

LONGi Green Energy Technology (601012.CN)

With significant technical advantages, the leading position is robust
China | Solar

1st Sep 2022

Brief introduction to the company

LONGi Green Energy(601012.CH) is a world-leading monocrystalline silicon wafer and vertically integrated solar module company. Its main business includes R&D, production, and sales of monocrystalline silicon ingots, monocrystalline silicon wafers, and solar modules. At the present, the company has formed a complete supply chain for the development, construction, and operation of mono-silicon rods, silicon wafers, monocrystalline silicon rods, silicon wafers, monocrystalline cells, modules, and PV power plants. It is also the world's largest manufacturer of monocrystalline silicon wafers and modules.

A review of H1 2022 Results

The company has announced the operating data from January to June 2022. The company achieved an operating income of ¥50.4 bn, up 43.6% YoY, with revenue in Q2 being ¥31.8bn, up 65.4% YoY, and up 71.1% QoQ; the net profit attributable to shareholders was ¥6.48 bn, up 29.8% YoY, with net profit in Q2 being ¥3.82 bn, up 53.2% YoY, and up 43.3% QoQ. The results indicate that although the company was affected by high material prices and rising shipping costs, the company's module shipments rose significantly in Q2, which accelerated the company's revenue growth and net profit began to rise.

With obvious advantages in brand and distribution channels, market share is expected to increase

We believe that the company has strong advantages in brand and distribution channels. A solar module business is a To B and To C business, hence there are high requirements of the brand, reliability, and distributing channels for a solar module company to succeed. In terms of the brand advantage, the modules produced by the company are of high quality and high reliability, and the reliability of the products has been recognized by customers. The US Renewable Energy Testing Center(RETC) and an independent third-party testing laboratory PVEL respectively selected LONGi as a High Achiever and the global Top Performer in the solar module industry, certifying the reliability of its modules and the brand of LONGi. In terms of distribution channels, the company has extensive global distribution channels. The company has manufacturing facilities and sales offices in more than 150 countries and regions worldwide. The company has set up production and manufacturing facilities in China, Vietnam, and Malaysia, as well as sales offices in the United States, Japan, India, Australia, the United Arab Emirates, and other countries. Due to the company's strong distribution channels, the company's overseas module revenue in 2021 increased by 81% YoY, much higher than the domestic growth rate of 37%, and the overseas module business accounted for 62% of total revenue. Because the company has such obvious advantages, the management of the company has expressed clear market share targets. In 2 years, LONGi expects the market share of the silicon wafer business to be 45%-50%, and the market share of the module business will increase to the current 25%-30%, up from about 23% in 2021.

The company has invented frontier solar cell technologies

The company has in-depth research on TOPCon, HJT, and HPBC batteries. First, the photoelectric conversion efficiency of the company's TOPCon and HJT cells continues to set new industry records. In July 2021, the conversion efficiency of the monocrystalline P-type TOPCon cell developed by LONGi's R&D team reached 25.19%, surpassing the world record (25.02%) set by the company, and was confirmed by the world-recognized Germany's Institute for Solar Energy Research Hamelin. In June 2022, the company broke the world record for the fourth time in one year, announcing that the conversion efficiency of HJT cells has increased to 26.50%, which is 1.24% higher than that announced on 3rd June 2021. Second, the company's HPBC cell(One of the IBC cells) leads the industry. IBC is the most difficult cell technology in manufacturing crystalline silicon cells, and the use of P-type silicon wafers

Buy

CMP RMB 52.80
(Closing price as of 30th August)
Target RMB 67.94(+28.7%)

COMPANY DATA

O/S SHARES (MN) :	7582
MARKET CAP (RMB bn) :	440.31
52 - WK HI/LO (RMB):	73.6/39.96

SHARE HOLDING PATTERN, %

Li ZhenGuo	14.08%
Hong Kong Securities Clearing Company Limited	12.51%
Hillhouse Investment Management Limited	5.85%

PRICE VS. SSE Index



Source: Phillip Securities (HK) Research

KEY FINANCIALS

Source: Company reports, Phillip Securities Est.

RMB \$' mn	FY20	FY21	FY22E	FY23E	FY24E
Net Sales	54,583	80,932	131,663	156,701	179,817
Net Profit	5,557	8,700	9,074	12,258	15,662
Basic EPS (RMB)	2.3	1.7	2.3	2.9	3.3
P/E ratio, x	23.3	31.2	23.3	18.2	16.1
Dividend Yield,%	1.0%	0.5%	0.7%	1.0%	1.0%

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further increases the difficulty of manufacturing an IBC cell. According to an environmental impact assessment of the LONGi 4GW Taizhou monocrystalline cell project, the company has not only mastered the IBC process, but also made use of P-type silicon wafers in manufacturing HPBC cells. Third, the company has mastered the N-type silicon wafer process, which requires high purity. On the contrary, second-tier manufacturers need to spend time learning how to reduce the cost of N-type silicon wafers with low impurity. We believe that regardless of whether the mainstream technology in the future will be HJT, TOPCon, or IBC, the company now has enough technical reserves to adapt to any of these new cell technologies.

The company has entered BIPV and hydrogen production market, bringing the possibility of a second growth curve for the company

The company has already entered BIPV and hydrogen production markets. In terms of BIPV business, the company released the first BIPV product, LongDing, in August 2020, and later acquired part of the shares of metal roof construction company Center International Group Co. Ltd in 2021, with a shareholding ratio of 24.74%. The two parties will combine their respective advantages to jointly promote cooperation in BIPV product research and development, market development, and related fields, entering the big market of distributed photovoltaics and BIPV. In terms of the hydrogen production business, the company has a production capacity of 500MW alkaline water electrolyzers, and the production capacity will reach 5-10GW in the next five years. The electrolyzer is designed with a high current density and a hydrogen production capacity above 1000Nm³/h. The company's first alkaline water electrolyzer was manufactured in October 2021. In addition, on April 12, 2022, three 1000Nm³/h electrolyzers were successfully shipped. We believe that BIPV and hydrogen production market will become the company's second growth curve in the future, which could boost the company's valuation.

Company valuation

We believe that the company is the leader in the solar module industry, with advantages in brand, distribution channel, and cell technologies. It is expected that the company's module business market share will increase. In addition, the company's entry into the BIPV and hydrogen production markets could boost the company's valuation. We estimated that the company's EPS in 22/23 will be ¥2.26/2.89 respectively, corresponding to a P/E of 23.3/18.2x in 22/23. By considering the average P/E of peers, we have conservatively given the company a P/E of 35x in 2022, corresponding to the target price of ¥67.94, and a "buy" rating. (Current price as of 30th August).

Graph 1 : Peer Comparison

Company	Stock Code	Closing Price (CNY)	EPS(CNY)			PE(x)		
			2021A	2022E	2023E	2021A	2022E	2023E
Jinko Solar	688223.SH	17.58	0.14	0.30	0.50	124.3	57.7	34.9
Trina Solar	688599.SH	73.44	1.03	1.77	2.84	71.51	41.52	25.84
Ja Solar	002459.SZ	67.77	1.17	1.91	2.63	58.2	35.4	25.8
ZhongHuan	002129.SZ	50.79	1.63	1.87	2.34	31.2	27.1	21.8
Shangji	603185.SH	149.85	5.22	6.20	10.51	28.7	24.2	14.3
Average							37.2	
LONGi	601012.SH	52.8	1.69	2.26	2.89	31.2	23.3	18.2

Source: Wind, Phillip Securities Hong Kong Research

Risk factors

(1) Industry competition intensifies. (2) Policy changes. (3) New solar cell technologies replacement. (4) Raw material prices rise. (5) Product prices fall.

Financial

Consolidated Statement of Profit or Loss

Dec Y/E, RMB mn	FY19	FY20	FY21	FY22E	FY23E	FY24E
Revenue	32,897	54,583	80,932	131,663	156,701	179,817
COGS	(23,389)	(41,146)	(64,590)	(108,341)	(127,575)	(146,431)
Gross Profit	9,508	13,438	16,343	23,322	29,126	33,385
Other income	153	224	(77)	343	408	468
Taxes and surcharges	(178)	(282)	(418)	(680)	(809)	(929)
Selling and distribution expenses	(1,330)	(1,073)	(1,790)	(3,028)	(3,761)	(4,495)
Administrative expense	(971)	(1,466)	(1,811)	(2,946)	(3,506)	(4,023)
Research and development expenses	(304)	(499)	(854)	(1,390)	(1,654)	(1,898)
Share of profit of associates and JVs	240	1,078	800	1,620	1,928	2,213
Finance costs, net	(250)	(378)	(906)	(1,128)	(1,343)	(1,541)
Other Gains/Losses	(621)	(1,128)	(1,054)	(2,256)	(2,685)	(3,082)
Profit before tax	6,247	9,912	10,232	13,856	17,703	20,098
Income tax	(690)	(1,212)	(1,159)	(1,598)	(2,041)	(2,318)
Minorities	278	147	(12)	-	-	-
Net profit	5,557	8,700	9,074	12,258	15,662	17,780
EPS(RMB)-Basic	1.47	2.27	1.69	2.26	2.89	3.28
DPS	0.19	0.54	0.24	0.38	0.53	0.54
Payout ratio	13%	24%	14%	17%	18%	16%
Weighted Shares outstanding(mn)	3,780	3,832	5,369	5,413	5,413	5,413

Key Financial Data

Dec Y/E	FY19	FY20	FY21	FY22E	FY23E	FY24E
Valuation Ratio						
P/E ratio, x	35.9	23.3	31.2	23.3	18.2	16.1
Dividend Yield, %	0.4%	1.0%	0.5%	0.7%	1.0%	1.0%

Per share data (RMB)

EPS	1.47	2.27	1.69	2.26	2.89	3.28
BVPS	7.31	9.16	8.84	10.65	13.01	15.76
DPS (RMB)	0.19	0.54	0.24	0.38	0.53	0.54

Growth & Margin

Growth						
Revenue Growth	0.0%	65.9%	48.3%	62.7%	19.0%	14.8%
Gross Profit Growth	0.0%	41.3%	21.6%	42.7%	24.9%	14.6%
Operating Profit Growth	0.0%	58.7%	3.2%	35.4%	27.8%	13.5%
Net Profit Growth	0.0%	56.5%	4.3%	35.1%	27.8%	13.5%
Margin						
Gross Profit Margin	28.9%	24.6%	20.2%	17.7%	18.6%	18.6%
Operating Profit Margin	19.0%	18.2%	12.6%	10.5%	11.3%	11.2%
Net Profit Margin	16.0%	15.7%	11.2%	9.3%	10.0%	9.9%

Key Ratios

ROE	19.1%	24.4%	19.1%	21.3%	22.2%	20.8%
ROA	8.9%	9.8%	9.3%	7.6%	7.8%	7.8%

Consolidated Statement of Financial Position

Dec Y/E, RMB mn	FY19	FY20	FY21	FY22E	FY23E	FY24E
Non Current Asset						
PP&E, Gross	15,467	24,506	24,875	39,499	47,010	53,945
Right-of-use assets	-	-	3,009	4,895	5,826	6,686
Intangible assets	245	598	448	1,050	1,278	1,299
Construction in progress	2,882	2,400	2,562	4,168	4,960	5,692
Other non-current assets	3,343	5,030	7,889	12,522	14,870	17,037
Total Non-current Assets	21,937	32,534	38,783	62,134	73,944	84,659
Current Asset						
Cash & cash equivalent	19,336	26,963	29,172	46,082	62,680	71,927
Accounts receivable and note receivable	8,379	11,535	8,278	15,900	18,923	21,715
Inventories	6,356	11,452	14,098	25,333	30,150	34,598
Other current assets	3,295	5,151	7,404	12,045	14,335	16,450
Total Current Assets	37,367	55,101	58,952	99,359	126,089	144,689
Total Assets	59,304	87,635	97,735	161,493	200,033	229,348
Non Current Liabilities						
Lease liabilities	-	-	2,703	4,397	5,233	6,005
Long-term borrowing	2,509	1,125	1,661	12,888	16,305	9,415
Bonds payable	996	4,351	0	6,458	6,458	6,458
Other non-current liabilities	2,885	3,468	3,280	8,556	13,049	17,764
Total Non-current Liabilities	6,389	8,944	7,644	32,299	41,045	39,641
Current Liabilities						
Accounts payables	13,714	22,144	21,711	35,320	42,037	48,238
Other payables	3,898	8,612	6,674	10,857	12,922	14,828
Short-term borrowing	854	2,416	3,232	4,835	6,316	7,010
Other current liabilities	6,153	9,920	10,888	20,407	27,125	34,177
Total Current Liabilities	24,620	43,092	42,504	71,419	88,400	104,253
Equity						
Shareholders' equity	27,629	35,106	47,448	57,636	70,449	85,314
Minority interests	666	492	139	139	139	139
Total equity	27,629	35,106	47,448	57,636	70,449	85,314
Total Liabilities and Equity	59,304	87,635	97,735	161,493	200,033	229,348

Consolidated Statement of Cash Flow

Dec Y/E, RMB mn	FY19	FY20	FY21E	FY22E	FY23E	FY24E
CFO	8,158	11,015	12,323	13,666	23,143	26,653
Net Profit	5,557	8,700	9,074	12,258	15,662	17,780
Minorities	278	147	(12)	-	-	-
Depreciation and amortization	1,354	2,042	3,139	3,985	5,082	5,930
Finance expenses	250	378	906	568	2,138	2,568
Decrease in working capital	0	657	(394)	(3,646)	(334)	(308)
Others	998	(762)	(402)	500	595	683
CFI	(2,753)	(5,171)	(7,141)	(13,956)	(10,593)	(10,402)
Total Capex	(2,690)	(4,827)	(4,904)	(12,362)	(8,705)	(8,238)
Investment	(76)	162	(2,782)	(1,480)	(1,762)	(2,021)
Others	13	(506)	545	(114)	(126)	(142)
CCF	4,560	2,810	(2,088)	19,889	4,049	(7,005)
Proceeds from Borrowings	2,709	9,351	4,993	30,659	17,252	7,793
Repayment of borrowings	(2,907)	(4,428)	(5,006)	(9,216)	(10,969)	(12,587)
Equity investment	4,594	136	137	-	-	-
Dividend paid	(721)	(2,051)	(1,281)	(2,070)	(2,849)	(2,915)
Others	885	(199)	(931)	516	615	705
Net Change in Cash	9,965	8,654	3,093	19,599	16,598	9,246
FX impact	(70)	(309)	(516)	-	-	-
Cash and CE at Y/E	15,560	23,905	26,483	46,082	62,680	71,927

Current Price as of: 30th August, 2022

Source : PSHK Est.

PHILLIP RESEARCH STOCK SELECTION SYSTEMS

Total Return	Recommendation	Rating	Remarks
>+20%	Buy	1	>20% upside from the current price
+5% to +20%	Accumulate	2	+5% to +20% upside from the current price
-5% to +5%	Neutral	3	Trade within \pm 5% from the current price
-5% to -20%	Reduce	4	-5% to -20% downside from the current price
<-20%	Sell	5	>20% downside from the current price

We do not base our recommendations entirely on the above quantitative return bands. We consider qualitative factors like (but not limited to) a stock's risk reward profile, market sentiment, recent rate of share price appreciation, presence or absence of stock price catalysts, and speculative undertones surrounding the stock, before making our final recommendation

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