



# ACT Australian CleanTech Index

**2008-09**

## Annual Performance Report

July 2009

To request further information or to be added to the distribution list for future ACT Australian CleanTech Index reports, please email [index@auscleantech.com.au](mailto:index@auscleantech.com.au)

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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 70 companies falling under the coverage of the Index and with a combined market capitalisation of nearly \$10Bn, 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 section 5 of this 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 and in the international Cleantech Investor magazine.

Monthly results can be emailed directly to interested parties by sending an email to [index@auscleantech.com.au](mailto:index@auscleantech.com.au) with 'Index Subscription Request' in the Subject line.

## 2. ACT Australian CleanTech Index Performance 2008-09

ACT Australian CleanTech Index outperformed both the S&P ASX200 and the S&P Small Ordinaries for both the month of June 2008 and for the fourth quarter of the 2009 fiscal year. Over the full fiscal year however it underperformed both its benchmarks.

The ACT Australian CleanTech Index rose from 69.7 to 73.6 over the month of June recording a 5.6% gain. This compared to the S&P ASX Small Ordinaries Index gain of 2.8% and the S&P ASX200 gain of 3.5%.

Over the 2009 fiscal year, the ACT Australian CleanTech Index recorded a loss of 38.7%, lagging behind the S&P ASX200's loss of 25.8% and the S&P ASX Small Ordinaries' loss of 32.4%.

Percentage Change	FY07	FY08	JUN'09	4Q09	2H09	FY09	3 Yr Returns
<b>ACT Australian CleanTech Index</b>	42.9%	-16.0%	5.6%	30.8%	18.6%	-38.7%	-26.4%
<b>S&amp;P/ASX200</b>	25.4%	-16.4%	3.5%	7.8%	6.4%	-25.8%	-22.2%
<b>S&amp;P/ASX Small Ords</b>	40.4%	-23.0%	2.8%	22.7%	23.3%	-32.4%	-26.9%

The market capitalisation of the 77 stocks in the ACT Australian CleanTech Index is just under A\$10.0 billion.

The month's performance was buoyed by strong results from Quantum Energy, the Crane Group GRD, Sims Metal Group, Energy Developments, Carbon Concious and Aeris Technologies partially offset by poor results from CMA Corp, Bluglass and Willmott Forests.

The best performers of the 2009 fiscal year were Quantum Energy, Tox Free Solutions, AnaeCo, Medivac, Eco Quest and Pacific Environment.

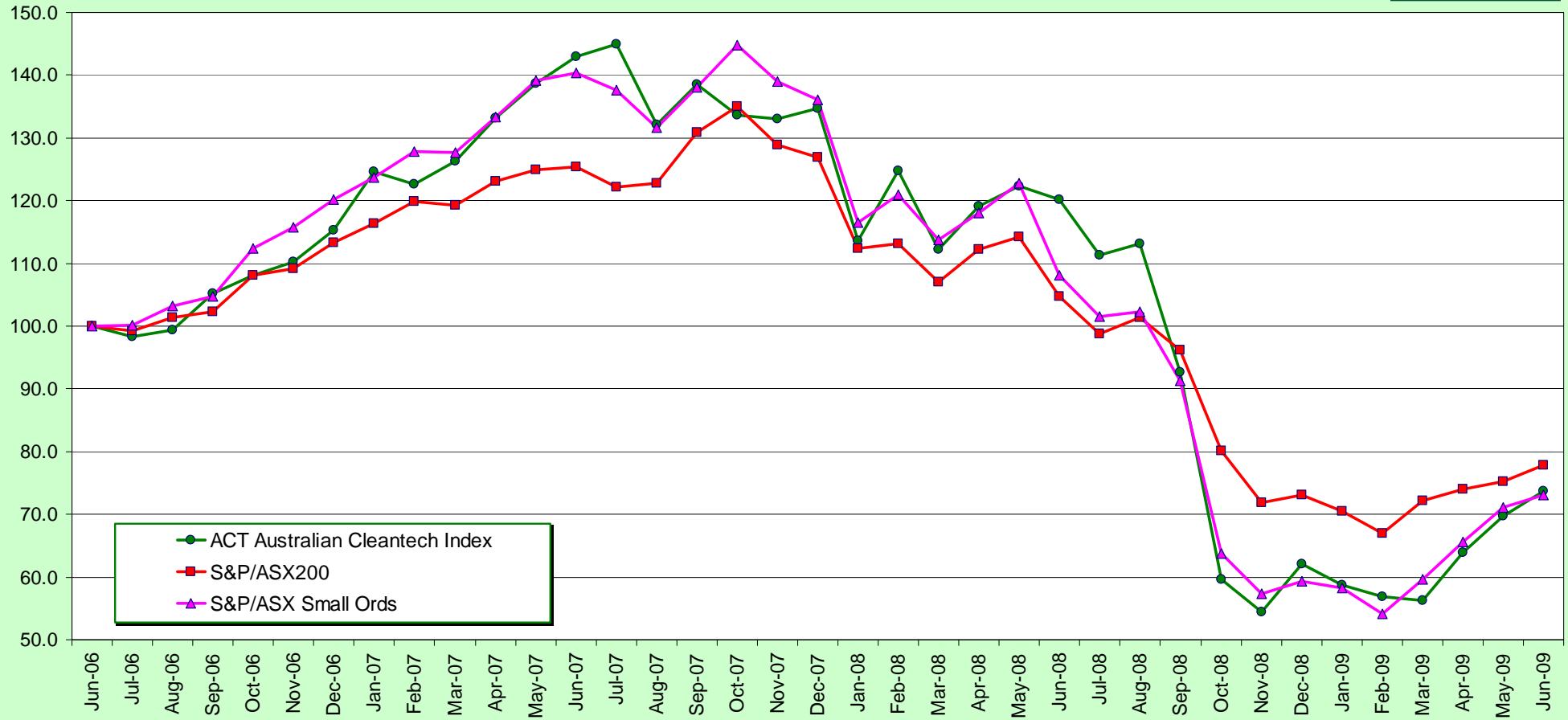
Some of the worst performers of the year were Viridis Clean Energy Group, Infigen Energy, Transfield Services Infrastructure Fund, Advanced Energy Systems, Mission New Energy, CMA Corp, Transpacific Industries, Sims Metal Group, Eden Energy, Willmott Forests, Soil Sub Technologies and Green Invest.



The ACT Australian CleanTech Index underwent its quarterly rebalancing at the end of June which took account of recent share issues and other corporate activity. There were no changes made to the index constituents at this rebalancing.

### 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 three financial years is shown in the table below.

**ACT Australian CleanTech Sub-Indices**

	FY07	FY08	4Q09	FY09
<b>ACT Solar Index</b>	36.5%	-31.1%	48.1%	86.7%
<b>ACT Wind Index</b>	73.3%	-28.3%	26.7%	-29.0%
<b>ACT Biofuel Index</b>	-46.2%	-55.5%	-8.4%	-60.4%
<b>ACT Water Index</b>	32.9%	-18.9%	17.4%	-25.2%
<b>ACT Waste Index</b>	56.3%	-0.4%	38.8%	-44.3%
<b>ACT Efficiency/Green Buildings/Biomaterials/ Energy Storage/Fuel Cells Index</b>	58.5%	-47.1%	31.9%	-65.1%
<b>ACT Geothermal Index</b>	205.9%	-29.6%	-10.5%	-38.9%
<b>ACT Environmental Services Index</b>	12.1%	-34.1%	14.7%	-6.7%

Other than the Biofuel and Geothermal Indices, all of the other indices recorded strong gains over the fourth quarter of the 2008-09 fiscal year. Other than the ACT Solar Index however, these gains were not sufficient to put the indices into positive territory for the full fiscal year.

The Biofuels sub-sector has been a continual underperformer since the investment bubble for biofuels burst in 2006. It is interesting to note that whilst biofuels have disappointed in Australia during this period they have performed strongly elsewhere in the world.

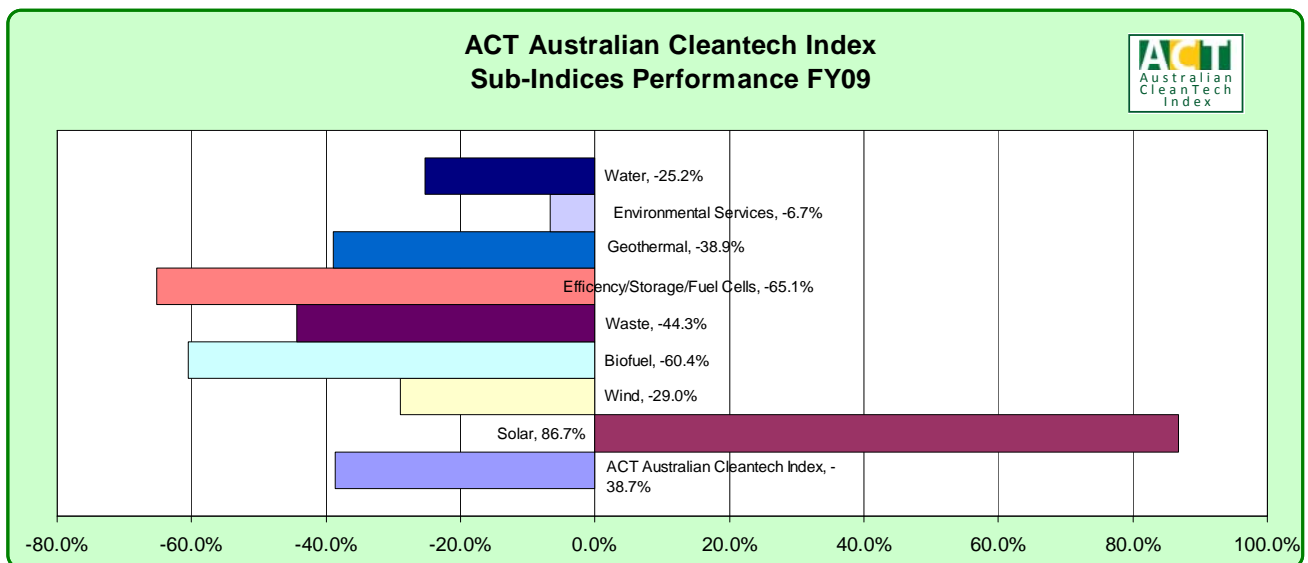
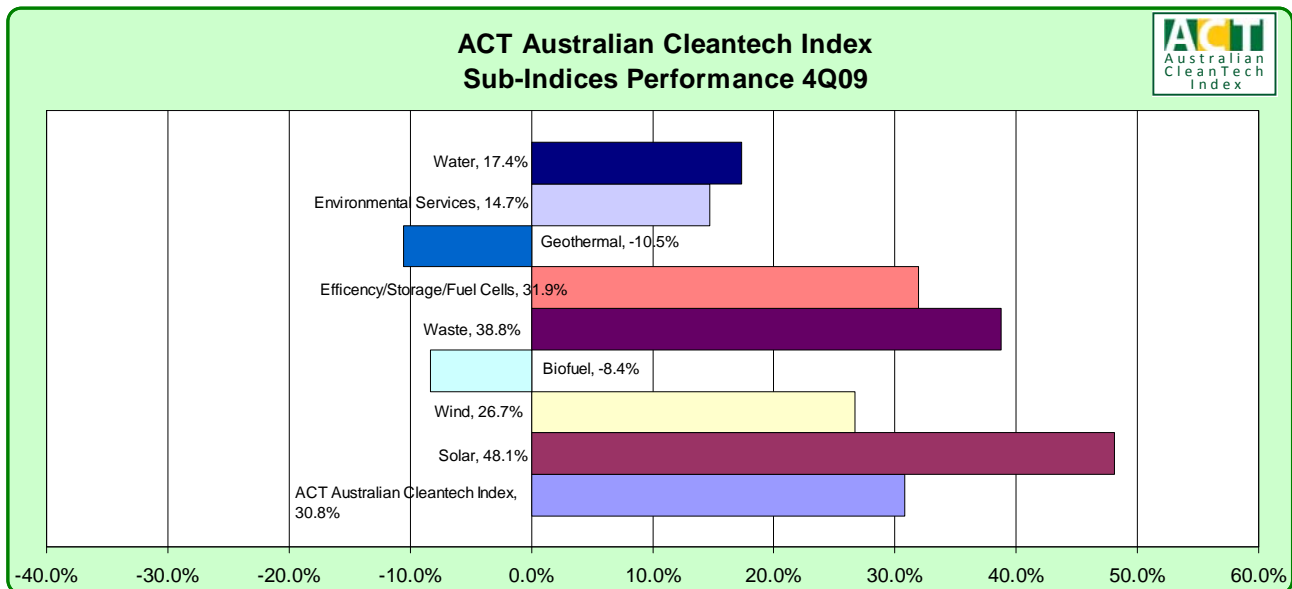
The Geothermal sub-sector was impacted by the uncontrolled well blow out experienced by Geodynamics that effectively dissuaded investors from returning to any of the sub-sector stocks.



The strong performance of the Solar sub-sector has been driven by the very strong growth of Quantum Energy, whose share price has increased 589% over the fiscal year. This has been supported by Dyesol whose share price held up when others were collapsing based on its international progress with its thin film products.

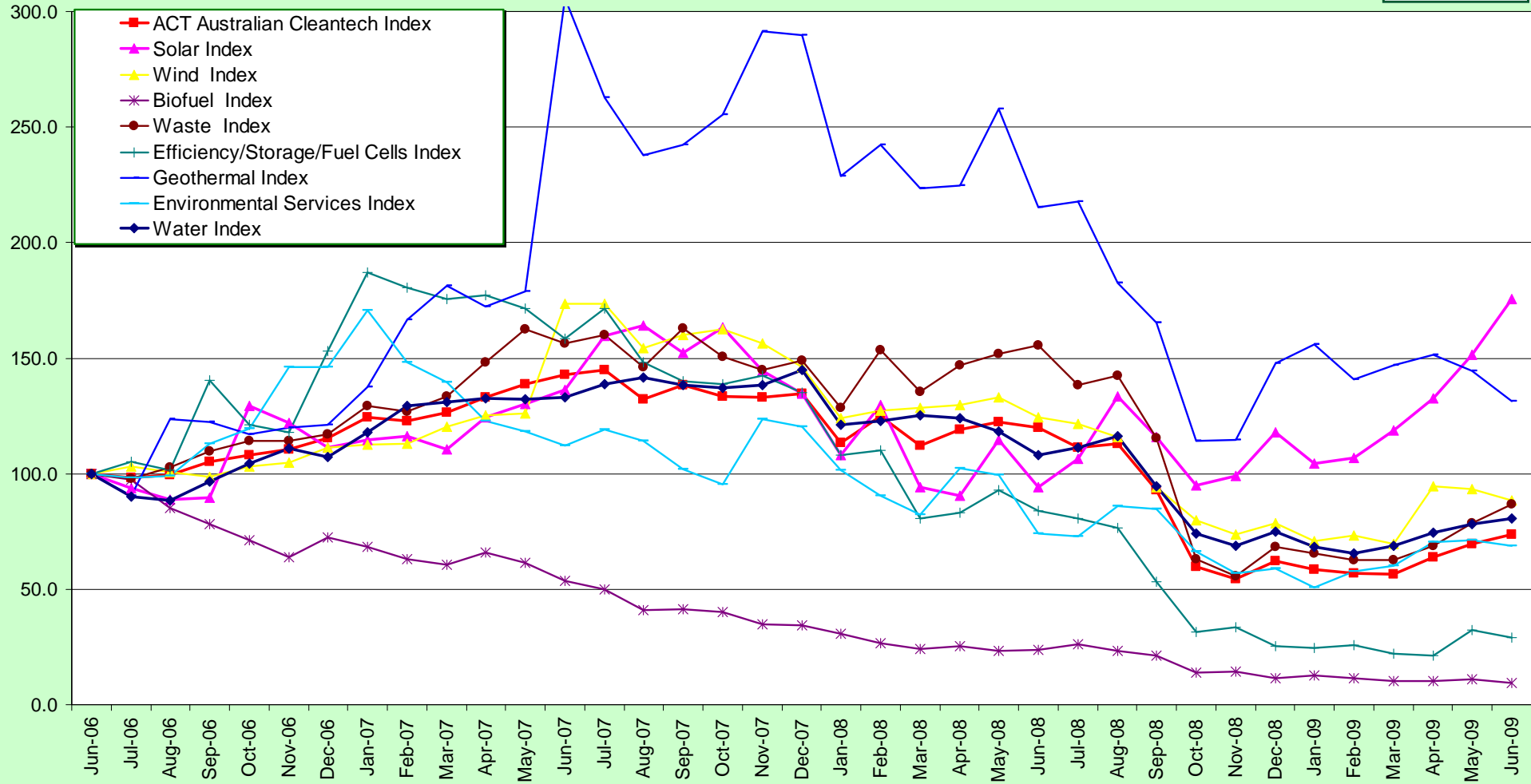
The strong 4Q09 recovery in the ACT Wind Index was driven by share price recoveries of 48% in WHL Energy and 30% in Infigen Energy, whilst the ACT Waste Index recovery was driven over the same period by a 49% increase Sims Metal Group, a 44% increase in GRD and a 44% increase in Dolomatrix.

The 4Q09 and the FY09 results are shown graphically on the bar charts below.



### 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 30 June 2009

The largest 20 largest Index constituents by market capitalisation on 30 June 2009 are provided in the Table below.

Market Cap Ranking	Company
1	Sims Metal Management Ltd
2	Infigen Energy (formerly Babcock & Brown Wind Partners)
3	Crane Group
4	Transpacific Industries
5	Energy Developments
6	Geodynamics
7	Transfield Services Infrastructure Fund
8	Quantum Energy
9	Coffey Environments
10	Ceramic Fuel Cells
11	Tox Free Solutions
12	Carnegie Corporation
13	Dyesol
14	GRD Ltd
15	CMA Corp
16	Pacific Energy
17	CO2 Group
18	Viridis Clean Energy Group
19	AnaeCo
20	Orbital Corp

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. Overview of Index Rules

### Closing Prices

The ACT Australian CleanTech Index and the eight sub-indices are calculated based on the closing prices on the last day of trading of each calendar month. The Index values are the result of calculating the total market capitalisation of the companies included in the index and normalising this value in comparison to the total market capitalisation at the starting point of the Index. The value of each index was set to equal 100 on 30 June 2006.

### Number of Shares

The number of shares used in the calculation of the market capitalisation of each company is based the total number of Ordinary Shares, including those that are held in escrow and are temporarily unlisted. Shares that are not included in the calculation include listed and unlisted Options, Preference Shares, Warrants and Convertible Notes.

During share buy-back schemes, shares are only removed from the index once they have been cancelled by the company. Shares issued as part of Rights issues are only included in total shares if formally announced by the company as having been taken up.

### Rebalancing

The Indices are all rebalanced at the end of each quarter to take account of any changes to the capital structures of the component companies and to add or remove companies to the Index as required. Companies may be added if they have been listed during the previous quarter or have changed their operation such that the majority of their current or future revenue is derived from an approved cleantech activity. Conversely, companies may be removed from the Index if they have been

delisted or their activities have changed such that the majority of their current or future revenue will not be sourced from an approved cleantech activity. If a company's shares are suspended from trading, the company remains in the index at rebalancing until such time as it is delisted.

The Index is calculated both prior to and after the rebalancing. The normalising factor is then adjusted to ensure that Index value is unchanged due to the act of rebalancing.

## **Exclusions**

The ACT Australian CleanTech Index excludes some sub-sectors that are included in some other global clean energy and cleantech measures. The reason behind this is to keep the Index focussed on 'pure' cleantech companies that will form part of long term sustainable solutions. The following sub-sectors are excluded from the Index:

### **'Clean' Fossil Fuels**

Natural gas, coal seam methane, underground coal gasification, gas to liquids, carbon capture and storage and clean coal technologies are each sometimes included in indices and funds focussed on clean energy. All of these are excluded from the ACT Australian CleanTech Index because, whilst they have lower emissions profiles than other fossil fuel energy sources, they are all still reliant on fossil fuels and are therefore at best only a transition resource or technology.

### **Nuclear and Uranium**

Whilst the emissions profile of the nuclear industry means that it is likely to form part of the long term global solution to climate change, there are still significant parts of the Australian community that have concerns over the environmental impacts of uranium transport, usage and waste storage.

To prevent this discussion becoming a distraction to the performance of the ACT Australian CleanTech Index, this sub-sector is currently excluded.

### **Agri-Business**

Agri-businesses are included in many measures of environmental performance due to their clear interaction with the environment. Whilst the ACT Australian CleanTech Index will include companies that provide products and services to improve agriculture's impact on the environment through, for instance, the use of water and energy saving technologies, it will not include the businesses that merely purchase these technologies.