

Utilities - HK/China (H/A)

Watt's Up #12: National People's Congress on power, EU ban on forced labor products

Industry Overview

Power highlights from 2024 Government Work Report

Chinese Premier Li Qiang reported 2024 Government Work Report during the National People's Congress. We highlight key aspects related to the power sector.

Review of the power sector in 2023

Cumulative renewable energy (RE) installation reached 1,472GWac in China, exceeding thermal power (1,390GWac) for the first time. The addition of 301GWac RE capacity (mainly by solar at 217GWac) accounted for over half of the global RE addition. PV products (wafer + cell + module) export volume increased by c.50% YoY to 321GW vs 214GW in 2022. The government has enacted policies to support the development of green and low-carbon industries, and promote ultra-low emission transformation of key industries.

Key power/energy focus in 2024

Energy consumption per unit of GDP reduces by 2.5%, higher than target of 2% in 2023. The 14th FYP mid-term assessment last Dec mentioned per GDP energy consumption and per GDP CO₂ emission indicators are lagging ([see our previous Watt's up](#)), which may prompt the government to set a higher target in 2024. China previously targeted reducing per GDP energy consumption by 13.5% in the 14th FYP.

Boost green and low-carbon economy and launch ten major carbon-peaking initiatives, which were first mentioned by the State Council in 2021, among which six are related to distributed PV. The State Council sets the target that, by 2025, RE is to replace 8% of conventional energy in urban buildings and distributed PV to cover 50% of rooftops on new public institutions and new factories. Enterprises can reduce their carbon footprint by consuming distributed solar power.

Accelerate large-scale RE bases & transmission line construction; promote distributed RE and energy storage system. China targets having 455GW large-scale wind & solar bases in the desert by 2030. By Nov 2023, 45GW of first batch projects have been connected to the grid, and over 50GW of the second and third batch have been approved. It appears to us both the utility and distributed segments will continue to see decent demand in 2024. On the other hand, coal/thermal power is important to ensure stable energy supply. Energy storage capacity has reached 32GW by the end of 2023, achieving China's target of >30GW by 2025.

Renewable: Proposal to stabilize RE power tariff

Mr. Cao Renxian, Sungrow Chairman, suggests decoupling the coal-fired power tariff and the RE tariff in each region and revisiting new projects' tariff each year, based on a reasonable return on long-term contracts. Mr Cao also urges promotion of green power/certification sales through both mandatory and voluntary measures to boost green power supply and demand. (More on the next page)

08 March 2024

Equity
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NDRC: National Development and Reform Commission

NEA: National Energy Administration

RE: renewable energy

14th FYP: the 14th Five Year Plan

EU: European Union

NPC: National People's Congress

SEIA: Solar Energy Industry Association

PV: Photovoltaic

MoM: month over month

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Timestamp: 07 March 2024 03:00PM EST

RE: 500GW distributed energy can be connected by 2025

The NDRC and the NEA jointly released guidelines on power grid development. China targets power grids having connection capacity of 500GW distributed renewable energy (RE) by 2025. NEA data reveals that 254GW of distributed PV has been connected to grids by YE2023. Including distributed wind power, the total distributed RE connected was less than 300GW, implying **100GW connection addition each in 2024 and 2025**.

Solar: LONGi urges govt to prevent below-cost prices

According to Bloomberg news on Mar 4, LONGi's Chairman Zhong Baoshen urged the government to introduce **new bidding rules to avoid below-cost price competition**. Mr Zhong believes manufacturers winning bids with below-cost bids may sacrifice product quality and will discourage R&D investment. Trina Solar's Chairman Gao Jifan said in late 2023 that extreme low prices would squeeze out small players.

Solar: EU ban on products involved in forced labor

On Mar 5, the European Parliament and Council reached a provisional agreement to ban products made with forced labor in the EU market. Suspected products will be asked for additional supply chain documents, otherwise will be withdrawn from the EU market. EU countries will **have 3 years to apply the new rules**.

For solar this policy mainly targets Chinese solar module using Xinjiang polysilicon, and is similar to the Uyghur Forced Labor Prevention Act (UFLPA) in the US. Major Chinese solar manufacturers are used to separate their supply chains to supply to the US market since 2022. About 30% of global polysilicon supply comes from Xinjiang. With the oversupply we estimate non-Xinjiang polysilicon capacity at >900GW by 2024, more than enough to satisfy demand. We don't think this deal will have much impact.

Solar: US installed 32.4GW of solar capacity in 2023

On Mar 7, the US Solar Energy Industry Association (SEIA) released solar market insight review report for 2023, revealed that the US added 32.4GWdc of solar capacity in 2023, among which utility-scale installation was 22.5GWdc (+77% YoY). For the 9.9GWdc distributed solar installed in 2023, residential solar took the largest proportion of 69% (6.8GWdc). SEIA expects commercial, community, and utility-scale segment will grow by 19%, 15%, and 26%YoY in 2024, resulting a total of 38GWdc addition. Residential segment is expected to decline by 13% as a result of high interest rate and California's net billing transition. Under base case scenario, SEIA expects a long-term annual growth range of 48-50GWdc starting from 2030 onward and accumulative PV installation will reach more than 670GWdc by 2034.

Power: Jan-Feb power output up by 11.7% YoY

On Mar 6, Mr. Zheng Shanjie, the director of the NDRC, said that national power output in 2M24 increased by 11.7% YoY, with industrial power consumption increased by 9.7% YoY. Solar cell output increased by 54% in the first two months.

Solar: Output to surge with most prices staying flat

According to InfoLink's weekly price report on Mar 7th, most prices remain flat throughout the supply chain except for wafer price. N-type wafer prices dropped by 1-3% week-over-week. March wafer output is expected to increase by 19% month-over-month (MoM) to 69GW, among which N-type wafer at 52-53GW, with penetration rising to c.76%. Cell output is expected to rise by 32% MoM to 62GW, among which N-type cell estimated to be 39-41GW or 65% penetration. Scheduled March module output largely increased by 50% MoM to 55GW, driven by higher demand in domestic utility-scale projects and Europe. Producers are considering lifting prices by RMB2-4c/W for PERC product and RMB1-2c/W for TOPCon, but it is still under negotiation with end users.

Exhibit 1: Valuation comparison table for China Utilities and Renewable companies

Selected valuation metrics for utility and renewable sector companies in 2023-25E

		Prices (LCY)			PE			PB			EPS Growth			ROE			Dividend yield		
		2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
Wind																			
Longyuan -H	916 HK	5.7	6.5	4.9	3.7	0.6	0.6	0.5	38%	32%	33%	10%	12%	14%	3%	4%	5%		
Longyuan -A	001289 CH	19.6	24.3	18.4	13.8	2.4	2.1	1.9	38%	32%	33%	10%	12%	14%	1%	1%	1%		
Datang Renewables	1798 HK	1.8	4.9	5.2	4.5	0.4	0.3	0.3	-16%	-5%	15%	8%	7%	7%	3%	2%	3%		
Three Gorges Renew.	600905 CH	4.8	18.5	16.1	12.7	1.7	1.6	1.4	3%	15%	26%	9%	10%	12%	2%	2%	2%		
Ming Yang	601615 CH	9.9	6.9	6.1	5.2	0.7	0.7	0.6	-10%	13%	17%	11%	11%	12%	3%	3%	4%		
Goldwind-H	2208 HK	2.9	4.6	4.4	3.5	0.3	0.3	0.3	10%	4%	28%	8%	8%	10%	7%	7%	9%		
Goldwind-A	002202 CH	7.7	13.2	12.7	10.0	0.9	0.9	0.8	10%	4%	28%	8%	8%	10%	2%	2%	3%		
Solar																			
Maxwell	300751 CH	119.0	31.8	17.0	9.6	4.6	3.9	3.0	21%	87%	76%	15%	25%	35%	1%	2%	3%		
LONGi	601012 CH	20.8	11.1	16.2	10.3	2.1	1.9	1.7	-4%	-32%	58%	21%	13%	18%	2%	1%	2%		
JA Solar	002459 CH	18.3	7.3	17.4	9.1	1.7	1.6	1.4	4%	-58%	90%	26%	10%	16%	1%	1%	1%		
Jinko Solar	688223 CH	8.7	11.4	14.8	9.4	2.7	2.4	2.0	155%	-23%	57%	26%	17%	24%	3%	2%	3%		
Trina Solar	688599 CH	25.1	8.4	13.4	7.8	1.8	1.6	1.4	73%	-37%	72%	23%	13%	19%	3%	2%	4%		
IPPs																			
China Resources Power	836 HK	18.1	8.1	6.5	6.0	1.0	0.9	0.8	53%	24%	9%	13%	15%	15%	5%	9%	7%		
Huaneng-H	902 HK	4.7	6.3	7.2	7.1	1.0	0.9	0.8	n.a.	-13%	1%	18%	13%	12%	8%	7%	7%		
Huaneng-A	600011 CH	9.3	13.6	15.5	15.3	2.2	2.0	1.8	n.a.	-13%	1%	18%	13%	12%	4%	3%	3%		
Huadian-H	1071 HK	4.1	7.5	6.9	6.2	0.9	0.8	0.7	n.a.	9%	11%	12%	12%	11%	7%	7%	8%		
Huadian-A	600027 CH	6.6	13.3	12.2	11.0	1.5	1.3	1.2	n.a.	9%	11%	12%	12%	11%	4%	4%	5%		
CPID	2380 HK	3.4	11.6	7.3	6.5	0.9	0.9	0.8	20%	58%	12%	8%	12%	13%	5%	7%	8%		
Gas																			
ENN Energy	2688 HK	61.7	9.3	10.2	9.9	1.5	1.4	1.3	17%	-9%	4%	18%	14%	13%	5%	4%	4%		
China Resources Gas	1193 HK	23.8	8.9	9.1	8.2	1.3	1.2	1.1	27%	-1%	11%	15%	13%	14%	6%	6%	6%		
China Gas	384 HK	7.4	10.3	7.9	7.3	0.7	0.7	0.6	-10%	31%	7%	7%	8%	9%	7%	8%	8%		
Shenzhen Gas	601139 CH	6.7	12.0	12.3	11.5	1.3	1.3	1.2	31%	-2%	7%	12%	11%	10%	3%	2%	3%		
BJ Enterprises Holding	392 HK	30.0	5.4	5.1	4.5	0.4	0.4	0.4	-7%	6%	12%	8%	8%	8%	5%	6%	8%		
Hydro																			
Yangtze Power	600900 CH	25.9	21.0	20.4	19.8	2.8	2.7	2.6	32%	3%	3%	15%	13%	13%	3%	3%	4%		
Guiguan Power	600236 CH	6.0	17.8	15.7	15.4	2.6	2.4	2.2	-15%	13%	2%	15%	16%	15%	3%	3%	3%		
SDIC	600886 CH	15.0	17.3	14.3	13.7	2.1	1.9	1.8	66%	21%	4%	13%	14%	14%	3%	4%	4%		
Environmental protection																			
Everbright Environment	257 HK	2.9	4.0	4.1	4.1	0.4	0.3	0.3	-5%	-2%	0%	9%	8%	8%	8%	8%	8%		
BJ Enterprises Water	371 HK	1.8	8.2	8.2	7.7	0.6	0.5	0.5	70%	0%	7%	7%	7%	7%	9%	9%	9%		
HK Utilities																			
CK Infrastructure	1038 HK	46.1	15.9	14.6	14.1	1.0	1.0	0.9	-6%	9%	3%	6%	7%	7%	6%	6%	6%		
CLP Holdings	2 HK	65.3	24.8	13.9	13.5	1.6	1.6	1.5	620%	78%	3%	6%	11%	11%	5%	5%	5%		
Guangdong Investment	270 HK	4.8	7.7	7.1	5.9	0.7	0.7	0.7	-15%	9%	21%	9%	10%	12%	13%	13%	13%		

Source: BofA Global Research estimates

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