

China CleanTech Index

2015 Annual Performance Report

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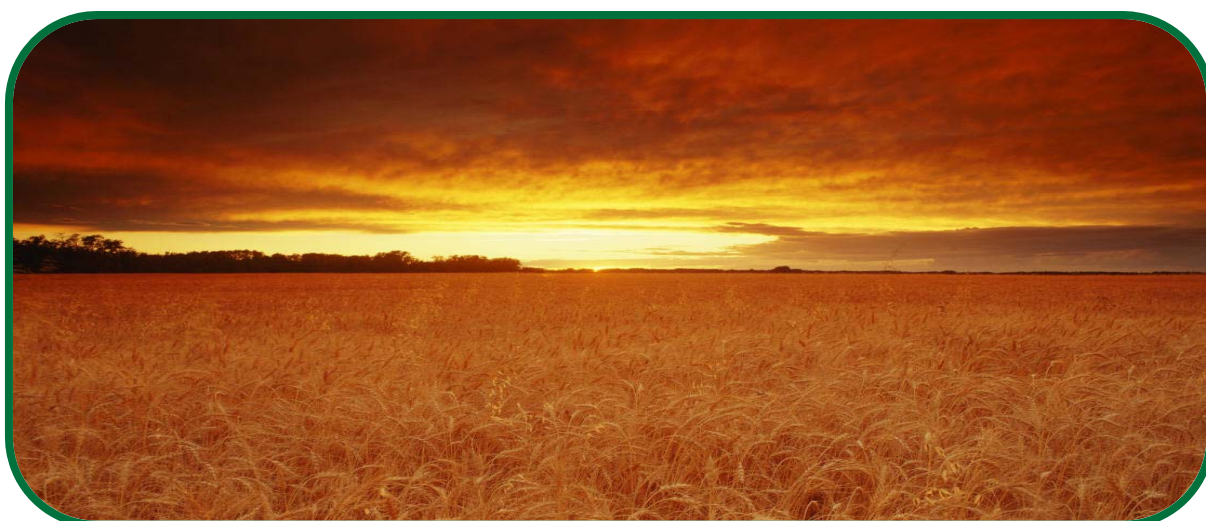
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The Definitive Measure of Chinese Cleantech Industry Performance

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1. China CleanTech Index Overview

The China CleanTech Index provides the definitive measure of the performance of Chinese cleantech companies that are listed on stock exchanges around the world.

The combined investment themes of China and environment provide a compelling case for investment. The sector remains volatile as it matures and reacts to environmental and industry development policy shifts. The quality and scale of the companies included in the sector varies widely and strong research into both sub-sectors and companies is essential before committing to the sector. However, the cleantech sector in China presents a very strong medium term investment thesis and the China CleanTech Index provides the first level of data to enable informed investment decisions to be made.

The cleantech industry is split into a number of sub-sectors as detailed in the table below. Each of the sub-sectors contains companies that have both environmental and economic benefits.

Biogas	Geothermal – Hot dry rocks and conventional
Biofuels	Low Emissions Transport Technologies
Carbon Trading	Solar Thermal and Photovoltaics
Energy Efficiency & Biomaterials	Waste Management & Recycling
Energy Storage & Fuel Cells	Water
Environmental Services	Wave, Tidal & Hydro
Green Buildings	Wind Generation

The cleantech sector is fundamentally different to Socially Responsible Investments (SRI) or Environmental, Social and Governance (ESG) performance. SRI and ESG look at incremental improvements in company performance and can be seen as 'operational hygiene' measures that find the 'best in class'. Cleantech focuses on companies whose output positively enhances the communities and ecologies in which they reside. It is about doing 'more good' rather than 'less bad'.

With over 160 companies falling under the coverage of the Index and with a combined market capitalisation of over two trillion Renminbi (US\$324 billion), the China CleanTech Index presents for the first time a picture of the Chinese cleantech industry's growth in a single measure.

The Index is weighted by market capitalisation and is benchmarked against the following indices to show its relative performance:

- **Wilder Hill New Energy Global Innovation Index (NEX)** – which measures the performance of global clean energy stocks
- **Cleantech Index (CTIUS)** – which measures the performance of global cleantech stocks

- **China Shanghai Composite Index (SHCOMP)** – which measures the performance of stocks listed in Shanghai.
- **MSCI World (MSCI)** – which provides a measure of the performance of global stock markets.

The rules for the formulation and management of the Index have been developed with reference to global best practice.

The China Cleantech Index is updated each month and published on the SinoCleantech website at www.sinocleantech.com and on the Australian CleanTech website at www.auscleantech.com.au. It is published internationally in conjunction with Cleantech Investor (www.cleantechinvestor.com) and in China in conjunction with Top Capital (www.topcapital.cn).

Monthly results can be emailed directly to interested parties by subscribing at www.sinocleantech.com.

Differences to the other Low Carbon Indices in China

There are other stock market indices that track the performance of some of China's cleantech stocks. However, none of these is as comprehensive as the China CleanTech Index for the following reasons:

- All cleantech companies that have headquarters in Mainland China, Hong Kong and Taiwan are included in the China CleanTech Index, which provides much wider coverage than other indices.
- There is no lower limit to market capitalization for inclusion in the China CleanTech Index meaning that all cleantech companies are included. The China CleanTech 20 gives a measure of the performance of the large cap stocks in the sector.
- The China CleanTech Index excludes nuclear, clean coal and natural gas, which are not considered to be 'cleantech'.
- The China CleanTech Index includes biofuels, green buildings, biomaterials, carbon trading, geothermal and environmental services, all of which appear to be missing from other indices.
- The China CleanTech Index is rebalanced quarterly whereas other indices are generally only rebalanced annually.

2. China CleanTech Index Performance

The China CleanTech Index outperformed two of its four benchmarks for the month of December 2015 and recorded a gain of 1.6%.

The China CleanTech Index rose from 57.59 to 58.53 over the month of December recording a 1.6% gain. This compared to the NEX gain of 2.1%, the CTIUS loss of 1.6%, the Shanghai Composite gain of 2.6% and the MSCI loss of 1.9%. The China CleanTech 20 recorded a gain of 1.2% over the month.

Over the final quarter of 2015, the China CleanTech Index recorded a gain of 18.8%, outperforming all of its benchmark indices. Over the quarter, the NEX gained 9.0%, the CTIUS gained 11.4%, the Shanghai Composite gained 15.9% and the MSCI gained 5.1%.

For the 2015 calendar year, the China CleanTech Index also outperformed all of its benchmarks. For the full year, the China CleanTech Index recorded a gain of 11.1%, compared to the NEX loss of 0.6%, the CTIUS gain of 1.6%, the Shanghai Composite gain of 9.4% and the MSCI loss of 2.7%.

The twelve month gain is being driven by the China Storage Index (+117.5%), including strong gains by Tianqi Lithium and the China Efficiency Index (+47.1%).

	2012	2013	2014	DEC 2015	4Q15	2H15	2015	3 Years
China CleanTech Index (CCTI)	-16.5%	29.2%	18.8%	1.6%	18.8%	-10.0%	11.1%	70.4%
China CleanTech 20 (CCT20)	-15.5%	24.1%	18.2%	1.2%	4.2%	-15.5%	-0.9%	45.4%
Wilder Hill New Energy Global Innovation Index (NEX)	-5.5%	53.7%	-3.2%	2.1%	9.0%	-9.6%	-0.6%	47.9%
Cleantech Index (CTIUS)	7.3%	37.0%	-8.4%	-1.6%	11.4%	-3.3%	1.6%	27.4%
China Shanghai Composite Index (SHCOMP)	3.2%	-6.7%	52.8%	2.6%	15.9%	-17.3%	9.4%	56.0%
MSCI World (MSCI)	13.2%	24.1%	2.9%	-1.9%	5.1%	-4.2%	-2.7%	24.2%

The market capitalisation of the 162 stocks in the China CleanTech Index after its rebalance is RMB 2.10 trillion (US\$324 billion). This is close to the all time high of RMB 2.3 trillion set in June 2015 and a long way up from the Index's trough of RMB 604 billion in November 2012.

Best and Worst Stocks

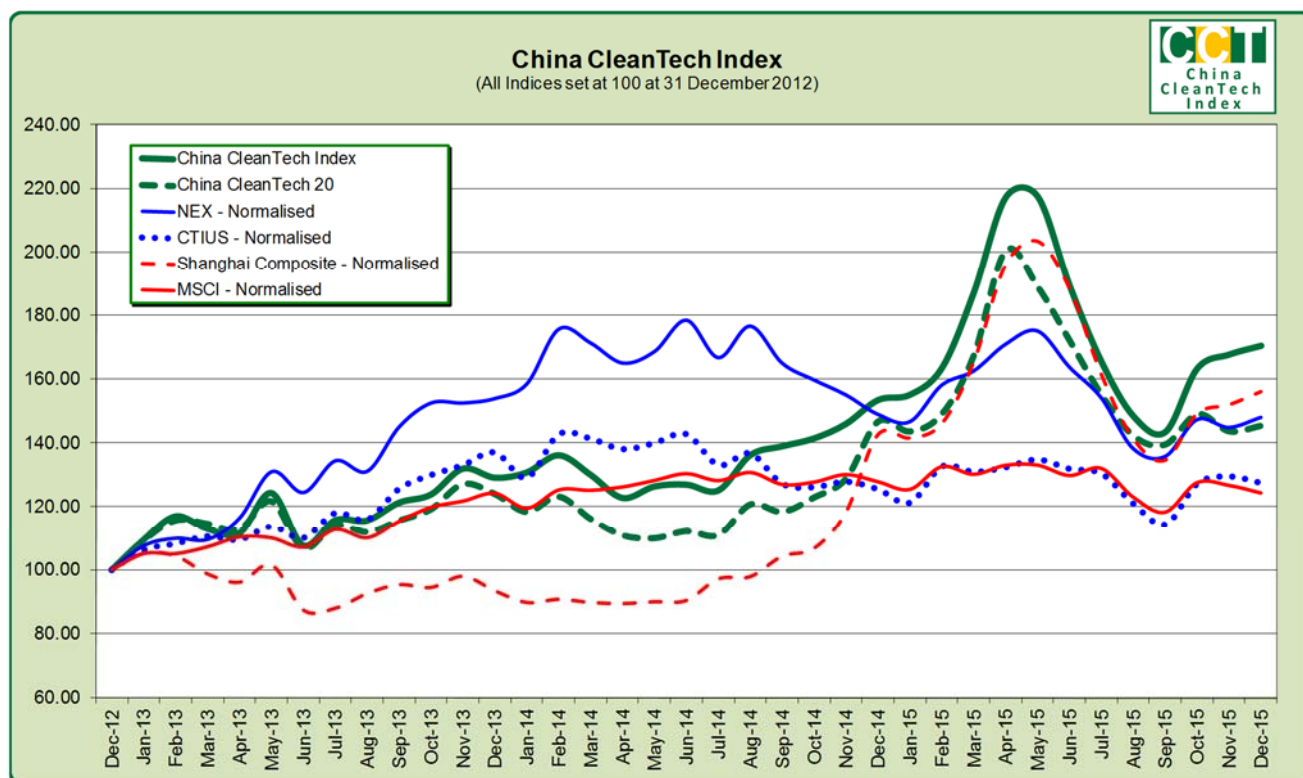
The best and worst performers in terms of share price performance over the month, final quarter and full year of 2015 are shown in the table below.

Over the month, 13 companies recorded share price gains of more than 20% and 7 companies made losses of more than 20%. Over the quarter, 16 companies recorded share price gains of more than 75% and 9 companies made losses of more than 25%.

Over 2015, 24 companies recorded share price gains of more than 75% and 14 companies made losses of more than 50%.

December 2015	
Best Performers Share Price Gain > 20%	Worst Performers Share Price Loss > 20%
Foshan Electrical and Lighting Foshan Nationstar Optoelectronics Leader Environmental Technologies Canadian Solar Gintech Energy Hanwha Solarone ReneSola Jiangxi Ganfeng Lithium Shanghai Young Sun Investment Jiangxi Sanchuan Water Meter China Power New Energy Development Cleantech Solutions International Xinjiang Goldwind Science & Technology	China Clean Energy LED International Holdings GCL-Poly Energy Holdings Shanghai Chaori Solar Energy Science Yingli Green Energy Advanced Battery Technologies Jiangsu Jiangnan Water
Fourth Quarter 2015	
Best Performers Share Price Gain > 75%	Worst Performers Share Price Loss > 25%
HC Semitek Shenzhen AOTO Electronics Hunan Yonker Environ Protection Gintech Energy Corporation Green Energy Technology Hanwha Solarone ReneSola Beijing Easpring Material Technology EVE Energy Hunan Corun New Energy Jiangxi Ganfeng Lithium Sichuan Tianqi Lithium Industries Unilumin Group Shanghai Young Sun Investment Jiangxi Sanchuan Water Meter Qian Jiang Water Resources Development	China Energy Recovery SmartHeat Leader Environmental Technologies Beijing New Building Materials Advanced Battery Technologies China Sun Group High Tech China Recycling Energy Jiangsu Jiangnan Water China Longyuan Power Group

Full Year 2015	
Best Performers Share Price Gain > 75%	Worst Performers Share Price Loss > 50%
Cofco Biochemical (Anhui) Guangzhou Zhiguang Electric Jiangxi Lianchuang Optoelec. Tellhow Sci-Tech Tianli Environmental Protection Hunan Yonker Environ Protection RINO International Corporation Shantou Wanshun Package Material Shenzhen Sunwin Intelligent Hanwha Solarone JS Huasheng Tianlong Photoelec. Risen Energy GCL System Integration Technology Co Ltd Yingli Green Energy Beijing Easpring Material Technology EVE Energy Jiangxi Ganfeng Lithium Shenzhen Desay Battery Technology Sichuan Tianqi Lithium Industries Tianneng Power International Unilumin Group Zhejiang Narada Power Source Chiho-Tiande Group Shanghai Young Sun Investment	LED International Ledman Optoelectronic SmartHeat Fujian Longking Beijing New Building Materials Hareon Solar Technology LDK Solar Shunfeng Photovoltaic International Suntech Power Advanced Battery Technologies China Recycling Energy Shenzhen Dongjiang Environmental Beijing Water Business Doctor CT Environmental Group



Index Rebalance

The China CleanTech Index underwent its quarterly rebalancing at the end of December which took account of recent share issues and other corporate activity. One company was removed from the Index after ongoing research into the Chinese cleantech sector. No companies were added at this rebalance.

The removed company was:

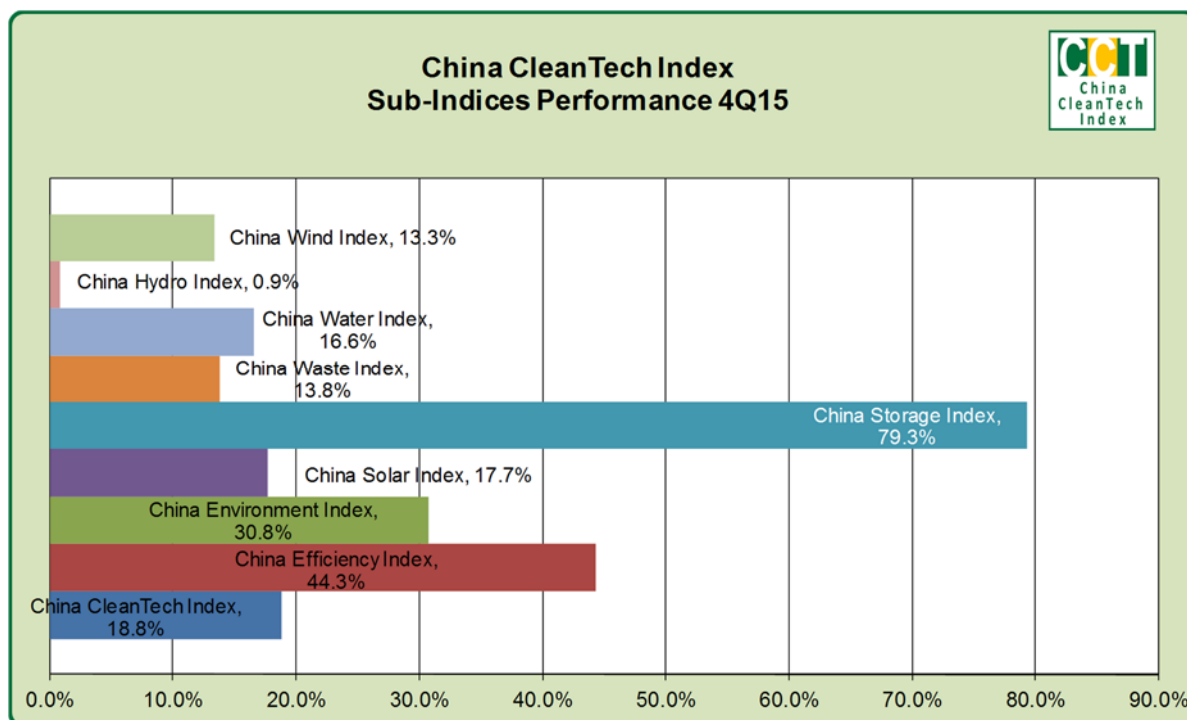
3. Component Sub-Indices

To provide an analysis of the China CleanTech Index, eight sub-indices have been developed. The performance of each of these sub-indices over the last five years and the current quarter are shown in the table and charts below.

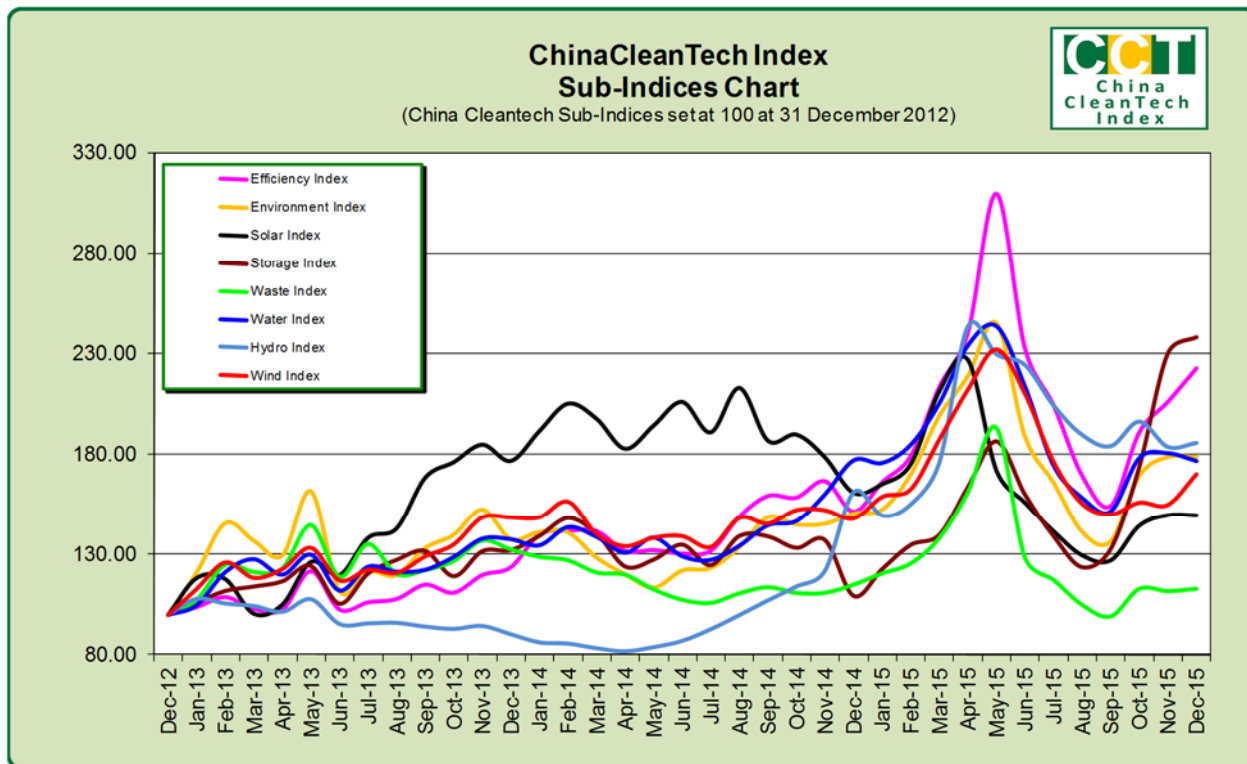
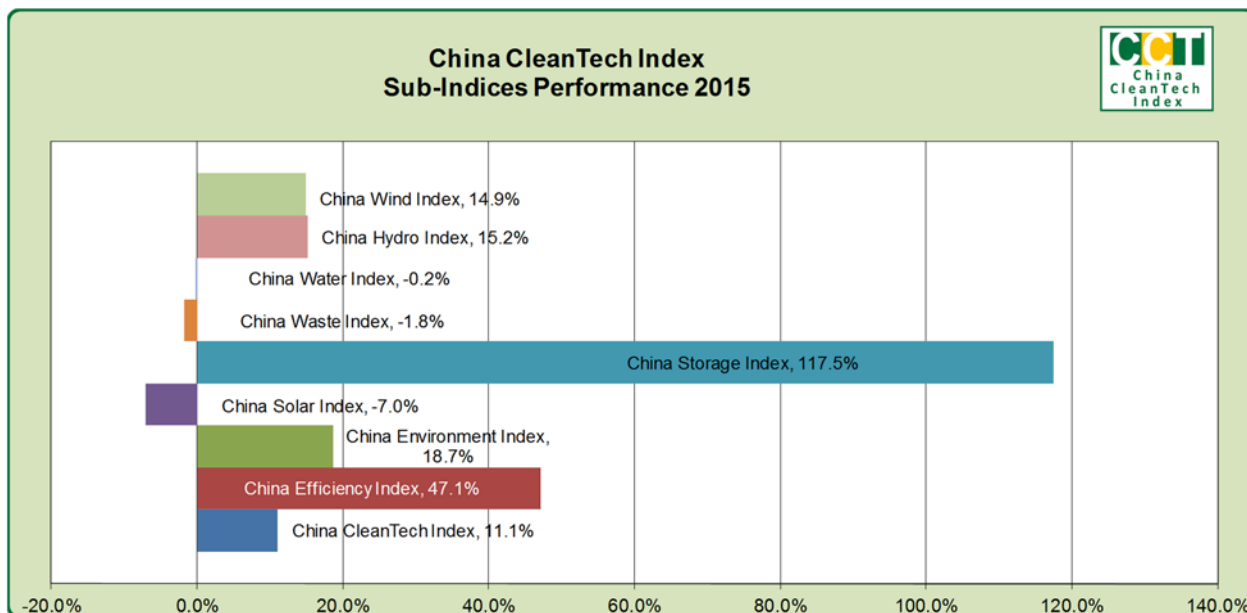
China CleanTech Sub-Indices

	2011	2012	2013	2014	4Q15	2015
China Efficiency Index	-60.4%	-30.9%	23.5%	22.6%	44.3%	47.1%
China Environment Index	-31.1%	-21.8%	37.7%	9.3%	30.8%	18.7%
China Solar Index	-57.5%	-36.2%	76.9%	-9.0%	17.7%	-7.0%
China Storage Index	-36.6%	11.7%	32.2%	-17.2%	79.3%	117.5%
China Waste Index	-25.9%	-12.5%	32.5%	-13.2%	13.8%	-1.8%
China Water Index	-49.7%	-8.0%	37.6%	28.7%	16.6%	-0.2%
China Hydro Index	-23.0%	1.1%	-9.9%	78.9%	0.9%	15.2%
China Wind Index	-57.7%	-32.5%	48.5%	-0.3%	13.3%	14.9%

All of the eight sub-indices recorded gains for the quarter. The best results were the 79.3% gain for the China Storage Index and the 44.3% gain for the China Efficiency Index. The worst results were recorded by the 0.9% gain from the China Hydro Index and 13.3% gain from the China Wind Index.



Over 2015, five of the eight sub-indices recorded gains. The best results were the 117.5% gain for the China Storage Index and the 47.1% gain for the China Efficiency Index. The worst results were recorded by the 7.0% loss from the China Solar Index and 1.8% loss from the China Waste Index.



4. Index Component Companies

The 20 largest Index constituents by market capitalisation on 31 December 2015 are provided in the table below. These stocks will be the constituents of the China CleanTech 20 until the Index rebalance on 31 March 2016.

In the China CleanTech 20, the greatest sub-sector representations are Water with seven companies followed by Wind with three companies.

New entrants to this list at this rebalance GCL System Integration Technology (formerly Shanghai Chaori Solar Energy Science), Sichuan Tianqi Lithium Industries and Jiangxi Ganfeng Lithium. These have taken the place of Beijing New Building Materials Public, Huaneng Renewables Corp, GCL-Poly Energy Holdings.

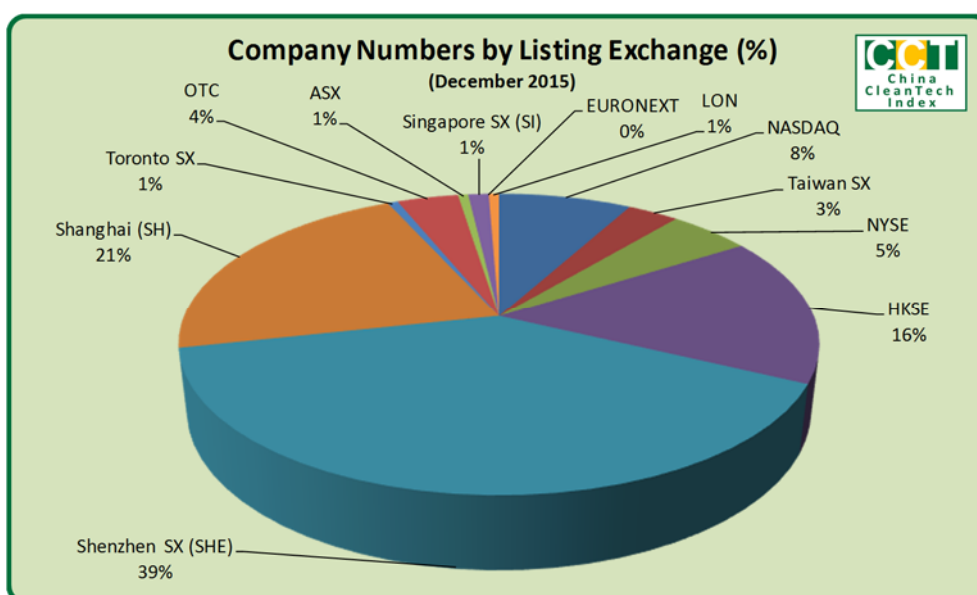
	Company	Sector	Exchange	Code
1	China Yangtze Power	WAVE, TIDAL, HYDRO	Shanghai	600900.SS
2	Hanergy Thin Film Power Group	SOLAR	HKSE	0566.HK
3	Power Construction Corporation of China,	WAVE, TIDAL, HYDRO	Shanghai	601669.SS
4	Beijing Originwater Technology.	WATER	Shenzhen	300070.SZ
5	Xinjiang Goldwind Science & Technology	WIND	Shenzhen	002202.SZ
6	GCL System Integration Technology	SOLAR	Shenzhen	002506.SZ
7	Tsinghua Tongfang.	ENERGY EFFICIENCY & BIOMATERIALS	Shanghai	600100.SS
8	Chongqing Water Group	WATER	Shanghai	601158.SS
9	Beijing Enterprises Water Group	WATER	HKSE	0371.HK
10	China Longyuan Power Group	WIND	HKSE	0916.HK
11	China Everbright International	WATER	HKSE	0257.HK
12	Sichuan Tianqi Lithium Industries	STORAGE & FUEL CELLS	Shenzhen	002466.SZ
13	Sound Environmental Resources	WASTE	Shenzhen	000826.SZ
14	Sinovel Wind Group	WIND	Shanghai	601558.SS
15	Guangdong Golden Dragon Development	WATER	Shenzhen	000712.SZ
16	Beijing SJ Environmental Protection and New Material	ENVIRONMENTAL SERVICES	Shenzhen	300072.SZ
17	Beijing Capital	WATER	Shanghai	600008.SS
18	Jiangxi Ganfeng Lithium	STORAGE & FUEL CELLS	Shenzhen	002460.SZ
19	Beijing SPC Environment Protection Tech	ENVIRONMENTAL SERVICES	Shenzhen	002573.SZ
20	Chengdu Xingrong Investment	WATER	Shenzhen	000598.SZ

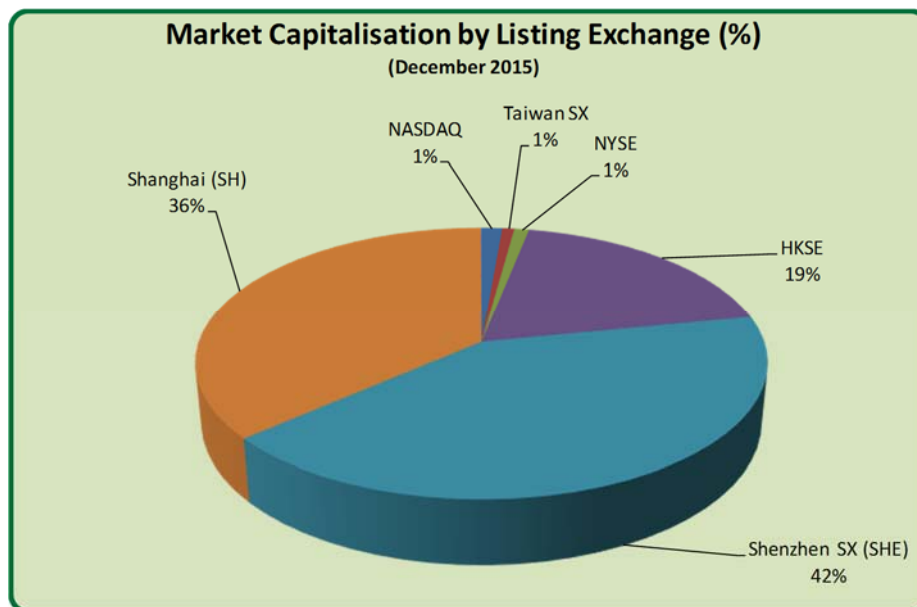
5. Index Profile

The profile of the constituent companies that comprise the China CleanTech Index provides some context for its performance. The 162 constituent companies are listed on eleven different exchanges, although 77% of them are listed on the exchanges in Shanghai, Shenzhen and Hong Kong. There are a further 12% listed on exchanges in North America.

When considering the total market capitalisation on each exchange, the figures show an increased focus on the Chinese exchanges. With only 22% of the companies, the Shanghai Exchange holds 36% of the Index's total market capitalisation. Combined with Shenzhen and Hong Kong, these three exchanges hold 97% of the total market capitalisation.

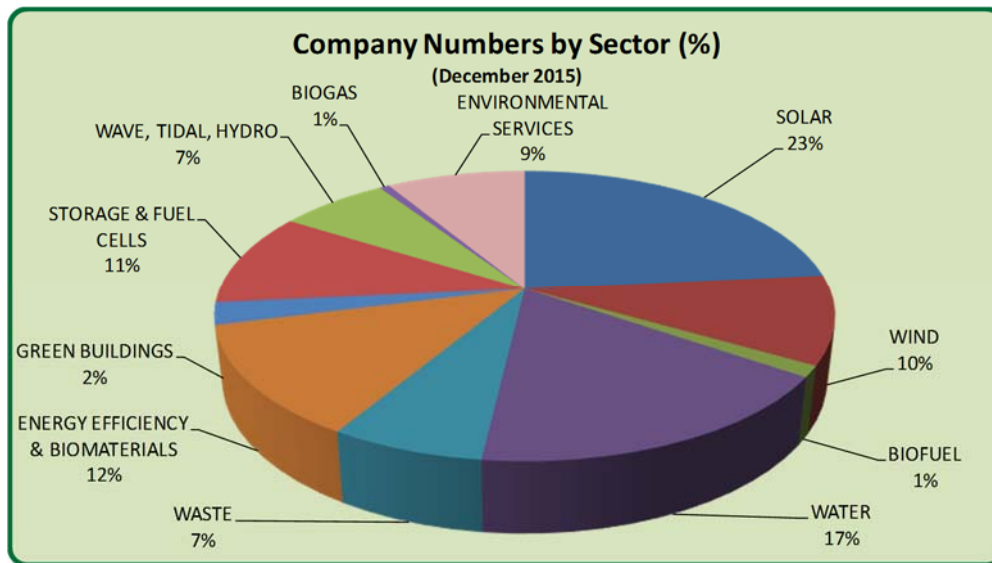
Listing Market	Number of Companies	Market Capitalisation (RMB million) December 2015
NASDAQ	13	¥ 28,478
Taiwan SX	5	¥ 16,634
NYSE	8	¥ 20,186
HKSE	26	¥ 394,406
Shenzhen SX (SHE)	64	¥ 876,009
Shanghai (SH)	35	¥ 763,057
Toronto SX	1	¥ 64
OTC	6	¥ 66
ASX	1	¥ 314
Singapore SX (SI)	2	¥ 1,009
LON	1	¥ 0.32
TOTAL	162	¥ 2,100,223



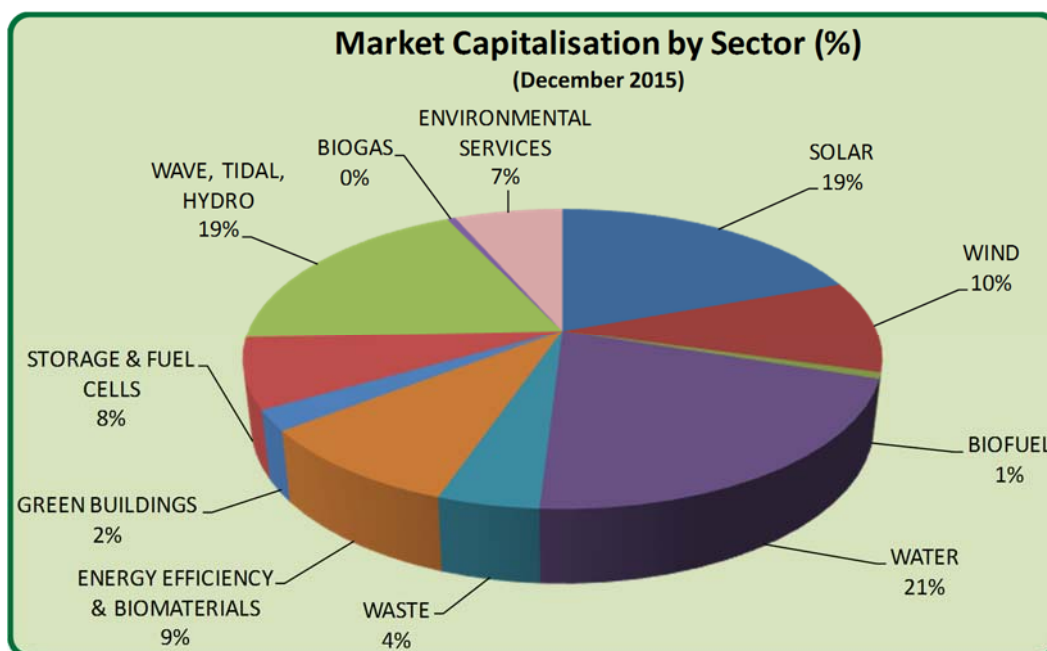


When considering the various sub-sectors present in the China CleanTech Index, the company numbers are lead by Solar (23.5%) followed by Water (17.3%) and Energy Efficiency (12.3%).

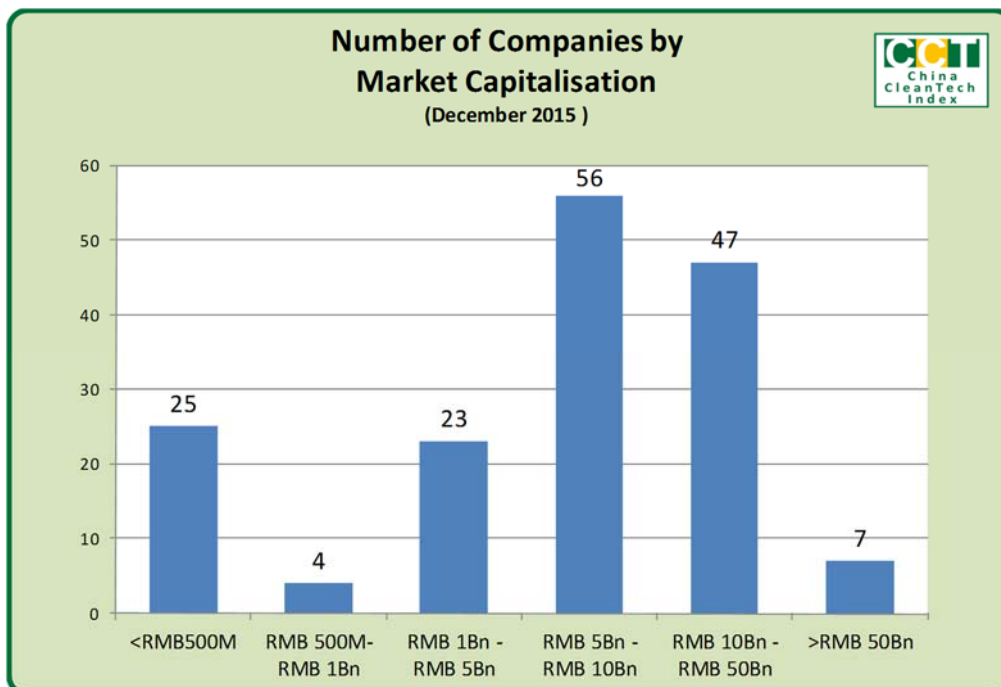
Sector	Number of Companies	Market Capitalisation (RMB million) December 2015
SOLAR	38	¥ 407,677
WIND	16	¥ 209,774
BIOFUEL	2	¥ 14,304
WATER	28	¥ 438,254
WASTE	11	¥ 91,156
ENERGY EFFICIENCY & BIOMATERIALS	20	¥ 193,424
GREEN BUILDINGS	4	¥ 46,660
STORAGE & FUEL CELLS	17	¥ 159,364
WAVE, TIDAL, HYDRO	11	¥ 391,297
BIOGAS	1	¥ 10,590
ENVIRONMENTAL SERVICES	14	¥ 137,723
TOTAL	162	¥ 2,100,223



The market capitalisation of the sub-sectors shows that Water (20.9%), Solar (19.6%) and Hydro (18.6%) are the largest groups. The performance of these larger sub-sectors therefore impacts the overall Index performance to a greater extent than the smaller sub-sectors.



An analysis has also been completed on the sizes of companies that are included in the Index in terms of ranges of market capitalisation. As shown in the chart below, the largest number of companies (34.6%) are in the market capitalisation range of RMB 5 billion to RMB 10 billion.



It is interesting to compare this final chart with those published for the market capitalisation spread for the Index over the previous three years. There has been a steady growth in company sizes as additional companies have been brought under coverage of the Index and the growth in the sector drives company valuations to increase. 2015 is the first year that the largest number of companies has not been in the RMB 1 billion to RMB 5 billion category.

