

# Market Analysis

Issue No. 570

www.stockmarket.co.nz

December 9, 2019

## Inside Market Analysis

BUY Elixir Energy .....	8, 9, 10	Renewable Energy - Part 2: An Investment Overview of Energy Technologies .....	10, 11, 12
Ellex Medical Lasers receives offer for Laser & Ultrasound business .....	5	Neglect Rating of NZ Shares .....	13
FBR makes Share Purchase Plan .....	5	Neglect Rating of Australian Shares .....	15, 16
OZ Minerals to develop <i>Pedra Branca</i> mine .....	6	Short Interest in Australian shares .....	16, 17

## Summary and Recommended Investment Strategy.

The global economy is continuing to slow, but there are always investment opportunities in individual companies (with a *niche* market and/or asymmetric potential returns) and in under-valued, out-of-favour sectors. Remain fully invested.

## Investment Outlook.

Many Software, Technology and/or Growth shares are expensive (anticipating future growth) but being down rated as global economic growth rates continue to slow. These companies have large market capitalisations and may drag down the stock market indices . . . but (unless you are an “index fund” investor) you do not have to be invested in these sectors. There are many companies and many sectors where share valuations are low.

Energy is just one example.

Energy sector shares are under-valued, probably as fossil fuels (especially coal and oil) are out-of-favour with both individual and institutional investors. Renewable energy is growing only slowly, so the quickest way to improve the environment (i.e. air quality and CO<sub>2</sub> emissions) is to replace coal with *cleaner* gas. If renewable energies dominate in the future, gas will still be important to meet peak electricity demand.

So gas producers should be good investments - and at least *better* for the environment than thermal coal. **Woodside Petroleum** (which mainly produces gas, not petroleum) shares trade on a Price/Earnings ratio of 16 and Dividend Yield of 6.1%. That is an attractive valuation for a growing business! We are also adding a Coal Bed Methane gas explorer, **Elixir Energy**, to our portfolio.

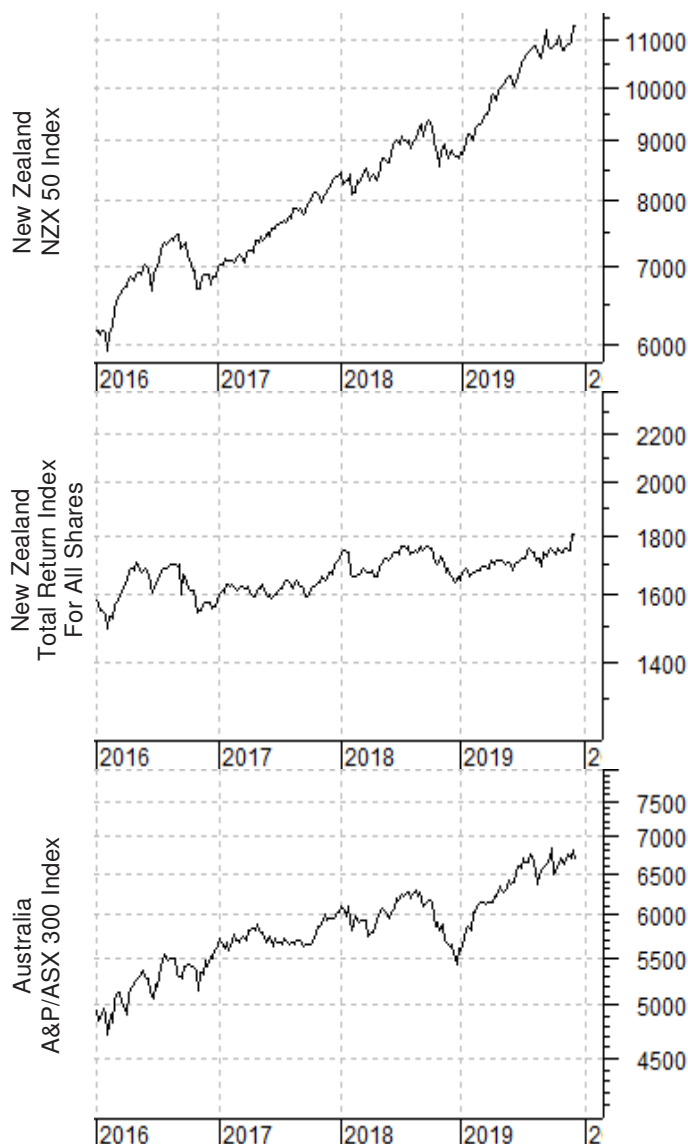
Last month we added **Greenland Minerals** to our portfolio as it has a globally significant Rare Earth deposit. There are many other potentially attractive renewable energy mineral companies listed in Australia.

Renewable Energy minerals may also offer an attractive buying opportunity ahead. The *slowdown* in global EV sales (mainly in China) has *lowered demand* (and prices), while producers have opened new mines and brought *increased supply* to the market. We shall be discussing this current “bust” in the boom/bust growth cycle for renewable energy minerals in greater detail next month - and looking at further investment opportunities.

(Continued on Page 19)

### Stockmarket Forecasts

	One-Month	One-Year
Australia:	46% (Neutral)	62% (Neutral)
New Zealand:	72% (Bullish)	74% (Bullish)



# Recommended Investments

**Cavalier Corporation** expects to lose \$1.1-1.6 million for the half year to 31 December 2019. Revenues are expected to be 9-13% lower at \$61-64 million.

## Cavalier Corporation



**Colonial Motor Company** expects total new vehicle industry sales to decline slightly for 2019 but remain steady at current levels in the future.

The company sells Electric Vehicles where available. Dealerships in Hastings and Queenstown sell *Nissan* EVs, New Plymouth sells *Hyundai* EVs and Nelson sells *Kia* EVs. Next year *Mazda* is expected to have a fully electric vehicle for the New Zealand market. The company reports “significant interest” in EVs, but “sales are slow” as at \$60-75,000 “the price to value is a major objection” and “the price gap between an equivalent petrol vehicle” is “higher than most customers are prepared to pay”. *Ford*, one of the company's main brands, is putting more emphasis on hybrids.

## Colonial Motor Company



## Australian Shares

(This section is in Australian currency, unless stated.)

**Acru Ltd** hopes to license one to three products during the 2020 calendar year and in 2021 to license another 3-5 products. This should make the company “cash flow positive by the end of 2021”.

In addition the company hopes to submit four new products for FDA review each year, while maintaining around 11 new products under development.

Acru Ltd is a “pooled development fund” so subject to Australian income tax at just 15%, while Australian

shareholders are exempt from capital gains tax and exempt from income taxes on dividends.

## Acru Ltd



**AJ Lucas Group** reports that **Cuadrilla Resources** flow testing of PNR2 from six fractures “peaked at 275,000 cubic feet per day” and “stable flow rates varied from between 60,000 and 100,000 cubic feet per day”. .. according to the original Cuadrilla report, although AJ Lucas incorrectly states “60 and 100 cubic feet per day” in their announcement.

## AJ Lucas Group



**ALS Limited** reports steady growth in revenues, profits, net cash flow and dividends:

### Six Months to 30/9/2019

	Latest	Previous	Change
Revenues	\$919.1m	\$826.1m	+11.3%
Net Profit	\$98.2m	\$93.3m	+5.3%
Net Cash Surplus	\$90.4m	\$87.6m	+3.2%
Earnings per share	20.4c	19.1c	+6.6%
Dividends per share	11.5c	11.0c	+4.5%

In addition, there was a \$51.7 million gain on the sale of its Chinese business.

**Commodities** revenues rose 2% to \$319.9 million but earnings fell 2% to \$92.7 million.

**Life Science** revenues grew 15% to \$468.6 million with earnings up 19% at \$97.4 million. In August the group acquired Mexican based **Laboratorio de Control ARJ SA de CV**, the largest pharmaceutical testing laboratory in Latin America for \$85 million (i.e. \$59.5 million in cash and \$25.5 million subject to earnings targets over the next three years). This is a Price/Sales

ratio of about 2.70 and a Price/Earnings ratio of 13.7. The business will become an “important hub for Latin and North American growth”.

Industrial revenues were up 23% to \$130.7 million with earnings up 25% at \$19.6 million.

The company's on-market share repurchase program has been extended until December 2020 and increased by a further \$25 million. That means the company *may* repurchase up to \$96.6 million worth of its own shares over the next year. Over the last two years it has spent \$153.4 million on share re-purchases.

The full year net profit is forecast at \$185-195 million, up about 2-8%.



(Continued on Page 4)

## Portfolio of Recommended Investments

CURRENT ADVICE	Company	Code	Initial Recommendation		Performance Forecast	Issued Shares (mil.)	Volatility Ratio	Price/Sales Ratio	Price/Earnings Ratio	Gross Dividend Yield	Recent Share Price	Cash Dividends Rec'd	Total Return %
			- Date -	Price									
<u>NZ Shares</u>													
BUY	CDL Investments Ltd	CDI	12/01/99	25	C	278.1	1.1	2.78	7	5.7	85	39.8	+399%
HOLD	Cavalier Corporation	CAV	05/12/95	156*	C	68.7	2.0	0.15	11	Nil	30	282.0	+100%
HOLD-	Colonial Motor Company	CMO	10/11/92	128*	A	32.7	0.4	0.32	13	7.1	880	642.8	+1090%
HOLD	Smiths City Group	SCY	09/10/06	64	E	52.7	2.0	0.07	NE	Nil	28	37.0	+1%
HOLD	South Port New Zealand	SPN	13/02/96	120	D	26.2	0.4	4.12	18	5.2	690	329.3	+749%
HOLD+	Steel & Tube Holdings	STU	08/08/00	139*	D	166.0	1.3	0.27	13	8.6	81	346.1	+207%
<u>Australian Shares (in Aust cents)</u>													
BUY	Acrux Limited	ACR	12/05/14	99	B	166.7	2.3	5.99	NE	Nil	19	14.0	-67%
HOLD+	AJ Lucas Group	AJL	13/05/03	107*	E	1462.7	4.1	0.41	NE	Nil	7	36.4	-60%
HOLD+	ALS Limited	ALQ	12/10/99	72*	A	482.4	0.5	2.62	24	2.5	904	346.9	+1637%
HOLD	ARQ Group	ARQ	10/02/04	53	A	122.1	1.6	0.21	NE	20.8	39	226.0	+399%
HOLD	Atlas Pearls & Perfume	ATP	14/05/96	73	D	424.8	13.8	0.24	NE	Nil	1	17.5	-75%
HOLD+	Brickworks Ltd	BKW	12/11/12	1115	A	149.9	0.3	3.07	12	3.0	1883	301.5	+96%
BUY	CardieX Ltd	CDX	11/11/13	15	D	695.5	6.9	4.98	NE	Nil	3	Nil	-81%
HOLD	CPT Global Ltd	CGO	10/03/08	88	B	37.8	2.0	0.38	11	2.6	29	19.5	-45%
HOLD-	CSG Limited	CSV	11/10/10	166*	C	449.3	1.8	0.62	NE	Nil	31	60.5	-45%
BUY	Cynata Thera.	CYP	13/03/17	50	E	101.9	1.1	NA	NE	Nil	111	Nil	+121%
BUY	Elixir Energy	EXR	07/12/19	4.2	D	500.9	5.7	NA	NE	Nil	4.2	Nil	
BUY	Ellex Medical Lasers	ELX	14/03/06	49	D	143.6	1.5	1.07	NE	Nil	61	Nil	+24%
BUY	FBR Limited	FBR	07/07/17	14	D	1572.5	5.3	NA	NE	Nil	4	Nil	-69%
HOLD-	Fiducian Group	FID	11/02/08	260	B	31.4	0.5	3.41	16	4.2	530	116.8	+149%
HOLD	Finbar Group Ltd	FRI	12/04/10	106	B	272.1	1.0	1.50	22	7.0	86	74.5	+51%
HOLD+	Greenland Minerals	GGG	11/11/19	11	C	1191.0	2.8	NA	NE	Nil	13	Nil	+18%
HOLD	Ignite Ltd	IGN	08/04/03	82*	D	89.6	4.7	0.03	NE	Nil	5	70.5	-7%
HOLD+	Iluka Resources Ltd	ILU	12/10/04	471	B	422.6	0.5	2.94	13	3.1	943	301.0	+164%
HOLD	Integrated Research	IRI	14/01/08	40	A	171.9	0.5	5.54	26	2.3	325	59.5	+861%
HOLD	McMillan Shakespeare G	MMS	07/11/16	1041	B	77.4	0.4	2.16	13	5.2	1435	173.0	+54%
BUY	Michael Hill Int'l Ltd	MHJ	11/06/91	4*	A	387.8	1.5	0.48	16	5.7	70	72.3	+3458%
HOLD+	Mt Gibson Iron	MGX	10/11/14	44	B	1157.7	1.5	3.34	13	4.8	83	5.0	+99%
HOLD	Opthea Limited	OPT	10/02/04	188	B	250.3	0.9	NA	NE	Nil	295	65.0	+91%
HOLD	OZ Minerals	OZL	14/03/16	522	A	323.9	0.4	3.04	15	2.2	1052	63.0	+114%
BUY	Prophecy International	PRO	08/09/08	26	B	64.0	1.5	3.03	NE	Nil	51	24.0	+186%
BUY	Reckon Limited	RKN	08/08/16	141	A	113.3	1.1	1.18	12	3.8	79	8.0	-15%
HOLD-	Silver Chef Ltd	SIV	13/11/17	740	C	39.3	1.2	0.11	NE	Nil	67	10.0	-90%
BUY	St Barbara	SBM	12/08/19	396	A	699.2	0.8	2.70	12	3.2	252	Nil	-36%
HOLD+	The Reject Shop Ltd	TRS	11/01/05	257	C	28.9	0.9	0.07	NE	5.0	200	520.5	+180%
HOLD+	Village Roadshow	VRL	10/08/09	71*	B	195.2	0.6	0.64	NE	1.6	322	284.3	+754%
BUY	Woodside Petroleum	WPL	08/04/19	3410	A	942.3	0.4	4.25	16	6.1	3372	Nil	-1%

The average Total Return (i.e. both Capital Gains/Losses plus Dividends received) of all current investments from initial recommendation is +278.9%. This is equal to an average annual rate of +23.5%, based upon the length of time each position has been held.

The average annual rate of gain of ALL recommendations (both the 37 current and 170 closed out) is +28.8%, compared with a market gain of +3.9% (by the SRC Total Return Index).

CURRENT ADVICE is either Buy, Hold+, Hold, Hold- or Sell. Hold+ indicates the most attractive shares not rated as Buy. Hold- indicates relatively less attractive issues.

\* Initial Recommendation Prices adjusted for Share Splits, Bonus and Cash Issues.

(1) Reckon Ltd's return includes 1/3 share of GetBusy plc (GETB) worth 50.0 pence (96.0 Aust cents).

## Recommended Investments

(Continued from Page 3)

**Brickworks Ltd's** 50% owned Property Trust received development approval in September for the 89 hectares of land at *Oakdale West*, which will provide “significant further growth for up to a decade”. Brickworks also expects to sell 10 hectares at *Oakdale East* to the Property Trust during the second half of the current financial year.

**Southern Cross Cement** (33.3% owned) has completed its Brisbane terminal - capable of receiving over 200,000 tonnes per annum of cement imports - with the first shipment unloaded in October. This will provide a “reliable, cost effective source of cement” for the *Austral Masonry* and *Bristle Roofing* businesses.

### Brickworks Ltd



**CardieX Ltd** has entered a *Flexible Capital Facility* with **MST Financial Services Pty** that gives it the ability to place up to \$3 million of new shares over the next 18 months.

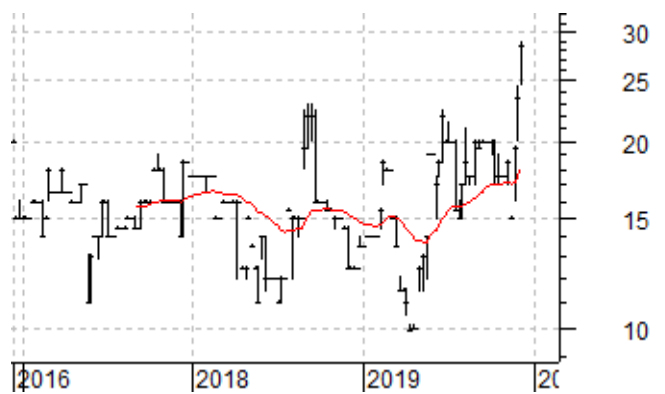
The company reports first quarter *ATCOR* revenues up 88% to over \$900,000. That does not include the *Oscar 2 ABPM* which was launched in China in August. Revenues for the group are forecast to rise 50% for the year to June 2020.

### CardieX Ltd



**CPT Global** reports “a reasonable start” to the June 2020 financial year with “the first quarter in line with expectations”. Contract extensions of \$3.5 million have been signed, with a further \$1.5 million contract extension expected by 31 December. In November the company began a \$2.7 million, 12 month contract for an Australian University and also signed two new Australian banks where the company seeks to “convert these initial engagements into recurring revenue”.

## CPT Global



**Cynata Therapeutics** has “filed a *Clinical Trial Authorisation* application with the **UK Medicines and Healthcare products Regulatory Agency (MHRA)**” for its Phase II clinical trial into *Critical Limb Ischaemia (CLI)*. This review is expected to take two months. The company should then be able to commence its clinical trials at multiple centres in the UK and Australia.

The CLI treatment market is expected to reach US\$5.4 billion annually by 2025. This is a very small \$114 million capitalisation company looking at developing therapies for several very large markets. That offers the very asymmetric investment returns (i.e. a maximum 100% loss if nothing ever works out but significantly higher returns even if only one project advances to a commercial therapy).

Cynata Therapeutics also reports “positive efficacy data” from preclinical studies of *Cymerus* stems cell in a model of sepsis. Sepsis is involved in 5% of all deaths and 50% of all hospital deaths.

Cynata Therapeutics are at annual lows so we are upgrading the shares to a “Buy”.

### Cynata Therapeutics



**Ellex Medical Lasers** reports an “unsolicited non-binding conditional offer to acquire the Ellex Laser & Ultrasound business” from a “major European group”. The companies are in “advanced discussions” and Ellex Medical Laser shares will remain suspended from trading until a further announcement is made in mid-December.

This potential sale would require shareholder approval.

As we wrote in March and August this year, we believe the Laser & Ultrasound business (excluding the 2RT treatment) to be worth at least \$85 million (about 60 cents per share). In a merger with an existing competitor

it should be worth even more, owing to synergies (i.e. removing excess competition and improving margins).

The *iTrack* business should be worth a similar amount.

The sale of those businesses could leave Ellex Medical with its high growth *iTrack* and 2RT technology.

The company reports a *loss* of \$2.0 million - an improvement of 18% - for the first four months. As previously predicted, the company expects *iTrack* to turn earnings “positive in the second half” of the current financial year.

### Ellex Medical Lasers



**FBR Ltd** reports completing the *demonstration stage* for **Archistruct Building & Designers**. This will now move to a complete *Display Home*.

FBR Ltd has also raised \$5.5 million from the placement of 122,222,223 shares at 4.5 cents and will seek to raise another \$5 million (and perhaps oversubscriptions) from a *Share Purchase Plan* to shareholders at 4.5 cents. Shareholders can subscribe to between \$1000 and \$30,000 each (although the shares are currently trading on-market at 4.4-4.5 cents). The SPP will remain open until 23 December (if not closed earlier).

FBR has been invited by the **Australian Government** to be its *Official Australian Construction Robotics Partner* for **Expo 2020** (from October 2020 until April 2021) in Dubai. 25 million people are expected to attend over the six month period.

Over the next year the company plans to construct (and retain) two show homes for **Archistruct** and **Summit Homes**, form more *WaaS* joint ventures “with key organisations in strategic markets” and manufacture a small number of additional *Hadrian X* robots, while continuing “to refine design and implement mechanical and software changes to improve performance”.

Reliability, “measured by up-time” has “increased significantly” over the last year but needs further improvement over the next year. Waste is close to being eliminated entirely. The recent house structure used 2420 blocks with only 5½ blocks wasted.

The lay rate has improved, with large double width blocks laid at the rate of 85 per hour (equal to 1000 standard brick equivalents per hour). Increased speed is expected over the next year and the company has begun building test rigs to lay 1000 blocks per hour (12,000 standard brick equivalents) which will be used in “the successor” robot to *Hadrian X*. This would see a

4-bedroom, 2-bathroom structure built “in a matter of hours with a single operator”.

All of this is good . . . except that FBR management and directors seem to be more interested in building ever bigger and better and faster robot toys than they are in building brick walls or revenues!

FBR Ltd's robotic construction technology is far ahead of competitors (i.e. there is no serious competition) but at 4½ cents the market is perhaps disillusioned by the slow pace of commercialisation and values this company at just \$75 million (after the \$5.5 million placement and \$5.0 million SPP).

This is another example of extremely asymmetric returns. The maximum loss from buying FBR shares is 100% of the amount invested, but - as we estimated in July - the successful commercialisation of this technology could see the shares valued around \$20-55 per share (i.e. up 44,000-122,000%) by 2035. Of course, you would *never* invest *all* of your money in any investment, especially when you can buy five or ten or twenty shares with asymmetric returns, which comes close to guaranteeing you will eventually hit *several to many* very big winners!

\$75 million is also a ridiculously low valuation! Someone (perhaps even **Brickworks** or European partner **Wienerberger** or a global construction company or a construction machinery company) will take this company over (at a very large percentage premium, but still extremely cheaply) and properly commercialise this technology and make billions.

“Buy”.

### FBR Ltd



**Ignite Ltd** has effectively given away its **Lloyd Morgan China** business. The 89% shareholding was sold to the China Chief Executive for a “nominal cash consideration”. The business earned a profit of \$125,000 in 2018 but *lost* \$966,000 in the year to June 2019. It then *lost* a further \$895,000 in the first four months of the current financial year.

In addition to the current year loss of \$895,000 there will be a \$750-850,000 *loss* on the sale.

The company reports a “promising and growing pipeline of sales opportunities” and a “strong business momentum” in Australia, but the remaining operations are fairly small and the shares probably have little remaining value.

(Continued on Page 6)

**Recommended Investments**

(Continued from Page 5)

**Ignite Ltd**



**Integrated Research** reports year to date revenues “comparable” with this time last year, but has closed “four large contracts over \$1 million”. The company expects revenue and profit growth for the full year.

**Integrated Research**



**Opthea Ltd** has raised \$50 million from the placement of 18,900,000 new shares at 265 cents per share. That increases the issued capital by about 7.5%.

This will fully fund three Phase 3 clinical trials for Wet AMD. Each trial will involve 660 patients and are largely similar. 330 patients in each trial will be given an anti-VEGF-A therapy and OPT-302 with a 330 control group receiving just the anti-VEGF-A. These studies will start in the December 2020 quarter with final results expected in the first half of 2023.

The Phase 2A clinical trial for persistent DME, will finish soon with data expected in the June 2020 quarter.

Yes, you guessed it, Opthea is another example of an investment with very asymmetric returns - although we have recently enjoyed some of those potential upside returns!

**Opthea Ltd**



**OZ Minerals** has advanced plans for its Brazilian operations, including developing the *Pedra Branca mine*, acquiring further exploration interests from **Vale** and agreements giving OZ Minerals the option to sell ore to Vale, giving it flexibility in its developments.

The *Pedra Branca Feasibility Study Update* has led to OZ Minerals making a final investment decision to proceed with this underground mine. The upfront capital cost of development will be US\$35 million. Production will be around 1.0 million tonnes of ore per annum, containing 18,000 tonnes of Copper and 11,000 ounces of Gold over an initial mine life of eight years. Ore will be transported 75km to the *Antas* processing plant. The net present value of this project is US\$55 million (but would rise to US\$75 million if OZ Minerals can develop other mines to feed its Antas plant and sell the ore to Vale). The mineral resource is “open at depth and along strike” so it is likely the mine life will extend well beyond eight years.

OZ Minerals has also exercised the option to acquire the *Pantera* project (covering 9,700 hectares) from Vale ... and has options to purchase two additional exploration projects: *Santa Lucia*, an advanced project 40km from Antas, with potential for a high grade open cast mine, perhaps with 5-14 million tonnes at 1.4-2.0% Copper and nearby *Circular North*, less advanced but “highly prospective”.

OZ Minerals plans to drill *Pantera* and *Santa Lucia* in the first half of 2020 and, subject to results, proceed to scoping studies.

Initial drilling results at *Clovis* - just 2km from Antas - suggest a target of 2-4 million tonnes at 3.1-5.0% Copper.

In Australia, the *West Musgrave Joint Venture* has been expanded with **Cassini Resources** contributing additional exploration tenements to the joint venture. The partners are currently producing a *Pre-Feasibility Study* for the *Nebo-Babel* deposit.

**OZ Minerals**



**St Barbara** has formed an earn-in joint venture with **Catalyst Metals**. St Barbara has agreed to spend at least \$1 million on exploration over the next two years but can earn a 50% interest in the *Drummartin Project* by spending up to \$3.5 million in total over the next four years.

St Barbara is the largest shareholder in Catalyst Metals, owning 11,149,617 shares or 14.1% of the capital (plus 1,114,962 listed options).

The *Horn Island* joint venture with **Alice Queen Ltd** (where St Barbara is spending \$4.0 million to earn a 70% interest outside some “excluded zones”) has collected 407 soil samples (spaced 100 by 50 metres apart) and 176 quartz rock samples within this area.

The maximum assay soil sample was 2.31grams/tonne of Gold (with 21 samples higher than 0.1g/t) and with the rock samples a very high 215.0g/t, obviously on a very small rock sample, (with 14 samples greater than 1g/t). 1g/t, or less, can be economic for open pit mining. The samples also contain Antimony, Silver, Arsenic, Lead and Zinc.

The area is being tested with an ongoing ground dipole-dipole induced polarisation (DDIP) survey program covering a 3km by 2.5km area to identify “near surface to deeply occurring chargeable anomalies” associated with sulphide minerals and gold.

The “excluded zones” include an existing 0.5 million ounce Gold Inferred Resource (8Mt @ 1.9g/t), historic mine infrastructure, waste dumps, low grade ore stockpiles and *all Gold on Horn Island to a depth of 6 metres*. St Barbara has an option to later purchase a 70% interest in all or part of these excluded zones at “fair value”.

**St Barbara**



**SIV Capital** (formerly **Silver Chef**) has completed the sale of its *Hospitality* business for \$18.25 million - less transaction costs of \$3.75 million!!! Someone is getting rich on this situation and it is not the shareholders.

The *GoGetta* business is expected to realise \$20 million over the next 18 months - less “customer remediation and related costs” of \$5.8 million over the next six months.

The only thing the company has been successful at growing in value is “carry forward tax losses” which now stand at \$39 million (i.e. worth \$11.7 million if the company has any future taxable income to offset against these losses). SIV Capital also has franking credits of \$25 million (i.e. enough for \$58 million in franked dividends, more than double the amount needed to distribute its remaining cash).

Probably the only way to utilise these tax losses and fully utilise these franking credits would be for a

profitable company to list on the Australian stockmarket using SIV Capital in a “reverse-takeover”. This has significant value so will probably be the ultimate outcome.

In the meantime, the directors “are aiming to make an interim distribution as early as possible” in 2020 (i.e. the second half of the current financial year).

**SIV Capital**



**Woodside Petroleum** is targeting over 6% per annum production growth over the period to 2028.

Major developments will include two large gas projects and one smaller oil project:

The *Scarborough* and *Pluto Train 2*. These will cost US\$10,100 million to develop, with a resource of 1,462 MMboe (i.e. million barrels of oil equivalent), equal to US\$6.90/boe (i.e. barrel of oil equivalent). Production of 6.5Mtpa of LNG and 1.0 Mtpa of pipeline gas will begin in 2024.

The *Browse to NWS Project*, costing US\$6,300 million, with a resource of 866 MMboes, equal to a cost of US\$7.30/boe. The final investment decision will be made in 2021, with production of 10.0 Mtpa of LNG and 1.4 Mtpa of pipeline gas and 60,000 barrels of oil per day from 2026/27.

*Sangomar Phase 1* will cost US\$1,500 million to develop 81 MMboe (Woodside's 35% share) or US\$19/boe. This is under development for first oil production of 100,000 barrels of oil per day from 2023.

Woodside Petroleum holds cash of US\$3037 million (US\$3.22 per share or A\$4.70) and generates annual free cashflows of around US\$1500 million, plus could borrow to finance developments and/or sell down some of these projects (e.g. is seeking a 50% partner for the *Pluto Train 2*).

**Woodside Petroleum**



# Share Recommendation: Buy Elixir Energy

## BUY Elixir Energy (code EXR).

Elixir Energy is a very small \$21 million capitalisation Australian company that is seeking to develop a Coal Bed Methane (CBM) project in Mongolia. In Australia this business would be called Coal Seam Gas (CSG). The company owns 100% of a *Production Sharing Contract* (PSC) covering 30,000km<sup>2</sup> of the Gobi desert. This is probably the largest and best CBM prospect in the world.

### Company History

This company listed on the Australian stockmarket in 2005 under the name **Elixir Petroleum** with petroleum interests in the North Sea, off the United Kingdom.

The current Mongolian gas project dates from October 2017 when the company acquired **Golden Horde Ltd** for 79 million Elixir shares. This gave the company 100% of the *Nomgon IX CBM PSC*.

### Nomgon IX CBM PSC

The *Nomgon IX CBM PSC* (coal bed methane profit sharing contract) covers over seven million acres (over 30,000km<sup>2</sup>) in a highly prospective coal basin in the South Gobi desert expected to contain a “potentially giant gas resource”.

Under the PSC the company has at least 10 years and up to 15 years to explore for CBM (i.e. before it is *required* to begin production, although *small scale* production is likely in the near future) and then the right to produce gas for at least 30 years (but the PSC is “extendable” for further periods). The company will

pay no income tax, resource royalties or other taxes in Mongolia but the Mongolian government will receive up to a 40% share of the profits.

[By way of comparison, in Australia the state governments charge a 10% royalty on the value of gas at the well head, then the Federal government takes up to 30% of profits as company income tax.]

Mongolia currently has no gas production - but some of the worst air quality - and “there is a strong political desire to replace high emission coal power with low emission clean-burning gas fired generation”.

The methane gas content of coal at the Tavan Tolgoi thermal coal mine (which is within the *Nomgon IX* area, but excluded from the PSC) has a very high gas content of 15m<sup>3</sup>/tonne (480cf/ton). *Nomgon IX* contains Late Permian aged sub-bituminous and bituminous coals (which are “ideal for CBM”), within 1000 metres of the surface with coal seam thickness up to 55 metres.

These deposits are very similar to the Late Permian aged sub-bituminous and bituminous coals in the *Bowen Basin*, Queensland, Australia (which has a gas content of 7-14m<sup>3</sup>/tonne from coal seams up to 30 metres thick within 1000 metres of the surface).

Elixir Energy directors are experienced in the Australian CSG industry: Non-Executive Director Richard Cottee was the Managing Director of **QGC** when it developed its CSG business in Australia. Managing Director Neil Young previously worked at

## Renewable Energy in Mongolia . . . in the Future

Mongolia has *massive* potential for clean, renewable energy, but it currently generates over 80% of its electricity (4.5TWh) from seven very old and inefficient coal fired power stations. Urban areas use electricity, coal and wood for cooking, while rural areas use dung and wood. Coal and wood are also burnt for domestic heating and in industry. All of this gives Mongolia some of the worst air pollution in the world.

Hydroelectric generation contributes about 3% of the country's electricity and while this could be expanded there is a lot of opposition from international environmental groups like **World Wide Fund for Nature** (WWF).

Diesel generators provide about 4% and the balance is imported from Russia and China.

There is little wind or solar power at present, but Mongolia's Gobi desert is a *very windy* and *very sunny* place that is ideal for very large scale wind and solar energy projects (and with no other economic uses and fewer environmental concerns). The **US Department of Energy** estimates that the Mongolian part of the Gobi desert has the potential for 1100 TWh of wind energy and 1500 TWh of solar energy! That is 600-times Mongolia's current electricity usage and about 10% of the world's total usage although probably only a low single digit percentage of this will ever be developed. This would still be a mega-project and make Mongolia a major exporter of clean energy to China, Russia, South Korea, Japan and South East Asia.

None of these potential very large scale renewable energy projects are currently underway. They would require billions of dollars of foreign investment and the technology for GW-scale and TW-scale solar energy projects is still being developed.

The Mongolian government's immediate objective is to replace coal with cleaner CBM gas. For the same energy output, gas produces less than 50% of the CO<sub>2</sub> emissions of coal, with none of the sulphur dioxide, nitrogen oxides, toxic metals and small particles that cause haze and smog (and respiratory problems). Developing CBM gas is an economically viable way to significantly and quickly improve air quality.

Depending how grid-scale energy storage technology develops, gas powered off-peak electricity may still be necessary in conjunction with clean wind and solar energy in the foreseeable future.



**Santos**, involved in CSG acquisitions. Non-Executive Director Stephen Kelemen also previously worked for **Santos**, developing their CSG business in parallel with QGC.

### Current Activities

Final approval following the *Detailed Environmental Impact Assessment* was received in July, allowing field work to begin.

Mongolia has an “extensive mining industry” so exploration services are available from local contractors.

Mongolian based **Micro Seismic LLC** acquired 131km of 2D seismic data in the September quarter and this is being processed and interpreted.

Mongolian company **Erdenedrilling LLC** was selected after a tender process, to drill 2-4 chip holes (at “a fraction” of the cost of a core hole and this will provide broken rock chips, rather than a solid core sample) and 2-3 core holes. Drilling - on a “per metre” (i.e. fixed price) contract - began in early October.

Core holes are the “primary tool” for CBM exploring and will target developed CBM leads from “surface outcrops, gravity and 2D seismic mapping”. At least two (and perhaps three) core holes will be drilled this quarter and have “world-class drilling and geological supervision at the well head”. The cores will be accurately logged, coal samples “put through US certified coal desorption process (Q1+Q2+Q3)” and gas samples captured for chromatographic analysis. The coal collected will be examined and “finally the core holes will be subject to *Injectivity Fall-Off Testing* of the coal seams to determine the permeability of the coals and the cleating”. This will define *Proof of Concept* for CBM in Nomgon IX.

The first chip hole, *BO-CH-1* was drilled to a depth of 738 metres, encountering a carbonaceous section of 30 metres with 7 metres of coal. This “carbonaceous interval appears to be highly fractured and gas” was seen “bubbling from the rock samples”.

At the latest report the second chip hole, *BO-CH-2* was at 574 metres while the first core hole, *Ugtaal-1*, was at 324 metres (of a target 600 metres) but has already found “net coal thicknesses of 20.6 metres”. This coal will be tested for desorption - to measure its gas content - which can take around 60 days (depending upon the type of coal). “The presence of gas in the system is observable to the naked eye”.

Development of the CBM will initially focus on “small scale and modular electricity generation” which is “a tried and trusted mechanism in Australia to de-risk CSG projects”. Within the PSC there are large electricity users and electricity transmission infrastructure with substantial spare capacity. This is a low cost development strategy that will produce immediate cashflow from the sale of electricity to the grid and finance the steady expansion of the project.

Rio Tinto’s *Oyu Tolgoi* copper mine currently imports electricity from China and locally produced electricity from coal powered stations. The company's agreement with the government requires it to use local electricity from 2022, which will require the mine to build a coal fired power station. Rio Tinto wants to have a *greener* image and would rather change to cleaner gas power generation.

Mongolia has an electricity shortage but has so far avoided building more coal powered stations. Gas turbines powered by Elixir Energy’s CBM gas would meet that power shortfall and then, as production increased, allow the coal powered stations to close.

Longer term, increased gas production could be exported to China - a major gas pipeline is only 400km away - or exported to China as electricity.

### Corporate Activity

In December 2018 the company made a cash issue to shareholders of one option (exercisable at 7.5 cents until December 2020) for every share held.

In April 2009 the company made an “in specie” distribution of **Entek Energy** shares (i.e. 0.475 Entek shares for every Elixir share) received from the sale of its Alaskan North Slope oil and gas leases. Following this distribution the listed options exercise price was adjusted to 6.79 cents.

In May 2019 the company placed 99.4 million shares at 3.6 cents to raise \$3.6 million.

The current drilling program is expected to provide proof of concept for CBM in Mongolia . . . and this would significantly improve Elixir Energy's strategic development options: It could:

1. sell the whole project or Elixir Energy could be taken over by a larger company that would then finance and develop this “de-risked” CBM project or
2. raise development cash by selling an interest in the project to a new partner or
3. raise additional equity from the market or shareholders (at attractive prices, if the shares are re-rated) to drill production wells, install gas turbines to generate electricity to earn cashflow to finance further steady expansion.

### Investment Criteria

Elixir Energy has no revenues or profits and only about \$3.1 million in cash (0.6 cent per share). That is enough to take the company through to proof of concept.

At that stage the value of the business *could* increase significantly. Elixir Energy *could* bring in new, well capitalised partners or may need to raise additional equity capital. It would, however, be relatively cheap to drill some gas producing CBM wells and use that gas to produce electricity, with this cash flow financing further wells to expand the business.

At 4.2 cents per share the market values this company - and its 100% owned project - at just \$21.0 million.

The issued capital is 500,870,706 ordinary shares plus 110,706,617 listed options (code EXROA, trading at 1.5 cents) exercisable at 6.79 cents by 31 December 2020 (plus about 56,500,000 performance rights, subject to various milestones and 17,500,000 incentive options exercisable at 10 cents within about four years).

Investors should avoid chasing the share price significantly higher to make an investment in Elixir Energy. The shares are fairly actively traded with at least 1-10 million shares (worth \$50-500,000) traded each day.

It is probably no surprise to learn this small company is *neglected* by brokers.

Directors and senior management have sizeable interests in the company through ordinary shares,  
(Continued on Page 10)

**BUY Elixir Energy***(Continued from Page 9)*

performance shares and incentive options: Non-Executive Chairman R Cottee holds just 250,000 shares, 7,500,000 listed options and 15,000,000 performance rights.

Managing Director N Young holds 19,760,809 shares and 17,500,000 performance rights.

Non-Executive Director S Keleman owns 290,000 shares and 5,000,000 incentive options (exercisable at 10 cents).

There were two *insider* buys over the last year. N Young bought 287,773 shares at 3.5 cents in January 2019 and S Keleman bought his 290,000 shares at 5.1 cents in October.

The shares traded as low as 2.7 cents in March and as high as 6.5 cents in July. Overall the shares are probably in an uptrend. Our Relative Strength Rating is +3.3%, ranked 31 (on a scale of 0-99).

**Summary and Recommendation**

Elixir Energy involves high risks but offers a very *asymmetric* investment opportunity. This is a *very small* company seeking to develop a *very large* Coal Bed Methane gas project in Mongolia. So risk (as always) is limited to 100% but the potential returns have no upper limits! Given the size of the exploration area, the thick coal seams and the high gas contents (i.e. known from coal being mined within the area) there is a high

probability that this project will be technically and economically successful.

The main risk is that Elixir Energy has only enough cash for its current program of 2-3 core holes and will then need to raise additional capital. A successful *Proof of Concept* (in early 2020) increases the company's options - selling out for a capital gain, raising capital from an equity partner or raising a little cash from shareholders for a low cost, low risk development strategy (i.e. small scale gas turbines, turning gas to electricity and cashflow).

Nevertheless, any investment - especially in mineral exploration - does involve risk. So any investment should be a small part, perhaps just 1-2%, of a well diversified investment portfolio.

**Elixir Energy**

## Renewable Energy - Part 2: An Investment Overview of Energy Technologies

Last year (i.e. 2018) the world generated 26,700 TWh of electricity, 64% from fossil fuels (i.e. coal 38%, gas 23% and oil 3%) and 36% from renewable energy (i.e. hydro 17%, nuclear 10%, wind 5%, solar 2% and other 2%).

While renewables are growing they are not yet replacing fossil fuels globally. Total global electricity demand grew 2.5% last year, with 1.1% (i.e. 45% of the increased demand) met from new renewable energy generation and 1.4% met from new fossil fuel generation.

This month we examine the economic factors and operating characteristics of renewable energy technologies. These factors should drive their expansion and be relevant to investors in making potential investment decisions.

The most important economic factor is that renewable energies have very high upfront capital costs and relatively low operating/maintenance costs (except for bio-fuels which have similar economics to fossil fuels). Generating electricity with fossil fuels generally requires a lower upfront capital cost but higher on-going operating cost (i.e. on fuel purchases).

**Capital and Operating Costs**

Capital costs can vary significantly, but Table 1 shows the approximate upfront capital and operating costs for generating electricity from various sources.

As many renewable energies will require electricity storage we also included some figures for grid scale battery and pumped hydro storage.

These capital costs can vary in different countries. For example, utility scale solar costs about \$800/kW in India and \$2400/kW in Canada owing to (1) lower labour costs in India but also (2) lower "solar irradiance" in Canada (i.e. less sunlight reaching Canada, requiring

**Table 1: Energy Technology Costs**

Energy Technology	Capital Cost (US\$/kW)	Operating Cost (US\$/kWh)
<b>Fossil Fuels</b>		
Gas turbine	\$400-1000	0.04-0.10
Coal	\$500-1000	0.02-0.04
Coal (removing SO <sub>2</sub> )	\$3500-3800	0.02-0.03
<b>Renewable</b>		
Onshore Wind	\$1200-1700	<0.01
Offshore Wind	\$6500	<0.01
Utility scale Solar	\$1060	<0.01
Home Solar	\$2000-3700	0.10-0.20
Hydroelectricity	\$2680	<0.01
Geothermal	\$2800	<0.01
Nuclear	\$1500-7000	0.02-0.03
Nuclear, Gen IV (est)	\$1800-3900	<0.01
<b>Grid Storage</b>		
Grid Battery Storage	\$700-1000	-
Pumped Hydro Storage	\$600-2200	-

more solar panels, and more capital cost, per kW of capacity).

Home solar operating costs can be high owing to maintenance (i.e. replacing relatively short lived and expensive charge controllers and inverters) on a relatively small scale system and some countries require annual cleaning and inspection. For off-grid home solar add perhaps another \$1000 (per kW) for battery storage. Note, however, that home solar does not need to be competitive with *wholesale* electricity prices but with much higher *retail* prices, so is generally still competitive.

All renewable energy technologies are now generally competitive or very close to competitive with fossil fuels, except offshore wind which still requires large subsidies. Modern “critical” and “super critical” coal powered stations (which remove sulphur dioxide and nitrogen oxides from the exhaust and produce more electricity per tonne of coal burnt) can have very high capital costs.

From about 2030, Generation IV nuclear reactors will be mass produced in factories and have significantly lower capital costs and operating costs than earlier generations which were essentially unique designs with high individual engineering and approval costs.

#### **Operating Characteristics**

Operating characteristics vary and are also very important.

Hydroelectric provides storage and flexibility, making it the most attractive renewable energy. Hydro capacity is still expanding but often faces opposition from environmental groups opposed to the impact on fish populations and land flooded for storage dams.

In theory, hydroelectric output can be controlled from 0% output to 100% output in a few seconds. This is done with *pumped hydro*, but this is “storage”, not a source of power. Dams provide storage (unlike solar and wind) but the operation of a hydroelectric station must take into account its environment.

A hydroelectric station that took water from one high dam and released it into a second lower dam (or into the ocean) could vary output from 0 to 100% as electricity demand and prices rose or fell, maximising its revenues and profit from the water by only using it when demand and prices are at their highest.

A station taking water from a dam for release into a river system would probably be required to maintain a minimum water flow (i.e. continue to use water and generate electricity even if spot prices fell to zero) and would likely have limits on how quickly it could increase electricity output and water flow (e.g. to avoid flash flooding down river).

There are currently about 450 nuclear power stations in operation worldwide and that number has been relatively unchanged for the last 30 years. 50 new stations are planned or under construction and nuclear energy *may* expand from 2030 when safer, smaller scale, modular Generation IV stations become available.

Nuclear power stations usually run at 100% of rated capacity. In theory one could operate a nuclear station at less than full capacity but as there is virtually no cost

saving, they are usually run at a steady 100% output.

Wind output can vary from 0% to 100% of rated output depending upon the wind. This can vary daily (and depending upon the location) but averaged over a long period, peak output is about from 10 am to 10 pm. Offshore wind farms tend to have more consistent daily winds and therefore more consistent electricity output.

There are two main types of wind turbines: Doubly-fed induction generators (DFIG) used mainly onshore and Permanent magnet synchronous generators (PMSG) used mainly offshore.

DFIG uses a gearbox that allows operation over a limited range of wind speeds and uses electromagnets (i.e. iron and copper) instead of rare earth magnets in the generator.

PMSG offers full power conversion over a wide wind speed, may or may not use a gearbox, and require rare earth magnets which allows for a significantly lighter generator (e.g. 12-15 tonnes for a 4 MW PMSG, compared with 70 tonnes for a 4 MW DFIG). This lower weight reduces torque (i.e. the wind force required to start the turbine revolving) so is more efficient at lower wind speeds. While more expensive, PMSG is preferred for offshore wind farms with benefits of greater reliability and reduced maintenance.

There is no control over when or how much solar and wind power is generated, so other energy sources are required to meet demand . . . or significant grid-scale storage capacity would be required.

Wind power capacity is growing rapidly and turbine technology is also likely to evolve. Onshore wind energy is competitive, but offshore wind energy still requires significant subsidies.

Solar generation, of course, only works during daylight hours and significant output is only available within 2-3 hours of midday and on days with little cloud cover.

With fossil fuels, coal powered stations have only some operating flexibility and are best run at a steady output. Combined cycle gas turbines have some flexibility, while simple cycle gas turbines have excellent flexibility to meet fluctuations in grid demand.

So solar and wind provide power only when the sun shines or the wind blows, coal and nuclear provide steady power 24 hours a day (whether or not it is required) and gas and hydroelectric output can be relatively quickly varied to meet fluctuations in demand.

Solar and onshore wind are competitive technologies. In the future, deserts (i.e. with sunny cloudless skies, strong winds and few alternative land uses) could be excellent locations for large scale solar energy and wind farms . . . although this may require large macro-grids to take the power across continents to its final markets.

Pumped hydro storage and grid battery storage are generally designed to store and release electricity over a daily cycle, for example, buying and storing electricity when solar generation is high but demand and prices are low and releasing that stored energy when demand exceeds supply and wholesale prices are high. Neither is designed to

(Continued on Page 12)

## Renewable Energy Technologies

(Continued from Page 11)

store electricity *long* term (e.g. over a week of overcast days with no solar generation). Storage is, of course, less than 100% efficient.

Pumped hydro storage has an efficiency of 75-85% (i.e. 15-25% of energy is lost) while batteries are 80-90% efficient.

### Investment Implications

As renewable energies have very high upfront capital costs and low operating costs these are “return on capital” investments. The initial capital investment provides a steady future income stream, but no growth.

A large part of the initial investment will be provided with debt capital, so the availability of debt and the interest rate will be important factors and could lead to a series of boom/bust cycles. For example, the availability of capital and low interest rates *could* lead to over-investment (in anticipation of future demand growth) and electricity prices could fall, providing lower than expected returns. Higher interest rates, or a change in the availability of financing (or re-financing) could see net profits fall and some renewable energy companies fail financially, with losses for shareholders (although the projects will be acquired by competitors and continue to generate electricity).

The renewable energy market has many economic similarities with the Personal Computer market and Telecom/Internet boom... demand will increase strongly but capital costs of building solar/wind/nuclear are likely to fall and the long term *wholesale* price of electricity is also expected to fall. (Ultimately governments will likely tax electricity - to replace existing taxes on fossil fuels - so *retail* prices may increase.)

Growth in solar and wind power will also tend to lower wholesale electricity prices at periods of maximum production. The sun will usually shine (or not shine) on all solar farms in a country or region, so wholesale prices will fall when solar electricity production is high and (together with base load production from coal, nuclear and hydro) exceeds demand. Prices will be high when the sky is overcast or at night. When solar farms will have energy to sell, electricity prices will likely be near their lowest levels. Wind farms will have a similar, though less extreme, experience. So, in the future, a stand alone solar or wind farm may be only marginally economic unless it has its own battery storage capacity or is part of a larger, diversified energy group.

Manufacturing solar panels is exactly like manufacturing PCs in the computer boom - a low margin “commodity” business, with little or no product differentiation and constantly falling selling prices. Electronic components (i.e. charge controllers, inverters) probably have better margins, but these markets are competitive with new manufacturers entering the market with cheaper products (and improving quality).

Some aspects of building offshore wind farms requires specialist seabed work from a very small number of businesses, but there is still extreme pricing pressure (i.e. to reduce the total costs). Subsidies for relatively

high cost offshore wind farms will not continue forever and the costs of construction need to fall significantly for this technology to become competitive and to survive and grow.

Generation IV nuclear reactors will be manufactured in a factory production line so the upfront capital costs will likely be lower than at present. They will also be small, modular units, so more suitable for smaller communities than existing nuclear power plants. This technology should put further cost reduction pressure on the whole energy industry.

Gas is a lot cleaner than coal, with less than half the CO<sub>2</sub> emissions per unit of energy. As fossil fuels still produce two-thirds of global electricity - and electricity produced from fossil fuels is still *increasing* at this time - it is reasonable to expect that eventually the use of coal will start to decline but that “cleaner” gas will be around for a long while. Gas powered generation is also extremely flexible and able to quickly provide extra power to meet demand peaks (or to provide “backup” base load power on overcast and windless days).

Most renewable energy projections, even those with the most optimistic *cheap battery storage*, continue to see a need for gas turbines to meet peak electricity needs very far into the future!

### Summary and Recommendation

Most renewable energy generating projects will not be particularly attractive to investors seeking capital *growth*. These are *income* businesses but likely to suffer from *falling* revenues and *falling* asset values (i.e. *negative* growth). They will also be sensitive to interest rates and the availability of finance or re-financing.

Companies manufacturing rechargeable batteries or renewable energy equipment are also unlikely to be great investments. The market is growing, but competition is high, margins are low and selling prices are falling.

The best renewable energy investments may be in some renewable energy minerals (i.e. lithium, cobalt, nickel, copper, uranium) producers... although most of these are competitive, boom/bust businesses... but currently in a “bust” (owing to the drop in EV sales in China) with demand and prices *falling* so the next 6-12 months could offer some good buying opportunities. We shall examine this situation and these renewable energy metals and some producers next month.

It is perhaps an inconvenient truth that fossil fuels are still used to produce almost two-thirds of the world's electricity... and will not be replaced by renewable energy anytime soon. At best we can hope that the use of coal will decline, but the demand for “cleaner” gas will continue to grow strongly (which will reduce CO<sub>2</sub> emissions and other pollutants). Gas producers are out-of-favour so valuations are low, yet these are businesses that can produce high cashflows and profits.

Electricity from gas is more expensive than from renewables, but it has the flexibility to produce electricity to meet peak demand - which is also the time that wholesale electricity prices are at their highest! So this can be an economically attractive and profitable business.

# Computer Selections of NZ Shares based upon our Comprehensive Share Selection Criteria

For an explanation of this table see the *Share Selection Methods* report available from our website. These shares are not formal “buy” and “sell” recommendations, but the “Under-Valued”, “Best Performing” and “Income” shares should be considered for purchase, while the “Over-Valued” and “Worst Performing” shares can generally be sold to release money for re-investment in more attractive shares.

Company	STRENGTH RATING										Market Cap'n		
	Share Price	Cur- rent	4-Wk Chg.	Rank 0-99	Followed by Brokers	Price to NTA	Return on Equity	Volatility	Price Earnings Ratio	Dividend Yield		Price Sales Ratio	
<b>UNDER-VALUED SHARES:</b> Lowest Price/Sales, Yld > 0, Rel Strength > 0													
AWF Madison Grp	195	+4.7	+1.0	29	1-0	- 1.9	6	0.8	32	11.5	0.24	65	
TIL Logistics	115	+6.2	-5.5	24	0-0	- 3.0	12	1.7	25	6.0	0.28	99	
Col Motor Co	880	+1.0	-0.6	52	1-0	- 1.4	10	0.4	13	7.1	0.32	288	
Warehouse Group	285	+14.2	+3.6	7	0-0	4	2.1	5	0.7	43	7.8	0.33	983
Abano Health.	531	+3.9	+8.0	34	0-0	2	0.9	5	0.7	18	6.3	0.50	139
Air New Zealand	281	+1.1	-0.5	52	3-3	6	1.5	13	0.8	12	10.9	0.55	3,155
Ebos Group Ltd	2360	+3.3	-2.0	40	2-3	6	3.1	11	0.5	28	4.3	0.55	3,816

## BEST PERFORMING SHARES: Strongest Shares, P/E < 20, P/S < 1.0

Good Spirits	13	+7.8	-2.0	18	0-0	- 0.4	4	3.7	10	Nil	0.21	5	
Abano Health.	531	+3.9	+8.0	34	0-0	2	0.9	5	0.6	18	6.3	0.50	139
Air New Zealand	281	+1.1	-0.5	52	3-3	6	1.5	13	0.6	12	10.9	0.55	3,155
Col Motor Co	880	+1.0	-0.6	52	1-0	- 1.4	10	0.3	13	7.1	0.32	288	

## “Neglect” Ratings of NZ Shares

“Neglected” Shares = 0-2 Brokers, “Moderately Followed” Shares = 3-4 Brokers, “Widely Followed” Shares = 5 or more Brokers.

Company	No. of Brokers Following	Market Capitalisation (NZ\$ Mill.)	Company	No. of Brokers Following	Market Capitalisation (NZ\$ Mill.)
A2 Milk Company	9	10,801	Metro Per Glass	5	53
AMP Limited	11	5,629	NZ Exchange Ltd	2	334
Abano Health.	2	139	NZ King Salmon	4	305
Air New Zealand	6	3,155	NZ Refining Co	3	6,064
Akd Int Airport	7	10,811	NZME Limited	1	78
Argosy Property	6	1,098	PGG Wrightsons	1	180
Arvida Group	2	662	Port Tauranga	5	4,555
Augusta Capital	2	126	Precinct Prop.	6	2,222
Briscoe Group	1	838	Property F Ind.	5	1,187
Chorus Ltd	5	2,655	Restaurant Brds	4	1,516
Comvita	2	144	Ryman Health.	5	7,685
Contact Energy	6	5,179	Sanford Limited	3	721
Delegat Group	2	1,153	Scales Corp Ltd	3	695
Ebos Group Ltd	6	3,816	Skellerup Hold.	2	458
F & P Health.	7	12,112	Sky City Ltd	7	2,636
Fletcher Build.	12	4,364	Sky Network TV	6	323
Fonterra S/H Fd	4	6,609	Spark NZ Ltd	10	8,134
Freightways Ltd	6	826	Steel & Tube	4	134
Genesis Energy	6	3,102	Summerset Group	5	1,707
Gentech Group	4	357	Synlait Milk	6	1,358
Goodman Prop.	6	2,836	Tourism Hold.	4	413
Investore Prop.	5	482	Tower Limited	2	248
Kathmandu Ltd	2	689	Vector Ltd	5	3,570
Kiwi Property	6	2,214	Vista Group Ltd	4	622
Mainfreight Grp	6	4,139	Vital Health PT	4	1,533
Mercury NZ	6	6,881	Warehouse Group	4	983
Meridian Energy	6	12,815	Z Energy Ltd	5	1,936
MetLifeCare	4	1,258			

Company	STRENGTH RATING										Market Cap'n		
	Share Price	Cur- rent	4-Wk Chg.	Rank 0-99	Followed by Brokers	Price to NTA	Return on Equity	Volatility	Price Earnings Ratio	Dividend Yield		Price Sales Ratio	
<b>INCOME SHARES:</b> Highest Yields, Capitalisation > NZ\$100 million													
Sky Network TV	83	-17.1	-2.2	92	0-0	6	0.9	28	0.8	3	12.6	0.41	323
Z Energy Ltd	484	-9.4	-3.9	85	0-0	5	2.1	20	0.6	10	12.3	0.36	1,936
Tourism Hold.	313	-8.0	-2.0	84	3-0	4	1.5	11	0.5	14	12.0	0.98	413
Air New Zealand	281	+1.1	-0.5	52	3-3	6	1.5	13	0.6	12	10.9	0.55	3,155
Hallenstein G.	638	+11.7	+1.1	10	0-14	- 5.5	40	0.5	14	9.6	1.36	378	
PGG Wrightsons	239	-28.1	+4.0	97	5-0	1	0.5	1	0.7	45	8.7	0.22	180
Turners Auto.	275	-2.4	+3.6	68	2-1	- 1.1	10	0.6	10	8.6	0.71	238	
Steel & Tube	81	-10.2	+1.0	87	2-0	4	0.5	4	0.9	13	8.6	0.27	134
Green Cross H.	122	-2.5	+2.5	69	0-0	- 1.4	13	0.8	11	8.0	0.31	175	
Marlin Global	100	+4.3	+0.8	32	0-1	- 1.0	6	0.6	18	7.9	N/A	147	

## INSIDER BUYING: Most Insider Buying, Relative Strength > 0

Oceania Health.	109	+1.5	+1.3	48	11-1	-	- 0.9	15	4.3	3.51	665		
MetLifeCare	590	+5.1	+7.0	27	7-0	4	0.8	3	0.5	32	1.9	N/A	1,258
F & P Health.	2122	+14.1	+4.8	9	3-0	7	54.8	86	0.2	64	1.5	N/A	12,112
Heartland Group	171	+3.4	+0.7	39	3-0	- 1.7	10	0.4	17	6.1	5.98	804	
Blis Technology	4	+9.9	-4.9	12	2-0	-12.2	- 3.2	NE	Nil	8.62	48		
Evolve Educat.	15	+7.3	+9.3	20	2-0	-	- 1.6	NE	Nil	N/A	26		
IkeGPS Limited	84	+24.0	+12.7	4	2-0	- 8.1	- 0.9	NE	Nil	9.50	76		
NZ King Salmon	220	+2.2	-0.5	46	2-0	4	1.8	7	0.6	27	3.2	1.77	305
Cannasouth Ltd	61	+42.6	+4.2	1	1-0	-	- 1.1	NE	Nil	N/A	N/A		
Col Motor Co	880	+1.0	-0.6	52	1-0	- 1.4	10	0.3	13	7.1	0.32	288	

## OVER-VALUED SHARES: Highest Price/Sales Ratios, Relative Strength < 0

TruScreen Ltd	9	-5.4	-1.0	79	1-0	- 1.8	- 1.9	NE	Nil	9.62	21		
Allied Farmers	67	-2.8	+1.5	71	0-1	-26.6	28	0.9	95	0.4	5.63	120	
Vista Group Ltd	376	-15.1	-1.2	91	4-2	4	4.3	8	0.5	51	1.2	4.76	622
Gentech Group	362	-7.3	-4.9	82	0-0	4	1.6	6	0.4	26	5.2	3.41	357
Chorus Ltd	605	-0.5	+3.3	61	5-2	5	2.7	5	0.4	50	5.3	2.74	2,655
Vector Ltd	357	-1.5	-0.1	63	1-2	5	1.5	4	0.4	43	6.4	2.71	3,570
Synlait Milk	928	-2.5	+0.5	69	0-0	6	5.3	13	0.3	39	Nil	2.48	1,358

## WORST PERFORMING SHARES: Weakest Shares, P/S Ratio > 0.25, Yield < Twice Average

Vital Health PT	266	-58.3	-0.0	98	0-2	4	1.5	9	0.3	16	3.3	N/A	1,533
Pac Edge Bio.	13	-17.8	-5.6	94	3-0	- 4.6	- 1.5	NE	Nil	N/A	64		
Finzsoft Sol'ns	99	-17.2	+1.3	93	0-0	-	- 0.6	130	Nil	0.70	9		
Vista Group Ltd	376	-15.1	-1.2	91	4-2	4	4.3	8	0.5	51	1.2	4.76	622
WN Drive Tech.	17	-11.5	-1.1	89	0-0	- 7.2	- 1.5	NE	Nil	0.79	46		
PaySauce Ltd	50	-11.1	+3.3	88	0-0	-	- 1.5	NE	Nil	1.80	1,656		
Moa Group Ltd	29	-9.9	+0.8	86	0-0	- 2.4	- 1.0	NE	Nil	1.24	20		
Comvita	280	-9.4	+3.7	85	9-0	2	0.8	- 0.5	NE	Nil	0.84	144	
Gentech Group	362	-7.3	-4.9	82	0-0	4	1.6	6	0.4	26	5.2	3.41	357
QEX Logistics	78	-6.8	+1.6	81	0-0	- 3.8	18	0.9	21	Nil	0.69	41	
New Talisman	1	-6.4	+1.6	80	0-0	- 1.2	- 5.3	NE	Nil	N/A	19		
TruScreen Ltd	9	-5.4	-1.0	79	1-0	- 1.8	- 1.8	NE	Nil	9.62	21		
Geo Ltd	11	-5.3	+9.2	78	0-0	- 3.5	- 1.7	NE	Nil	1.73	9		
Rakon Ltd	27	-5.2	+1.3	77	0-0	- 0.7	4	0.9	18	Nil	0.54	62	
Millennium & C.	250	-5.0	-0.0	77	0-0	- 0.6	10	0.3	6	1.9	1.81	396	
A2 Milk Company	1517	-4.7	+0.9	74	0-7	9	81.2	23	0.4	355	Nil	N/A	10,801
SeaDragon Ltd	0	-3.9	+1.1	74	0-0	- 1.1	-11.9	NE	Nil	1.98	10		
Sol. Dynamics	159	-3.5	-0.3	73	1-2	- 7.5	34	0.4	22	4.6	1.38	22	
Scott Tech. Ltd	231	-3.1	-0.1	72	1-0	- 1.7	10	0.6	16	6.0	0.96	175	
Tower Limited	74	-2.9	-0.4	71	0-0	2	0.9	- 0.6	NE	Nil	0.77	248	

## INSIDER SELLING: Most Insider Selling, Relative Strength < 0

A2 Milk Company	1517	-4.7	+0.9	74	0-7	9	81.2	23	0.4	355	Nil	N/A	10,801
Vital Health PT	266	-58.3	-0.0	98	0-2	4	1.5	9	0.3	16	3.3	N/A	1,533
Allied Farmers	67	-2.8	+1.5	71	0-1	-26.6	28	0.8	95	0.4	5.63	120	
Vector Ltd	357	-1.5	-0.1	63	1-2	5	1.5	4	0.3	43	6.4	2.71	3,570
Sol. Dynamics	159	-3.5	-0.3	73	1-2	- 7.5	34	0.4	22	4.6	1.38	22	
Finzsoft Sol'ns	99	-17.2	+1.3	93	0-0	-	- 0.6	130	Nil	0.70	9		

# Computer Selections of Australian Shares based upon our Comprehensive Share Selection Criteria

For an explanation of this table see the *Share Selection Methods* report available from our website. These shares are not formal “buy” and “sell” recommendations, but the “Under-Valued”, “Best Performing” and “Income” shares should be considered for purchase, while the “Over-Valued” and “Worst Performing” shares can generally be sold to release money for re-investment in more attractive shares.

STRENGTH RATING														STRENGTH RATING																
Company	Share Price	Cur- rent	4-Wk Chg.	Rank 0-99	Insider Buy-Sell	Brokers Following	Short Interest	Price to P/E	ROE	Volatility	P/E Ratio	Div Yield	P/S Ratio	Market Cap'n	Company	Share Price	Cur- rent	4-Wk Chg.	Rank 0-99	Insider Buy-Sell	Brokers Following	Short Interest	Price to P/E	ROE	Volatility	P/E Ratio	Div Yield	P/S Ratio	Market Cap'n	
<b>OVER-VALUED SHARES:</b> Highest Price/Sales Ratios, Relative Strength < 0															Blue Sky Alt In 19 -33.5 +3.7 97 0-0 - 1.1 0.1 - 1.2 NE Nil 0.48 14															
Immuron Ltd	15	-11.4	+7.8	77	5-0	-	-	4.8	-	1.1	NE	Nil	9.91	24	Battery Mineral	1	-33.0	+0.2	97	2-0	-	0.0	-	-	5.1	NE	Nil	N/A	8	
OBJ Limited	2	-4.8	-0.1	61	0-0	-	-	-	-	3.3	NE	Nil	9.89	27	Firefly Res.	6	-32.8	+0.8	97	0-0	-	-	-	-	2.3	NE	Nil	N/A	119	
Chart H Retail	452	-1.3	+1.3	51	0-0	9	2.1	1.1	3	0.2	38	6.4	9.87	2,000	Kore Potash plc	2	-32.6	+0.8	97	0-0	-	-	-	-	2.6	NE	Nil	N/A	17	
SenSen Networks	9	-7.8	-2.9	69	2-0	-	-	-	-	1.7	NE	Nil	9.86	37	Platina Res.	2	-32.5	-3.3	97	0-0	-	0.1	-	-	2.7	NE	Nil	N/A	6	
Tasman Resource	4	-0.7	-4.5	49	0-0	-	-	-	-	2.0	NE	Nil	9.72	23	G Medical Inn.	12	-31.9	+3.5	97	1-0	-	-	-	-	1.4	NE	Nil	N/A	44	
Buru Energy Ltd	18	-7.6	-4.4	68	0-0	1	0.2	-	-	1.1	NE	Nil	9.58	76	Elixinol Global	87	-31.6	-4.7	97	0-0	-	2.1	-	-	0.5	126	Nil	2.92	52	
BIR Financial	10	-9.1	+1.1	72	0-0	-	-	-	-	1.1	NE	Nil	9.55	8	Osprey Medical	4	-31.1	+0.8	97	1-0	2	-	-	-	-	2.2	NE	Nil	6.53	16
Vitalharvest F.	78	-5.4	-0.7	62	0-0	-	-	-	-	0.7	NE	7.3	9.29	143	Paringa Res Ltd	5	-29.8	-0.4	96	0-0	1	1.9	-	-	1.8	NE	Nil	N/A	29	
Hotel Property	324	-2.6	-1.2	55	0-0	4	0.2	1.2	13	0.2	10	6.1	9.25	475	Argonaut Res.	0	-29.7	+2.3	96	0-0	-	-	-	-	6.2	NE	Nil	N/A	6	
Calius Res.	22	-13.5	-10.5	81	1-0	-	-	-	-	0.8	NE	Nil	9.20	34	Vanadium Res.	3	-29.3	-3.7	96	0-0	-	-	-	-	2.1	NE	Nil	N/A	6	
Rural Funds Grp	181	-10.6	+0.5	75	8-0	3	5.3	1.8	10	0.3	18	5.8	9.09	606	Millennium Min.	5	-29.0	-5.3	96	0-0	1	0.1	-	-	1.5	NE	Nil	0.32	45	
360 Capital TR	111	-1.9	-1.2	53	0-0	-	-	-	-	0.5	10	10.8	8.97	78	Cann Group	46	-28.9	-9.1	96	2-0	2	1.0	-	-	1.5	NE	Nil	N/A	65	
Frontier Cap Gr	8	-0.0	+0.0	44	0-0	-	-	1.6	-	1.3	NE	Nil	8.80	22	Int. Green En.	10	-28.6	-0.4	96	0-0	-	-	-	-	1.0	NE	Nil	N/A	38	
Rhinomed Ltd	20	-3.1	-7.1	57	0-0	-	-	10.0	-	1.0	NE	Nil	8.64	28	Medibio Limited	1	-28.5	+0.3	96	0-0	-	0.2	0.2	-	3.2	NE	Nil	8.18	12	
Nexus Minerals	4	-2.8	-1.6	56	0-0	-	-	-	-	2.1	NE	Nil	8.63	5	Mali Lithium	7	-28.2	-0.9	95	1-0	-	-	-	-	1.7	NE	Nil	N/A	21	
Family Zone CS	18	-4.1	+2.2	59	1-0	-	0.0	-	-	1.3	NE	Nil	8.63	43	Australis O & G	7	-28.2	-5.2	95	5-0	-	0.2	-	-	1.4	496	Nil	1.25	66	
QuickFee Ltd	35	-4.0	+0.3	59	0-0	-	-	-	-	1.1	NE	Nil	8.36	44	Altura Mining	6	-28.0	+0.2	95	0-0	3	1.2	-	-	1.8	NE	Nil	3.07	141	
Platinum Asset	420	-5.5	+3.4	63	1-1	10	4.0	7.4	48	0.4	15	6.4	8.27	2,464	Red Emperor Res	1	-28.0	+3.5	95	0-0	-	-	-	-	3.7	NE	Nil	N/A	6	
Blackwall Prop.	139	-1.0	+2.4	50	22-0	-	-	1.0	6	0.3	16	2.5	8.21	206	Tigers Realm	2	-27.9	-9.6	95	2-0	-	-	-	-	3.1	3	Nil	0.58	30	
Medibio Limited	1	-28.5	+0.3	96	0-0	-	0.2	0.2	-	3.5	NE	Nil	8.18	12	Real Energy	4	-27.7	+6.3	95	4-0	-	-	-	-	2.1	NE	Nil	N/A	12	
Panoramic Res.	36	-0.8	+4.0	49	0-0	4	0.1	-	-	1.1	20	Nil	8.16	236	Hankstone Min.	1	-27.0	-4.9	95	1-0	-	-	-	-	4.6	NE	Nil	N/A	6	
Department 13	4	-2.1	+0.6	54	0-0	-	-	-	-	2.1	NE	Nil	7.99	22	Pilbara Mineral	28	-27.0	+1.0	95	1-1	8	7.8	-	-	0.8	NE	Nil	N/A	612	
US Masters Res.	84	-13.7	+4.5	81	0-0	-	-	0.5	-	0.4	NE	11.9	7.92	310	Lake Resources	3	-26.8	-3.9	95	0-1	-	-	-	-	2.8	NE	Nil	N/A	8	
Cirralto Ltd	1	-19.2	-2.2	88	0-4	-	-	-	-	5.0	NE	Nil	7.87	5	Tempo Australia	4	-26.5	+0.9	94	0-0	-	-	0.4	-	1.9	NE	Nil	0.26	14	
Carindale Prop	600	-6.3	-1.3	65	0-0	2	-	0.7	3	0.1	22	6.0	7.86	420	Alita Resources	8	-26.5	+3.9	94	0-1	-	0.3	-	-	1.5	NE	Nil	N/A	121	
MedAdvisor Ltd	33	-4.3	-6.2	60	0-0	-	-	-	-	0.9	NE	Nil	7.85	65	Xanadu Mines	3	-26.4	-1.8	94	1-0	-	-	-	-	2.1	NE	Nil	N/A	23	
CFOam Limited	9	-22.6	-3.8	92	3-0	-	-	3.1	-	1.3	NE	Nil	7.77	11	Slater & Gordon	89	-26.3	-1.8	94	0-0	-	0.0	-	-	0.5	2	Nil	0.39	123	
Scentre Group	386	-0.5	-0.1	47	2-0	11	0.3	1.0	11	0.2	9	5.7	7.77	20,280	New Century Res	28	-25.7	+4.3	94	3-0	-	7.8	-	-	0.7	NE	Nil	N/A	179	
Ausquest Ltd	1	-4.7	-1.5	61	0-0	-	-	-	-	3.7	NE	Nil	7.73	9	Creso Pharma	14	-25.5	-7.2	94	0-0	-	-	-	-	1.2	NE	Nil	N/A	17	
Suda Pharm.	7	-18.4	-5.2	87	2-0	-	-	-	-	1.5	NE	Nil	7.70	9	Kin Mining NL	4	-25.4	-5.4	94	5-0	-	-	-	-	1.8	NE	Nil	N/A	20	
Namoi Cotton	32	-2.0	+1.4	53	1-0	1	-	0.3	-	0.6	NE	Nil	7.54	45	Toro Energy Ltd	1	-25.3	-7.9	94	0-0	-	0.0	-	-	4.4	NE	Nil	N/A	17	
HUB24 Limited	1028	-2.6	-0.8	55	3-2	7	10.2	36.7	29	0.2	127	0.3	7.53	646	Benitec Bio.	4	-25.2	+1.7	94	0-0	-	-	0.4	16	2.2	3	Nil	0.64	13	
Baumart Hold.	23	-2.3	-0.5	54	0-0	-	-	-	-	0.8	NE	Nil	7.53	33	Aeon Metals	10	-24.7	+0.6	93	2-0	1	-	-	-	1.4	NE	Nil	N/A	23	
Merlin Diamonds	1	-0.2	+0.1	46	0-0	-	-	-	-	5.3	NE	Nil	7.17	8	Terramin Aust	3	-24.7	-3.8	93	0-0	-	-	1.1	-	2.0	NE	Nil	N/A	99	
Ariadne Aust	60	-1.7	+0.0	52	0-1	-	-	0.7	-	0.6	NE	2.8	7.10	118	A-Cap Energy	1	-24.7	-11.0	93	0-0	-	-	-	-	3.8	NE	Nil	N/A	8	
Abacus Property	376	-0.6	-1.0	48	4-0	4	0.1	1.2	14	0.2	9	4.8	7.06	2,426	Moreton Res Ltd	0	-24.6	-10.7	93	0-0	-	-	-	-	7.8	NE	Nil	N/A	11	
Candy Club Hold	7	-21.1	+3.5	90	1-0	-	-	-	-	1.9	NE	Nil	6.87	9	<b>INSIDER SELLING:</b> Most Insider Selling, Relative Strength < 0															
Appen Limited	2295	-4.9	+0.0	61	0-1	8	0.7	91.8	-	0.3	59	0.3	6.72	2,777	Enerco Refresh	7	-1.8	-1.6	53	0-9	-	-	1.7	-	1.6	NE	Nil	2.04	19	
Osprey Medical	4	-31.1	+0.8	97	1-0	2	-	-	-	2.3	NE	Nil	6.53	16	Nearmap Ltd	272	-5.4	+1.6	62	0-5	6	10.5	68.0	-	0.4	NE	Nil	N/A	1,227	
Xref Limited	38	-12.2	+1.8	78	0-0	1	-	6.3	-	0.8	NE	Nil	6.28	63	Cirralto Ltd	1	-19.2	-2.2	88	0-4	-	-	-	-	4.2	NE	Nil	7.87	5	
Reef Casino Trt	262	-6.5	+2.2	65	0-0	-	-	1.3	5	0.3	26	7.7	6.09	130	Nthn Star Res.	985	-3.6	-5.3	58	1-5	14	2.9	9.7	24	0.3	41	1.1	4.50	6,392	
Cann Global Ltd	1	-23.6	-8.8	93	0-0	-	0.3	-	-	3.4	NE	Nil	6.04	27	Bravura Sol.	503	-7.0	+1.4	67	0-3	-	0.3	-	-	0.3	40	1.8	4.87	1,225	
Stemcell United	1	-10.3	+0.1	74	0-0	-	-	-	-	3.8	NE	Nil	5.75	9	Diatreme Res.	1	-10.4	+0.4	75	0-2	-	-	-	-	3.9	NE	Nil	N/A	13	
Seafarms Group	7	-4.3	+0.8	60	0-0	-	-	2.3	-	1.5	NE	Nil	5.75	140	Medlab Clinical	35	-3.3	-6.4	57	0-2	-	-	11.5	-	0.8	NE	Nil	N/A	73	
Skyfii Limited	17	-1.3	+3.0	51	0-1	-	-	8.5	-	1.0	NE	Nil	5.71	53	Laneway Res.	1	-15.4	-3.0	84	0-2	-	-	-	-	5.1	NE	Nil	N/A	24	
Parazero Ltd	6	-14.4	-1.7	82	0-0	-	-	-	-	1.8	NE	Nil	5.61	5	AusNet Services	167	-0.2	-0.8	46	0-2	10	0.7	1.9	8	0.3	24	5.8	3.31	6,162	
Adv Share Reg.	69	-1.0	-0.4	50	0-0	-	-	5.3	27	0.5	20	2.9	5.61	29	Prime Media Grp	20	-8.8	+3.4	71	0-2	1	-	9.8	-	0.8	10	Nil	0.37	71	
Prospect Res.	11	-18.1	+2.4	87	0-0	-	-	-	-	1.4	NE	Nil	5.60	26	Nthn Minerals	6														

# “Neglect” Ratings of Australian Shares

“Neglected” Shares = 0-2 Brokers, “Moderately Followed” Shares = 3-9 Brokers, “Widely Followed” Shares = 10 or more Brokers.

Company	No. of Brokers Following Company	Market Capitalisation (\$ Mill.)	Company	No. of Brokers Following Company	Market Capitalisation (\$ Mill.)	Company	No. of Brokers Following Company	Market Capitalisation (\$ Mill.)	Company	No. of Brokers Following Company	Market Capitalisation (\$ Mill.)
1300 Smiles Ltd	3	150	C.S.R. Ltd	9	2,320	G8 Education	10	856	McPherson's Ltd	2	256
360 Capital Grp	2	259	CIMIC Group	5	10,651	GDI Property	1	841	Medical Dev Int	4	474
3P Learning	2	121	CML Group	3	99	GPT Group	10	11,765	Medibank Priv.	9	8,840
A.P. Eagers	8	2,441	CSG Ltd	1	137	GR Engineering	2	128	Megaport Ltd	8	1,318
A2B Australia	2	185	CSL Limited	12	127,537	GWA Group Ltd	6	887	Mesoblast Ltd	1	1,020
AFT Pharma.	1	312	Caltex Australia	9	8,617	Galaxy Res.	10	348	Metals X Ltd	4	95
AGL Energy Ltd	11	13,171	Cann Group	2	65	Galilee Energy	1	173	Metcash Ltd	11	2,519
AJ Lucas	1	98	Capital Health	4	181	Garda Div Prop	2	223	Metro Mining	2	201
ALS Limited	9	4,361	Cardno Ltd	1	218	Gascoyne Res.	1	39	Metro Per Glass	5	54
AMA Group Ltd	6	805	Cardinal Res.	4	153	Genex Power	3	59	Michael Hill	3	271
AMP Ltd	11	6,341	Carindale Prop	2	420	Genworth Mort.	2	1,497	Midway Limited	4	167
ANZ Bank	14	69,702	Carsales.com	12	4,105	Gold Road Res.	7	1,041	Millennium Min.	1	45
APA Group	10	12,660	Cash Converters	1	154	Goodman Group	10	26,402	Mineral Res.	4	2,916
APN Industria	3	563	Catapult Group	5	368	Graincorp	6	1,774	Mirvac Group	10	13,218
APN Conv Retail	3	279	Cedar Woods Prp	2	603	Growthpoint Pro	4	3,388	Moelis Aust.	1	731
ARB Corporation	7	1,505	Centuria Indust	5	1,105	HT&E Limited	5	458	Monash IVF Grp	3	248
ARQ Group	2	47	Centuria Metro.	5	1,436	HUB24 Limited	7	646	Monadelphous Gr	10	1,505
ASX Limited	11	15,455	Challenger Ltd	12	4,822	Hansen Tech.	3	701	Money3 Corp Ltd	4	413
AUB Group	4	849	Charter Social	5	1,023	Harvey Norman	9	5,320	Mosaic Brands	2	251
AV Jennings	1	244	Chart Hall Long	4	2,466	Healius Ltd	10	1,818	Motorcycle Hold	2	135
Abacus Property	4	2,426	Charter Hall GR	7	4,923	Helloworld Trav	5	559	Mt Gibson Iron	3	955
Accent Group	3	922	Chart H Retail	9	2,000	Hotel Property	4	475	Myer Holdings	7	411
Acrow Formwork	2	62	Citadel Group	3	209	Huon Aquacult.	4	409	Mystate Ltd	2	437
Adacel Tech.	1	46	City Chic Coll.	6	509	IDP Education	9	4,557	NRW Holdings	6	1,166
Adairs Limited	6	382	Class Limited	4	253	IMF Bentham Ltd	2	893	Namoi Cotton	1	45
Adelaide Bright	10	2,275	Clearview Wlth	2	288	IOOF Holdings	9	2,742	Nanosonics Ltd	6	2,006
Aeon Metals	1	23	Clean Teq Hold.	2	153	IPH Limited	6	1,733	Nat Veterinary	3	157
Ainsworth Game	6	229	Cleanaway Waste	8	4,205	IRESS Limited	5	2,301	Nat'l Aust Bank	14	73,260
Ale Property	3	1,085	Clinuvel Pharm.	2	1,302	Icar Asia Ltd	1	132	National Stor.	7	1,517
Alliance Aviat.	4	319	Clover Corp.	3	454	Iluka Resources	9	3,985	National Tyre	1	43
Altium Limited	7	4,715	CocaCola Amatil	12	8,109	Imdex Limited	6	619	Navigator Gl In	2	441
Altura Mining	3	141	Cochlear Ltd	13	13,318	Impedimed Ltd	3	82	Nearmap Ltd	6	1,227
Alumina Ltd	10	6,393	Codan Ltd	3	1,136	Incitec Pivot	10	4,994	Netwealth Group	9	1,892
Amaysim Aust.	2	122	Collection Hse	6	153	Independ. Group	13	3,503	Neuren Pharm.	1	224
Amcor Ltd	3	15,947	Collins Foods	4	1,124	Infigen Energy	5	587	New Hope Corp.	5	1,663
Ansell Ltd	10	3,820	Com'wealth Bank	14	139,831	Infomedia Ltd	5	669	New Energy Sol.	1	456
Apiam Animal H	1	46	Comet Ridge Ltd	4	135	Ingenia Com Grp	2	1,222	Newcrest Mining	14	22,689
Appen Limited	8	2,777	Computershare	11	9,257	Inghams Group	7	1,253	Nexdc Limited	13	2,233
Arena REIT	5	888	Cons Operations	1	141	Insurance Aust.	11	18,142	Nib Holdings	9	3,042
Aristocrat Leis	13	21,627	Cooper Energy	6	876	Int Research	2	559	Nick Scali Ltd	3	542
Asaleo Care Ltd	4	551	Corp Travel M.	10	2,154	Invocare Ltd	8	1,507	Nine Entertain.	7	3,070
Aspen Group Ltd	2	112	Costa Group	8	978	Iselect Limited	1	120	Nthn Star Res.	14	6,392
Aurelia Metals	2	358	Credit Corp	6	1,770	Ive Group	3	347	Nufarm Limited	11	1,906
Aurizon Hold.	11	10,936	Cromwell Prop.	3	3,174	JB Hi-Fi Ltd	12	4,375	OFX Group	3	330
AusNet Services	10	6,162	Crown Resorts	10	8,261	James Hardie	11	12,754	OZ Minerals Ltd	13	3,407
Austal Limited	5	1,376	Cyclopharm Ltd	2	75	Janus Henderson	10	1,378	Oceania Health.	4	622
Aust Finance Gr	3	515	Cynata Therap.	2	113	Japara Health.	4	286	Oil Search Ltd	14	10,765
Aust Agricult.	1	678	Dacian Gold Ltd	6	314	Johns Lyng Grp	4	478	Oncosil Medical	2	107
Aust Pharm. Ind	5	640	Danakali Ltd	3	165	Jumbo Interact.	3	1,188	Onevue Holdings	3	99
Austin Eng.	2	133	Data 3 Ltd	2	537	KGL Resources	1	60	OohlMedia	5	919
Aust Vintage	2	140	Decmil Group	2	217	Karoon Energy	3	592	Opthea Limited	3	738
Auswide Bank	2	243	Dexus	8	13,327	Kina Securities	1	248	Orica Ltd	10	8,768
Aventus Retail	5	1,612	Domain Holdings	9	2,041	Kogan.com Ltd	4	672	Origin Energy	11	15,094
Avita Medical	4	1,281	Domino's Pizza	11	4,377	Korvest Ltd	1	39	Orocobre Ltd	12	612
BHP Group Ltd	18	110,057	Downer EDI Ltd	6	4,888	LendLease Group	9	10,736	Orora Limited	9	3,910
BWP Trust	5	2,724	EML Payments	4	1,341	Lifestyle Com.	2	876	Osprey Medical	2	16
BWX Limited	7	554	Eclixp Group	4	539	Lindsay Aust	1	101	Over The Wire	3	238
Baby Bunting Gr	4	432	Elanor Investor	2	213	Link Admin.	8	2,962	P2P Transport	1	7
Bank of Q'land	14	3,268	Elders Limited	5	982	Lithium Power	1	63	PWR Holdings	3	487
Bapcor Limited	6	1,869	Ellex Medical	1	88	Livetiles Ltd	3	237	Pacific Current	2	309
Base Resources	2	258	Emeco Holdings	9	624	Livehive Ltd	1	67	Pacific Smiles	3	255
Beach Energy	14	5,675	Empired Ltd	1	54	Lovisa Holdings	7	1,271	Pact Group Hold	6	932
Beacon Lighting	3	271	Energy Resource	1	75	Lucapa Diamond	1	54	Palia Pharma	2	93
Bega Cheese Ltd	7	782	Enero Group Ltd	1	165	Lynas Corp Ltd	2	1,426	Panoramic Res.	4	236
Bellamy's Aust.	6	1,499	Equity Trustees	2	658	MMA Offshore	4	162	Pantoro Limited	2	165
Bendigo Bank	13	4,834	Estia Health	5	694	MFN Group	3	389	Paringa Res Ltd	1	29
Berkeley Energy	1	57	Event Hospital.	4	2,161	MSL Solutions	1	23	Peet Ltd	3	619
Big River Ind.	1	77	Evolution Min.	12	6,618	MacMahon Hold	2	517	Pendal Group	12	2,621
Bingo Indust.	8	1,850	Experience Co	2	128	Maca Limited	3	314	Peninsula En.	2	44
Bionomics Ltd	3	52	FAR Ltd	5	308	Macquarie C Tel	1	485	People Infra.	4	234
Blackmores Ltd	10	1,402	Fiducial Group	1	167	Macquarie Group	13	47,877	Perenti Global	7	1,352
Bluescope Steel	10	7,619	Fleetwood Corp	3	188	Magellan Fin Gp	11	9,541	Perpetual Ltd	11	1,834
Bluglass Ltd	1	48	Flexicorp Ltd	4	785	Marley Spoon AG	2	38	Perseus Mining	5	1,203
Boral Limited	8	5,404	Flight Centre	13	4,388	Mastermyne Grp	1	98	Pharmaxis Ltd	1	104
Brainchip Hold.	2	60	Fortescue Metal	13	30,513	Matrix Comp.	1	38	Piedmont Lith.	2	86
Brambles Ltd	11	19,258	Freedom Foods	5	1,406	Maxi TRANS	2	41	Pilbara Mineral	8	612
Breville Group	6	2,205	Freelancer Ltd	2	280	Mayne Pharma Gr	7	729	Pinnacle Invest	4	820
Brickworks Ltd	3	2,823	Frontier Digit.	2	194	McMillan Shake.	5	1,110	Pioneer Credit	2	156
Buru Energy Ltd	1	76	G.U.D. Holdings	7	960						

Company	No. of Brokers Following Company	Market Capitalisation (\$ Mill.)	Company	No. of Brokers Following Company	Market Capitalisation (\$ Mill.)	Company	No. of Brokers Following Company	Market Capitalisation (\$ Mill.)	Company	No. of Brokers Following Company	Market Capitalisation (\$ Mill.)
Platinum Asset	10	2,464	Rio Tinto Ltd	14	35,559	Soul Pattinson	1	5,214	Transurban Grp	13	41,242
Polynovo Ltd	4	1,173	Rural Funds Grp	3	606	South32 Limited	15	12,554	Treasury Wine	13	12,376
Praemium Ltd	7	206	SG Fleet Group	2	703	Spark Infrastru	10	3,483	Vicinity Centre	10	9,891
Premier Invest	10	3,089	Salt Lake Pot.	2	187	Speedcast Int'l	5	170	Village Road.	5	628
Prime Media Grp	1	71	Sandfire Res.	13	972	St Barbara Ltd	7	1,762	Virgin Money UK	20	2,999
Pro Medicus Ltd	7	2,420	Santos Ltd	13	16,852	Starpharma Hold	3	472	Virgin Aust	4	1,309
Q.B.E. Insur.	11	16,086	Saracen Mineral	7	3,255	Star Entertain.	11	4,174	Virtus Health	4	337
QMS Media	2	407	Scentre Group	11	20,280	Steadfast Group	5	2,927	Vista Group	4	601
Qantas Airways	10	10,644	Sealink Travel	6	735	Sth Cross Elect	1	128	Vita Group Ltd	2	177
Qantm LP.	1	169	Seek Ltd	6	7,794	Sth Cross Media	4	673	Viva Energy Grp	10	4,142
Qube Holdings	9	5,203	Select harvest	5	795	Stockland	10	11,874	Viva EnergyREIT	8	2,165
REA Group Ltd	11	13,718	Senex Energy	9	473	Suncorp Group	11	16,394	Vocus Group Ltd	11	1,849
Ramelius Res.	4	682	Servcorp Ltd	2	421	Sunland Group	1	227	Volpara Health	3	393
Ramsay Health	12	14,447	Service Stream	4	962	Super Retail Gr	10	1,938	Wagners Hold.	4	395
Reckon Limited	2	89	Seven West Med.	7	558	Superloop Ltd	6	344	Westfarmers Ltd	13	46,385
Red River Res.	3	72	Seven Group	6	6,478	Supply Network	2	182	Western Areas	14	763
Redbubble Ltd	3	484	Shaver Shop Grp	2	82	Sydney Airport	13	20,779	West African R.	2	361
Redflex Holding	1	73	Sheffield Res.	2	93	Syrah Resources	5	178	Westgold Res.	3	807
Reece Limited	4	5,917	Shine Corporate	2	156	TPG Telecom Ltd	8	6,402	Westpac Banking	14	86,618
Regis Resources	13	2,343	Shopping Centre	9	2,488	Tabcorp Holding	11	9,499	Whitehaven Coal	16	2,699
Regis Health.	6	839	Sigma Health.	5	710	Tassal Group	4	881	Wisetech Global	7	8,184
Reliance W/wide	10	3,113	Silver Lake Res	5	1,045	Technology One	6	2,862	Woodside Petrol	14	31,774
ResAoo Health	1	191	Sims Metal Mgmt	10	2,119	Telstra	13	44,005	Woolworths Grp	11	48,380
Resolute Mining	9	1,093	Smart Parking	2	83	Temple Webster	3	239	Worsley Ltd	10	7,628
Rhipe Limited	5	298	Smartgroup Corp	5	1,190	The Reject Shop	2	58	XRF Scientific	1	31
Ridley Corp.	3	344	Somnord Ltd	2	179	Think Childcare	4	68	Xref Limited	1	63
			Sonic Health	11	13,850				Zip Co Ltd	5	1,339

## Short Interest in Australian Shares

Company	Short Interest Ratio	Market Capitalisation (\$ Mill.)	Company	Short Interest Ratio	Market Capitalisation (\$ Mill.)	Company	Short Interest Ratio	Market Capitalisation (\$ Mill.)	Company	Short Interest Ratio	Market Capitalisation (\$ Mill.)
360 Capital Grp	0.0%	259	Aristocrat Leis	3.1%	21,627	Blackham Res.	0.0%	61	Cleanaway Waste	0.9%	4,205
5G Networks	0.0%	46	Artimis Res.	0.0%	25	Blue Sky Alt In	1.1%	14	Clinuvel Pharm.	6.9%	1,302
A.P. Eagers	0.2%	2,441	Asaleo Care Ltd	0.5%	551	Bluescope Steel	1.2%	7,619	CocaCola Amatil	2.9%	8,109
A2B Australia	0.5%	185	Atlas Arteria	3.4%	5,235	Bod Australia	0.2%	24	Cochlear Ltd	0.6%	13,318
AGL Energy Ltd	1.5%	13,171	Atomos Limited	0.1%	260	Boral Limited	0.9%	5,404	Codan Ltd	0.1%	1,136
ALS Limited	0.4%	4,361	Atrum Coal Ltd	0.0%	157	Boss Resources	0.0%	86	Coles Group	0.9%	20,356
AMA Group Ltd	1.5%	805	Audinate Group	0.3%	593	Botanix Pharma.	1.7%	90	Collection Hse	8.2%	153
AMP Ltd	5.7%	6,341	Audio Pixels	0.1%	456	Brainchip Hold.	0.0%	60	Collins Foods	0.2%	1,124
ANZ Bank	0.6%	69,702	Aurelia Metals	0.5%	358	Brambles Ltd	0.2%	19,258	Com'wealth Bank	0.6%	139,831
APA Group	0.3%	12,660	Aurizon Hold.	0.9%	10,936	Bravura Sol.	0.3%	1,225	Comet Ridge Ltd	0.2%	135
APN Industria	2.8%	563	AusNet Services	0.7%	6,162	Breaker Res NL	0.0%	69	Computershare	1.6%	9,257
ARB Corporation	3.1%	1,505	Ausmex Mining	0.0%	44	Breville Group	0.8%	2,205	Cooper Energy	5.5%	876
ARQ Group	1.0%	47	Austal Limited	0.5%	1,376	Brickworks Ltd	0.2%	2,823	Corp Travel M.	6.3%	2,154
ASX Limited	0.5%	15,455	Aust Finance Gr	0.0%	515	Buddy Tech.	0.3%	60	Costa Group	9.8%	978
AUB Group	0.5%	849	Aust Agricul.	2.4%	678	Buru Energy Ltd	0.2%	76	Credit Corp	4.2%	1,770
AVZ Minerals	0.3%	101	Aust Pharm. Ind	2.5%	640	Byron Energy	0.1%	208	Cromwell Prop.	5.7%	3,174
Abacus Property	0.1%	2,426	Aust Dairy Nut.	0.2%	36	C.S.R. Ltd	4.5%	2,320	Croplogict Ltd	0.0%	13
Accent Group	0.1%	922	Aust U. Office	0.4%	467	CIMIC Group	0.7%	10,651	Crown Resorts	2.3%	8,261
Acrow Formwork	0.0%	62	Aust Mines Ltd	0.0%	55	CSL Limited	0.3%	127,537	Crown Media	0.1%	6
Acruz Ltd	0.4%	32	Australis O & G	0.2%	66	Calima Energy	0.0%	15	CuDeco Ltd	0.0%	93
Actinogen Med.	0.0%	50	Aust Ethical In	0.0%	414	Calix Limited	0.0%	97	Dacian Gold Ltd	6.7%	314
Adairs Limited	4.2%	382	Auswide Bank	0.0%	243	Caltex Austria	1.0%	8,617	Danakali Ltd	0.0%	165
Adelaide Bright	2.5%	2,275	Autosports Grp	0.0%	306	Cann Group	1.0%	65	Data 3 Ltd	0.1%	537
Advance NanoTek	0.1%	373	Aventus Retail	0.4%	1,612	Cann Global Ltd	0.3%	27	De Grey Mining	0.0%	38
Afterpay Ltd	1.0%	7,557	Avita Medical	1.5%	1,281	Capricorn Metal	0.0%	2,062	Dexus	0.7%	13,327
Ainsworth Game	0.3%	229	BHP Group Ltd	3.3%	110,057	Cardno Ltd	0.0%	218	Dicker Data Ltd	0.3%	971
Alacer Gold	0.1%	629	BUBS Australia	3.9%	514	Cardinal Res.	0.0%	153	Digital CC Ltd	0.0%	20
Ale Property	0.1%	1,085	BWP Trust	1.1%	2,724	Carnarvon Pet.	3.4%	501	Domain Holdings	2.9%	2,041
Alita Resources	0.3%	121	BWX Limited	6.8%	554	Carsales.com	1.4%	4,105	Domino's Pizza	10.1%	4,377
Alkane Explor.	1.1%	288	Baby Bunting Gr	0.1%	432	Cash Converters	0.0%	154	Donaco Inter'l	0.1%	72
Alliance Aviat.	0.6%	319	Bank of Q'land	6.0%	3,268	Cassini Res Ltd	0.0%	34	Downer EDI Ltd	1.3%	4,888
Altech Chemical	0.0%	75	Bapcor Limited	0.8%	1,869	Catapult Group	0.1%	368	Droneshield Ltd	0.7%	68
Althea Group	0.3%	57	Bardoc Gold	0.0%	108	Cedar Woods Prp	0.2%	603	Dropsuite Ltd	0.1%	25
Altium Limited	0.4%	4,715	Base Resources	0.1%	258	Celsius Res.	0.3%	10	Dubber Corp.	0.4%	257
Altura Mining	1.2%	141	Battery Mineral	0.0%	8	Centuria Cap'l	0.1%	921	EML Payments	0.3%	1,341
Alumina Ltd	4.1%	6,393	Beach Energy	0.3%	5,675	Centuria Indust	0.2%	1,105	Eclixp Group	3.0%	539
Amaysim Aust.	0.3%	122	Beacon Lighting	0.5%	271	Centuria Metro.	0.5%	1,436	Ecofibre Ltd	0.6%	358
Amcor Ltd	1.0%	15,947	Bega Cheese Ltd	10.4%	782	Challenger Ltd	7.6%	4,822	Eden Innovation	0.0%	78
Animoca Brands	0.0%	168	Bellamy's Aust.	0.6%	1,499	Champion Iron	0.3%	1,085	Elanor Ret Prop	0.2%	156
Ansell Ltd	2.1%	3,820	Bellevue Gold	3.1%	285	Charter Social	0.4%	1,023	Elders Limited	3.3%	982
Antipa Minerals	0.0%	23	Bendigo Bank	4.9%	4,834	Chart Hall Long	0.5%	2,466	Electro Optic	0.3%	759
Apollo Tourism	0.1%	73	Berkeley Energy	0.1%	57	Charter Hall GR	0.1%	4,923	Elixinol Global	2.1%	52
Appen Limited	0.7%	2,777	Bid Energy Ltd	0.2%	84	Chart H Retail	2.1%	2,000	Elmo Software	0.0%	483
Arafura Res.	0.3%	94	Bigtinan Hold.	0.1%	217	Cirrus Networks	0.1%	33	Emeco Holdings	3.2%	624
Ardent Leisure	3.7%	566	Bingo Indust.	7.4%	1,850	Citadel Group	0.2%	209	Emerald Res.	0.1%	122
Arena REIT	0.1%	888	Biotron Limited	0.1%	36	City Chic Coll.	0.1%	509	Emerge Gaming	0.1%	7
Argo Investment	0.0%	6,115	Blackstone Min.	0.0%	25	Class Limited	0.7%	253	Empire Energy	0.1%	114
Argosy Minerals	0.2%	76	Blackmores Ltd	10.2%	1,402	Clean Teq Hold.	5.5%	153	Empire Resource	0.5%	75



Company	Short Interest Ratio	Market Capitalisation (\$ Mill.)	Company	Short Interest Ratio	Market Capitalisation (\$ Mill.)	Company	Short Interest Ratio	Market Capitalisation (\$ Mill.)	Company	Short Interest Ratio	Market Capitalisation (\$ Mill.)
Energy World	1.0%	153	LendLease Group	1.6%	10,736	Orocobre Ltd	13.9%	612	Silex Systems	0.0%	57
Envirosuite Ltd	0.2%	89	Lepidico Ltd	0.0%	70	Orora Limited	0.5%	3,910	Silver Heritage	0.0%	13
Estia Health	3.4%	694	Lifestyle Com.	1.2%	876	Othrocell Ltd	0.2%	78	Silver Lake Res	5.7%	1,045
European Cobalt	0.0%	14	Life 360 Inc.	0.1%	418	Ottoman Energy	0.3%	86	Silver Mines	0.0%	81
Euro. Lithium	0.0%	49	Linus Tech.	0.0%	35	PPK Group Ltd	0.0%	463	Sims Metal Mgmt	6.1%	2,119
Event Hospital.	0.2%	2,161	Link Admin.	1.2%	2,962	PWR Holdings	0.0%	487	Slater & Gordn	0.0%	123
Evolution Min.	1.2%	6,618	Liontown Res.	0.1%	135	Pact Group Hold	4.7%	932	Smartgroup Corp	0.0%	1,190
Experience Co	0.1%	128	Liq Natural Gas	5.2%	118	PainChek Ltd	0.0%	207	Sonic Health	0.8%	13,850
FAR Ltd	0.7%	308	Lithium Power	0.5%	63	Paladin Energy	0.4%	172	Soul Pattinson	2.5%	5,214
FBR Limited	0.4%	69	Lithium Aust.	0.0%	19	Panoramic Res.	0.1%	236	South32 Limited	1.6%	12,554
Family Zone CS	0.0%	43	Livetiles Ltd	0.9%	237	Pantoro Limited	0.2%	165	Spark Infrastru	4.6%	3,483
Fatfish B'chain	0.1%	7	Livehive Ltd	0.0%	67	Paradigm Bio.	0.2%	693	Speedcast Int'l	13.3%	170
Fineos Corp Ltd	0.0%	701	Longtable Group	0.1%	33	Paragon Care	0.4%	150	Splitit Payment	0.5%	157
First Graphene	0.0%	66	Lovisa Holdings	3.6%	1,271	Paringa Res Ltd	1.9%	29	St Barbara Ltd	1.6%	1,762
Flexicorp Ltd	1.8%	785	Lynas Corp Ltd	2.6%	1,426	Peak Resources	0.0%	54	Stanmore Coal	0.0%	256
Flight Centre	4.8%	4,388	MMA Offshore	3.1%	162	Peel Mining Ltd	0.0%	62	Starpharma Hold	3.6%	472
Fortescue Metal	4.6%	30,513	MNF Group	0.0%	389	Pendal Group	0.9%	2,621	Star Entertain.	0.5%	4,174
Freedom Foods	2.8%	1,406	MSL Solutions	0.0%	23	People Infra.	0.0%	234	StarGroup Ltd	0.0%	2
G.U.D. Holdings	4.7%	960	MacMahon Hold	0.1%	517	Perenti Global	0.2%	1,352	Stavely Mineral	0.1%	213
G8 Education	4.3%	856	Maca Limited	0.4%	314	Perpetual Ltd	8.1%	1,834	Steadfast Group	0.1%	2,927
GDI Property	0.0%	841	Macquarie Group	0.3%	47,877	Perseus Mining	1.1%	1,203	Sth Cross Media	0.9%	673
GPT Group	0.5%	11,765	Mader Group	0.0%	214	Phoslock Env.	1.7%	437	Stockland	0.7%	11,874
GWA Group Ltd	14.7%	887	Magellan Fin Gp	2.0%	9,541	Piedmont Lith.	0.0%	86	Straker Trans.	0.1%	81
GWR Group Ltd	0.0%	23	Magnis Energy T	0.0%	62	Pilbara Mineral	7.8%	612	Strike Energy	0.1%	290
Galaxy Res.	17.0%	348	Mayne Pharma Gr	5.4%	729	Pinnacle Invest	5.4%	820	Suncorp Group	0.3%	16,394
Galan Lithium	0.1%	21	McMillan Shake.	0.9%	1,110	Pioneer Credit	2.8%	156	Sundance Res.	0.0%	46
Galilee Energy	0.1%	173	McPherson's Ltd	0.0%	256	Platinum Asset	4.0%	2,464	Sunstone Metals	0.0%	24
Gascoyne Res.	0.3%	39	Medibank Priv.	1.0%	8,840	Platina Res.	0.1%	6	Super Retail Gr	8.2%	1,938
Genworth Mort.	5.3%	1,497	Medbio Limited	0.2%	12	Pointsbet Hold.	0.1%	644	Superloop Ltd	3.3%	344
Getswift Ltd	0.4%	85	Megaport Ltd	1.2%	1,318	Polynovo Ltd	2.6%	1,173	Sydney Airport	0.6%	20,779
Gold Road Res.	4.6%	1,041	Megnetite Mines	0.0%	4	Praemium Ltd	0.3%	206	Syrah Resources	16.0%	178
Goodman Group	0.3%	26,402	Mesoblast Ltd	4.9%	1,020	Premier Invest	0.1%	3,089	TPG Telecom Ltd	1.4%	6,402
Graincorp	5.2%	1,774	Metals X Ltd	5.1%	95	Pro Medicus Ltd	0.6%	2,420	Tabcorp Holding	1.7%	9,499
Grange Resource	2.0%	272	Metcash Ltd	10.1%	2,519	Probiotec Ltd	0.0%	138	Tassal Group	0.6%	881
Growthpoint Pro	0.1%	3,388	Meteoritic Res.	0.0%	57	Propel Funeral	0.0%	313	TechnologyOne	3.6%	2,862
HT&E Limited	4.6%	458	Michael Hill	0.2%	271	Prospa Group	0.0%	300	Telix Pharma.	0.0%	426
HUB24 Limited	10.2%	646	Millennium Min.	0.1%	45	Q.B.E. Insur.	0.5%	16,086	Telstra	0.2%	44,005
Hansen Tech.	0.6%	701	Mincor Resource	0.0%	209	Qantas Airways	1.6%	10,644	Terracom Ltd	0.0%	161
Harvey Norman	8.1%	5,320	Mineral Res.	10.9%	2,916	Qube Holdings	1.0%	5,203	The Reject Shop	0.0%	58
Hastings Rare M	0.1%	150	Mirvac Group	0.4%	13,218	REA Group Ltd	1.9%	13,718	Thorn Group Ltd	0.1%	74
Healius Ltd	2.0%	1,818	Mitchell Serv.	0.3%	103	RPM Global Hold.	0.0%	190	Tiger Resources	0.0%	110
Highfield Res.	0.0%	211	Monash IVF Grp	0.0%	248	Ramelius Res.	0.7%	682	Titomic Ltd	0.0%	127
Horizon Oil Ltd	0.0%	169	Monadelpous Gr	3.8%	1,505	Ramsay Health	2.0%	14,447	Toro Energy Ltd	0.0%	17
Hotel Property	0.2%	475	Money3 Corp Ltd	0.3%	413	Reckon Limited	0.0%	89	Transurban Grp	0.4%	41,242
Huon Aquacult.	0.0%	409	Mortgage Choice	0.8%	161	Red 5 Ltd	0.0%	317	Treasury Wine	3.6%	12,376
I-SignThis Ltd	1.4%	1,169	Mosaic Brands	0.0%	251	Red River Res.	0.2%	72	Tribune Res.	0.0%	346
IDP Education	0.6%	4,557	Mt Gibson Iron	1.4%	955	Redbubble Ltd	0.0%	484	Tubi Limited	0.1%	29
IMF Bentham Ltd	2.0%	893	Myanmar Metals	0.1%	65	Redcope Hotel	0.1%	613	Tungsten Mining	0.0%	135
IOOF Holdings	6.9%	2,742	Myer Holdings	7.0%	411	Redflex Holding	0.2%	73	Unibail-Rod.	0.2%	3,657
IPH Limited	0.2%	1,733	Mystate Ltd	0.3%	437	Reece Limited	0.1%	5,917	Uniti Group	0.0%	379
IRESS Limited	0.5%	2,301	NRW Holdings	1.5%	1,166	Regis Resources	4.4%	2,343	Vault Intell.	0.3%	49
Icar Asia Ltd	0.0%	132	Nanosonics Ltd	3.0%	2,006	Regis Health.	0.9%	839	Vicinity Centre	0.4%	9,891
Iluka Resources	2.9%	3,985	Nat'l Aust Bank	0.8%	73,260	Reliance W/wide	6.6%	3,113	Victory Offices	0.1%	86
Imdex Limited	0.1%	619	National Stor.	2.5%	1,517	ResAoo Health	0.1%	191	Village Road.	0.1%	628
Impedimed Ltd	1.4%	82	Navigator GI In	0.2%	441	Resolute Mining	7.6%	1,093	Virgin Money UK	1.0%	2,999
Imugene Ltd	0.5%	134	Nearmap Ltd	10.5%	1,227	Retail Food Grp	0.0%	181	Virgin Aust	0.0%	1,309
Incitec Pivot	1.4%	4,994	Neometals Ltd	0.0%	103	Rhipe Limited	0.1%	298	Virtus Health	0.5%	337
Independ. Group	0.7%	3,503	Netwealth Group	5.8%	1,892	Ridley Corp.	0.1%	344	Vita Group Ltd	0.2%	177
Infigen Energy	1.8%	587	New Century Res	7.8%	179	Rightcrowd Ltd	0.2%	42	Viva Energy Grp	1.1%	4,142
Infomedia Ltd	0.1%	669	New Hope Corp.	2.1%	1,663	Rio Tinto Ltd	4.2%	35,559	Viva Energy REIT	0.3%	2,165
Ingenia Com Grp	0.1%	1,222	New Energy Sol.	0.1%	456	Rural Funds Grp	5.3%	606	Viva Leisure	0.0%	153
Inghams Group	14.1%	1,253	Newcrest Mining	0.8%	22,689	S/Tracks ASX200	0.1%	3,797	Vocus Group Ltd	0.9%	1,849
Insurance Aust.	0.4%	18,142	News Corp.	2.7%	941	S2 Resources	0.2%	29	Volpara Health	0.7%	393
Int Research	1.0%	559	Nextdc Limited	11.5%	2,233	SG Fleet Group	0.5%	703	WPP AUNZ Ltd	0.2%	430
Intega Group	0.0%	222	NextScience	0.0%	217	SIV Capital	1.0%	26	Wagners Hold.	1.5%	395
Investec A Prop	0.2%	899	Nib Holdings	0.6%	3,042	SRG Global	0.1%	165	Wameja Ltd	0.0%	115
Invocare Ltd	8.8%	1,507	Nick Scali Ltd	1.4%	542	Salt Lake Pot.	0.3%	187	Wattle Health	0.7%	103
Ioneer Limited	2.9%	327	Nickel Mines	0.3%	769	Sandfire Res.	4.5%	972	Webjet NL	10.9%	1,620
Iselect Limited	0.7%	120	Nine Entertain.	5.3%	3,070	Santos Ltd	0.5%	16,852	Webster Ltd	0.0%	717
Ive Group	0.1%	347	Nova Minerals	0.8%	32	Saracen Mineral	2.6%	3,255	Wellard Limited	0.0%	24
JB Hi-Fi Ltd	11.5%	4,375	Nthn Star Res.	2.9%	6,392	Scentre Group	0.3%	20,280	Wesfarmers Ltd	0.6%	46,385
James Hardie	1.8%	12,754	Nufarm Limited	7.7%	1,906	Sealink Travel	0.0%	735	Western Areas	2.5%	763
Janus Henderson	4.1%	1,378	Nuheara Limited	0.0%	37	Seek Ltd	4.0%	7,794	West African R.	2.4%	361
Japara Health.	1.9%	286	OFX Group	0.1%	330	Select harvest	0.0%	795	Westgold Res.	0.5%	807
Jervois Mining	0.0%	122	OM Holdings	0.0%	373	Senetas Corp	0.0%	79	Westpac Banking	0.6%	86,618
Johns Lyng Grp	0.2%	478	OZ Minerals Ltd	1.7%	3,407	Senex Energy	4.6%	473	Whitehaven Coal	1.7%	2,699
Jumbo Interact.	4.5%	1,188	Oklo Search Ltd	1.5%	10,765	Servcorp Ltd	0.1%	421	White Energy Co	0.0%	37
Jupiter Mines	1.7%	490	Oklo Resources	0.1%	52	Service Stream	0.4%	962	Wisetech Global	3.4%	8,184
Karoon Energy	0.5%	592	Onevue Holdings	0.1%	99	Seven West Med.	2.7%	558	Woodside Petrol	0.9%	31,774
Kina Securities	0.2%	248	Ooh!Media	7.6%	919	Seven Group	1.8%	6,478	Woolworths Grp	0.8%	48,380
King River Res.	0.0%	29	Opthea Limited	0.1%	738	Sezzle Inc	0.1%	183	Worsley Ltd	5.4%	7,628
Kip McGrath EC	0.1%	54	Opticomm Ltd	0.0%	457	Sheffield Res.	0.0%	93	Zenith Energy	0.3%	96
Kogan.com Ltd	4.7%	672	Orica Ltd	0.7%	8,768	Shopping Centre	0.8%	2,488	Zimplats Hold.	0.0%	1,227
Leigh Creek En.	0.0%	84	Origin Energy	0.9%	15,094	Sigma Health.	0.6%	710	Zip Co Ltd	3.6%	1,339

# Performance Forecasts

"Performance Forecasts" are computer generated predictions of the relative future price performance of a company's shares over the next three to six months. Performance Forecasts are calculated for every listed NZ share (except Investment Trusts) on a rating scale using the letters "A" (Highest potential for capital appreciation over the next 3-6 months), "B" (Above Average), "C" (Average), "D" (Below Average) and "E" (Lowest). These predictions are NOT buy or sell recommendations, but can be useful to help time planned purchases or sales, or to identify shares worthy of further study and analysis.

Performance Forecast					Price/Sales Ratio					P/E Ratio					Gross Yield								
Company	Rating	Price	Ratio	P/E	Yield	Company	Rating	Price	Ratio	P/E	Yield	Company	Rating	Price	Ratio	P/E	Yield	Company	Rating	Price	Ratio	P/E	Yield
A2 Milk Company	B	1517	N/A	NE	Nil	Gentech Group	C	362	3.41	26	5.2	Promisia Integ.	E	0.2	5.23	NE	Nil	Oil Search Ltd	A	706	4.94	22	2.1
AFC Group Hold.	A	0.1	N/A	NE	Nil	Geo Ltd	C	11	1.73	NE	Nil	Property F Ind.	D	238	N/A	11	3.2	Orica Ltd	A	2304	1.63	NE	2.2
AFT Pharma.	A	345	1.10	NE	Nil	Good Spirits	C	13	0.21	10	Nil	Pushpay Hold.	D	395	7.52	39	Nil	Origin Energy	A	857	1.07	13	2.8
AMP Limited	B	193	0.86	NE	7.6	Goodman Prop.	B	219	N/A	9	3.0	QEX Logistics	E	78	0.69	21	Nil	Orora Limited	A	324	0.82	24	4.0
AWF Madison Grp	A	195	0.24	32	11.5	Green Cross H.	C	122	0.31	11	8.0	Rakon Ltd	E	27	0.54	18	Nil	Pendal Group	A	812	4.50	14	6.4
Abano Health.	A	531	0.50	18	6.3	Hallenstein G.	A	638	1.36	14	9.6	Restaurant Brds	E	1215	1.91	42	Nil	Perenti Global	A	197	0.82	7	3.6
Air New Zealand	A	281	0.55	12	10.9	Heartland Group	C	171	5.98	17	6.1	Rubicon Limited	E	19	1.89	NE	Nil	Perpetual Ltd	A	3913	3.56	16	0.1
Akd Int Airport	A	899	N/A	17	3.4	IkeGPS Limited	B	84	9.50	NE	Nil	Ryman Health.	C	1537	N/A	24	1.5	Perseus Mining	A	103	2.36	NE	Nil
Allied Farmers	E	67	5.63	95	0.4	Infratil NZ	B	500	N/A	15	4.8	Sanford Limited	D	770	1.40	17	4.1	Platinum Asset	A	420	8.27	15	6.4
Aorere Res.	N/R	0.1	5.02	NE	Nil	Investore Prop.	C	184	N/A	10	4.1	Scales Corp Ltd	D	497	1.73	24	5.2	Polynovo Ltd	B	178	N/A	NE	Nil
Argosy Property	C	139	N/A	8	4.5	Just Life Group	B	45	2.35	19	6.2	Scott Tech. Ltd	E	231	0.96	16	6.0	Premier Invest	A	1949	2.59	37	3.2
Arvida Group	B	160	4.34	11	4.0	Kathmandu Ltd	B	306	1.39	14	6.8	SeaDragon Ltd	D	437	1.73	24	5.2	Pro Medicus Ltd	A	2327	N/A	NE	0.3
Asset Plus	C	64	7.76	27	5.6	Kingfish Ltd	B	156	N/A	7	7.5	SeaDragon Ltd	D	437	1.73	24	5.2	Q.B.E. Insur.	B	1228	0.84	29	4.1
Augusta Capital	C	144	5.23	18	4.2	Kiwi Property	C	155	7.73	16	4.5	Seeka Kiwifruit	D	467	0.67	18	3.6	Qantas Airways	B	714	0.62	13	3.5
Barramundi Ltd	C	70	N/A	16	7.7	Mainfreight Grp	C	4110	1.40	30	1.9	Serko Limited	D	515	N/A	NE	Nil	Qube Holdings	B	320	3.08	26	2.1
Blackwall Gbl.	C	0.8	2.81	NE	Nil	Marlborough WE	C	20	N/A	NE	Nil	Skellerup Hold.	D	235	1.86	16	7.7	REA Group Ltd	B	10415	N/A	NE	1.1
Blis Technology	C	4.4	8.62	NE	Nil	Marlin Global	C	100	N/A	18	7.9	Sky City Ltd	D	392	3.29	18	7.1	Ramsay Health	B	7149	1.25	26	2.1
Briscoe Group	B	378	1.33	13	7.3	Marsden Mar.	A	675	N/A	30	3.2	Sky Network TV	D	83	0.41	3	12.6	Reece Limited	B	1055	1.08	29	1.9
Burger Fuel	D	48	1.23	21	Nil	Mercer Group	C	22	0.49	NE	Nil	Smartpay NZ Ltd	C	56	4.56	NE	Nil	Regis Resources	B	461	3.58	14	3.5
CBL Corporation	C	317	1.91	25	2.2	Mercury NZ	B	492	3.82	29	4.3	Smiths City	C	28	0.07	NE	Nil	Reliance W/wide	B	394	2.82	23	2.3
CDL Investments	C	85	2.78	7	5.7	Meridian Energy	B	500	3.67	28	4.6	Snakk Media Ltd	E	5.5	0.09	NE	Nil	Rio Tinto Ltd	A	9579	0.62	2	4.5
CSM Group Ltd	A	2.0	N/A	NE	Nil	MetLifeCare	B	590	N/A	32	1.9	Sol. Dynamics	E	159	1.38	22	4.6	S/Tracks ASX200	B	6246	N/A	10	1.5
Cannasouth Ltd	B	61	N/A	NE	Nil	Metro Per Glass	C	29	0.20	10	18.5	South Port NZ	C	690	4.12	18	5.2	Santos Ltd	B	809	3.24	19	1.7
Cavalier Corp	C	30	0.15	11	Nil	Mid-Cap Index	C	582	N/A	8	2.3	Spark NZ Ltd	D	443	2.30	20	7.8	Saracen Mineral	C	304	4.49	27	Nil
Chatham Rock	C	19	N/A	NE	Nil	Millennium & C.	C	250	1.81	6	1.9	Steel & Tube	E	81	0.27	13	8.6	Scentre Group	B	386	7.77	9	5.7
Chorus Ltd	B	605	2.74	50	5.3	Moa Group Ltd	D	29	1.24	NE	Nil	Sthn Charter F.	D	0.1	3.24	NE	Nil	Seek Ltd	A	2214	5.00	43	2.1
Col Motor Co	A	880	0.32	13	7.1	NZ Exchange Ltd	C	123	4.95	29	6.9	Stride Property	C	226	N/A	9	5.7	Seven Group	B	1909	1.58	30	2.2
Comvita	C	280	0.84	NE	Nil	NZ King Salmon	C	220	1.77	27	3.2	Summerset Group	C	770	N/A	8	1.7	Shopping Centre	B	267	9.15	23	5.5
Contact Energy	B	723	2.40	39	6.1	NZ Oil & Gas	N/R	61	2.36	NE	Nil	Synlait Milk	E	928	2.48	39	Nil	Sims Metal Mgmt	B	1044	0.32	14	4.0
Cooks Global Fd	B	6.8	5.61	NE	Nil	NZ Refining Co	C	194	1.69	20	5.4	T&G Global	C	276	0.28	94	6.0	Smartgroup Corp	B	904	4.79	20	4.6
Delegat Group	B	1140	4.15	24	2.1	NZ Windfarms	C	15	3.45	67	20.5	TIL Logistics	D	115	0.28	25	6.0	Sonic Health	B	2916	2.25	25	2.9
EROAD Ltd	A	314	3.49	NE	Nil	NZF Group	D	1.0	N/A	NE	Nil	Tiit Renewables	D	337	8.19	NE	Nil	Soul Pattinson	B	2178	3.23	21	2.7
Ebos Group Ltd	A	2360	0.55	28	4.3	NZME Limited	C	40	0.20	7	6.9	Tourism Hold.	D	313	0.98	14	12.0	South32 Limited	B	254	1.23	23	4.4
Enprise Group	B	93	1.32	NE	1.1	NZSX 50 Port.	C	306	N/A	14	3.5	Tower Limited	E	74	0.77	NE	Nil	Spark Infrastru	B	205	N/A	13	7.8
Evolve Educat.	B	15	N/A	NE	Nil	NZSX 10 Fund	C	194	N/A	11	3.5	Training Sol.	E	9.2	N/A	NE	Nil	St Barbara Ltd	A	252	2.70	12	3.2
F & P Health.	A	2122	N/A	64	1.5	NZX Aust MidCap	B	713	N/A	7	2.8	TruScreen Ltd	E	9.1	9.62	NE	Nil	Star Entertain.	A	455	1.93	21	4.5
Finsoft Sol'ns	C	99	0.70	NE	Nil	New Talisman	N/R	0.8	N/A	NE	Nil	Trust Power Ltd	D	725	2.41	24	6.3	Steadfast Group	B	344	4.72	22	2.5
Fletcher Build.	B	513	0.53	18	6.2	Oceania Health.	C	109	3.51	15	4.3	Turners Auto.	C	275	0.71	10	8.6	Stockland	B	498	4.35	12	5.3
Foley Wines Ltd	C	189	2.59	25	2.2	Ozzy (Tortis)	D	384	N/A	14	8.5	Vector Ltd	E	357	2.71	43	6.4	Suncorp Group	B	1300	1.16	20	2.0
Fonterra S/H Fd	C	410	0.32	NE	2.4	P&G Wrightsons	D	239	0.22	45	8.7	Vista Group Ltd	D	376	4.76	51	1.2	Super Retail Gr	A	981	0.71	14	5.1
Freightways Ltd	B	820	1.34	13	5.2	Pac Edge Bio.	D	13	N/A	NE	Nil	Vital Health PT	E	266	N/A	16	3.3	Sydney Airport	B	920	N/A	56	4.1
Future Mobility	C	2.7	0.09	NE	Nil	PaySauce Ltd	D	50	1.80	NE	Nil	Vital Ltd	E	81	0.96	8	5.1	TPG Telecom Ltd	B	690	2.57	16	0.6
Geneva Finance	C	56	1.84	10	8.7	Plexure Group	D	76	9.67	NE	Nil	WN Drive Tech.	C	17	0.79	NE	Nil	Tabcorp Holding	B	469	2.47	NE	4.5
Genesis Energy	C	303	1.15	52	7.8	Port Tauranga	D	670	N/A	45	2.8	Warehouse Group	C	285	0.33	43	7.8	Technology One	A	900	9.54	56	1.0
General Capital	B	7.8	5.69	NE	Nil	Precinct Prop.	D	184	N/A	9	3.2	Z Energy Ltd	C	484	0.36	10	12.3	Telstra	B	370	1.74	20	2.7
A.P. Eagers	A	950	0.44	18	3.8	Crown Resorts	B	1220	2.82	21	4.9	<b>Ave of 134 Cos</b>	C	332	0.68	22	3.7	Transurban Grp	B	1509	N/A	70	3.7
AGL Energy Ltd	B	2042	1.04	8	5.7	Dexus	B	1215	N/A	10	4.1	<b>Ave of 192 Cos</b>	C	234	0.29	4	1.3	Treasury Wine	B	1719	4.37	29	2.2
ALS Limited	A	904	2.62	24	2.5	Domain Holdings	B	350	6.12	47	1.7	United Overseas	B	83	2.58	7	3.0	Unibail-Rod.	C	1142	N/A	NE	Nil
AMP Ltd	B	185	0.34	NE	7.6	Domino's Pizza	A	5075	5.46	36	2.1	Vicinity Centre	B	263	7.71	29	6.0	Virgin Money UK	B	335	1.63	6	1.7
ANZ Bank	B	2459	1.98	11	6.5	Downer EDI Ltd	B	822	0.38	19	3.4	Virgin Aust	C	16	0.22	NE	Nil	Viva Energy Grp	B	213	0.25	7	2.3
APA Group	A	1073	5.21	44	6.8	EML Payments	B	448	N/A	NE	Nil	Viva Energy/REIT	A	278	N/A	13	5.0	Vocus Group Ltd	A	298	0.98	54	Nil
ARB Corporation	A	1885	3.53	29	2.0	Event Hospital.	B	1342	2.23	20	3.9	WAM Capital Ltd	A	224	N/A	NE	6.9	Webjet NL	A	1195	4.42	27	1.8
ASX Limited	A	7983	N/A	35	2.7	Evolution Min.	B	389	4.37	30	2.4	Wesfarmers Ltd	A	4091	1.66	24	4.4	Westpac Banking	B	2427	2.18	10	7.7
Abacus Property	A	376	7.06	9	4.8	Flight Centre	B	4339	1.50	0	3.8	Whitehaven Coal	B	263	1.08	0	4.9	Wisetech Global	A	2572	N/A	NE	0.1
Adelaide Bright	A	349	1.40	12	5.7	Fortescue Metal	A	991	3.32	26	2.3	Woolworths Grp	A	3836	0.88	31	2.4	Worsley Ltd	A	1466	1.10	46	1.9
Afterpay Ltd	B	2990	N/A	NE	Nil	Freedom Foods	A	514	2.95	NE	0.6	Yancoal Aust.	C	293	0.80	5	13.3	Zimplats Hold.	B	1140	1.37	6	7.7
Altium Limited	A	3600	N/A	63	0.8	GPT Group	B	604	N/A	8	4.2	Zip Co Ltd	C	359	N/A	NE	Nil						

## Investment Outlook

(Continued from Page 1)

At this stage some renewable energy minerals companies have failed (i.e. in receivership) or are looking to refinance debt (i.e. to *avoid* receivership). Almost all have changed their focus from *maximising production* (i.e. growth) to *minimising costs* (i.e. survival, debt reduction). Just about every expansion project is being deferred (or slow-tracked) and companies are still searching for (read “unable to find”) development partners and/or project financing. In the short term things may get worse before a recovery in perhaps 6-12 months but this is the time to be looking for bargains.

So, regardless of what is happening in the wider economy, the currently depressed energy and renewable energy sectors offer investors good value and potential recovery and long term growth.

### Total Return Index for All Listed Shares

Nov 11	1755.07	Nov 18	1737.39
Nov 12	1762.75	Nov 19	1741.27
Nov 13	1756.21	Nov 20	1749.77
Nov 14	1754.72	Nov 21	1752.59
Nov 15	1751.20	Nov 22	1750.61
Nov 25	1746.30	Dec 2	1801.99
Nov 26	1751.15	Dec 3	1796.86
Nov 27	1752.49	Dec 4	1802.46
Nov 28	1769.00	Dec 5	1803.52
Nov 29	1806.65	Dec 6	1806.83

## Dividend \$

Company	Cents per Share	Ex-Date	Pay-able	Tax Credit
	<b>Australian Shares</b>			
ALS Ltd	11.50	27-11	16-12	

### Next Issue:

The next issue of *Market Analysis* will be emailed in five weeks time on Monday January 13, 2020.

The print version will be delivered later that week, depending upon printing and postal delivery times.

MARKET ANALYSIS is published 12 times per year by Securities Research Company Limited, 3/47 Boyce Ave, Mt Roskill, Auckland. Subscribe online at [www.stockmarket.co.nz](http://www.stockmarket.co.nz) or email [james@stockmarket.co.nz](mailto:james@stockmarket.co.nz).

Readers are advised that they should not assume that every recommendation made in the future will be profitable or equal the performance of recommendations made in the past. A summary of all prior recommendations is published on the website. The information presented has been obtained from original and published sources believed to be reliable, but its accuracy cannot be guaranteed.

The entire contents are copyright. Reproduction in whole or part is strictly forbidden without the approval of the publisher.