.2*	*18.8*	*16.8*	*16.4*	*19.3*
P/E	24.2	25.9	45.3	38.9	22.1
EV/EBITDA	14.0	12.8	14.6	14.0	10.6
FCF Yield (%)	*5.72*	*-6.18*	*3.74*	*3.56*	*5.67*
Net Debt/Equity (X)	0.07	0.30	0.24	0.19	0.11
Pre-tax RoCE (%)	7.3	6.6	4.9	5.1	7.0
RoE (%)	***7.4***	***6.4***	***3.5***	***4.0***	***6.8***

Note:*FY20 Cons. PAT Adjusted excludes gain on consumer business sale; *Source: Company,Nirmal Bang Institutional Equities Research*

SELL

Sector: Chemicals

CMP: Rs819

Target Price: Rs563

Downside: 31.3%

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Key Data

Current Shares O/S (mn)	254.8
Mkt Cap (Rsbn/US$bn)	208.8/2.8
52 Wk H / L (Rs)	834/231
Daily Vol. (3M NSE Avg.)	8,430,182

Price Performance (%)

	1 M	6 M	1 Yr
TTCH	7.4	171.7	251.5
Nifty Index	(1.5)	24.8	63.2

Source: Bloomberg

TTCH – NBIE vs street estimates and PE

	FY21E	FY22E	FY23E
NBIE EPS Rs	18.1	21.1	37.1
Consensus EPS Rs	18.0	32.7	39.8
NBIE fwd PE x	45.3	38.9	22.1
Consensus fwd PE x	45.5	25.1	20.6

Source: Bloomberg

Our SOTP-based TP implies 15.2x PE on FY23E: We value TTCH using EV/E of 7x for the chemicals business (including India specialty business) and the value of 50% stake in Rallis at CMP less 20% conglomerate discount. We have also added future upside in Indian specialty business (ex Rallis) – Nutraceuticals and Silica. This is based on asset turn of 0.7x and 25% EBIDTA margin, and valuation at 30x PE on FY25E. This value is discounted back to FY23E equivalent at 15% discount rate per annum to estimate Mar 22E valuation for the segment,

Risk: We see limited room for disappointment in TTCH results in the next 3-4 quarters as the stock's current valuation post the recent surge is building in (a) excessive optimism about the core chemicals business and (b) perhaps also adding potential upside from the Lithium battery/Battery actives business even as the management is yet to freeze project details like cost, timeline and volume. An added worry is the potential headwinds from higher energy and freight costs and any interim weakness in soda ash demand due to the recent spate of lockdowns and restrictions on mobility following the fresh Covid wave across EU, UK, LatAm, USA, China and India. It is also possible that the market is adding part of the value of the 2.5% stake held by TTCH in unlisted Tata Sons (the parent company).

The upside risk to our call is (a) higher-than-expected volume and margins in Chemicals business, especially in the US (b) visibility on Lithium Battery business plan materially adding to earnings by FY23/24 and (c) It is possible that the market is adding part of the value of the 2.5% stake held by TTCH in unlisted Tata Sons (the parent company), which in our view is a stretch, as TTCH cannot directly monetize the value of listed stocks held by the parent company.

Stock has priced in positives and offers limited room for disappointments:

The stock trades at 22.1x PE on FY23E as compared to 5-year median PE of 9.1x and the SD+1 reading of 16.4x. The stock is up more than 63.9% in the last 3 months and 252% YoY. We believe this outperformance has priced in fundamental drivers – be it the Soda Ash cycle reviving to more than 85-86% utilisation vs ~70% in CY20 or the scale-up in Nutra and Silica businesses in Indian specialty business (ex-Rallis).

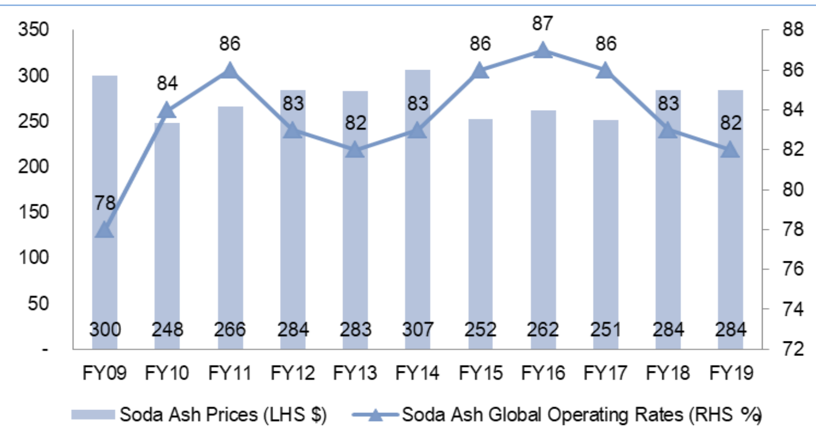
We see limited room for disappointment in TTCH results in the next 2-4 quarters as the stock's current valuation post the recent surge is building in (a) excessive optimism on the core chemicals business and (b) perhaps also adding potential upside from the Lithium battery/Battery actives business even as the management is yet to freeze project details like cost, timeline and volume.

To put this in context, the company had proposed to enter the business of Lithium battery and related active chemicals (actives) business in FY20. But, since then, TTCH management has maintained that the Lithium battery project is under evaluation and that it has not yet taken this to the board for discussion and approval.

Also, Indian Oil's JV with an Israeli company is developing an alternative based on Aluminum air technology for EV batteries. IOC believes this option is cheaper and also reduces the risk of dependence on importing lithium. Global reserves of lithium are concentrated in a handful of countries like Chile, Argentina, Australia and the US. Companies in China, which has limited domestic lithium reserves, have taken equity stakes in leading lithium producing companies to lock in lithium supplies for sustaining the Lithium Battery production for EVs and energy storage.

Hence in our view, it is premature to make estimates or put a value to the Lithium battery project, which is quite complex, needs scale and could also face competition from automakers integrating backwards and even conventional battery makers.

Exhibit 1: Chart Soda price vs capacity utilization



Note: Soda Ash price as per West Europe (FOB) ; Source: Soda Ash Global Operating rates from IHS Markit, Soda Ash Prices from Bloomberg, Nirmal Bang Institutional Equities

Potential positives: Potential recovery in Soda Ash demand to normal level and improvement in utilisation rates, especially over FY23-FY24.

There are signs of recovery across all sectors in China, with robust demand from Solar Panel Glass. The company also expects closure of capacities in China and deferred expansion plans as added positives. The 2-2.25mn tonnes of capacities that have been closed in the last two years will offset the supply overhang of 2.5mn tonnes from Turkey, which is aggressively pushing exports.

Other drivers for the stock price include the impact of sale of group company holdings like Titan and expectations of monetization of 2.5% stake in parent Tata Sons, which looks difficult for TTCH to achieve as its parent is not listed.

Potential concerns: We expect some pressure on margins in 1HFY21 due to the recent spike in energy and freight costs. The revival of lockdowns due to the new strain of the Covid virus in the UK and other countries is an added worry for demand, although the company has not indicated any disruption in business so far. The low cash cost for the naturally mined soda ash ~US$150/te could put further pressure on Soda Ash prices, which are down by US$10-12/te in LatAm and South East Asia.

Revision in earnings and TP

We have cut our earnings estimates over FY21E-23E, but raised SOTP-based TP from Rs466 to Rs563 on higher EV/E for Chemicals business of 7x vs 6x earlier.

Exhibit 2: Earnings revision table

	Revised estimate			Earlier estimate			*% Revision*		
Rs Mn	**FY21E**	**FY22E**	**FY23E**	**FY21E**	**FY22E**	**FY23E**	***FY21E***	***FY22E***	***FY23E***
Total Revenue	101681	108626	122344	1,00,768	1,05,743	1,18,320	*0.9*	*2.7*	*3.4*
EBITDA	17065	17862	23585	16,208	18,374	23,689	*5.3*	*-2.8*	*-0.4*
EBITDA margin (%)	*16.8*	*16.4*	*19.3*	*16.1*	*17.4*	*20*	*68*	*-96*	*-72*
PAT	4604	5373	9462	3,829	5,837	9,604	*20.2*	*-7.9*	*-1.5*
EPS	**18.07**	**21.09**	**37.14**	**15.03**	**22.91**	**37.7**	***20.2***	***-7.9***	***-1.5***
TP		**563**			**466**			***20.8***	

Source: Nirmal Bang Institutional Equities Research

Exhibit 3: TTCH SOTP Valuation Summary

No	Valuation drivers	multiple	Valuation Rs/sh	Remarks
1	Core chemicals EV/E	7.0	408	Excluding Rallis, Old EV/E - 6x
2	Rallis	50% stake	79	20% disc to cmp
3	Specialty ex Rallis	30x PE	26	***based on asset turn 0.7x and 25% EBIDTA margin, 30 PE - FY25E***
4	**Equity holdings**		50	50% disc. to latest CMP (excluding Tata Sons stake)
5	**NEW TP**		**563**	-
6	Implied PE FY23E incl Tata sons		**15.2**	-
7	-	**up/ down from CMP**	**-31.3%**	-

Source: Nirmal Bang Institutional Equities Research

Notes to SOTP Valuation:
Chemicals EV/E valuation based on: EV/E of 7x, EV - Rs 2,47,285mn, FY23E EBITDA - Rs 23585mn and FY23E Net debt-16,581, Equity value - Rs1,42,557mn

Our new TP implies PE of 15.2x on FY23E vs 5-year median PE of 9.1x

Exhibit 4: Specialty nutrition and silica business impact on TTCH valuation

Rs mn	**FY25E**	**FY27E**
CAGR Revenue %	20.5	22.9
Investment	6000	6000
debt	3000	3000
Asset Turn x	0.7	1
Rev	**4200**	**6000**
RM /sales - 50%	2100	3000
OPEX/sales - 25%	1050	1500
EBITDA	**1050**	**1500**
EBITDA Margin %	25	25
DEP	360	360
EBIT	690	1140
EBIT Margin %	16.4	19.0
EBIT/ASSETS - ROIC PRE TAX	11.5	19
Int exp	300	300
PBT	390	840
tax	97.5	210
PAT	**292.5**	**630**
PAT margin %	7.0	10.5
VALUATION		
Method A Based on EV/E x	**15**	**15**
EV Rsmn	15750	22500
debt	3000	3000
mkt cap	12750	19500
Valuation upside - Rs/sh	50.0	76.5
Method B Based on PE x	**30**	**30**
EPS upside Rs	1.1	2.5
TP upside - Rs/sh	34	74
no of years discounted back	2	4
Discount rate back to FY23E	15%	15%
Method A - Discounted upside FY23E on EV/E	38	44
Method B - Discounted upside FY23E on PE	26	42

Source: Nirmal Bang Institutional Equities Research

We have raised our TP by 20.8% to Rs563 based on the following:

- Raised target EV/E for Chemicals from 6x to 7x on FY23E EBITDA, based on potential upturn in the Soda Ash cycle over the next two years. Global Soda Ash company Ciner Resources of USA had a historical average EV/E multiple of 6.5x over FY18-20. Our global peer group average for FY23E is EV/E 5.7x and PE of_8.5x
- Marginal cut in the value of 50% stake in Rallis India following the recent correction in the stock.
- Future upside in Indian specialty business (ex-Rallis) – Nutraceuticals and Silica - based on asset turn of 0.7x and 25% EBIDTA margin, 30x PE on FY25E– see workings in above exhibit– method B.
- Marginal increase in value of strategic holdings, including Titan, but excluding the 2.5% stake in Tata Sons.

  We have not considered the value of 2.5% stake held by TTCH in the unlisted Tata Sons. We have also not considered any future upside from the proposed EV battery business, which is still to be finalised and may take a few years to achieve visibility and critical mass in terms of scale and financials. The impact of Tata Sons stake assuming 90% discount to NAV of the parent's listed holdings (NAVp) is Rs111/TTCH share ~ this is the same as adding 10% of the parent's NAVp to TTCH valuation.

We have trimmed FY22E/FY23E earnings by 7.6%/1.5% to build in tempered margin assumptions due to the recent increase in global commodity prices and freight rates – this could increase expenses on freight and energy. Indian soda ash industry players, including TTCH believe this could hurt margins in 1HFY22 as they expect to pass on these added costs in 2HFY22 once the soda ash demand attains and resumes its pre-Covid growth. But, **we have raised FY21E by 20.2%** based on YTDFY21 run-rate and improved demand conditions for soda ash in 4QFY21 based on management's expectations and revival in activity in key end use sectors - barring hospitality/tourism - to near pre-Covid levels in India and other markets.

We have revised volume and price assumptions

- soda ash volumes (mn tonnes) in FY21E/FY22E/FY23E
  - from 3.059/3.421/3.656 to 2.942/3.394/3.548 - cut of 3.8%/0.8%/3.0%
  - This still offers growth of 15.4%/4.5% in FY22E/FY23E on FY21E volume decline of 13.7% due to Covid-19 impact, especially in 1HFY21
- soda ash realization raised by 1.8%/0.7%/2.8% over FY21E/FY22E/23E
- We have also revised revenue/EBITDA estimates for all regions as shown in the exhibits below.

Exhibit 5: Change in revenue estimates

	FY21E	FY22E	FY23E
India	0.0%	2.1%	8.7%
TCNA	0.0%	1.1%	-3.3%
TCE	0.0%	4.4%	4.8%
TCAHL	0.0%	5.6%	9.2%
Rallis (Unrated)	3.9%	3.9%	3.9%
Total Revenue	0.9%	2.7%	3.4%

Source: Nirmal Bang Institutional Equities Research

Exhibit 6: Change in EBITDA estimates

	FY21E	FY22E	FY23E
India	5.0%	-6.0%	115.7%
TCNA	2.4%	-7.2%	-22.6%
TCE	3.1%	7.4%	9.6%
TCAHL	3.2%	29.2%	57.3%
Rallis	-3.4%	2.1%	2.2%
Total EBITDA	2.3%	-2.8%	-0.4%

Source: Nirmal Bang Institutional Equities Research

We have maintained the Mithapur expansion impact: The phased commissioning of the Salt and Bicarb expansion by FY22 and the 0.228mn tpa Soda Ash expansion by 3QFY23 are added long-term positives. We have built in (i) part of the increase in Salt capacity by 0.353mn tonnes and Bicarb capacity by 31,000 tonnes in FY23E and (ii) the 10-15% conversion of Soda Ash to Bicarb in the UK over FY22-FY23, which could add to the UK earnings.

TTCH business outlook

The improving long-term outlook for demand growth in Soda Ash – at more than 2% p.a with limited new capacity in sight could trigger an upswing in operating rate to more than 85% in the next two years. TTCH management believes that the 85% utilisation threshold will turn the industry into a sellers' market. This augurs well for a rebound in industry pricing and margins to pre-Covid level, according to industry channels. Global consultant "IHS Markit" had indicated, in an update in 2HCY20, that pressure on demand and pricing will persist until the end of CY21 and a recovery is expected only by end-CY22. This implies that the full impact of a visible upcycle is unlikely before FY24E.

TTCH and GHCL (not rated), both in their 3QFY21 concalls in February had sounded cautiously optimistic regarding a revival to pre-Covid volume and margins by 2HFY22. TTCH also cautioned that margins could see some pressure due to increase in energy and freight costs until 2QFY22 and it expects to pass on these costs through price hikes in markets with quarterly contracts.

TTCH also believes that its Soda Ash volume could nudge the peak of 3.6mn tpa over the next two years. This is based on all end use sectors returning to normal demand in all markets, including LatAm and South East Asia, which have suffered due to the weak travel/tourism sectors (that dented demand by ~13% from the container glass segment). The Mithapur expansion is expected to be completed in phases between end-FY22 and FY23 at a cost of Rs24bn.

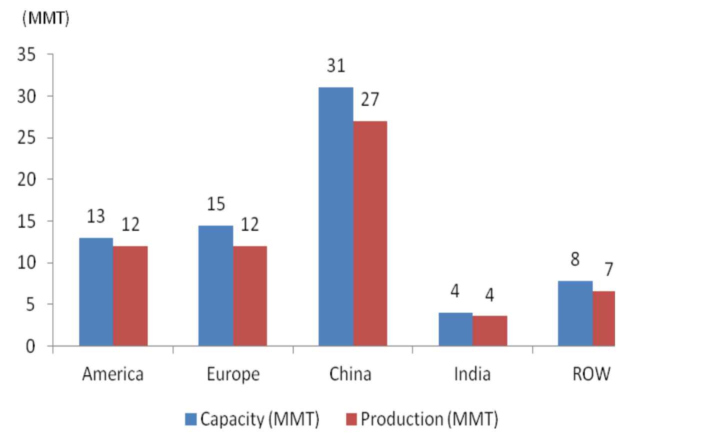
Outlook for specialty segment (ex Rallis) – Nutraceuticals and Silica

The Nutrition and Silica projects are in the process of commercial scale-up. The former will turn EBITDA positive in FY22 while Silica requires to raise existing 10,000 tpa capacity by 25,000-50,000 tpa to make it viable. This implies additional undisclosed capex to expand capacity to 35,000 – 60,000 tpa to achieve scale and breakeven in the Silica business.
TTCH had stated in 3QFY21 PPT that it sees positive traction in nutraceuticals and expects EBITDA breakeven in 2HFY22. In Silica, it is awaiting approvals for food and non-food applications. The management expects some headwinds from competition.

Soda Ash outlook:

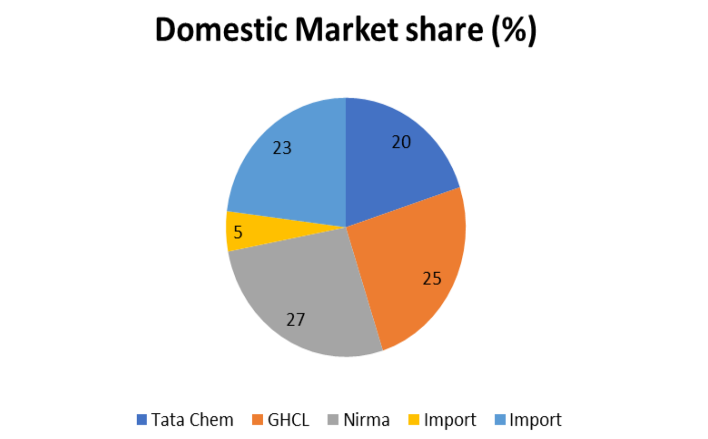
Normal growth of 2% CAGR in global demand requires around 1.2mn tpa of new supply each year

Exhibit 7:Global Soda ash capacity and production



Source: GHCL 3QFY21 Presentation, Nirmal Bang Institutional Equities Research

Exhibit 8: Indian Soda ash Market share



Source: GHCL 3QFY21 Presentation, Nirmal Bang Institutional Equities Research

Pl see Annexure I for global trends in charts

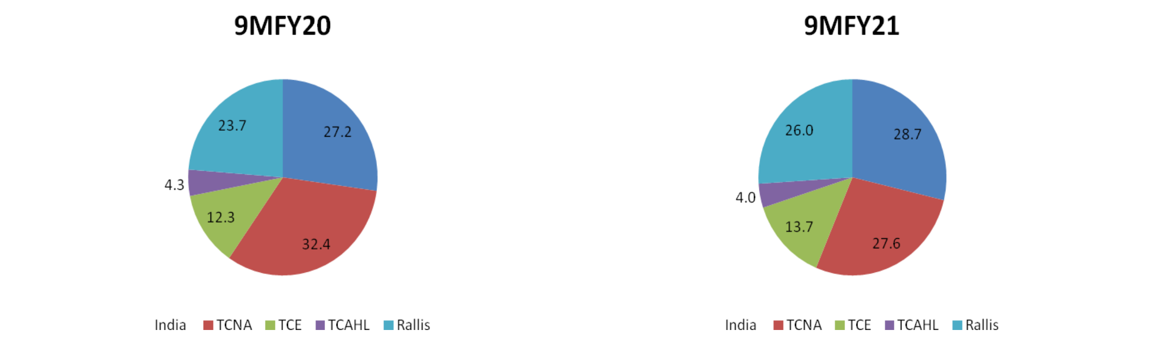
TTCH financials in pictures

Exhibit 9: Operating assumptions

Rs Mn	FY20	FY21E	FY22E	FY23E
Segment Revenue				
Basic chemistry	80,306	74,739	80,328	90,835
Specialty Nutra + HDS	744	1586	2083	2829
Specialty Rallis	22,518	24,569	26,215	28,680
Total Revenue	**1,03,568**	**1,01,460**	**1,08,626**	**1,22,344**
Segment EBITDA				
Basic chemistry	17,216	14,010	14,729	19,641
Specialty Nutra + HDS	-238	-735	-563	-270
Specialty Rallis	2,594	3,223	3,930	4,448
Total	**19,492**	**16,844**	**18,096**	**23,819**
Segment EBITDA Margins %	**FY20**	**FY21E**	**FY22E**	**FY23E**
Basic chemistry	21.4	18.7	18.3	21.6
Specialty	-32.0	-46.3	-27.0	-9.5
Rallis	11.5	13.1	15.0	15.5
Total	18.8	16.6	16.7	19.5
Geographic wise Revenue	**FY20**	**FY21E**	**FY22E**	**FY23E**
India	28,830	29,845	30,833	36,882
TCNA	34,030	28,531	31,428	35,136
TCE	13,560	14,120	15,676	16,787
TCAHL	4,630	4,050	4,474	4,859
Rallis	22,518	24,569	26,215	28,680
Total Revenue	**1,03,568**	**1,01,681**	**1,08,626**	**1,22,344**
Geographic wise EBITDA	**FY20**	**FY21E**	**FY22E**	**FY23E**
India	7,218	6,392	6,861	9,650
TCNA	7,620	4,503	5,043	6,793
TCE	1,570	1,625	1,703	2,127
TCAHL	490	680	559	800
Rallis	2,594	3,223	3,696	4,214
Total EBITDA	**19,492**	**16,574**	**17,862**	**23,585**
Volume (mt)	**FY20**	**FY21E**	**FY22E**	**FY23E**
Soda ash				
TCL India	0.63	0.62	0.74	0.80
TCNA -US	2.24	1.84	2.10	2.18
TCEL	0.29	0.27	0.32	0.33
TCAHL	0.25	0.22	0.24	0.24
Sodium bicarb - India	0.10	0.11	0.11	0.14
Sodium bicarb - UK	0.11	0.11	0.11	0.11
Price				
Soda ash - US $/tn	208	190	200	215
Soda ash- India Rs/tn	23,428	18,742	19,992	21,617
RM/sales %- TTCH consolidated	19.01	23.09	23.85	24.54
Tax rate %	18	20	20	20
Soda ash revenue growth (%)				
India	-9.7	-21.8	8.0	16.4
TCNA	0.6	-16.2	10.2	11.8
TCEL	16.4	-37.2	29.1	11.8
TCAH	-8.5	-12.5	10.5	8.6
Specialty segment – Rallis India				
Revenue growth %	13.5	9.1	6.7	9.4
RM/sales %	61.7	61.0	60.0	59.5

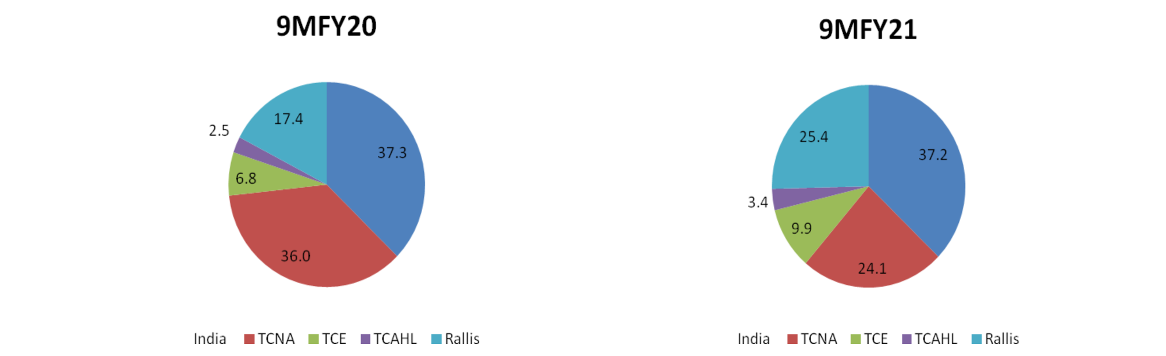
Note: Mt = Million Tonne, Tn= Tonne;Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 10: Geographic revenue pie % 9MFY20 and 9MFY21



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 11: Geographic EBITDA pie % 9MFY20 and 9MFY21



Source: Company, Nirmal Bang Institutional Equities Research

Key risks:

Upside surprise potential from earlier-than-expected upswing in soda ash cycle

The global economy could rebound faster than what we believe is possible once COVID-19 related disruption ends. The massive stimulus announced and the desire among people to make up for lost time could revive demand and supplies across sectors, including autos and construction, which are key for the soda ash business. Further, the nil capacity addition, normal demand growth of 2-3% and potential capacity closures in the intervening periods could **set the stage for an upswing in the Soda Ash cycle** that could be steeper and longer than our earlier expectations. (Chemical Giant Leveraged To Soda Ash Upcycle-27 May 2019).

Potential +VE drivers for TTCH stock outlook

- If the industry sees capacity closures coupled with sustained recovery in demand, we could see prospects for stock's revival. An earlier-than-expected global economic recovery could spur a revival in Auto and Construction sectors that could improve industry pricing and margins.
- Soda Ash demand could get a fillip from single use plastic ban under discussion in India and other countries. This could potentially create additional demand for glass, especially for milk, which implies additional avenue of growth for Soda Ash in container glass segment under normal conditions.
- Announcement and visibility on investments in the complete EV battery ecosystem could help investors assess long-term growth from an emerging high-tech business, which requires domain expertise in technology for Lithium Battery, active ingredients recycling, distribution and after sales. The flip side is that the meltdown in global energy prices could stall current plans to invest in green technology, including EVs. In India, this may have a lesser impact and for project sponsors like TTCH this could mean lower capital cost as there could be a lull in capex for the EV battery projects.
- EV battery based on Li-carbonate Salt could add to Soda Ash use in Lithium Battery manufacturing. The exact impact on volume is subject to debate as there is a competing hydroxide route, which does not

require Soda Ash, according to consultant "IHS Markit". Lithium Carbonate salt is one of actives used in Li batteries – this competes with others like Lithium Hydroxide.

- Solar panel for solar power is a new area of growth for float glass - a key end use market for Soda Ash; China is seeing strong demand in this segment.
- Other drivers for the stock price include the impact of sale of group company holdings like Titan.

The global Li Carbonate output is estimated at 100,000 te – this can support batteries required for EV volumes of 2-3m PHEV category, according to some research publications. According to a Reuters article, 1mn te of Lithium can support 39m Chevrolet Volt EVs. This is the equivalent of 158 gms of Li/kwh of EV battery power ~ 840 gms/kwh of Lithium Carbonate. **The actual industry norm is closer to 1.4kg/kwh of Lithium Carbonate~ 264 gm/kwh of Lithium metal, according to published data**

Solving the TTCH stock price rally puzzle: This has bemused most investors and analysts. If we see the last 12 months, the stock was initially a tracking stock for the consumer business pending its demerger. Post this deal, **the stock has rallied by more than 250% YoY**.

This is partly explained by:

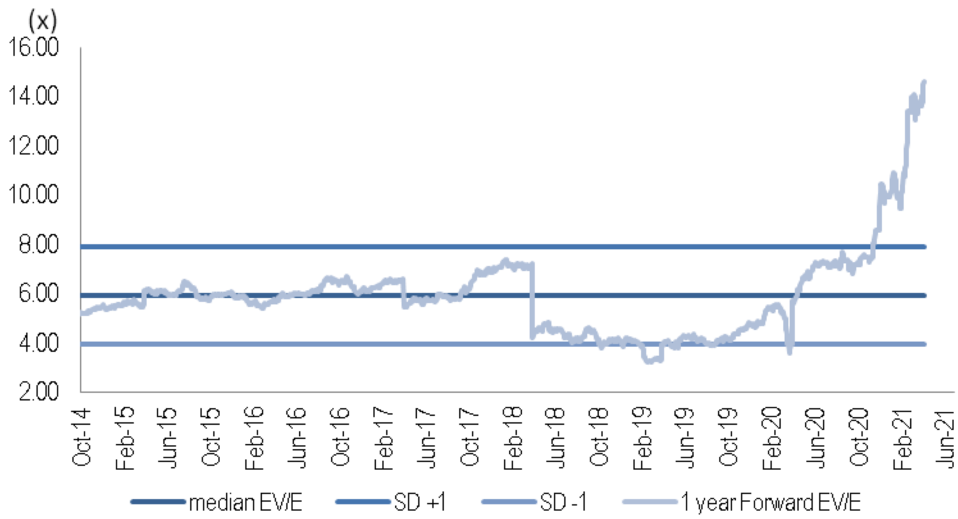
i. expectations of recovery with phased lifting of lockdown

ii. improved FY21 performance of its 50.1% subsidiary Rallis India (Not Rated) - ~10-12% of normal TTCH earnings

iii. The buzz around Lithium Battery project and the PLI scheme has also been a recent tailwind, although the company has said that the project is still under evaluation and not finalized yet. We also learn that the management is not keen on availing PLI benefits if it gets into this project.

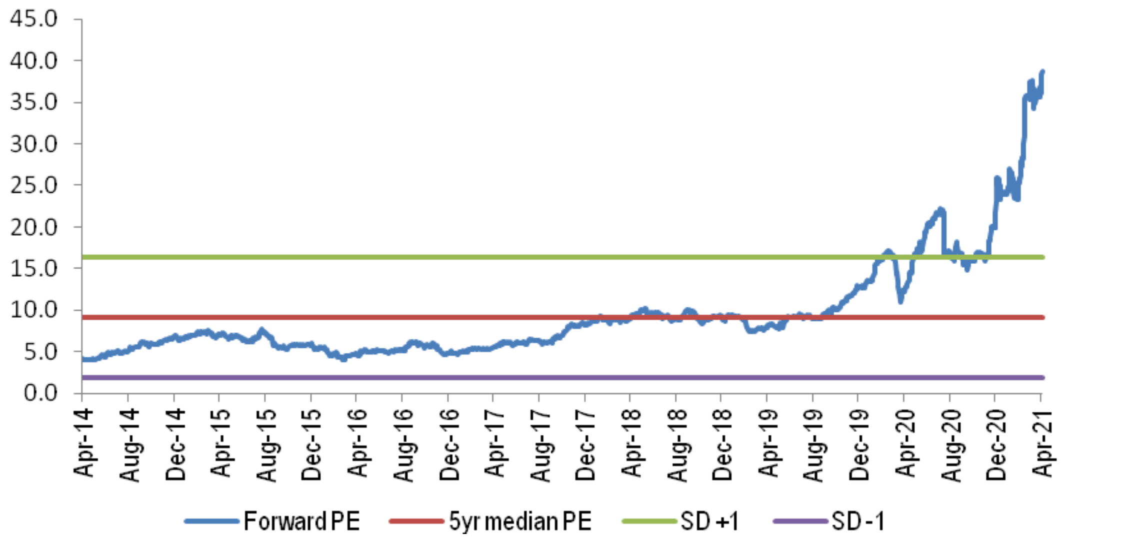
- The recent spike in the TTCH stock is also likely based on the option value of its 2.5% holding in its parent company Tata Sons based on the latter's listed holdings. This has been driven by talks of a settlement between the parent and the Shapoorji Pallonji group, and its likely impact on unlocking the value of TTCH's 2.5% stake. This has been put to rest as the Court has ruled in favour of Tata group and Shapoorji Pallonji group is in no hurry to sell its reported 18.4% stake in Tata Sons.
- Another tailwind for the TTCH stock could be expectation regarding the sale of investments in other listed Tata group companies, including Titan, considered as part of non-current investments in its accounts - we have included this in our TP at 50% discount to market valuation.

Exhibit 12: 5-year EV/EBITDA chart



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 13: 5-year P/E Chart



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 14: Peer comparison

	Code	CMP	Market cap (USD mn)	EPS FY23E	PE(x) FY23E	EV/EBITDA(x) FY23E
SOLVAY SA	SOLB BB Equity	106.7	13,428	9.0	11.8	6.8
GHCL Ltd	GHCL IN Equity	229.0	293	58.1	3.9	3.5
Genesis Energy LP	GEL US Equity	9.5	1,167	1.0	9.3	7.7
Ciech SA	CHX GR Equity	8.2	512	3.8	9.8	5.0
Sisecam	SISE TI Equity	7.3	2,736	1.4	5.2	3.5
Sanyou Chemical	600409 CH Equity	11.2	3,524	1.0	11.0	7.8
Average					**8.5**	**5.7**

Source: Company, Nirmal Bang Institutional Equities Research

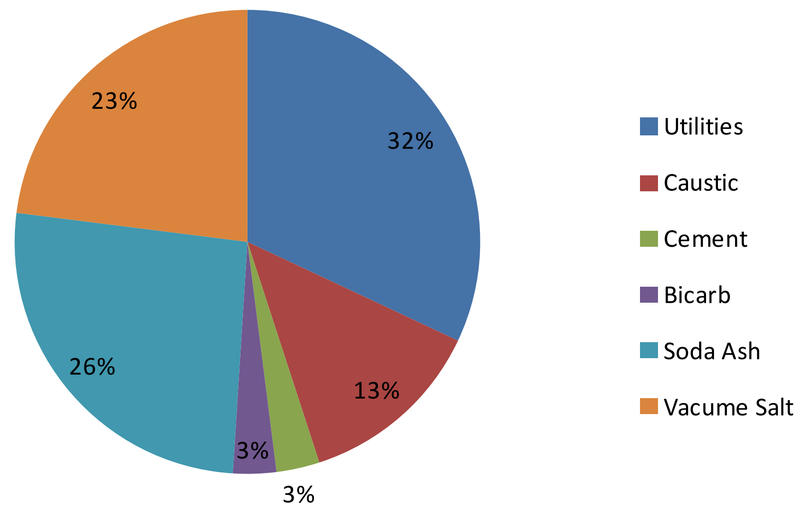
Capex plan and initiatives

This is per company guidance

- No plans to invest in Lithium Battery in the current capex plan for FY21-24
- Board to evaluate and make a final decision
- YTD FY21 capex at Rs7.76bn vs Rs8.96bn in YTD FY20
- Mithapur capex Rs24bn – Rs8bn committed while rest to be spent over FY22-23 and full impact on P&L by FY24
- There is no cost savings from the above capex

Specialty: Nutraceuticals business to breakeven at EBITDA level in FY22
Silica needs further capex to add 25000-50000 tpa capacity to existing 10000 tpa capacity to achieve scale and breakeven. This capex is pending finalization.

Exhibit 15: Mithapur Expansion plan - Rs24bn



Source: *Company,Nirmal Bang Institutional Equities Research*

Exhibit 16: Increase in volumes from expanion

Volume increase Tonnes	FY22E	FY23E	Total
Soda Ash	45000	183000	228000
Vaccum Salt	188000	165000	353000
Bicarb	0	31000	31000
Cement	0	221000	221000
Caustic	18000	18000	36000

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 17: Product wise revised Implementation and Commissioning Schedule

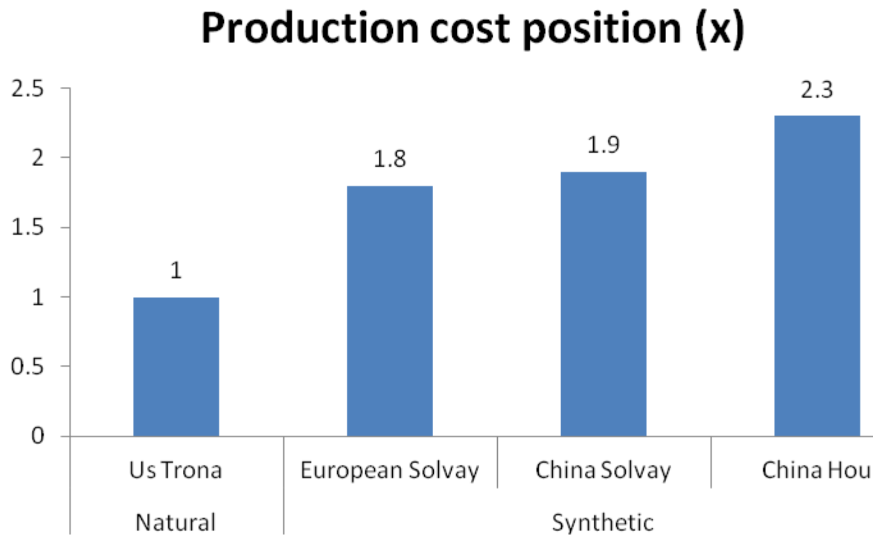
Products In Lac MT	FY20	FY21				FY22				FY23				FY24 & Beyond
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Total
Soda Ash					0.20			0.25			1.83			2.28
Vaccum Salt					0.23			1.65	1.65					3.53
Bicarb									0.31					0.31
Cement												2.21		2.21
Caustic					0.18						0.18			0.36

Source: *Company,Nirmal Bang Institutional Equities Research*

Annexure - I: Global Soda Ash Market in Pictures

We have extracted some key industry charts from recent PPTs of US Soda Ash companies – Ciner Resurces LP and Genesis Energy

Exhibit 18: Natural vs. Synthetic – Major Cost Advantage



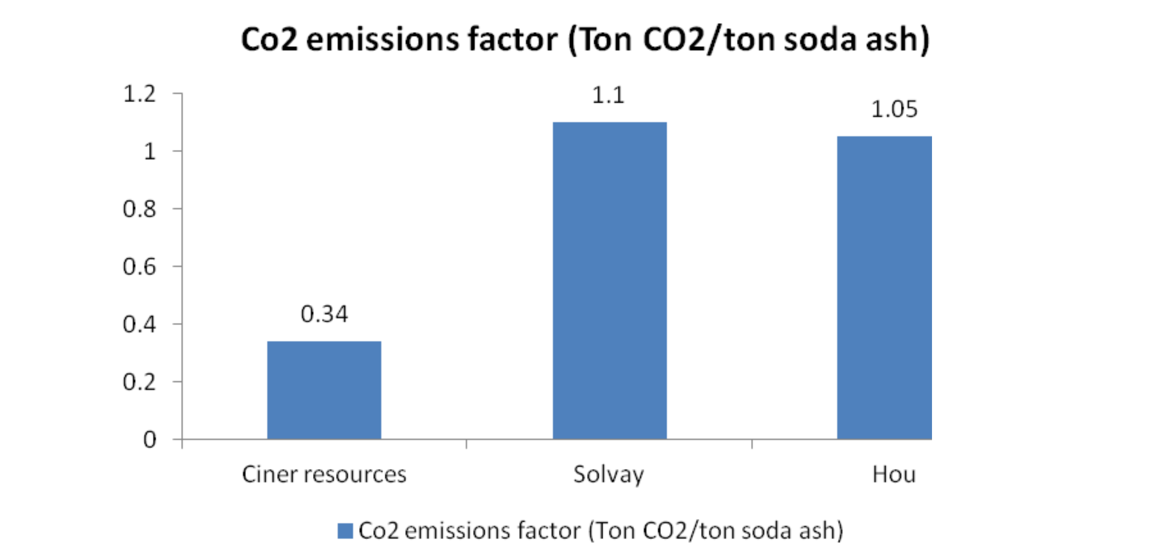
Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

Exhibit 19: Environmental Impact

	US Trona	Solvay	Hou
Process	Mining & refining trona	Synthetic	Synthetic
Raw Materials	Trona	Salt (brine), limestone, ammonia	Salt (brine), ammonia, CO_2
Energy Usage	3 – 6 MMBtu/ton	9 – 13 MMBtu/ton	9 – 13 MMBtu/ton
Water Usage	1.5 – 2.0 tons / ton of soda	10 – 15 tons / ton of soda	10 – 15 tons / ton of soda
By-Products	Deca (able to process into soda ash)	Calcium chloride (waste product)	Ammonium chloride (co-product)

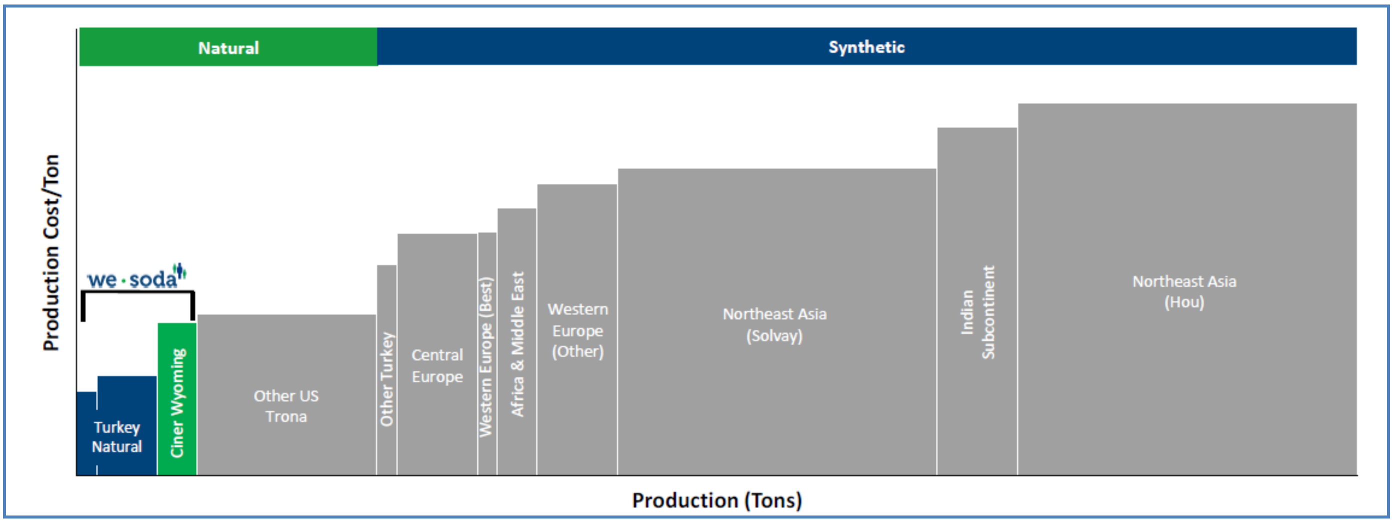
Source: Ciner Resources PPT,Nirmal Bang Institutional Equities Research

Exhibit 20: CO2 emmissions



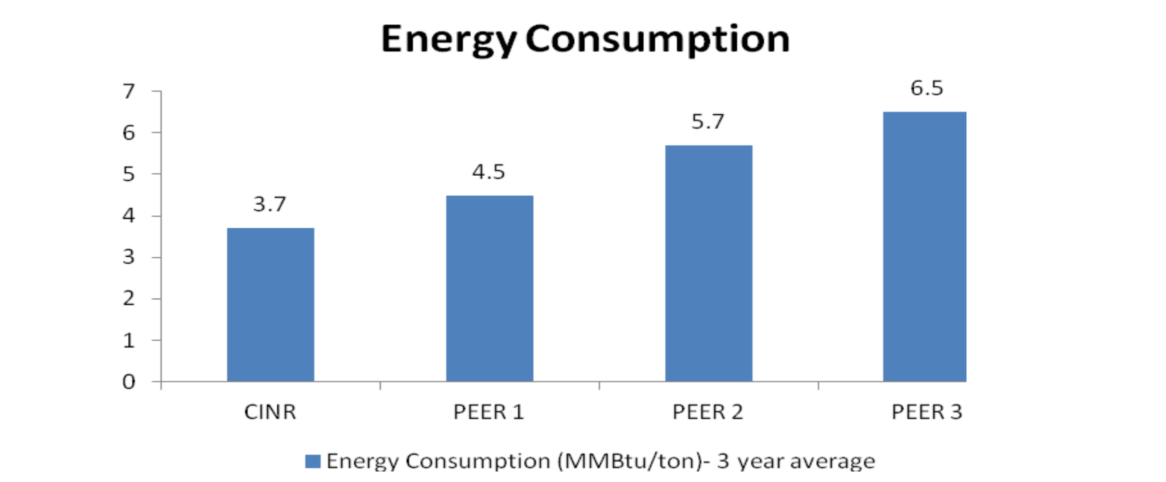
Source: Ciner Resources PPT,Nirmal Bang Institutional Equities Research

Exhibit 21: Global soda ash production cost comparision



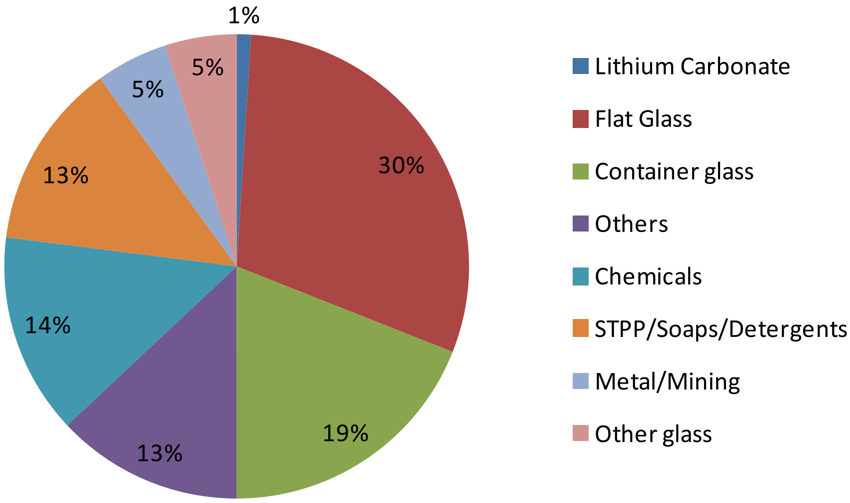
Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

Exhibit 22: Energy Consumption



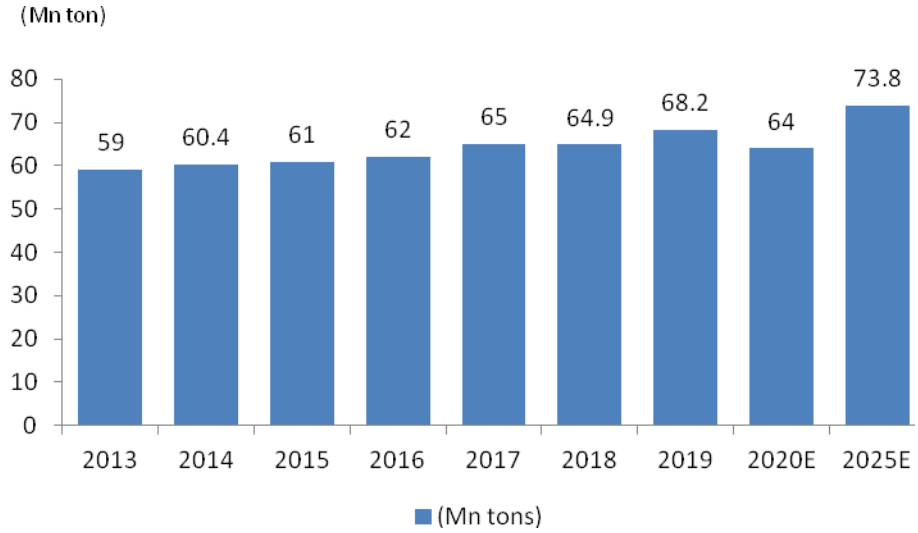
Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

Exhibit 23: Diverse end-market uses



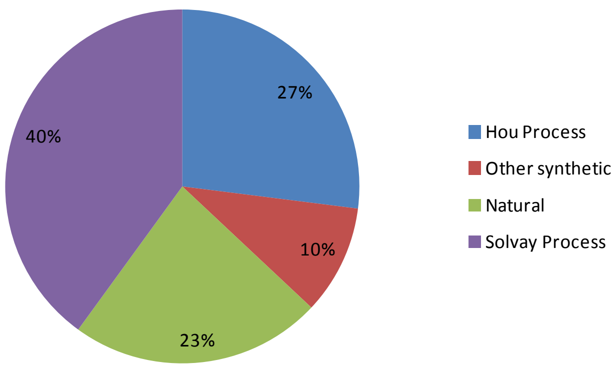
Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

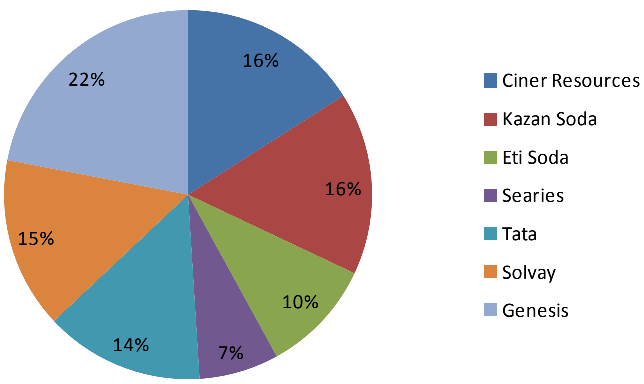
Exhibit 24: Steady global consumption growth



Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

Exhibit 25: Major producer of low -cost Natural Soda ash





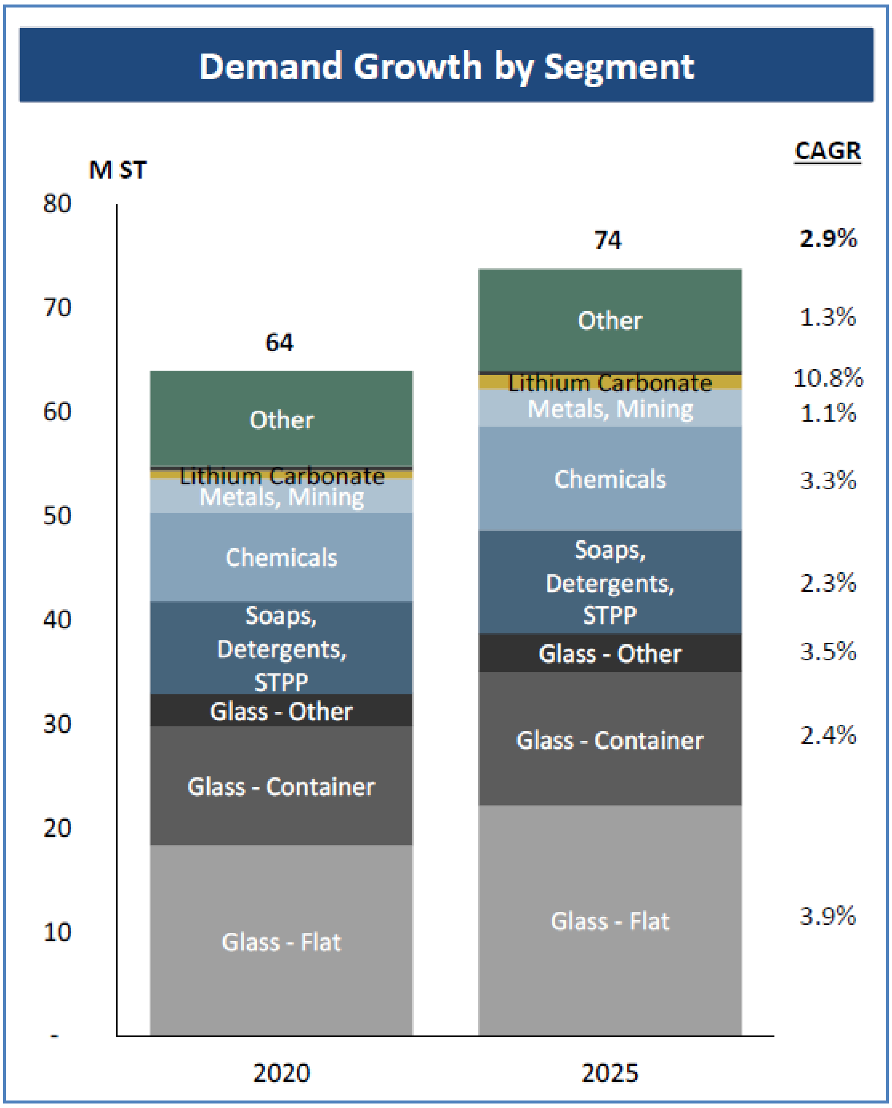
Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

Exhibit 26: Ample Room for per Capita Consumption to Grow

Region	Consumption per Capita (kg / person)
U.S.A	15
Middle East	7
Latin America	5
Asia Ex-China	5
Africa	1

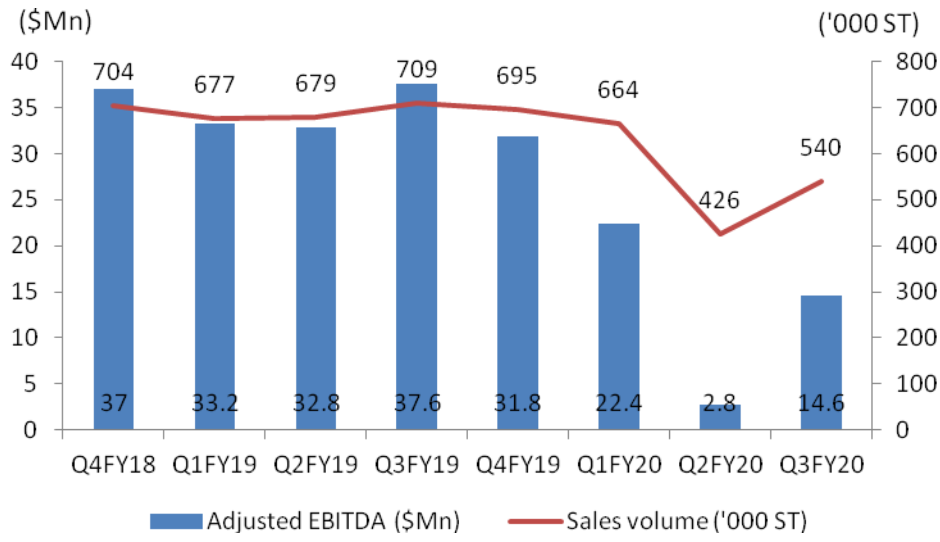
Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

Exhibit 27: Demand Growth by Segment



Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

Exhibit 28: COVID-19 Market Impact



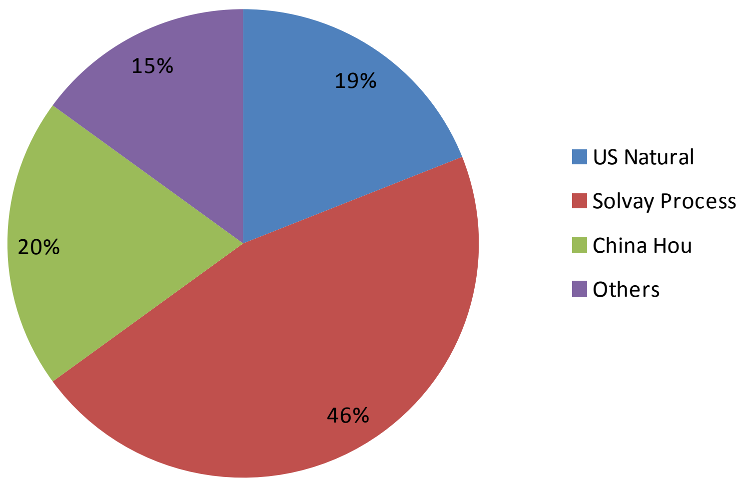
Source: *Ciner Resources PPT,Nirmal Bang Institutional Equities Research*

Exhibit 29: Natural vs. Synthetic Production

	US Natural	Solvay Process	China Hou
Raw Materials	Trona Ore	Salt (brine), Limestone, Carbon Dioxide	Salt (brine), Limestone, Ammonia
Energy Usage	4-6 MMBtu / ton	10-14 MMBtu / ton	10-14 MMBtu / ton
By-Products	None	Calcium Chloride (waste product)	Ammonium Chloride (waste product)

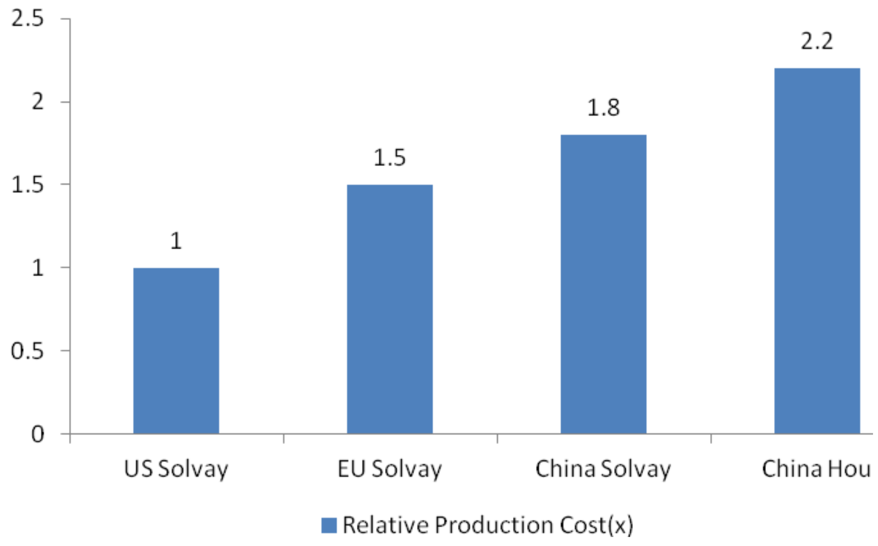
Source: *Genesis Energy PPT,Nirmal Bang Institutional Equities Research*

Exhibit 30: Natural vs. Synthetic Production



Source: Genesis Energy PPT,Nirmal Bang Institutional Equities Research

Exhibit 31: Relative Production Cost



Source: Genesis Energy PPT,Nirmal Bang Institutional Equities Research

Annexure - II: TTCH quarterly numbers in pictures

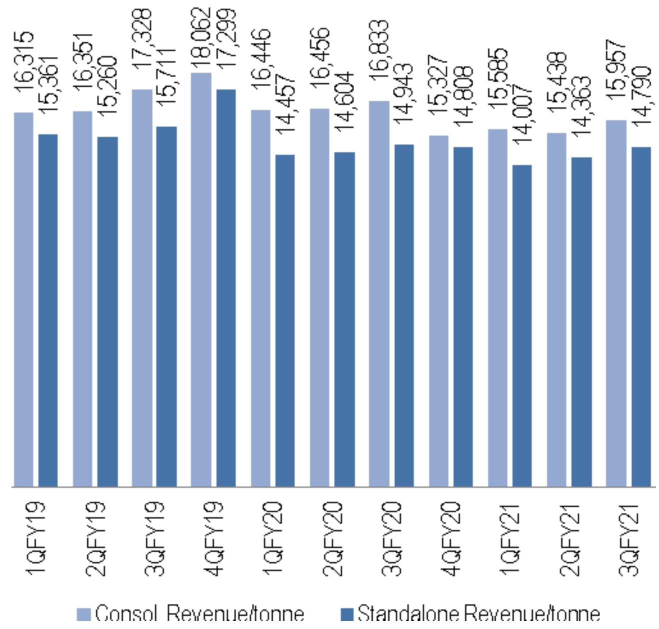
Exhibit 32: Geography-wise Analysis

TCL INDIA	3QFY20	3QFY21	YoY (%)	2QFY21	QoQ (%)	9MFY20	9MFY21	YoY (%)
Revenue Rs Mn	7,590	8,120	7.0	7,170	13.2	21,860	21,580	-1.3
EBITDA Rs Mn	1,950	1,750	-10.3	1,160	50.9	5,780	4,470	-22.7
PBT Rs Mn	1,880	1,480	-21.3	1,660	-10.8	6,920	4,560	-34.1
PAT Rs Mn	1,370	1,160	-15.3	1,350	-14.1	5,540	3,600	-35.0
EBITDA Margin %	25.69	21.55	-414	16.18	537	26.44	20.71	-573
PBT Margin %	24.77	18.23	-654	23.15	-493	31.66	21.13	-1053
PAT Margin %	18.05	14.29	-376	18.83	-454	25.34	16.68	-866
TCNA -US	**3QFY20**	**3QFY21**	**YoY (%)**	**2QFY21**	**QoQ (%)**	**9MFY20**	**9MFY21**	**YoY (%)**
Revenue Rs Mn	8,720	7,420	-14.9	7,110	4.4	26,030	20,710	-20.4
EBITDA Rs Mn	1,830	1,580	-13.7	960	64.6	5,570	2,890	-48.1
PBT Rs Mn	790	350	-55.7	-260	-234.6	2,560	-1,110	-143.4
PAT Rs Mn	400	190	-52.5	-440	-143.2	1,330	-1,310	-198.5
EBITDA Margin %	20.99	21.29	31	13.50	779	25.48	13.39	-1209
PBT Margin %	9.06	4.72	-434	-3.66	837	11.71	-5.14	-1685
PAT Margin %	4.59	2.56	-203	-6.19	875	6.08	-6.07	-1215
TCEL - UK	**3QFY20**	**3QFY21**	**YoY (%)**	**2QFY21**	**QoQ (%)**	**9MFY20**	**9MFY21**	**YoY (%)**
Revenue Rs Mn	3,480	3,740	7.5	3,370	11.0	9,910	10,260	3.5
EBITDA Rs Mn	430	450	4.7	460	-2.2	1,060	1,190	12.3
PBT Rs Mn	80	20	-75.0	20	0.0	10	-110	-1200.0
PAT Rs Mn	80	20	-75.0	20	0.0	10	-110	-1200.0
EBITDA Margin %	12.36	12.03	-32	13.65	-162	4.85	5.51	67
PBT Margin %	2.30	0.53	-176	0.59	-6	0.05	-0.51	-56
PAT Margin %	2.30	0.53	-176	0.59	-6	0.05	-0.51	-56
TCAHL- Africa	**3QFY20**	**3QFY21**	**YoY (%)**	**2QFY21**	**QoQ (%)**	**9MFY20**	**9MFY21**	**YoY (%)**
Revenue Rs Mn	820	1,070	30.5	910	17.6	3,470	2,980	-14.1
EBITDA Rs Mn	-90	260	-388.9	60	333.3	390	410	5.1
PBT Rs Mn	-200	180	-190.0	-50	-460.0	50	100	100.0
PAT Rs Mn	-200	180	-190.0	-50	-460.0	50	100	100.0
EBITDA Margin %	-10.98	24.30	3527	6.59	1771	1.78	1.90	12
PBT Margin %	-24.39	16.82	4121	-5.49	2232	0.23	0.46	23
PAT Margin %	-24.39	16.82	4121	-5.49	2232	0.23	0.46	23
Rallis India	**3QFY20**	**3QFY21**	**YoY (%)**	**2QFY21**	**QoQ (%)**	**9MFY20**	**9MFY21**	**YoY (%)**
Revenue Rs Mn	5,340	5,700	6.7	7,240	-21.3	19,060	19,540	2.5
EBITDA Rs Mn	560	630	12.5	1,180	-46.6	2,690	3,050	13.4
PBT Rs Mn	480	620	29.2	1,100	-43.6	2,400	2,920	21.7
PAT Rs Mn	360	460	27.8	830	-44.6	1,850	2,200	18.9
EBITDA Margin %	10.49	11.05	57	16.30	-525	12.31	14.13	183
PBT Margin %	8.99	10.88	189	15.19	-432	10.98	13.53	255
PAT Margin %	6.74	8.07	133	11.46	-339	8.46	10.19	173
TTCH - Consolidated*	**3QFY20**	**3QFY21**	**YoY (%)**	**2QFY21**	**QoQ (%)**	**9MFY20**	**9MFY21**	**YoY (%)**
Revenue Rs Mn	26,230	26,060	-0.6	26,090	-0.1	79,790	75,640	-5.2
EBITDA Rs Mn	4,730	4,720	-0.2	3,860	22.3	15,490	12,180	-21.4
PBT Rs Mn	2,890	2,550	-11.8	1,890	34.9	10,310	5,540	-46.3
PAT Rs Mn	1,670	1,608	-3.7	705	128.2	6,220	2,450	-60.6
EBITDA Margin %	18.03	18.11	8	14.79	332	70.86	56.44	-1442
PBT Margin %	11.02	9.79	-123	7.24	254	47.16	25.67	-2149
PAT Margin %	6.37	6.17	-19	2.70	347	28.45	11.35	-1710

*Consolidated financials after adjusting SPV and other adjustments, and after minority interest

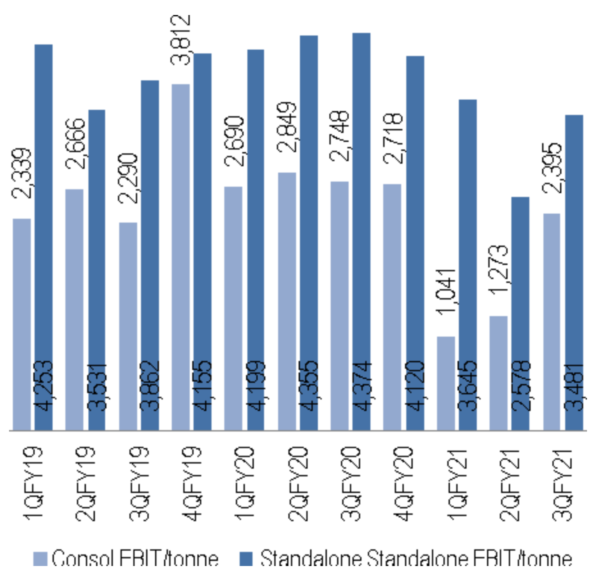
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 33: Chemistry segment Revenue/tonne Quarterly Trend



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 34: Chemistry segment EBIT/tonne Quarterly Trend



Source: Company, Nirmal Bang Institutional Equities Research

Annexure -III - Lithium and EVs

Price trend

- Spot lithium carbonate prices in China decreased from approximately $7,100 per ton at the beginning of the year to about $6,200 per ton in November.
- For large fixed contracts, the annual average U.S. lithium carbonate price was $8,000 per metric ton in 2020, a 37% decrease from that of 2019.
- Spot lithium hydroxide prices in China decreased from approximately $7,800 per ton at the beginning of the year to about $7,000 per ton in November. Spot lithium metal (99.9% lithium) prices in China decreased from approximately $83,000 per ton at the beginning of the year to about $71,000 per ton in November.

Leading Lithium producers

- Five mineral operations in Australia, two brine operations each in Argentina and Chile, and two brine and one mineral operation in China accounted for the majority of world lithium production. Owing to overproduction and decreased prices, several established lithium operations postponed capacity expansion plans.
- Junior mining operations in Australia and Canada ceased production altogether. Lithium supply security has become a top priority for technology companies in the United States and Asia.
- Strategic alliances and joint ventures among technology companies and exploration companies continued to be established to ensure a reliable, diversified supply of lithium for battery suppliers and vehicle manufacturers.
- Brine-based lithium sources were in various stages of development in Argentina, Bolivia, Chile, China, and the United States; mineral-based lithium sources were in various stages of development in Australia, Austria, Brazil, Canada, China, Congo (Kinshasa), Czechia, Finland, Germany, Mali, Namibia, Peru, Portugal, Serbia, Spain, and Zimbabwe; and lithium-clay sources were in various stages of development in Mexico and the United States.

World Resources:

- Owing to continuing exploration, identified lithium resources have increased substantially worldwide and total about 86 million tons. Lithium resources in the United States—from continental brines, geothermal brines, hectorite, oilfield brines, and pegmatites—are 7.9 million tons.
- Lithium resources in other countries have been revised to 78 million tons. Lithium resources are Bolivia, 21 million tons; Argentina, 19.3 million tons; Chile, 9.6 million tons; Australia, 6.4 million tons; China, 5.1 million tons; Congo (Kinshasa), 3 million tons; Canada, 2.9 million tons; Germany, 2.7 million tons; Mexico, 1.7 million tons; Czechia, 1.3 million tons; Serbia, 1.2 million tons; Peru, 880,000 tons; Mali, 700,000 tons; Zimbabwe, 500,000 tons; Brazil, 470,000 tons; Spain, 300,000 tons; Portugal, 270,000 tons; Ghana, 90,000 tons; and Austria, Finland, Kazakhstan, and Namibia, 50,000 tons each

Reserves and mines output of Lithium CY20

Global reserves – 21mn tonnes

Chile leads in reserves with 9.2mn tonnes, Australia – 4.7mn, Argentina – 1.9mn and China 1.5mn. USA has 0.75 mn

Global mines production – 82,000 tonnes

Australia Leads with 40,000 tonnes. Chile - 18,000, China - 14,000 and Argentina – 6200 are the other leading producers,

Source: extracted from U.S. Geological Survey, Mineral Commodity Summaries, January 2021

Electric Vehicles – Key figures

- **CY20 Global plug in EV capacity** (PEV) - 3mn; Tesla – 0.5mn

BNEF Estimates of EV battery capacity

- CY08 – 6Gwh, CY19 – 365 Gwh, CY23E- 1230 Gwh
- China share has declined from 97% to 75% over CY08-CY19; This is estimated to fall to 65% by CY23E

Lithium battery prices

Lithium-ion battery pack prices, have declined 89% in real terms from US$1,100 per kilowatt-hour in CY10, to US$137/kWh in CY20. By CY23, average prices are likely to fall further to US$100/kWh, according to the latest forecast from research company BloombergNEF (BNEF).

BNEF's 2020 Battery Price Survey, which considers passenger EVs, e-buses, commercial EVs and stationary storage, predicts that by CY23 average pack prices will be US$101/kWh. At around this price point, automakers should be able to produce and sell mass market EVs at the same price (and with the same margin) as comparable internal combustion vehicles in some markets. This assumes no subsidies are available, but actual pricing strategies will vary by automaker and geography.

Source: https://about.bnef.com/blog/battery-pack-prices-cited-below-100-kwh-for-the-first-time-in-2020-while-market-average-sits-at-137-kwh/

Consolidated financials

Exhibit 35: Income statement

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Net Revenue	**1,03,367**	**1,03,568**	**1,01,681**	**1,08,626**	**1,22,344**
y/y	10.00	-8.34	-3.24	7.24	12.50
Raw Material Expenses	20,020	19,684	23,479	25,903	30,019
RM/Sales %	19.4	19.0	23.1	23.8	24.5
Employee cost	13,185	13,754	14,004	14,327	15,191
Power and fuel cost	14,801	14,499	13,890	15,135	16,049
Selling, General & Admin Expense	37,556	36,139	33,244	35,398	37,500
EBITDA	**17,804**	**19,492**	**17,065**	**17,862**	**23,585**
y/y	-18.73	9.48	-12.45	4.67	32.04
Depreciation	5,685	6,665	7,552	7,962	8,517
EBIT	12,119	12,827	9,513	9,900	15,067
Interest Expense	3,537	3,419	3,632	3,517	3,384
Other Income	4,095	3,111	2,255	2,505	2,505
PBT (adjusted)	**12,677**	**12,519**	**8,135**	**8,887**	**14,188**
- Income Tax Expense	2,744	2,197	1,929	1,777	2,838
Share of associates Profit/(loss)	992	(39)	221	221	221
Less Minority Interests	2,309	2,218	1,823	1,957	2,110
Consolidated PAT (adjusted)	**8,615**	**8,066**	**4,604**	**5,373**	**9,462**
Consolidated PAT reported	11,559	70,063	4,604	5,373	9,462
Diluted EPS (adjusted)	**33.82**	**31.66**	**18.07**	**21.09**	**37.14**
y/y	-29.74	-6.38	-42.92	16.71	76.08

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 37: Balance sheet

Y/E March (Rsmn)	FY19	FY20	FY21E	FY22E	FY23E
Equity Share Capital	2,548	2,548	2,548	2,548	2,548
Reserves and Surplus	1,20,222	1,26,428	1,29,759	1,33,094	1,40,008
Networth	**1,22,770**	**1,28,977**	**1,32,307**	**1,35,642**	**1,42,557**
Non controlling interest	29,147	7,638	9,460	11,418	13,527
Long Term Borrowings	47,829	36,614	42,195	53,525	37,115
Deferred Tax Assets / Liabilities	12,972	14,379	14,379	14,379	14,379
Other Long-Term Liabilities	16,203	19,031	19,031	19,031	19,031
Trade Payables	13,033	16,309	15,879	15,656	18,023
Other Current and financial	17,043	30,717	9,436	9,436	9,436
Short Term Borrowings	3,525	19,129	19,129	19,129	19,129
Income tax liabilities	1,362	1,959	1,959	1,959	1,959
Short Term Provisions	2,803	2,769	2,504	2,842	3,162
Total Capital and Liabilities	**2,66,686**	**2,77,522**	**2,66,281**	**2,83,018**	**2,78,319**
Net Block	1,16,648	1,33,346	1,26,820	1,27,697	1,31,140
Goodwill on consolidation	18,590	19,998	19,998	19,998	19,998
CWIP plus IUD	7,738	8,350	16,293	13,349	6,581
Other Investments	33,901	27,050	27,050	27,050	27,050
Other Non-Current Assets	11,189	10,155	10,155	10,155	10,155
Currents Investments	22,523	16,010	16,010	16,010	16,010
Inventories	14,893	18,692	16,715	16,992	18,771
Sundry Debtors	14,525	15,799	13,929	15,096	17,430
Cash and bank balances	19,522	20,590	11,779	29,139	23,652
Other current assets	7,157	7,489	7,489	7,489	7,489
Assets classified as held for sale	0	43	43	43	43
Total Assets	**2,66,686**	**2,77,522**	**2,66,281**	**2,83,018**	**2,78,319**

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 36:: Cash flow

Y/E March (Rsmn): Consolidated	FY19	FY20	FY21E	FY22E	FY23E
PBT	17,304	74,075	8,356	9,108	14,409
Add depreciation	5,685	6,665	7,552	7,962	8,517
Other adjustments	(213)	(60,162)	1,156	792	658
Change in W/C	2,144	1,299	(3,152)	1,330	1,425
Income tax	4,849	1,478	1,929	1,777	2,838
Cashflow from Operations (A)	**15,784**	**17,801**	**18,288**	**14,755**	**19,322**
Net Capex (inc in Tang and Intang assets)	(10,795)	(11,695)	(8,968)	(5,896)	(5,192)
Other Non Current Assets	9,266	(21,497)	-	-	-
Free cashflow	**14,255**	**(15,391)**	**9,319**	**8,859**	**14,130**
Other income	1,681	1,610	2,255	2,505	2,505
Cashflow from Investing (B)	**151**	**(31,582)**	**(6,714)**	**(3,391)**	**(2,687)**
Ch in Borrowing	(5,762)	7,351	(15,700)	11,330	(16,410)
Dividends paid including dividend tax	(6,725)	(3,824)	(1,274)	(2,038)	(2,548)
Interest exp	(2,939)	(3,090)	(3,632)	(3,517)	(3,384)
Others	(21,086)	7,003	221	221	221
Cashflow from Financing (C)	**(36,511)**	**7,440**	**(20,384)**	**5,996**	**(22,120)**
Ch in Cash and Cash equiv	**(20,576)**	**(6,341)**	**(8,811)**	**17,359**	**(5,486)**
Opening cash	39,459	18,884	12,543	3,732	21,091
Closing cash	18,884	12,543	3,732	21,091	15,605

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 38: Key ratios

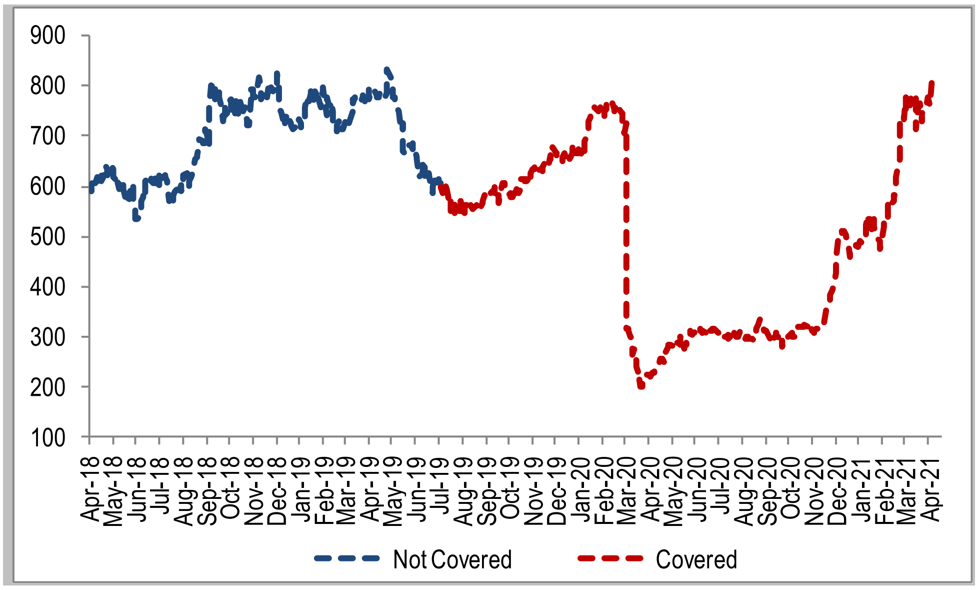
Y/E March	FY19	FY20	FY21E	FY22E	FY23E
Profitability & return ratios					
EBITDA margin (%)	17.2	18.8	16.8	16.4	19.3
EBIT margin (%)	11.7	12.4	9.4	9.1	12.3
Adj Net profit margin (%)	8.3	7.8	4.5	4.9	7.7
RoE (%)	7.4	6.4	3.5	4.0	6.8
Pre-tax RoCE (%)	7.3	6.6	4.9	5.1	7.0
RoIC (%)	5.0	5.5	3.8	3.8	5.8
Working capital ratios					
Receivables (days)	48.7	53.4	50.0	50.7	52.0
Inventory (days)	52.1	59.2	60.0	57.1	56.0
Payables (days)	49.1	51.7	57.0	52.6	53.8
Cash conversion cycle	52	61	53	55	54
Leverage ratios					
Net debt (Rsmn)	**10,331**	**40,423**	**33,534**	**27,505**	**16,581**
Net Debt (cash)/Equity (X)	0.1	0.3	0.2	0.2	0.1
Net Debt/EBITDA	0.58	2.07	1.97	1.54	0.70
Valuation ratios					
EV/sales (x)	2.38	2.38	2.42	2.27	2.01
EV/EBITDA (x)	13.85	12.65	14.45	13.80	10.45
P/E (x)	23.92	25.55	44.76	38.35	21.78
P/BV (x)	1.68	1.60	1.56	1.52	1.45
FCF Yield (%)	5.78	-6.24	3.78	3.59	5.73
Dividend Yield (%)	1.55	1.36	0.62	0.99	1.24
Per share ratios					
EPS	33.8	31.7	18.1	21.1	37.1
Cash EPS	56.1	57.8	47.7	52.3	70.6
BVPS	481.9	506.3	519.3	532.4	559.6
DPS	12.5	11.0	5.0	8.0	10.0

Source: Company, Nirmal Bang Institutional Equities Research

Rating track

Date	Rating	Market price	Target price (Rs)
27 May 2019	BUY	636	750
9 August 2019	BUY	564	750
9 October 2019	BUY	577	743
1 November 2019	BUY	630	798
4 February 2020	BUY	751	897
8 April 2020	ACCUMULATE	229	220
19 May 2020	Sell	276	216
4 August 2020	Sell	298	232
23 September 2020	Sell	279	232
2 November 2020	Sell	322	253
7th January 2021	Sell	491	308
1st February 2021	Accumulate	475	466
9th April 2021	Sell	819	563

Rating track graph



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SELL < -5%

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