



# ACT Australian CleanTech Index

1H FY12

## Half-Year Performance Report

January 2012

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## 1. ACT Australian CleanTech Index Overview

The ACT Australian CleanTech Index provides the definitive measure of the performance of Australian listed cleantech stocks.

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.

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

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 75 companies falling under the coverage of the Index and with a combined market capitalisation of over \$7Bn, the ACT Australian CleanTech Index presents for the first time a picture of the Australian cleantech industry’s growth in a single measure.

The Index is weighted by market capitalisation and is benchmarked against both the S&P/ASX200 and the S&P/ASX Small Ordinaries. 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 annual performance report.



The ACT Australian Cleantech Index is updated each month and published on the Australian CleanTech website at [www.auscleantech.com.au](http://www.auscleantech.com.au), in the Ethical Investor magazine, in WME's Environmental Management News, on the Clean Energy Council website and in the international Cleantech Investor publication.

Monthly results can be emailed directly to interested parties by subscribing at <http://www.auscleantech.com.au/Pages/cleantech.html>.

## 2. ACT Australian CleanTech Index Performance 1H FY12

ACT Australian CleanTech Index outperformed both the S&P ASX200 and the S&P ASX Small Ordinaries for the month of December 2011: a welcome change to the trend of the last few months.

The ACT Australian CleanTech Index rose from 36.9 to 37.2 over the month of December recording a 0.8% gain. This compared to the S&P ASX200 loss of 0.8% and the S&P ASX Small Ordinaries Index loss of 4.3%. The Australian CleanTech 20 had a better performance with a gain of 1.5%.

Over the second quarter of the 2012 fiscal year, the ACT Australian CleanTech Index recorded a gain of 2.2%, ahead of both the 1.6% gain of the S&P ASX200 and the 0.9% loss of the S&P ASX Small Ordinaries. Again the Australian CleanTech 20 outperformed the wider index with a quarterly gain of 3.1%.

Over the first half of the 2012 fiscal year, the ACT Australian CleanTech Index recorded a loss of 19.2%, a long way behind the 10.1% loss of the S&P ASX200 and the 11.5% loss of the S&P ASX Small Ordinaries. The Australian CleanTech 20 underperformed the wider index with a loss of 19.9%.

Percentage Change	FY07	FY08	FY09	FY10	FY11	DEC'11	2Q FY12	1H FY12	12 Mnths	3Yrs
<b>ACT Australian CleanTech Index</b>	42.9%	-16.0%	-38.7%	-32.0%	-8.1%	<b>0.8%</b>	<b>2.2%</b>	<b>-19.2%</b>	-38.7%	-40.1%
<b>Australian CleanTech 20</b>	56.4%	-21.4%	-37.8%	-16.3%	-17.6%	<b>1.5%</b>	<b>3.1%</b>	<b>-19.9%</b>	-49.6%	-44.6%
<b>S&amp;P/ASX200</b>	25.4%	-16.4%	-25.8%	11.8%	4.2%	<b>-0.8%</b>	<b>1.6%</b>	<b>-10.1%</b>	-15.0%	11.4%
<b>S&amp;P/ASX Small Ords</b>	40.4%	-23.0%	-32.4%	10.5%	9.5%	<b>-4.3%</b>	<b>-0.9%</b>	<b>-11.5%</b>	-23.9%	32.0%

The market capitalisation of the 77 stocks in the ACT Australian CleanTech Index is A\$7.3 billion, after its rebalance, falling from its peak of \$16.3 billion in July 2007.

## Best and Worst Stocks

The best and worst performers in terms of share price performance over the second quarter of the 2012 fiscal year are shown in the table below.

December 2011	
Best Performers Share Price Gain > 20%	Worst Performers Share Price Loss > 20%
Sylex Systems Algae.Tec Dolomatrix Intec Traffic Technologies Hot Rock Greencap	Mission NewEnergy Papyrus Australia Stericorp Medivac Bluglass Cardia BioPlastics Galaxy Resources Vmoto Geodynamics Greenearth Energy Pacific Environment Soil Sub Technologies
2Q FY12	
Best Performers Share Price Gain > 25%	Worst Performers Share Price Loss > 25%
Algae.Tec Dolomatrix Medivac Intec Pro-Pac Packaging Earth Heat Resources Hot Rock Aeris Environmental	Solco Mission NewEnergy Water Resources Group Electrometals Cardia BioPlastics Eco Quest Eden Energy Carnegie Wave Energy Green Rock Soil Sub Technologies
1H FY12	
Best Performers Share Price Gain > 50%	Worst Performers Share Price Loss > 50%
Algae.Tec CMA Corporation Dolomatrix Medivac	Mission NewEnergy Water Resources Group Eco Quest Eden Energy Soil Sub Technologies

## Index Rebalance

The ACT Australian CleanTech Index underwent its quarterly rebalancing at the end of December which took account of recent share issues and other corporate activity.

The changes that were made to the index constituents at this rebalancing were:

- the addition of **Greentech Flagship Ltd (SIM:GTF)** following its listing on the SIM Venture Stock Exchange. The company has acquired the worldwide rights to the production of next generation solar cells. This technology is collectively known as “Bundled Technology” as it allows geometrically smaller photovoltaic cells to be united in bundled parallel circuits thereby increasing the energy absorption and power generation of solar panels. The result is solar panels with double the efficiency; an output of 100 times the energy generation over the life of the solar cells; higher power output under concentrated irradiation in comparison with conventional solar cells; high temperature stability under conditions of high and low temperatures and most importantly a production cost significantly lower per watt.

This is the first of many potential cleantech listings on the SIM VSE and this will hopefully provide a good source of investment opportunities for the those interested in investing in the sector.

A watching brief is being maintained on the following companies in the Index:

- **Jatoil Ltd (ASX:JAT)** following its acquisition of coal assets in Kalimantan in Indonesia. At the same time, the company has expanded its Jatropha operations. A careful watch will be maintained on the source of the majority of the company’s revenue.
- **Green Rock (ASX:GRK)** which is buying into an oil and gas exploration project in the Kimberly region of WA.
- **BioProspect (ASX:BPO)** which is buying into an oil and gas exploration project in the Philippines.
- **Geothermal Resources (ASX:GHT)** is in the process of being acquired by



Havilah Resources NL and will be removed from the index once the acquisition has been completed.

In addition, a watching brief is being maintained on the following companies that may qualify for inclusion in the Index in the future:

- **Greenbox Group** that took over the asset of JackGreen and is seeking to relist as an energy efficiency solution provider following a capital raising.
- **Green Resources Group** that is primarily a solar panel integrator and installer and has stated its intention to list on the ASX.
- **Intelligent Solar (ASX:ISL)** that is a small listed solar installer that is currently in administration.
- **Frontier Solar Ltd (SIM:F50)** that is a solar tracking and racking manufacturer that is currently seeking an IPO on the SIM VSE.
- **AFT Corporation Ltd (ASX:AFT)** that is a provider of clean air technologies for marine and the built environment and building materials and façades for the construction industry.

Two companies were reviewed during the quarter that did not qualify as cleantech companies despite some environmental benefits to their operations:

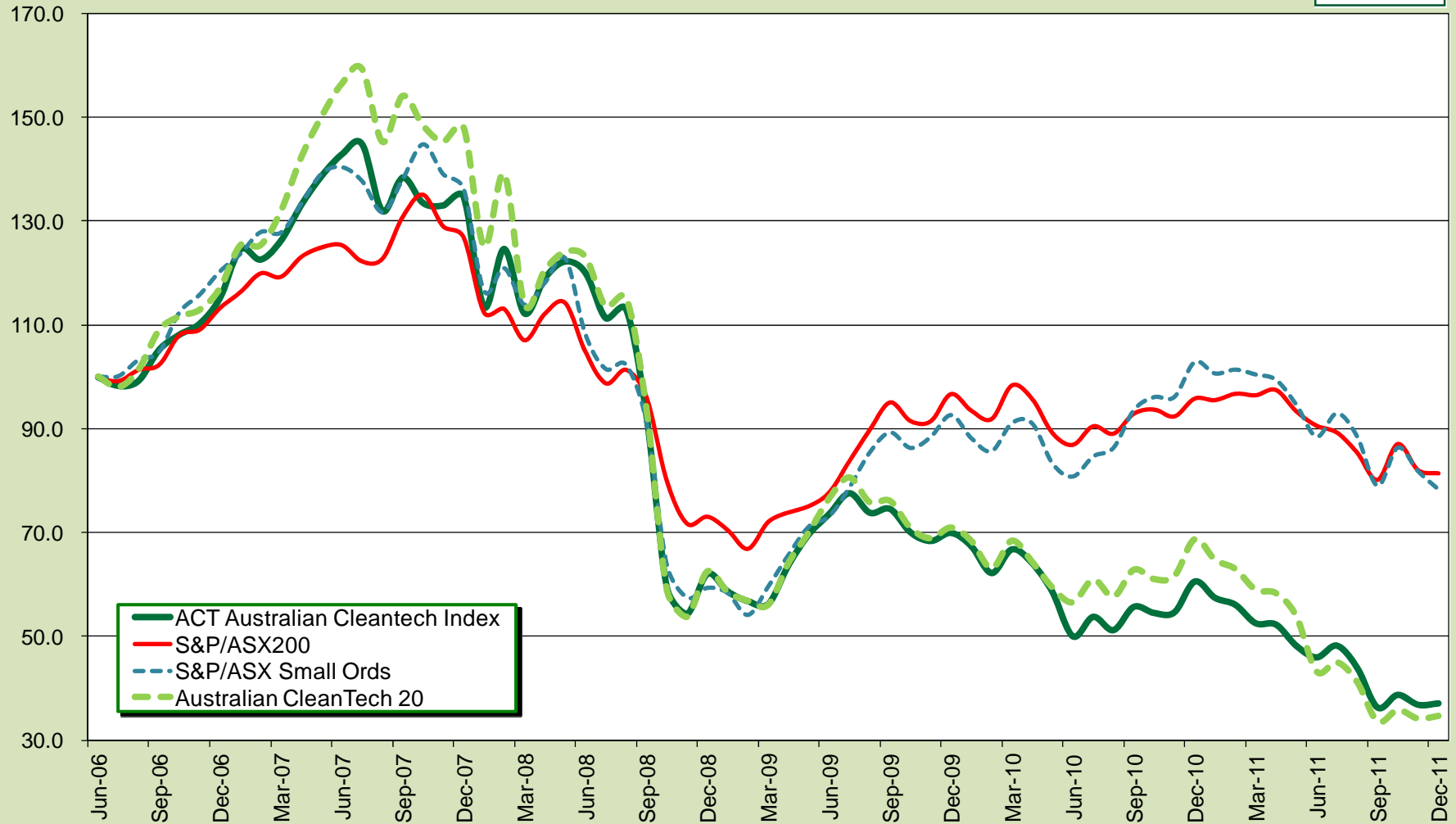
- **Energy Action Ltd (ASX:EAX)** that completed an IPO during the quarter and is primarily an energy procurement provider.
- **Telezon Ltd (SIM:TLZ)** that listed on the SIM during the quarter and manufactures plastic medical needles to replace steel needles.

There have been no changes to the constituents of the sub-indices other than the inclusion of Greentech Flagship into the ACT Solar Index.



### ACT Australian CleanTech Index

(ACT/AC Index, S&P/ASX200 and S&P/ASX Small Ords Indices set at 100 at 30 June 2006)



### 3. Component Sub-Indices

To provide an analysis of the ACT Australian CleanTech Index, eight sub-indices have been developed. The performance of each of these sub-indices over the last five financial years and during 2Q FY12 is shown in the table and charts below.

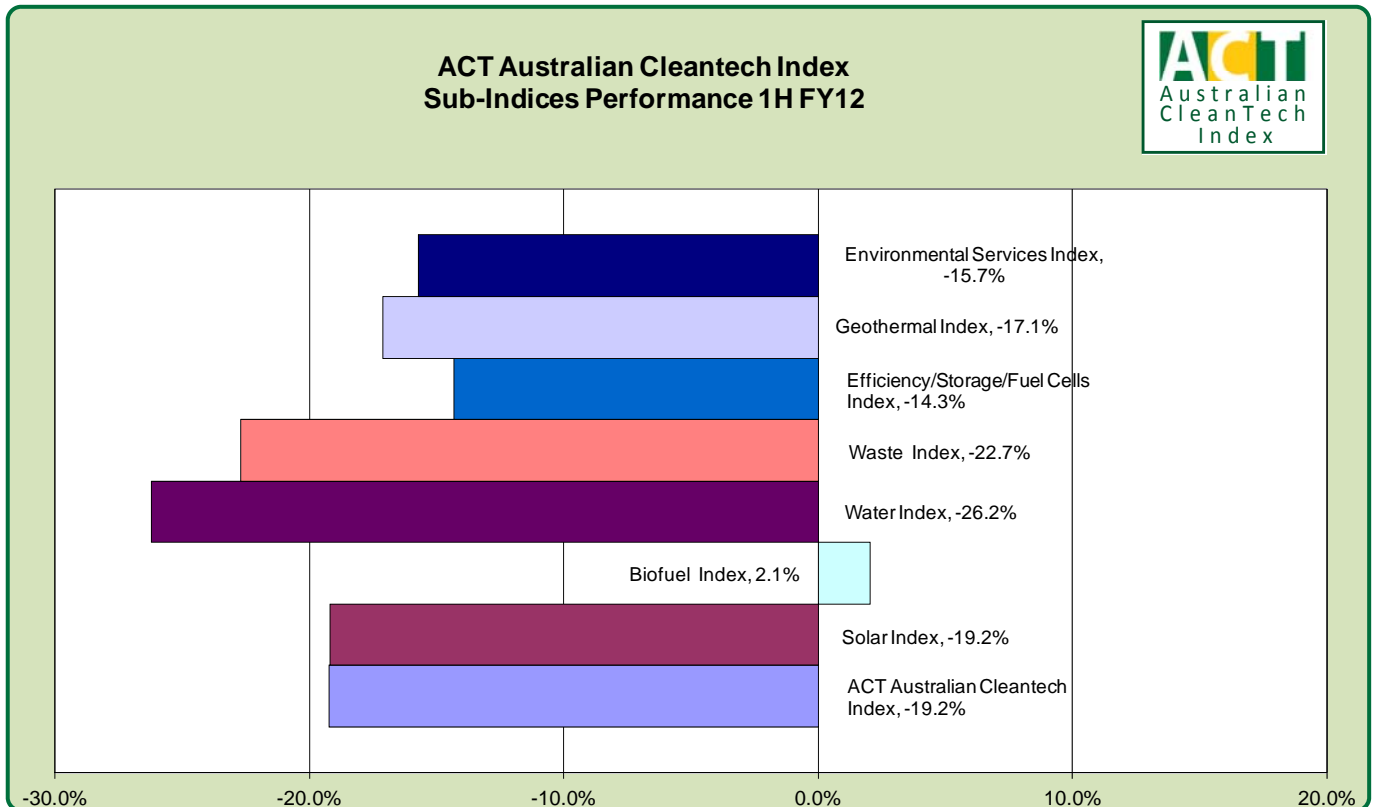
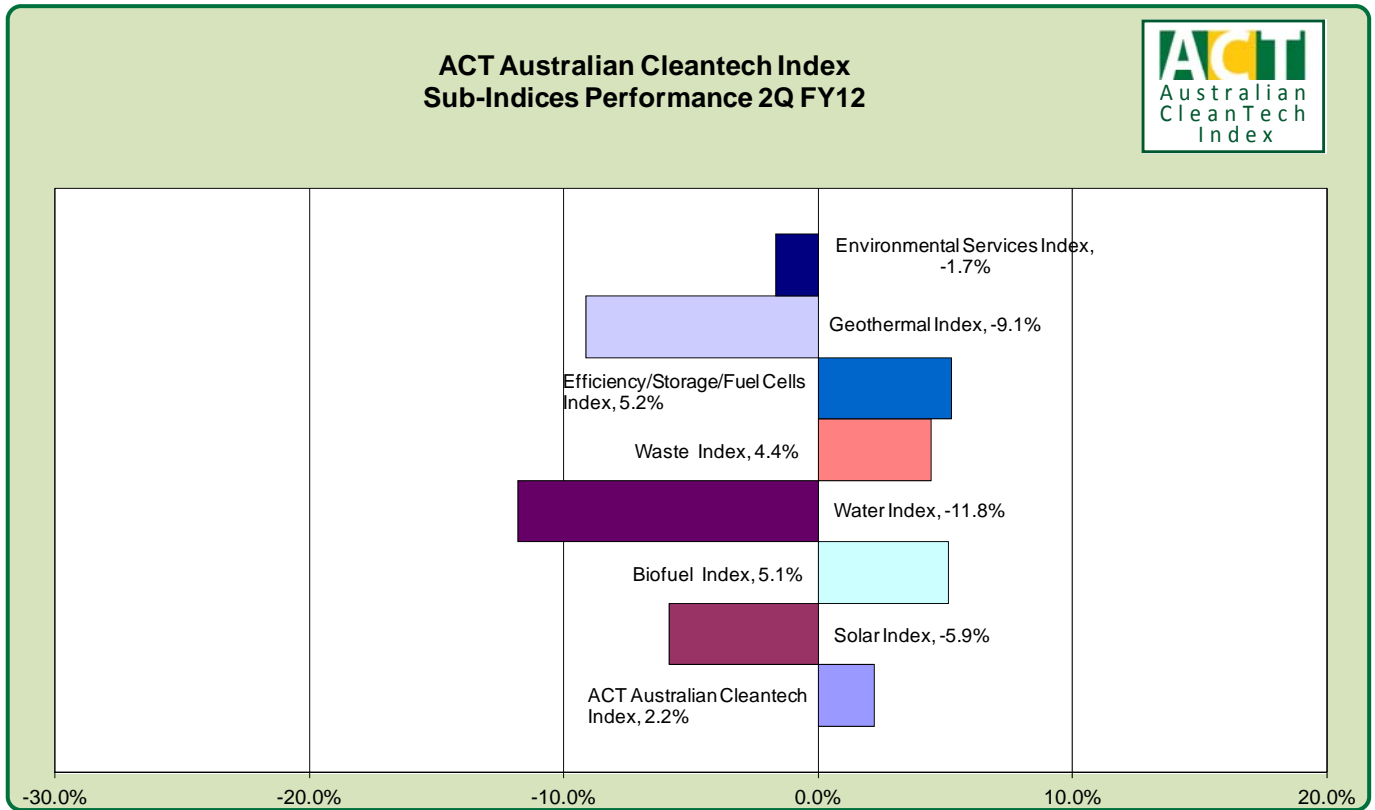
The best performing sectors for the three months to December 2011 were ACT Efficiency/Storage/Fuel Cells Index and the ACT Biofuel Index. The worst performer was the ACT Water Index, which was driven down by the poor result from the Water Resources Group.

The best performing sector for the six months to December 2011 was the ACT Biofuel Index. The worst performers were the ACT Water Index and the ACT Waste Index.

**ACT Australian CleanTech Sub-Indices**

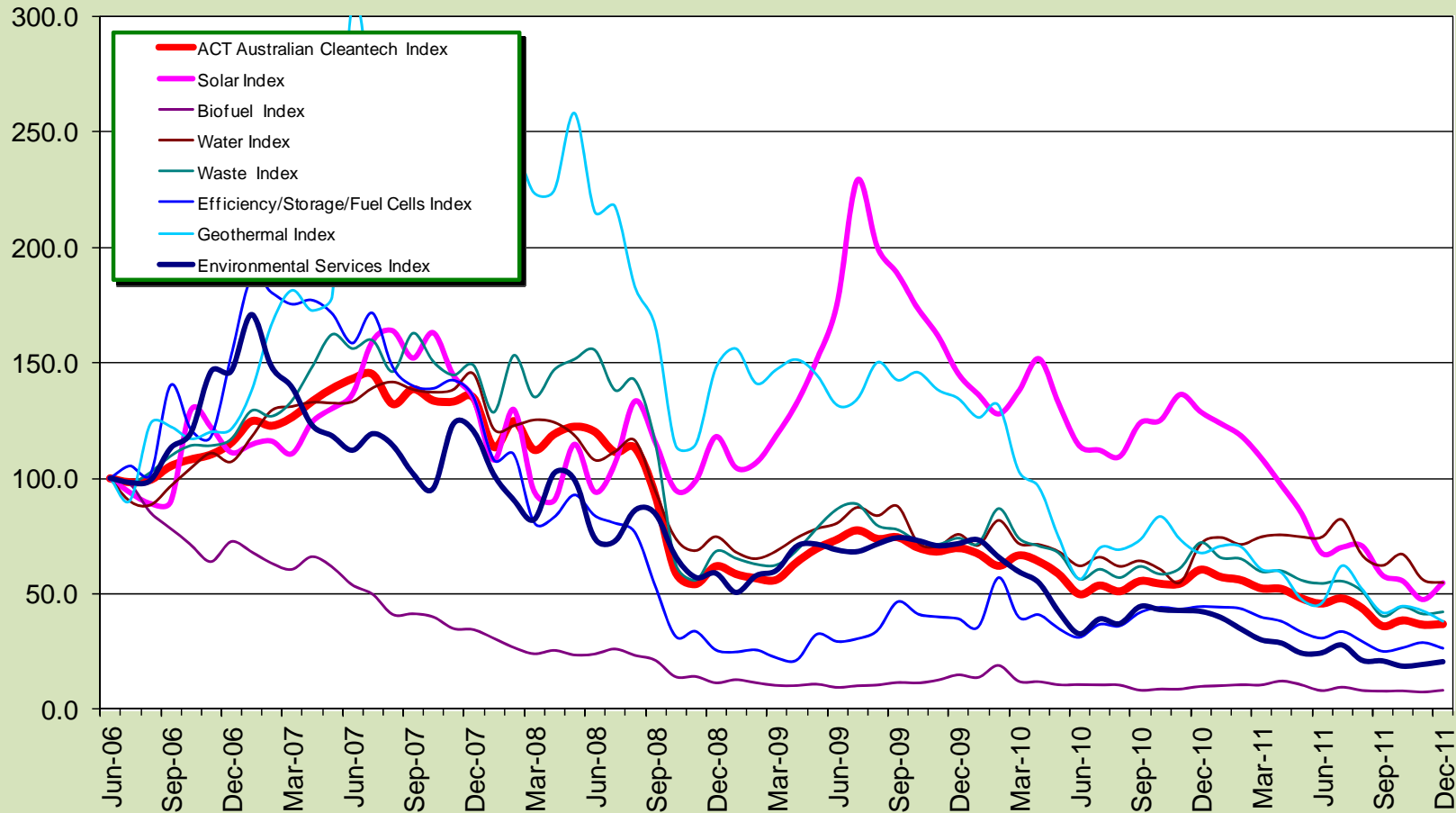
	FY07	FY08	FY09	FY10	FY11	2Q FY12	1H FY12
<b>ACT Solar Index</b>	36.5%	-31.1%	86.7%	-35.1%	-40.8%	-5.9%	-19.2%
<b>ACT Wind Index*</b>	73.3%	-28.3%	- 29.0%	-40.1%	-24.4%	-	-
<b>ACT Biofuel Index</b>	-46.2%	-55.5%	- 60.4%	12.8%	-24.5%	5.1%	2.1%
<b>ACT Water Index</b>	32.9%	-18.9%	- 25.2%	-22.8%	19.8%	-11.8%	-26.2%
<b>ACT Waste Index</b>	56.3%	-0.4%	- 44.3%	-35.0%	-3.3%	4.4%	-22.7%
<b>ACT Efficiency/Storage/Fuel Cells Index</b>	58.5%	-47.1%	- 65.1%	6.2%	-1.2%	5.2%	-14.3%
<b>ACT Geothermal Index</b>	205.9%	-29.6%	- 38.9%	-57.3%	-18.6%	-9.1%	-17.1%
<b>ACT Environmental Services Index</b>	12.1%	-34.1%	-6.7%	-52.6%	-25.2%	-1.7%	-15.7%

\*: ACT Wind Index discontinued on 1 July 2011 due to too few companies



### ACT Australian CleanTech Index Sub-Indices Chart

(ACT/AC Index and all ACT Cleantech Sub-Indices set at 100 at 30 June 2006)



#### 4. Component Companies on 31 December 2011

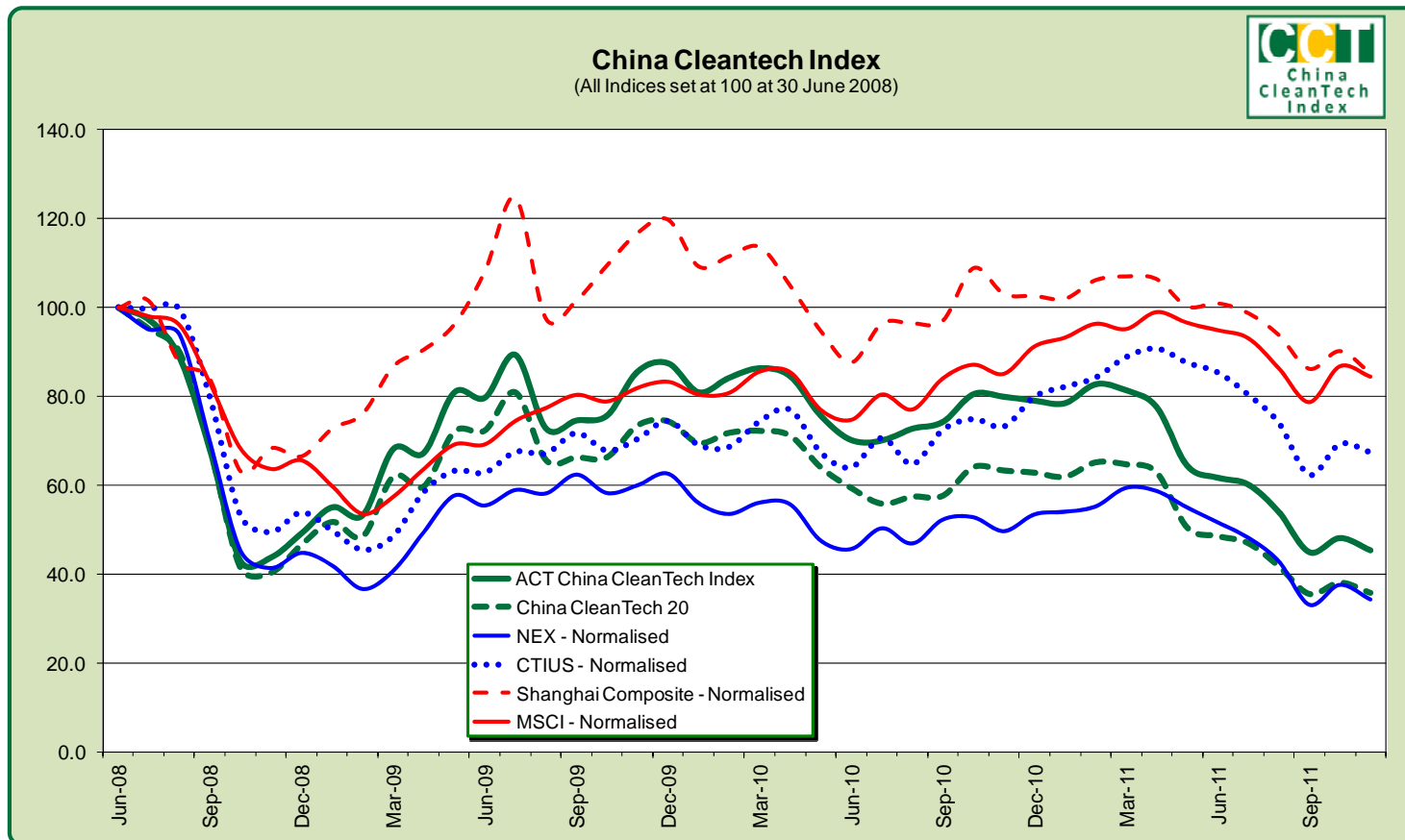
The largest 20 largest Index constituents by market capitalisation on 31 December 2011 are provided in the table below. These companies will form the constituents of the Australian CleanTech 20 until the index is rebalanced again on 31 March 2012.

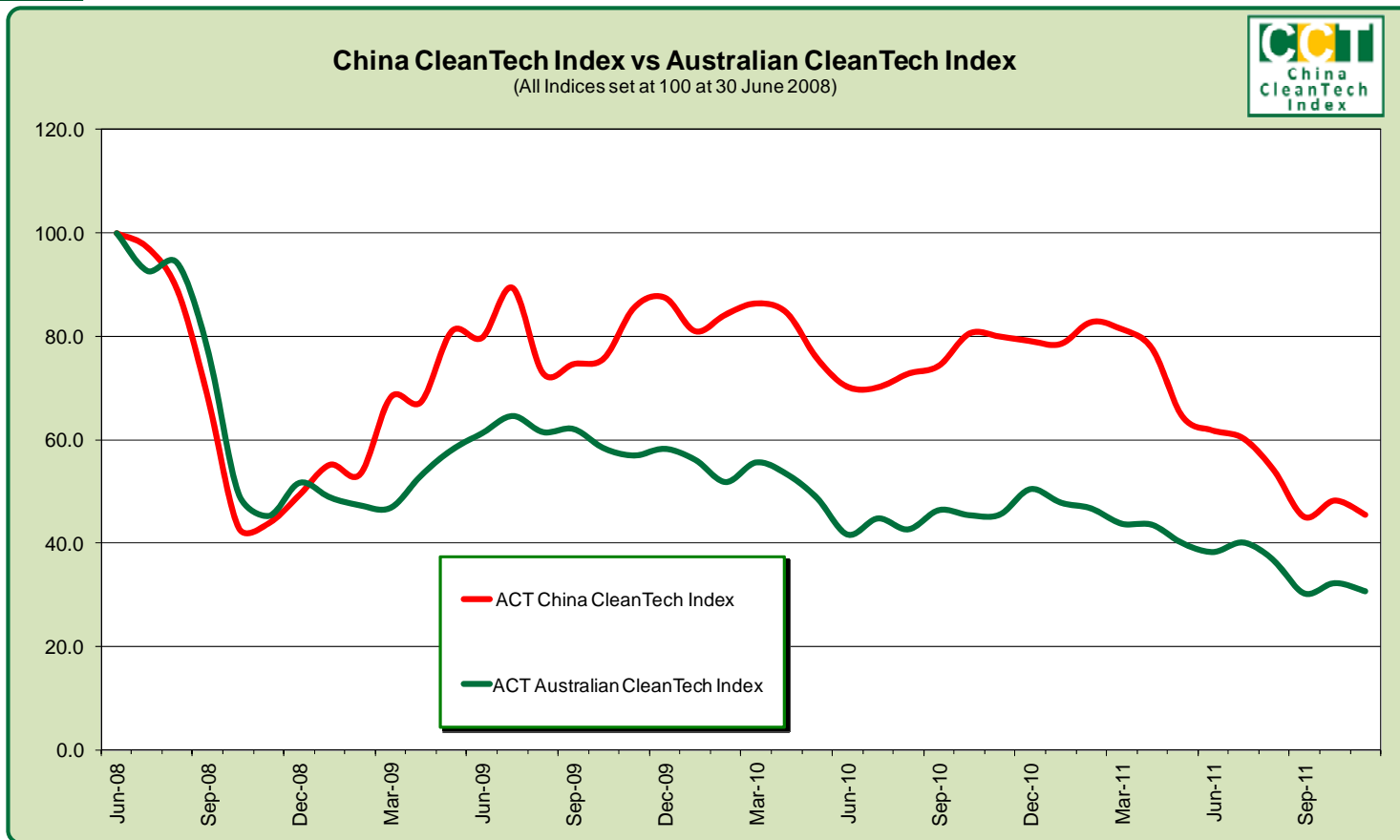
Market Cap Ranking	Company
1	Sims Metal Management
2	Transpacific Industries
3	Sylex Systems
4	Energy Developments
5	Tox Free Solutions
6	Galaxy Resources
7	Infigen Energy
8	Ceramic Fuel Cells
9	Nanosonics
10	Orocobre
11	Pacific Energy
12	Algae.Tec
13	Coffey Environments
14	Novarise Renewable Resources
15	Gale Pacific
16	CO2 Group
17	CMA Corporation
18	Pro-Pac Packaging
19	RedFlow
20	Wasabi Energy

For a full listing of all companies included in the ACT Australian CleanTech Index, please email your request to [index@auscleantech.com.au](mailto:index@auscleantech.com.au).

### 5. China CleanTech Index

Australian CleanTech, through its Beijing-based Chinese operations, now publishes the China CleanTech Index. This index tracks all Chinese-based listed cleantech companies wherever they are listed and will be used to provide the definitive measure of Chinese cleantech stocks. The charts below show the performance of the China CleanTech Index against its benchmarks up to the end of November 2011 and also show the relative performance of the China CleanTech Index against the ACT Australian CleanTech Index.





Full details of the China CleanTech Index can be downloaded from [www.sinocleantech.com.au](http://www.sinocleantech.com.au), where it is also possible to sign up to receive the monthly performance reports.