

# Improved wafer profitability on tech progress and Industry 4.0

Huatai Research

28 October 2022 | China (Mainland)

Quarterly Results Review

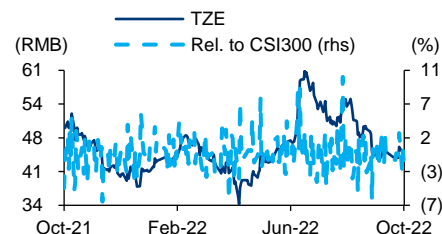
Power Equipment

Rating (Maintain): **BUY**Target price (RMB): **83.49**
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## Key data

Target price (RMB)	83.49
Closing price (RMB as of 19 Oct)	43.41
Potential upside +/- (%)	92
Mkt cap (RMBmn)	140,290
6m avg daily val (RMBmn)	2,351
52wk price range (RMB)	34.21-60.89
BVPS (RMB)	11.19

## Share performance



Source: Wind

## PV leader logging robust earnings growth; maintain BUY

TCL Zhonghuan Renewable Energy released its 3Q22 results, posting revenue/attributable NP/recurring NP of RMB49.85/5.00/4.98bn (+71.35/80.68/99.36% yoy) for 9M22 and RMB18.15/2.08/2.08bn (+58.56/66.80/74.83% yoy) for 3Q22. Considering the continuing supply tightness of large-size 210mm wafers, we revise up our wafer price forecasts and lift our 2022/2023/2024 EPS forecasts to RMB2.53/3.28/3.89 (previous: RMB2.45/2.96/3.69). We value the stock at 33x 2022E PE, roughly in line with its peers' average of 33.30x on Wind-consensus estimates, for a target price of RMB83.49 (previous: RMB85.75, at 35x 2022E PE). Maintain BUY.

## R&D progress + advanced manufacturing mode driving profitability

Zhonghuan has made progress in tech innovations. Its monthly crystal output per set rose by 12% yoy, with lower per-unit silicon consumption. Due to higher silicon wafer yield, together with the thin-line and thinning technology, the number of wafers per kg rose, which has raised technical barriers to entry and allowed the company to maintain tech and cost advantages. Under Industry 4.0, per-capita labor productivity has increased, product quality and consistency have been improved, and the consumption of raw materials and accessories has been reduced, which we believe have lifted its operational efficiency and optimized its cost structure. Its GPM/NPM was 18.32/12.47% in 3Q22 (up 1.43/2.82pp qoq).

## Crystal/wafer capacity unleashed, large-size wafer sales climbing

According to the company's announcement, as at end-3Q22, its crystal capacity had reached 128GW. We expect this to reach 140GW by end-2022, with the commissioning of the 50GW phase-6 project in Ningxia. In terms of wafers, construction and operation of the diamond wire (DW) phase 3 project in Tianjin and the DW phase 4 large-size wafer project in Yixing have been accelerated, while output and sales of large-size G12 products are steadily increasing.

## Battery modules gains improved global recognition and market share

Zhonghuan has adopted a competitive strategy of differentiation. Maxeon Solar Technologies, Ltd., in which Zhonghuan holds a non-controlling stake, holds intellectual property rights for interdigitated back contact battery modules and shingled modules. Owing to MAXN's technical advantages, coupled with Zhonghuan's sound manufacturing model, Zhonghuan has produced the shingled 3.0 product (a combination of shingled modules and G12 large-sized wafers) that has gained recognition from global customers, helping it enjoy market share gains.

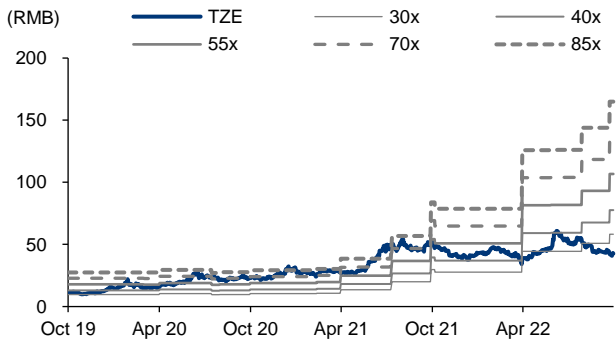
Risks: slow capacity expansion; overseas market risks; lower GPM.

## Financials

YE 31 Dec	2020	2021	2022E	2023E	2024E
Revenue (RMBmn)	19,057	41,105	68,291	80,418	81,023
+/-%	12.85	115.70	66.14	17.76	0.75
Net profit (RMBmn)	1,089	4,030	8,173	10,610	12,569
+/-%	20.51	270.03	102.82	29.83	18.46
EPS (diluted, RMB)	0.34	1.25	2.53	3.28	3.89
ROE (%)	5.25	10.64	17.75	18.98	18.45
PE (x)	128.82	34.81	17.17	13.22	11.16
PB (x)	7.30	4.43	3.52	2.83	2.27
EV EBITDA (x)	59.87	27.40	13.27	10.05	8.03

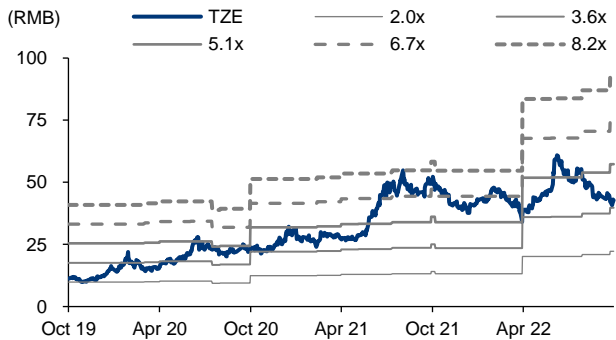
Source: Company announcements, Huatai Research estimates

Fig.1: TCL Zhonghuan Renewable Energy PE-Bands



Source: Wind, Huatai Research

Fig.2: TCL Zhonghuan Renewable Energy PB-Bands



Source: Wind, Huatai Research

## Full financials

### Balance sheet

YE 31 Dec (RMBmn)	2020	2021	2022E	2023E	2024E
<b>Current assets</b>	16,085	24,459	32,974	30,503	42,458
Cash & equivalents	7,516	10,746	12,292	16,084	21,520
Account receivables	2,084	3,085	3,744	3,567	4,535
Other receivables	93.28	51.78	474.49	34.38	391.19
Prepayments	838.29	1,981	3,387	2,740	3,272
Inventories	2,144	3,129	8,131	3,950	7,046
Other current assets	3,410	5,465	4,945	4,128	5,693
<b>Non-current assets</b>	42,635	53,521	66,784	75,191	77,930
Long-term investment	3,174	5,128	7,460	9,132	10,272
Fixed investment	25,273	29,615	38,890	44,702	47,369
Intangible assets	2,613	2,839	3,315	3,813	4,266
Other non-curr. assets	11,575	15,938	17,119	17,544	16,023
<b>Total assets</b>	58,720	77,979	99,758	105,694	120,388
<b>Current liabilities</b>	17,330	20,444	33,759	29,700	34,553
Short-term borrowings	1,692	1,393	3,644	5,491	1,393
Account payables	4,513	6,572	8,927	11,347	8,148
Other current liabilities	11,125	12,479	21,188	12,862	25,012
<b>Non-current liabilities</b>	13,308	15,866	15,335	14,459	10,870
Long-term borrowings	9,226	12,633	12,998	12,104	8,548
Other non-curr. liabilities	4,083	3,233	2,337	2,355	2,322
<b>Total liabilities</b>	30,638	36,310	49,093	44,159	45,422
Minority interest	8,874	9,997	10,820	11,888	13,153
Share capital	3,033	3,232	3,232	3,232	3,232
Capital reserves	12,389	21,134	21,134	21,134	21,134
Retained profit	3,766	7,614	2,087	487.01	(10.83)
Shareholders' equity attr. to parent	19,207	31,672	39,845	49,648	61,813
<b>Equity &amp; liabilities</b>	58,720	77,979	99,758	105,694	120,388

### Cash flow statement

YE 31 Dec (RMBmn)	2020	2021	2022E	2023E	2024E
<b>Operating cash flow</b>	2,859	4,282	15,679	13,154	18,428
Net profit	1,476	4,435	8,995	11,678	13,834
Depreciation/amortization	21.52	28.17	70.24	77.24	81.26
Financial costs	1,029	839.69	1,722	2,372	2,446
Investment losses	(303.13)	(1,168)	(1,582)	(943.39)	(423.59)
Chg in working capital	(1,697)	(4,367)	6,576	127.83	2,293
Other operating activ's	2,333	4,514	(102.77)	(157.23)	197.12
<b>Investing cash flow</b>	(7,426)	(7,826)	(11,006)	(7,726)	(2,556)
Capex	(3,657)	(6,102)	(13,302)	(6,371)	(1,228)
Long-term investment	(2,370)	(1,795)	(2,332)	(1,672)	(1,140)
Other investing activ's	(1,398)	70.77	4,628	317.34	(188.33)
<b>Financing cash flow</b>	4,135	9,270	(5,379)	(3,484)	(6,336)
Short-term borrowings	(2,731)	(299.47)	2,251	1,847	(4,099)
Long-term borrowings	1,545	3,408	364.54	(893.70)	(3,557)
Increase in common stock	247.77	198.81	0.00	0.00	0.00
Additional paid-in capital	4,670	8,745	0.00	0.00	0.00
Other financing activ's	403.38	(2,782)	(7,995)	(4,438)	1,319
Net change in cash	(525.78)	5,700	(705.36)	1,944	9,535

### Income statement

YE 31 Dec (RMBmn)	2020	2021	2022E	2023E	2024E
<b>Revenue</b>	19,057	41,105	68,291	80,418	81,023
Operating costs	15,464	32,190	54,246	60,821	58,485
Business taxes & surcharges	127.28	170.77	170.73	321.67	324.09
Operating expenses	158.68	130.60	102.44	281.46	324.09
Admin expenses	643.70	991.72	1,024	1,930	2,107
Financial costs	1,029	839.69	1,722	2,372	2,446
Asset impairment losses	(25.31)	(1,074)	(13.66)	(16.08)	(16.20)
P&L from fair value changes	69.81	0.00	0.00	0.00	0.00
Investment income	303.13	1,168	1,582	943.39	423.59
<b>Operating profit</b>	1,631	5,006	10,254	13,271	15,701
Non-operating income	71.34	22.18	40.50	44.67	35.78
Non-operating expenses	10.50	27.75	12.22	14.00	15.16
<b>Total profit</b>	1,692	5,000	10,282	13,302	15,722
Income tax expenses	216.60	564.90	1,287	1,624	1,888
<b>Profit after tax</b>	1,476	4,435	8,995	11,678	13,834
Minority interest	386.52	405.51	822.46	1,068	1,265
Net profit attr. to parent	1,089	4,030	8,173	10,610	12,569
EBITDA	2,700	5,855	11,987	15,687	18,165
EPS (RMB, basic)	0.38	1.32	2.53	3.28	3.89

### Performance

YE 31 Dec	2020	2021	2022E	2023E	2024E
<b>Growth (%)</b>					
Revenue	12.85	115.70	66.14	17.76	0.75
Operating profit	13.23	206.85	104.85	29.42	18.31
Net profit attr. to parent	20.51	270.03	102.82	29.83	18.46
<b>Profitability (%)</b>					
Gross profit margin	18.85	21.69	20.57	24.37	27.82
Net profit margin	7.74	10.79	13.17	14.52	17.07
ROE	5.25	10.64	17.75	18.98	18.45
ROIC	9.03	15.91	28.13	32.14	39.49
<b>Solvency</b>					
Liabilities/assets (%)	52.18	46.56	49.21	41.78	37.73
Net gearing ratio (%)	45.80	27.34	16.70	10.10	(9.08)
Current ratio (x)	0.93	1.20	0.98	1.03	1.23
Quick ratio (x)	0.68	0.86	0.59	0.75	0.89
<b>Operating capability</b>					
Total assets t/o ratio (x)	0.35	0.60	0.77	0.78	0.72
Receivables t/o ratio (x)	8.40	15.90	20.00	22.00	20.00
Payables t/o ratio (x)	4.12	5.81	7.00	6.00	6.00
<b>Per-share data (RMB)</b>					
EPS (diluted)	0.34	1.25	2.53	3.28	3.89
OCFPS (diluted)	0.88	1.32	4.85	4.07	5.70
BVPS (diluted)	5.94	9.80	12.33	15.36	19.13
<b>Valuation (x)</b>					
PE	128.82	34.81	17.17	13.22	11.16
PB	7.30	4.43	3.52	2.83	2.27
EV EBITDA	59.87	27.40	13.27	10.05	8.03

Source: Company announcements, Huatai Research estimates

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