

Australian CleanTech Index

2Q FY17

Quarterly Performance Report

January 2017

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1. Australian CleanTech Index Overview

The 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 & Biomaterials
Biofuels	Green Buildings
Water	Energy Storage & Fuel Cells
Environmental Services	Wave, Tidal & Hydro
Low Emissions Vehicle Technologies	Biogas
Carbon Trading	Geothermal – Hot dry rocks and conventional

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 62 companies falling under the coverage of the Index and with a combined market capitalisation, after its rebalance, of \$32 billion, the ACT Australian CleanTech Index presents a comprehensive 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 ASX200 and the 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, and in numerous domestic and international publications.

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

2. Australian CleanTech Index Performance 1Q FY17

Australian CleanTech Index underperformed the ASX200 for the month of December and the second quarter of FY17.

The Australian CleanTech Index rose from 56.99 to 58.11 over the month recording a 2.0% gain. This compared to the ASX200 gain of 4.1% and the ASX Small Ordinaries gain of 3.3%. The Australian CleanTech 20 recorded a gain of 2.2% for the month.

Over the second quarter of the 2017 fiscal year, the Australian CleanTech Index recorded a gain of 3.9%, slightly behind the ASX200's gain of 4.2% but leading the ASX Small Ordinaries' 2.9% loss.

The six and twelve month figures remain well ahead of both the ASX200 and the ASX Small Ordinaries. **Over the last 12 months, the Australian CleanTech Index recorded a gain of 30.4%, 23% ahead of the ASX200 and over the last 3 years, the Australian CleanTech Index leads the ASX200 by 40%.**

Percentage Change	FY13	FY14	FY15	FY16	DEC'16	2Q FY17	6 Mnth	12 Mnth	3Yrs	5Yrs
Australian CleanTech Index	-3.5%	19.6%	16.6%	21.3%	2.0%	3.9%	10.9%	30.4%	45.6%	56.3%
Australian CleanTech 20	-2.0%	19.6%	16.0%	18.4%	2.2%	4.3%	11.6%	30.8%	42.5%	58.9%
S&P/ASX200	17.3%	12.3%	1.3%	-4.3%	4.1%	4.2%	8.4%	7.0%	5.9%	39.2%
S&P/ASX Small Ords	-8.3%	9.6%	-2.8%	10.4%	3.3%	-2.9%	4.1%	9.5%	8.6%	7.9%

The market capitalisation after its rebalance of the 62 stocks in the Australian CleanTech Index is A\$32.0 billion setting a new record for the sector.

Best and Worst Stocks

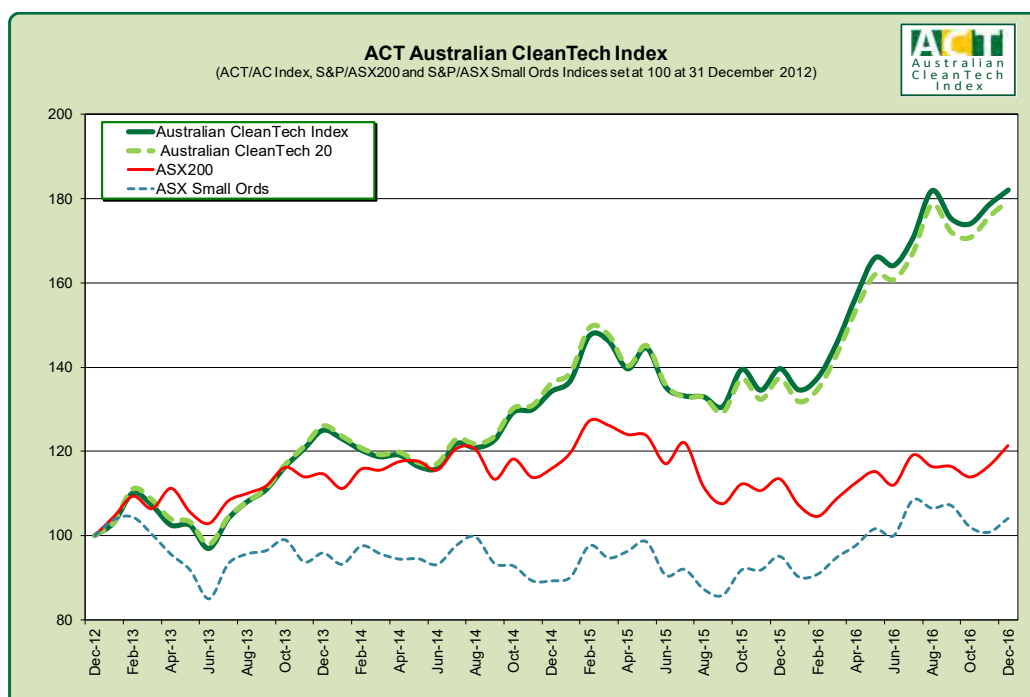
The best and worst performers in terms of share price performance over the month and the quarter are shown in the table below.

The month's performance was driven by 7 companies with gains of more than 15%. The greatest percentage gains were recorded by **Australian Vanadium (AVL)**, **Sterling Biofuels (SBI)** and **Intec (INL)**. The greatest gain in market capitalisation over the month was from **Cleanaway Waste (CWY)**.

These gains were partially offset by 9 companies recording losses of more than 15% led by **AnaeCo (ANQ)**, **Enerji (ERJ)** and **Papyrus Australia (PPY)**. The greatest loss in market capitalisation over the month was from **Nanosonics (NAN)**.

The quarter's performance was driven by 8 companies with gains of more than 25%. The greatest gains were recorded by **Carnegie Clean Energy (CCE)**, **Actinogen (ACW)**, **Sterling Biofuels (SBI)** and **Intec (INL)**. These gains were partially offset by 7 companies recording losses of more than 25% led by **Enerji (ERJ)**, **ReNu Energy (RNE)** and **Papyrus Australia (PPY)**.

December 2016	
Best Performers Share Price Gain > 15%	Worst Performers Share Price Loss > 15%
Actinogen Sterling Biofuels Intec Galaxy Resources Australian Vanadium Carnegie Clean Energy Vmoto	Quantum Energy Papyrus Australia AnaeCo Bluglass Traffic Technologies Enerji Protean Wave Energy ReNu Energy Limited Environmental Group
2Q FY17	
Best Performers Share Price Gain > 25%	Worst Performers Share Price Loss > 25%
Actinogen Sterling Biofuels Sims Metal Management Intec Galaxy Resources Carnegie Clean Energy Kalina Power Ltd Environmental Group	Papyrus Australia BuildingIQ Energy Action Enerji RedFlow Protean Wave Energy ReNu Energy Limited



Index Rebalance

The Australian CleanTech Index underwent its quarterly rebalancing at the end of December which took account of recent share issues and other corporate activity. The following two companies were removed from the Index

- **Australian Renewable Fuels (ASX:ARW)** following its collapse and subsequent delisting.
- **Soil Sub Technologies (ASX:SOI)** following its change of focus towards cloud computing and name change.

No companies were added to the Index at this rebalance but two companies changed their names, business activities and ticker codes:

- **Carnegie Clean Energy (ASX:CCE)** is the new name for Carnegie Wave Energy following its acquisition of Energy Made Clean and diversifying into revenue generating solar projects.
- **ReNu Energy Limited (ASX:RNE)** is the new name for Geodynamics as it too diversifies its focus to deliver other clean energy projects.

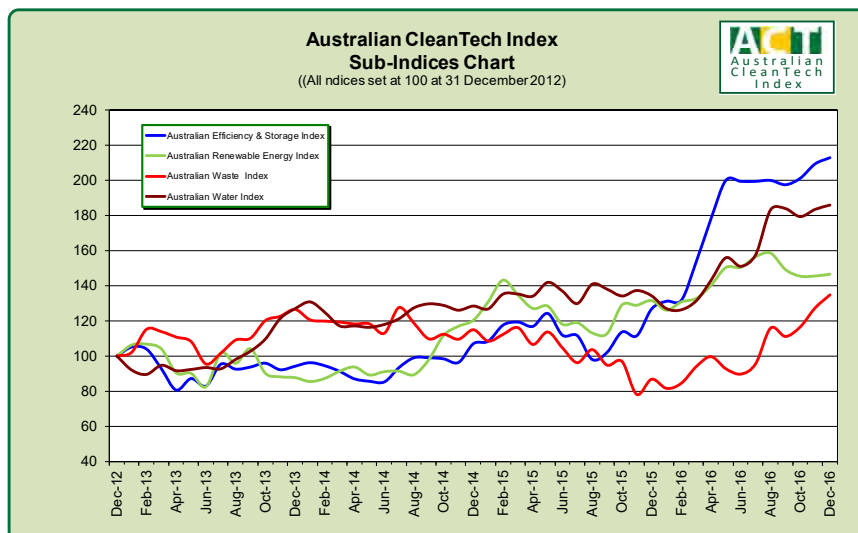
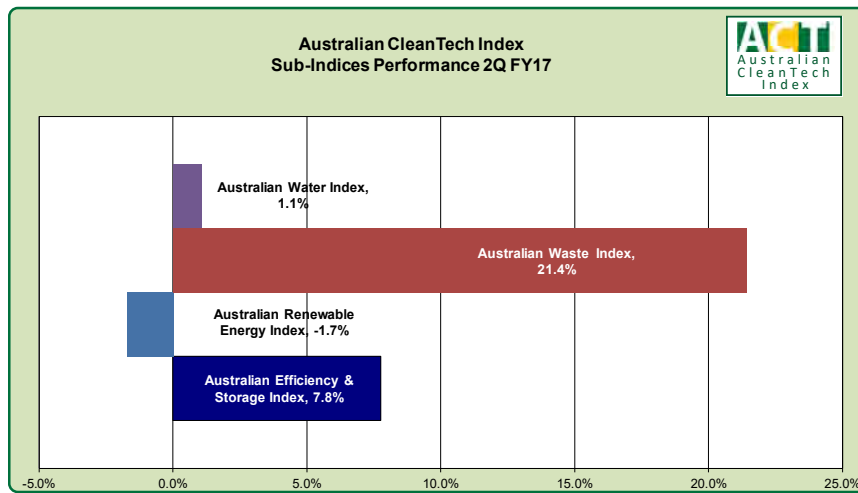
3. Component Sub-Indices

To provide an analysis of the Australian CleanTech Index, a number of sub-indices have been developed. The performance of each of these sub-indices over the last five financial years and during 2Q of FY17 is shown in the table and charts below.

The best performing sectors for the three months to December 2016 were the Australia Waste Index, led by Sims Metal Management, and the Australian Efficiency and Storage Index, led by Galaxy Resources.

Australian CleanTech Sub-Indices

	FY12	FY13	FY14	FY15	FY16	2Q FY17
Australian Efficiency & Storage Index	-23.5%	-27.9%	2.9%	31.0%	78.1%	7.8%
Australian Renewable Energy Index	-22%	-22%	10%	29.5%	27.4%	-1.7%
Australian Waste Index	-36.9%	-3.4%	18.3%	-7.4%	-14.3%	21.4%
Australian Water Index	1.6%	-14.6%	26.3%	16.1%	10.3%	1.1%



4. Component Companies on 31 December 2016

The largest 20 largest Index constituents by market capitalisation on 31 December 2016 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 2017.

Market Cap Ranking	Company	Ticker
1	Meridian Energy	MEZ
2	Reece Australia Holdings	REH
3	Mercury NZ	MYT
4	Contact Energy	CEN
5	Sims Metal Management	SGM
6	Cleanaway Waste	CWY
7	Reliance Worldwide Corp	RWC
8	Galaxy Resources	GXY
9	Orocobre	ORE
10	Nanosonics	NAN
11	Infigen Energy	IFN
12	Tox Free Solutions	TOX
13	Metro Performance Glass	MPP
14	Beacon Lighting Corp	BLX
15	Eden Energy	EDE
16	CleanTeQ	CLQ
17	Pacific Energy	PEA
18	Emefcy Group	EMC
19	Neometals	NMT
20	Carnegie Clean Energy	CCE

There was one new entrant to the Australian CleanTech 20 in this rebalance: Carnegie Clean Energy replacing the outgoing Range International.

Each of the constituents in the Australian CleanTech 20 has a market capitalisation of more than \$130m.

For a full listing of all companies included in the Australian CleanTech Index, please email your request to index@auscleantech.com.au.

6. China CleanTech Index

Australian CleanTech, through its Beijing-based Chinese operations, publishes the China CleanTech Index. This index tracks all 162 Chinese-based listed cleantech companies with a combined market capitalisation of US\$306 billion and provides the definitive measure of Chinese cleantech stocks for global markets. The charts below show the performance of the China CleanTech Index against its benchmarks and also show the relative performance of the China CleanTech Index against the Australian CleanTech Index.

Full details of the China CleanTech Index can be downloaded from www.sinocleantech.com, where it is also possible to sign up to receive the monthly performance reports.

