

# China CleanTech Index

## 2012 Full Year Performance Report

January 2013

Published internationally by:



Published in China by:



Published in Australia by:



Produced by:



To request further information or to be added to the distribution list for future China CleanTech Index reports, please see [www.sinocleantech.com](http://www.sinocleantech.com)

or contact [contact@sinocleantech.com](mailto:contact@sinocleantech.com)

## Table of Contents

<b>1. China CleanTech Index Overview</b>	<b>3</b>
<b>2. China CleanTech Index Performance</b>	<b>5</b>
<b>3. Component Sub-indices</b>	<b>9</b>
<b>4. Index Component Companies</b>	<b>12</b>



### Disclaimer

Whilst Australian CleanTech Pty Ltd provides this report with the skill, diligence and care normally exercised by qualified persons in the performance of comparable work, Australian CleanTech is not be liable to and does not indemnify any party that may rely on the content of the report, against any action, suit, claim, demand, loss, cost or expense whatsoever arising out of or referable to this document. By accepting this report, the reader, their organisations and any associated bodies corporate release Australian CleanTech from liability of any kind whatsoever arising out of or referable to this report.

In addition, nothing herein is intended to be nor should be construed as investment advice. Australian CleanTech does not recommend that any financial product should be bought, sold or held by you, and nothing in this document should be construed as an offer, nor the solicitation of an offer, to buy or sell securities by Australian CleanTech. You should not make any investment decision without consulting a fully qualified financial adviser.

## 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 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 nearly 150 companies falling under the coverage of the Index and with a combined market capitalisation of nearly 700 billion Renminbi (US\$112 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. An overview of these rules is provided in the Index Launch report.

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

Monthly results can be emailed directly to interested parties by subscribing at [www.sinocleantech.com](http://www.sinocleantech.com).

## 2. China CleanTech Index Performance

The China CleanTech Index outperformed all but one of its benchmarks for the month of December 2012.

The China CleanTech Index rose from 30.1 to 34.4 over the month of December recording a huge 14.2% gain. This compared to the NEX gain of 7.3%, the CTIUS gain of 5.3%, the Shanghai Composite gain of 14.6% and the MSCI gain of 1.7%.

The China CleanTech 20 fared slightly worse with a gain of only 11.7%.

Over the fourth quarter of the 2012, the China CleanTech Index recorded a gain of 5.9%, outperforming the NEX gain of 2.9%, and the MSCI gain of 2.0% but underperforming the CTIUS gain of 6.3% and the Shanghai Composite gain of 8.8%.

For the 2012 calendar year, the China CleanTech Index significantly underperformed all of its benchmarks driven by the ongoing collapse of the solar and wind stocks across the year. It is noted however that during the fourth quarter, both the solar and wind stocks made strong gains which might signify the end of their slump.

For the full year, the China CleanTech Index recorded a loss of 16.5%, compared to the NEX loss of 5.5%, the CTIUS gain of 7.3%, the Shanghai Composite gain of 3.2% and the MSCI gain of 13.2%.

Percentage Change	2009	2010	2011	DEC'12	4Q12	2H12	2012	3 Years
<b>China CleanTech Index (CCTI)</b>	77.5%	-9.6%	-48.0%	14.2%	5.9%	-6.5%	-16.5%	-60.7%
<b>China CleanTech 20 (CCT20)</b>	59.6%	-15.6%	-47.4%	11.7%	6.2%	-5.5%	-15.5%	-62.5%
<b>Wilder Hill New Energy Global Innovation Index (NEX)</b>	39.7%	-14.6%	-40.2%	7.3%	2.9%	4.3%	-5.5%	-51.7%
<b>Cleantech Index (CTIUS)</b>	38.1%	7.3%	-18.3%	5.3%	6.3%	9.2%	7.3%	-6.0%
<b>China Shanghai Composite Index (SHCOMP)</b>	80.0%	-14.3%	-21.7%	14.6%	8.8%	2.0%	3.2%	-30.7%
<b>MSCI World (MSCI)</b>	27.0%	9.6%	-7.6%	1.7%	2.0%	8.3%	13.2%	14.6%

The market capitalisation of the 149 stocks in the China CleanTech Index is RMB 689 billion (US\$110 billion), before its rebalance, falling from its peak of RMB 911 billion in February 2011.

### Best and Worst Stocks

The best and worst performers in terms of share price performance over the month, fourth quarter and full year of 2012 are shown in the table below.

December 2012	
Best Performers Share Price Gain > 25%	Worst Performers Share Price Loss > 25%
Zhejiang Yankon Group Co., Ltd. Shenzhen Das Intellitech Co., Ltd. Shenzhen Sunwin Intelligent Co., Ltd. Canadian Solar Inc Daqo New Energy Corp. JA Solar Holdings JinkoSolar Holding Co., Ltd. Solargiga Energy Holdings Limited Sungrow Power Supply Co Suntech Power Holdings Trina Solar Yingli Green Energy Sichuan Tianqi Lithium Industries, Inc. Qian Jiang Water Resources Development Co., Ltd Shanghai Canature Environmental Products Co Shanghai Safbon Water Service Co Zhongshan Public Utilities Group co., Ltd.	China Energy Recovery Inc SmartHeat Inc Bodisen Biotech, Inc. Advanced Battery Technologies China BAK Battery Duoyuan Global Water A-Power Energy Generation Systems Ltd
Fourth Quarter 2012	
Best Performers Share Price Gain > 40%	Worst Performers Share Price Loss > 40%
China Singyes Solar Tech. Hold. Ltd China Solar & Clean Energy Solns., Inc. Daqo New Energy Corp. JA Solar Holdings JinkoSolar Holding Co., Ltd. Shunfeng Photovoltaic International Suntech Power Holdings China BAK Battery Coslight Technology International Group Shanghai Safbon Water Service Co China Engerine International (Hldgs) Ltd China Power New Energy Development Co., Ltd Cleantech Solutions International Inc Huaneng Renewables Corp Ltd	China Energy Recovery Inc Hanwei Energy Services SmartHeat Inc Bodisen Biotech, Inc. Advanced Battery Technologies China Ritar Power Corp. China Sun Group High Tech Co. Duoyuan Global Water A-Power Energy Generation Systems Ltd

Full Year 2012	
Best Performers Share Price Gain > 50%	Worst Performers Share Price Loss > 50%
Beijing New Building Materials Public Limited Company China Singyes Solar Tech. Hold. Ltd Daqo New Energy Corp. JA Solar Holdings China BAK Battery China Hydroelectric Corporation Cleantech Solutions International Inc	China Clean Energy Inc. China Energy Recovery Inc Foshan Nationstar Optoelectronics Co., Ltd. Guangzhou Hongli Opto Electronic Co Ltd Suzhou Hailu Heavy Industry Co., Ltd. Bodisen Biotech, Inc. Xiamen Savings Environmental Co., Ltd. Beijing Jingyuntong Technology Co Ltd China Solar & Clean Energy Solns., Inc. JS Huasheng Tianlong Photoelec. Co.,Ltd. LDK Solar Risen Energy Co., Ltd. Shanghai Chaori Solar Energy Science Zhejiang Sunflower Light Energy Science & Technology Limited Advanced Battery Technologies China Sun Group High Tech Co. Jiangsu Welle Environmetnal Co., Ltd. Duoyuan Global Water Zhejiang Fuchunjiang Hydropower Equip A-Power Energy Generation Systems Ltd Sinovel Wind Group Company Limited

## 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.

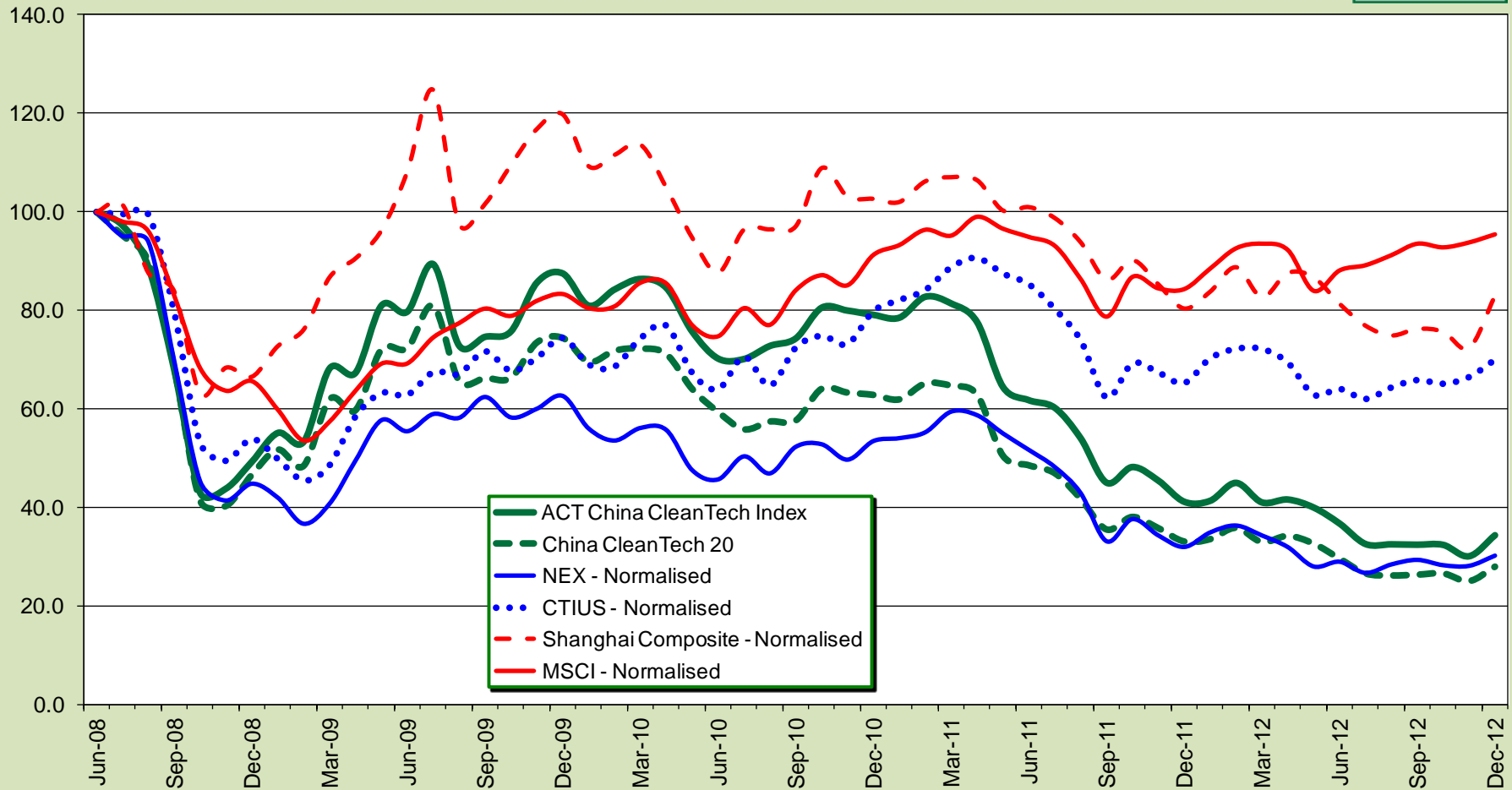
The following company was **removed** from the index at the end of December following ongoing research by Sino Cleantech into the activities of Chinese listed companies.

- Gushan Environmental Energy Limited (NYSE:GU)** - Gushan Environmental Energy Limited announced on 17 October 2012 the completion of its privatisation. Gushan operates a copper products business in China that manufactures copper rods, copper wires, copper granules and copper plates primarily from recycled copper. Gushan also produces biodiesel, a renewable, clean-burning and biodegradable fuel and a raw material used to produce chemical products, primarily from used cooking oil, and by-products from biodiesel production, including glycerine and plant asphalt.



### China Cleantech Index

(All Indices set at 100 at 30 June 2008)





### 3. Component Sub-Indices

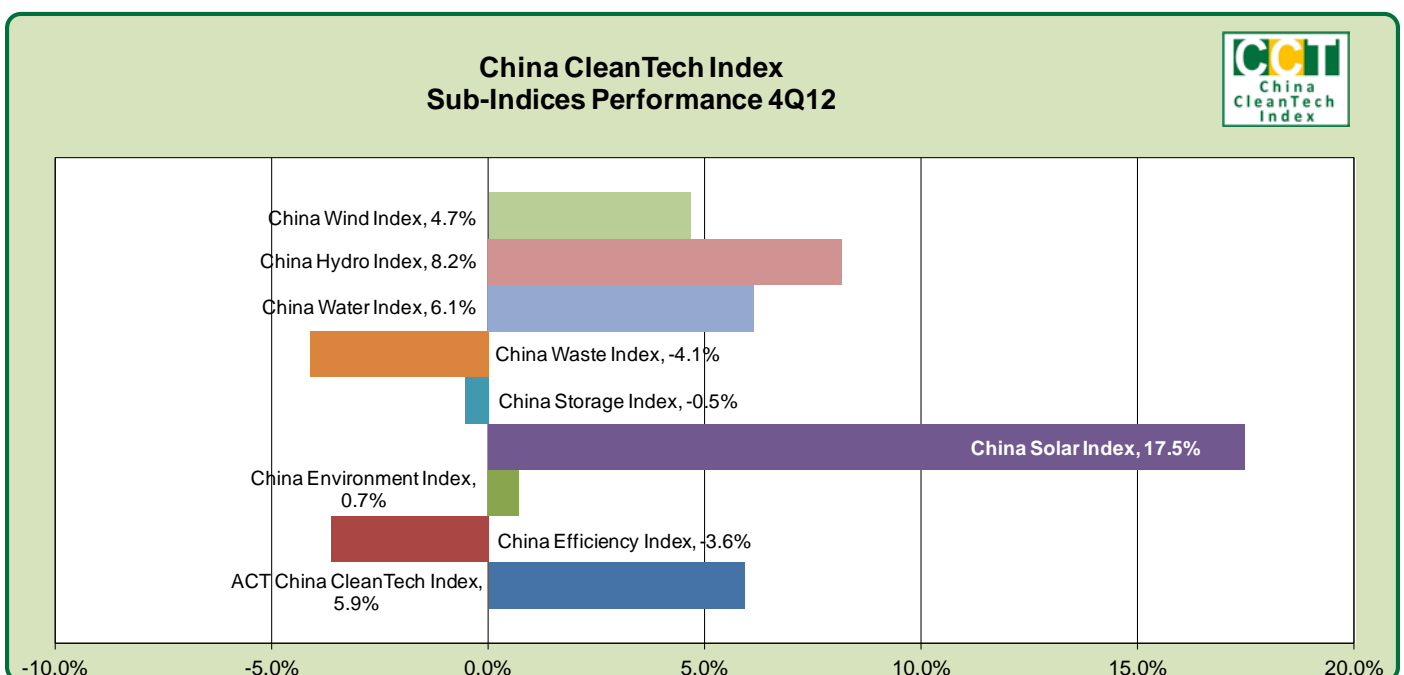
To provide an analysis of the China CleanTech Index, eight sub-indices have been developed. The performance of each of these sub-indices over the last four financial years is shown in the table and charts below.

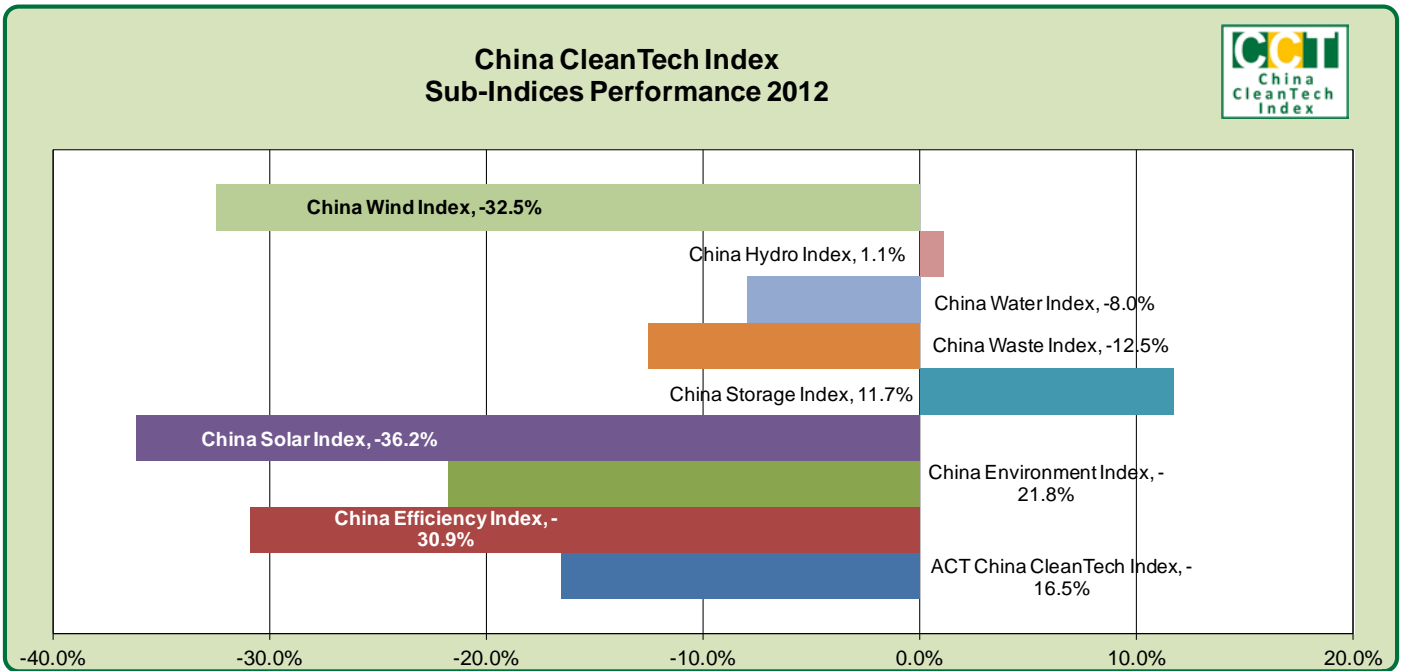
The best performing sectors for the three months to December 2012 were China Solar Index, clawing back some of its massive losses over the last 18 months, and the China Hydro Index, with the China Wind Index also making strong gains. The worst performer was the China Waste Index.

For the full year, whilst all sectors showed relatively poor performance, the best performing sectors were China Storage Index and the China Hydro Index. The worst performing sectors were the China Solar Index and the China Wind Index, each of which lost a third of its remaining value following the 50% losses in 2011.

**China CleanTech Sub-Indices**

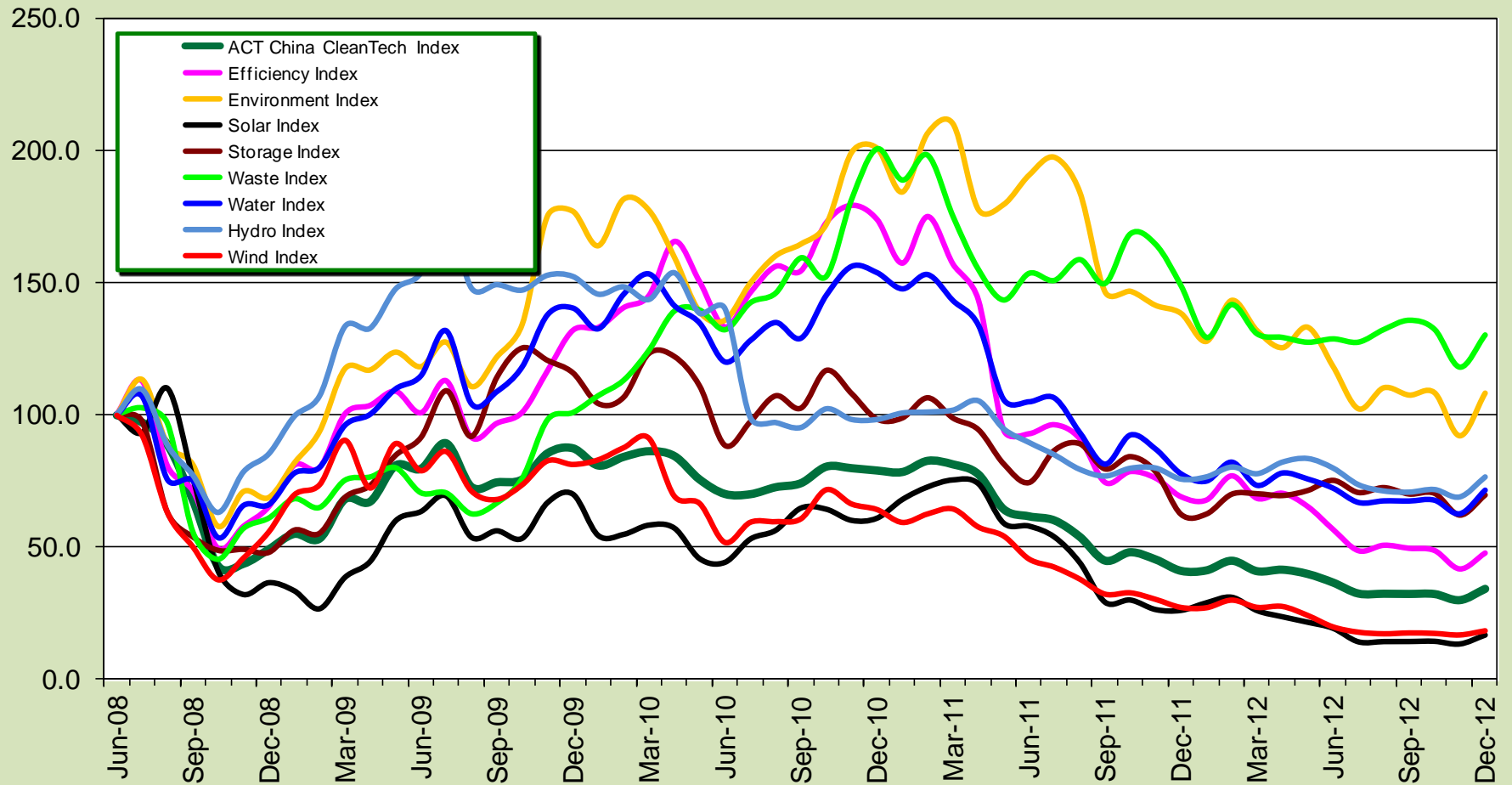
	2009	2010	2011	4Q12	2012
China Efficiency Index	102.4%	31.8%	-60.4%	-3.6%	-30.9%
China Environment Index	157.4%	13.5%	-31.1%	0.7%	-21.8%
China Solar Index	92.4%	-13.0%	-57.5%	17.5%	-36.2%
China Storage Index	141.0%	-15.1%	-36.6%	-0.5%	11.7%
China Waste Index	65.7%	99.1%	-25.9%	-4.1%	-12.5%
China Water Index	113.5%	9.6%	-49.7%	6.1%	-8.0%
China Hydro Index	78.9%	-35.6%	-23.0%	8.2%	1.1%
China Wind Index	45.8%	-21.0%	-57.7%	4.7%	-32.5%





## ChinaCleanTech Index Sub-Indices Chart

(China Cleantech Sub-Indices set at 100 at 30 June 2008)



## 4. Index Component Companies

The 20 largest Index constituents by market capitalisation on 31 December 2012 are provided in the table below. These stocks will be the constituents of the China CleanTech 20 until the Index rebalance on 31 March 2013.

In the China CleanTech 20, the greatest sub-sector representations are Water with eight companies and then Wind with four companies.

	Company		Sector	Exchange	Code
1	China Yangtze Power Co., Ltd.	长江电力	WAVE, TIDAL, HYDRO	Shanghai (SH)	600900.SS
2	Sinohydro Group Ltd		WAVE, TIDAL, HYDRO	Shanghai (SH)	601669.SS
3	China Longyuan Power Group Corp		WIND	HKSE	0916.HK
4	Chongqing Water Group Company Limited	重庆水务	WATER	Shanghai (SH)	601158.SS
5	Beijing Originwater Technology Co., Ltd.	碧水源	WATER	Shenzhen SX (SHE)	300070.SZ
6	Sinovel Wind Group Company Limited	华锐风电	WIND	Shanghai (SH)	601558.SS
7	GCL-Poly Energy Holdings		SOLAR	HKSE	3800.HK
8	Tsinghua Tongfang Co., Ltd.	同方股份	ENERGY EFFICIENCY & BIOMATERIALS	Shanghai (SH)	600100.SS
9	Xinjiang Goldwind Science & Technology Co.	金风科技	WIND	Shenzhen SX (SHE)	002202.SZ
10	China Everbright International		WATER	HKSE	0257.HK
11	Sound Environmental Resources Co., Ltd.	桑德环境	WASTE	Shenzhen SX (SHE)	000826.SZ
12	Beijing Enterprises Water Group		WATER	HKSE	0371.HK
13	Beijing New Building Materials Public Limited Company	北新建材	GREEN BUILDINGS	Shenzhen SX (SHE)	000786.SZ
14	Beijing Capital Co., Ltd.	首创股份	WATER	Shanghai (SH)	600008.SS
15	Huaneng Renewables Corp Ltd		WIND	HKSE	0958.HK
16	Zhongshan Public Utilities Group co., Ltd.	中山公用	WATER	Shenzhen SX (SHE)	000685.SZ
17	Chengdu Xingrong Investment Co.,Ltd	兴蓉投资	WATER	Shenzhen SX (SHE)	000598.SZ
18	Hunan Corun New Energy Co., Ltd.	科力远	STORAGE & FUEL CELLS	Shanghai (SH)	600478.SS
19	Shanghai Aero Auto Electromechanical	航天机电	SOLAR	Shanghai (SH)	600151.SS
20	Tianjin Capital Environmental Protection Group Co., Ltd.	创业环保	WATER	Shanghai (SH)	600874.SS