

Australian Cleantech Review 2011

Industry Status & Forecast Trends
April 2011

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Executive Summary

Australian CleanTech has analysed and assembled the most comprehensive report yet published on the cleantech sector in Australia. The report is based on detailed analysis of over 750 Australian companies to understand their activities, location, revenues, profit, employees and their capital transactions. This analysis is divided between listed and unlisted companies.

A comparison is also provided from international researchers including detailed charts and commentary from Bloomberg New Energy Finance, provided specifically for inclusion in this report, showing international activity and investment levels. Finally the report provides a forecast for the regulatory, technology and investment trends that will impact the cleantech industry in Australia in 2011 and identifies the top Cleantech Trends for 2011.

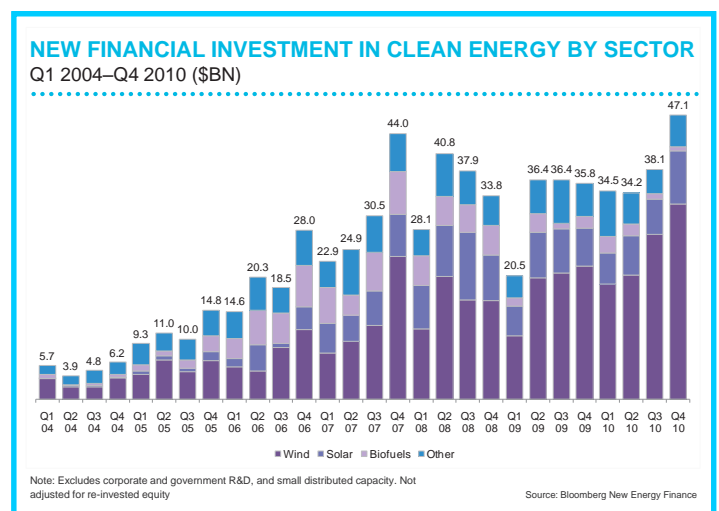
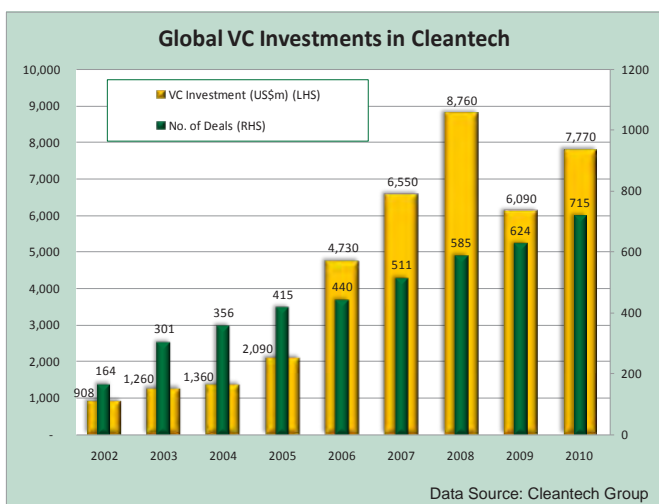
The data provided in this report will enable those interested in cleantech to more fully understand the activity that is occurring across the sector.

To be able to analyse the cleantech sector, it is first necessary to define the composition of the sector. The definition of cleantech used in this report is that it comprises of:

Economically viable products, services and processes that harness renewable materials and energy sources, dramatically reduce the use of natural resources and cut or eliminate emissions and wastes.

The sub-sectors of cleantech include renewable energy, water, waste and recycling, construction materials, energy efficiency, carbon trading and environmental services.

The international market trends were sourced from public data available from the Cleantech Group and detailed data provided by Bloomberg New Energy Finance. The data is summarised in a number of charts that show both venture capital investments in cleantech and total global investments in clean energy peaked in 2008 and dropped back to 2007 levels during 2009. 2010 saw a strong recovery nearly back up to the 2008 levels. In particular, the fourth quarter of 2010 saw the highest recorded total financial investment into clean energy. The key sub-sectors for the recipients of the 2010 venture capital investment were solar, energy efficiency and transport technologies. North America still dominated the figures for cleantech venture capital in 2010 whilst Europe and the Asia region vied for top spot for total cleantech energy investment.



The analysis of the 767 Australian cleantech companies that have been reviewed provide some interesting patterns in the sub-sectors with the greatest activity levels and the regions in which they are based. The companies reviewed do not cover every cleantech company in Australia, but the majority of operating and development companies have been captured. This includes nearly 350 additional companies to last year's Cleantech Review and now represents a more comprehensive coverage across all sectors and states. It is intended that this data set is further expanded during 2011 to continue to broaden the research coverage and capture every operating business.

The overview data for these companies is shown in the table below. As a sector, the companies had combined revenue of over \$22 billion and employed over 25,000 people. They were involved in capital transactions totaling \$1.4 billion during the 2010 calendar year in 214 separate deals. The average capital transaction was \$6.6 million. The \$22 billion of revenue places the sector at about half the size of the national construction industry in terms of contribution to GDP.

	Listed	Unlisted	TOTAL
Number of Companies	86	681	787
Market Capitalisation (\$m)	\$11,896m	N/a	N/a
Revenue (\$m)	\$14,394m	\$7,777m*	\$22,171m
NPAT (\$m)	-\$290.6m	N/a	N/a
Employees	11,276*	14,538*	25,814
Money Raised (\$m)	\$974.6m	\$436.6m	\$1.411m
No. of Capital Transactions	93	121	214
Average Capital Transaction (\$m)	\$10.5m	\$3.6m	\$6.6m

*: Australian CleanTech estimates based on company analysis.

The results have been analysed in comparison to the results from 2009. Due to the large increase in total company numbers, average per company figures were calculated for revenue, employee numbers and capital transactions. Overall there was a strong increase in revenues and a significant decrease in capital transactions. This was probably caused by the general economic recovery during 2010 and the large secondary capital raisings during 2009 to pay down high levels of debt. Employee numbers were fairly static.

	2009 Average per Company	2010 Average per Company	% Change for Average per Company
Total Revenue (\$m)	\$22.00	\$28.91	31.4%
Total Employees	32.5	33.7	3.6%
Total Capital Transactions (\$m)	\$5.43	\$1.84	-66.1%

Each of the categories in the table above has been analysed in terms of the sub-sectors and geography to provide a comprehensive national profile of the industry. This enables investors and policy makers to understand the extent and locations of activity and to be able to assess future options.

New South Wales with 248 cleantech companies and Victoria with 190, currently dominate the distribution of cleantech companies with a combined 57% of the 767 companies considered in this report. A comparison with 2010 Gross State Products (GSP) shows that Queensland and Western Australia are relatively under-represented in cleantech companies and South Australia has a greater share of the total than its GSP would indicate. The apparent reduced activity in Western Australia and Queensland may be due to the higher focus on mining in those states that inflates their GSP in areas where cleantech solutions are not yet being developed.

In terms of the sector distribution of cleantech companies, the Water, Waste, Energy Efficiency and Solar sectors are the only ones with greater than 10% of the companies. Water has the most companies with 150 companies, followed by Efficiency with 127 companies, Solar with 91 companies and Waste with 90 companies.

Both Revenue and Employee numbers show a strong dominance by New South Wales and the Waste sector. This is primarily because the figures for companies are allocated to the state of the head office and the overall sector is dominated by a number of large waste industry companies.

Victoria (13.7%) and Queensland (13.1%) generated the next largest amounts of revenue. Water (16.2%), Solar (5.4%), Energy Efficiency (5.0%) and Environmental Services (5.0%) all generated more than \$1 billion of revenue in 2010.

The distribution of capital transactions is more evenly spread than the revenue and employee figures. Whilst New South Wales still held the largest proportion at 37.3%, this was followed by South Australia with 20.0% and Western Australia with 15.9%. The sector showing the greatest transaction level was Water with \$264m.

Listed Companies

Listed cleantech companies in Australia had a combined market capitalisation of \$11.9 billion at 31 December 2010 and raised a total of \$975 million, or 8.2% of their value, by way of new capital in the 12 months to 31 December 2010. The sectors performance compared to the overall market is shown in the table below.

	Cleantech Sector (CY10)	Total ASX (CY10)	%
Number of Companies	86	2,229	3.9%
Market Capitalisation	\$11.9 billion	\$1.44 trillion	0.8%
New Equity	\$679 million	\$25 billion	2.7%

The table above shows that whilst the sector comprises just under 4% of the listed companies, it was less than 1% of the market capitalisation of the total market and raised only 2.7% of the new equity. This demonstrates that many of the listed cleantech companies are still small.

The listed cleantech companies had combined revenue of \$14.4 billion and a combined Net Profit After Tax (NPAT) of negative \$290.6 million (ie a loss) during the 2009-10 financial year. The estimated total number of employees for the listed companies was 11,276.

The greatest numbers of listed companies are to be found in New South Wales and Western Australia and are fairly well distributed across all of the cleantech sub-sectors. The sub-sectors with the greatest representation are Waste, Geothermal and Energy Efficiency.

From its relatively few companies, the Waste sub-sector provides by far the highest source of market capitalisation, revenue, NPAT and employment. This is due to the large relative size of companies such as Sims Metal Management and Transpacific Industries.

There were a total of 93 capital transactions in the listed cleantech sector, with the vast majority raised through secondary raisings. The ASX specifically provided data on capital raised on its markets for analysis in this report. A number of larger transactions dominate the statistics and have skewed the charts to show dominance by New South Wales.

A full listing of all the identified capital transactions for both listed and unlisted companies is provided in Appendix I.

Unlisted Companies

The unlisted cleantech companies had combined estimated revenues of \$ 7.8 billion in 2010 and they employed over 14,500 people. These companies raised 5.6% of their annual revenue (\$437 million) by way of new capital in the 12 months to 31 December 2010.

The greatest numbers of unlisted companies are to be found in New South Wales, with Victoria a close second place. The companies are reasonably well distributed across all of the cleantech sub-sectors. The sub-sectors with the greatest representation are Water, Energy Efficiency, Solar and Waste. New South Wales and Victoria dominate the revenue and employee numbers with Waste, Water, Solar and Energy Efficiency providing the sub-sectors with most activity.

There were a total of 121 capital transactions in the unlisted cleantech sector, with a number of larger transactions dominating the statistics. The largest recorded transaction was the acquisition of United Utilities Australia by Mitsubishi Corporation for \$225m before it was renamed Trility.

Cleantech Trends for 2011

Through its work throughout multiple sub-sectors and for multiple industry stakeholders, Australian CleanTech has identified a number of distinct trends that are occurring either globally or specifically within Australia and which will impact the evolution of the sector during 2011 and beyond. These are summarised in the table below.

Cleantech Trends for 2011	
Carbon Déjà Vu	The carbon debate will have a feel of déjà vu with the same arguments pulled out to oppose a broad based emissions trading scheme as were used so successfully to destroy the CPRS.
No Nukes	There will be no rational nuclear debate in Australia. The recent nuclear disasters in Japan will further reinforce the difficulty of this debate and has pushed back any serious consideration of nuclear energy by at least five years.
Scrambling Pollies	There will be an increasing realisation within the community that we dropping far behind the rest of the world in terms of cleantech industry development and jobs creation and the politicians will then start to scramble to show that they are indeed making progress and grasping those opportunities.
International Benefits	Companies and investors will form international partnerships to secure the greatest benefit from the world's shift towards sustainability. Successful Australian businesses will need to be more globally connected to be able to benefit from the greater rate of global uptake of cleantech internationally.
Chinese Wind	Chinese wind turbine suppliers will finally enter the Australian market and move quickly to dominate the local supply with high quality, cheap products. 2011 may even see provisional commitments for some local assembly by Chinese companies.
Large Solar	Whilst the Solar Flagships will fail to deliver on its promises, the State based schemes will drive 30-50 MW projects that may even break dirt in 2011. There will also be a growing roll out of small utility projects (1-3 MW) and also of commercial scale projects (50-200 kW) around the country. There will be no progress on the harmonisation of the state based feed-in tariffs.
Asian Money	In the same way that investment has been coming from Asia into the mining sector, 2011 will see the first of the large scale Asian investments into the cleantech sector in Australia. This will open up the sector to growth and may be the catalyst for Australia to build some momentum in the sector.
Local Money	There is also likely to be a growing interest and roll-out of community financed projects, where communities take control of local development and, at the same time, secure the investment returns.
Insurance Takes the Lead	Globally, there is a strong move from the insurance industry to quantify the risks inherent in climate change and the associated regulatory measures. The Australian insurance market is likely to start asserting its influence over investment decisions during 2011 following its assessment of the floods and cyclone pay-outs in Queensland. Indeed, the insurance industry may end taking the lead in the climate debate and in driving industry and government to adopt and develop cleantech solutions.