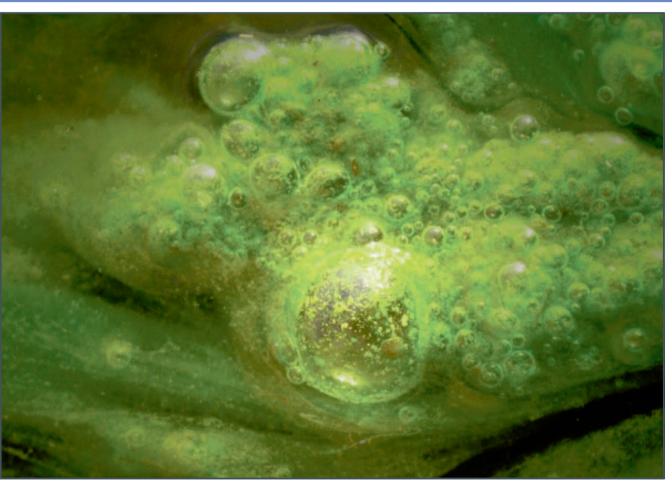


July 2010 Year 6 No 41

Investments That Solve Environmental Problems



Inside This Issue:

Editorial	3
Features	4, 9
Initial Public Offerings	7
ASX 300 Companies	12
Emerging Companies	18
Micro Cap Companies	19
Unlisted Companies	25
Unlisted Funds	27
Coming Events	27

Next Page - Left Mouse Click Previous Page - Right Mouse Click Exit Full Screen Mode - Escape

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Front Cover: Australia's first IPO to grow algae for biodiesel and other uses. Page 7.

Editorial

No Bounce from New PM

The big drop in the share prices of clean energy stocks that began with the Rudd Government's three year post-ponement of the Emissions Trading Scheme (ETS) was not helped when the Labor Party replaced Kevin Rudd as prime minister with Julia Gillard.

In her first speech as prime minister, Gillard signaled that Labor's new ETS policy would not change. In true polly-speak, she said she would "re-prosecute the case for a carbon price at home and abroad" but only "as global economic conditions improve and as our economy continues to strengthen".

The translation is "perhaps not for a few years".

She quickly re-enforced this by adding that before moving on an ETS she would seek "a deep and lasting community consensus". Well, good luck, but there are plenty of people who do not want consensus on the ETS unless the consensus is to delay or kill it.

Translation, "not until it is safe to do so" or "maybe even longer than a few years".

So Labor's ETS policy is now in the hands of Tony Abbott and the Liberal Party and perhaps also the fossil fuel industry including coal and the big carbon emitters.

It gets worse. Within days of Gillard becoming prime minister it emerged that within the Government's so called "gang of four", it was she who had argued for delaying the ETS.

There could have been many other ways to tackle the issue. Another look at the design of the Carbon Pollution Reduction Scheme. Stronger public advocacy. An interim carbon tax. A deal with the Greens. A double dissolution election. An election where Labor asks for a mandate for the Senate.

Company Index F	Page	Ceramic Fuel Cells	14	Intec	20
		CO2 Group	18	Metgasco	20
AGL	13	Dart Energy	14	Mission NewEnergy	22
Algae.Tec	7	DUET	15	Novarise Renewable	
Altus Renewables	9	Dyesol	22	Resources	18
APA Group	12	Environmental Clean		Papyrus Australia	10
Arrow Energy	14	Technologies	23	Spark Solar	25
Australian Ethical Equities	27	Geodynamics	16	•	
BluGlass	24	•		Style	5
Camaria Maria Francis		Green Rock Energy	25	Transfield Services Infras	tructure
Carnegie Wave Energy	21	Greencap	18	Fund	17
CBD Energy	25	Greenearth Energy	24	Transpacific Industries	17
Cell Aquaculture	19	Infigen Energy	16	White Energy Company	17, 23

Instead, urged on by Gillard, Labor wimped out. So it looks futile to expect any political guts from the new prime minster on the ETS.

As far as the ETS affects the share prices of clean energy stocks, Australia has gone from the best combination - Rudd and Turnbull, to the worst - Gillard and Abbott.

And this has happened while international economic conditions - the fear of a double dip recession in the US, Europe and Asia, and major sovereign debt issues in Europe, are keeping stock markets low around the world.

The S&P/ASX 200 Index rose from its GFC low on 6 March 2009 of 3145 points to a high on 15 April 2010 of 5001 and has now fallen back to around 4238. Clean energy stocks have followed suit and many are trading at around 12 month lows.

The outlook is not all bleak. The Renewable Energy Target was passed by parliament, but it mainly affects wind energy stocks and not enough to stop Infigen, for example, also trading at 12 month lows.

And it will be interesting to see what policy initiatives

Gillard and Abbott bring to the upcoming election, and how much these can offset the loss of the ETS and reinfuse some momentum into the clean energy sector.

Abbott has already put out some policies through his 'direct action' approach. Gillard will no doubt work hard to try and recapture some credibility on climate change.

Most commentators say a price on carbon is the best way to make the change to clean energy. So however worthwhile the forthcoming policies of both parties, they are unlikely to be as effective as a price on carbon.

If the Liberals win the election an ETS is unlikely. If labor wins it is also unlikely while Gillard seeks consensus.

A circuit breaker could be what happens overseas, particularly if Obama and the US move on an ETS. Again, nothing looks likely to happen quickly. Overseas markets may decide to pick up, and take our market and our clean energy stocks with them, but that is hope, not a strategy.

At least some things never change, like deciding if it is the season to buy, hang-in or sell.

Features

Listing Too Early is Mostly Nonsense

Victor Bivell

'Cash is king" is such a powerful idea that it is also a key to investing in pre-revenue companies such as the many micro-caps on the ASX. It can even help end, hopefully once and for all, the widespread myth that technology companies can "list too early" on the ASX.

The latest to propagate the idea that tech companies can go public too early is the recent report Navigating the Valley of Death prepared by Ernst & Young for the Clean Energy Council.

The report looks at ways to finance emerging clean technologies. It is a worthwhile read and it has some interesting cleantech commercialization insights and reiterates some useful basics of commercialization.

But a key error is its quote from an unsourced commentator - "Don't go to IPO too early" and presenting this as if it is a recommendation instead of providing a critique of the idea.

The reasons given by the unknown commentator for not listing too early are: the burden of continuous disclosure, the alignment with joint venture partners of material releases to the market, the market's demand for a regular success story every quarter, and the lack of cleantech awareness in financial markets, particularly for first time technologies.

These are factors that entrepreneurs need to consider, but they are much lesser considerations than the need to raise capital, which is often about survival.

If companies can raise sufficient capital from the

formal or informal venture capital markets then they usually do not need to list until later in their development and can do so at their or their investors' choosing.

But how many innovative companies are in that luxurious position? Perhaps the question could be re-phrased - Just how small is that small minority of companies?

The formal or managed venture capital market is the smallest of the three venture capital markets, and it is too small to supply anything like the demand for risk capital.

Nor is that likely to change soon. After 26 years the formal venture capital industry has not grown up - it is still much like a needy child dependent on the government teat. And even with hundreds of millions of dollars of government support, it is trying to sell a product that its prefered clients - financial institutions - do not want to buy.

FY2006

FY2007

To rely on the formal venture capital industry is to risk committing entrepreneurial and innovation suicide.

The angel or informal venture capital market is larger and functions better, but at some stage companies have to move past that source of capital too.

That usually leaves the ASX. Telling companies



■ Venture Capital
■ Private Equity
■ IPO Raising
■ Subsequent Raising

FY2008

that need capital not to list too early is to close off a venture capital market in Australia that works well and has supported many thousands of innovative companies.

FY2009

SOURCE: AVCAL, ASX

The massive difference between raising capital from formal venture capital and from the ASX was highlighted by the ASX in data it presented at Eco Investor magazine's recent Eco Innovation Forum.

In the four years to 2008-09, SMEs raised \$1.2 billion from venture capital funds and \$13 billion from the ASX through IPOs and secondary raisings. That's more than a ten-fold difference. Clearly, the ASX is a venture capital market that works.

It is a shame we don't have good data for the informal venture capital sector, but worldwide this is also

acknowledged as being much larger than formal venture capital.

When asked if companies can list too early, the ASX's manager for Listing and Capital Access, Eddie Grieve, made the point that those early stage companies that list and do well are usually those that had more capital to begin with or which raised more capital at the IPO.

The message for entrepreneurs looking at the ASX is to have as much money as possible in the bank, both before and during the IPO to raise more than the minimum level they think they will need, keep the capital supply channels open, and sometimes to raise capital when they can and not just when they need it.

If going down the ASX route, the hardest part is the initial raising to get listed. The consistently higher secondary raisings show that once companies are listed investors will follow through and provide the sort of follow-on capital that venture funds often struggle with.

For investors in pre-revenue businesses, the message is to keep an eye on the cash. The level of cash, the burn rate, upcoming capital needs, the price of new cash, and the achievement of milestones as milestones are how companies can keep faith with their investors.

It's funny how no one ever accuses resources companies of listing too early, even though many of them have little more than a four-wheel drive and a shovel. The same attitude to technology would help the ASX technology sector to be as big and vibrant as the resources board, which would be fantastic for everyone.

Listing on the ASX is a well trodden way to commercialize technology. Australia and the ASX should build on this.

Stylish Alternative for Eco Timber

The troubles in Australia's plantation timber sector may not auger well for the short term development of environmentally friendly timber products, but one company has avoided the industry's problems and is set to increase its international sales.

Melbourne based Style Ltd (ASX: SYP) was founded in 2004 and has intellectual property that helps it develop and manufacture sustainable flooring products. Style says its mission is to develop green flooring using a technology it has patented that can turn sustainable raw timbers into very hard and dense materials that look good and are among the most durable on the market.

The floorboards have numerous environmental advantages.

The company avoids tropical rainforest timber or old growth timber; it uses bamboo which grows in five



to six years, and is starting to use fast growing plantation eucalypts which its process allows it to harvest after only five to eight years.

Bamboo is a grass, not a wood product, says Style. There are over 1000 species, and some can grow up to one metre per day, making it the fastest growing plant on Earth. Some other interesting facts are that bamboo was the first plant used to re-green Hiroshima after the 1945 atomic bomb, and that Thomas Edison successfully used a carbonised bamboo filament when experimenting with the light bulb.

Bamboo has a strong resistance to diseases, insects and climatic injuries, and bamboo plantations reduce atmospheric carbon dioxide. Style says the Moso bamboo it uses is not eaten by pandas.

Style says there are over 460,000 hectares of eucalyptus plantations in China. Eucalyptus is the world's most widely planted species, being grown in over 90 countries and representing 8 per cent of planted forests. It is the fastest growing hardwood, and the company can harvest the trees in 5-8 years, adding to its environmental sustainability.

The company has three basic product types based on bamboo solid, bamboo engineered, and now eucalyptus, and these give a range of floorings. New products are under development, as is the use of other timber species.

The manufacturing process utilizes the company's patented strand woven technology that cuts the timbers into strands or sheets. Hydraulic technology then fuses the timber fibres into very dense rectangular blocks. These are cut and milled into floorboards using a patented Uniclic technology. The boards are finished with

Sytle Engineered flooring

the company's own stains and finishes.

The flooring has won environmental awards and accreditations. These include the US Green Building Council's LEED program as the flooring is made from a rapidly renewable resource and contains virtually no formaldehyde emissions.

The emission of formaldehyde from wood-based board materials can have environmental and health effects and acceptable levels of emission have been reduced over recent decades. "The issue of formaldehyde release from composite wood panels is mainly related to the use of urea-formaldehyde (UF) resins as bonding adhesives. All of Style's range is manufactured using a proprietary Urea-Free. This adhesive emits virtually no formaldehyde (0.01ppm)," says the company.

Style's flooring has also been accredited by Australia's GECA (Good Environmental Choice Award) and the Singapore Green Label. Both organizations are members of the Global Ecolabelling Network that promotes sustainable and renewable products.

The result, says Style, is a safe, healthy and quality floor that has been produced in an environmentally responsible manner.

Financials

While this environmental success has helped the company achieve strong sales, these have not yet turned into profits.

Since listing in 2004, the company has notched some significant losses that now total \$26.9 million.

Last year and this year Style has undergone a restructuring including board changes, capital raisings, and reducing its head office and manufacturing costs. Together with a good number of new international distributors, and some new products, the company believes it is now set to achieve "significant growth".

In 2008-09 Style achieved revenue of \$20.7 million, and in 2007-08 it was \$21.6 million.

Half year sales to 31 December 2009 were down by half to \$6.5 million, but the loss also fell to \$1.8 million from \$6.3 million in the December 2008 half. The loss in sales was due to issues with a North American distributor that have now been settled. Sales for the nine months to 31 March were \$8.4 million, so sales will be down for 2009-10, but are now expected to start to pick up again.

Style sources its bamboo and eucalypts from China, where it owns a manufacturing facility with production capacity of 2 million square metres per year. This compares with the current sales volume of 400,000 m2, giving plenty of room for more sales.

Capacity will also be expanded through a deal with Tarkett, said to be one of the world's largest flooring providers. Tarkett will initially import from China and later manufacture in Europe under a non-exclusive licence.

Style said the agreement provides it with access to the major European markets, and will be a new revenue stream for the company. The first revenue should be later this year.

In recent months five major new distributors have been signed up for Florida, the western and mid west US states, and Russia. Style told Eco Investor that orders are now coming in.

In February the company filed five new international patents, and said it will use these to launch new products.

Helping things along is a \$2.77 million placement late last month at 1.85 cents per share. 139 million of the new shares were placed with professional and so-



Style Select flooring.

phisticated investors, and 11 million shares with Style chairman Charles Gullotta and chief executive Peter Torreele. The money is for new products, supporting North American distribution and working capital.

All going well the revenue outlook over the next few years looks promising. The issue is whether the company can turn its sales into profits? Until it does it remains a micro cap company with potential. With profits, it would be an emerging company with international opportunities.

On the investment front, with its shares trading at around 2 cents, there is plenty of room for improvement.

Initial Public Offering

Algae to Float on ASX

There has been plenty of talk about algae as the feedstock of the future for biodiesel, and also at least one local unlisted company to invest in, but now investors have their first chance to see if an algae IPO will float on the ASX.

Algae.Tec Ltd has the exclusive global licence to commercialize the McConchie Stroud System for producing algae.

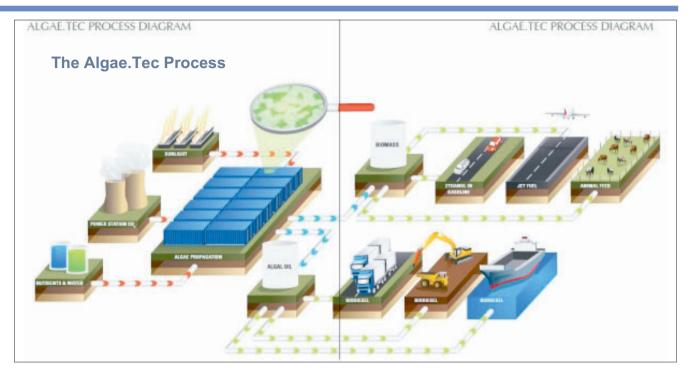
There are two main ways to grow algae: in open ponds and closed troughs, and in enclosed photoreactors such as tubes, plastic bags, plates and tanks.

The McConchie Stroud System is an enclosed photo-reactor that is modular, can be stacked four high, and is mobile. The vessel is based on a standard sea container with the inside modified to enable control of conditions such as the supply of light, water, carbon dioxide and nutrients. Light is supplied through a nearby parabolic solar collector that follows the sun. The photo-reactor can operate day and night.

The developers, Earl McConchie and Roger Stroud, say they have tested 50 varieties of algae and have identified a high yield microalgae for the bio-reactor.

The oil yield is around 50 per cent of the algae weight, and the remaining biomass can also be used. The oil and biomass can be converted into feedstocks for biodiesel, jet fuel, ethanol, animal feedstock and industrial applications. Different types of microalgae can be used for different end products.

Each module can conservatively produce about 250 tonnes of dried algae per year, and up to 40,000 tonnes per hectare per year may be achievable. "Production



costs of approximately US\$185 per metric tonne of dry algae may be achievable (excluding estimated start up capital costs of approximately US\$64 million)," says the prospectus. Based on recent world market prices for crude oil and energy, agricultural oils and animal feed products, the algae products could potentially produce revenue of around US\$483 per metric tonne.

Executive chairman, Roger Stroud says the development of the technology includes successful bench-scale research and development and pilot plant trials, and the selection of appropriate microalgae species. These have produced exceptional yields of algae and algal products, he says.

Having successfully trialed the McConchie Stroud System at the research and development stage, the company is now raising capital so it can build a demonstration facility. This would comprise two sea containers, and effectiveness could be demonstrated within a couple of months, said Mr Stroud.

Several sites are being looked at with the location likely to be in eastern Australia. The likely source of carbon dioxide is an industrial producer. A decision is close and the company would like to complete the plant by May 2011. The aim is to demonstrate the algae productivity and yields achieved during research and development and confirm the technology's potential for commercial production.

The company is also looking to conclude an agreement with a CO2 emitter such as a coalfired power station so it can build a more commercial scale facility with at least 200 modules.

Mr Stroud told Eco Investor that a commercial scale

plant is at least two and a half to three years away, and the first option to generate revenue would be to sell the oil rather than become a producer of biodiesel.

The prospectus says the system offers a competitive advantage in reduced production costs, "as the enclosed reactor module is water efficient, climate controlled, low maintenance and produces high yields of microalgae on a compact footprint."

Environmental benefits include fossil fuel replacement where the biodiesel, jet fuel or ethanol substitutes for fossil fuels. The company also highlights the use of waste CO2 from coal, gas and oil fired power stations, but this is only a net long term benefit where it replaces fossil fuels or the end product sequesters the CO2 for a long period of time. A big advantage of algae is that it is not a food crop, and algae production does not rely on arable or deforested land.

With so many advantages to algae, a system that can deliver high yield low cost algae would seem to have a lot going for it.

But can the company move from R&D to full commercialization, and will its products be competitive?

Funding is always an issue. Algae. Tec has been able to get a \$20 million conditional equity line of credit from London and New York based hedge fund GEM Global Yield Fund Ltd. If the line of credit becomes unconditional, the money can begin to be drawn down at any time in return for shares, with the shares issued as the funds are drawn.

This will substantially dilute shareholders, but as the company has no revenue this arrangement has the big advantage that if its chooses the company can bypass debt.

The company also has a Memorandum of Understanding with Leighton Contractors about joint ven-

tures to build and operate commercial plants.

Algae.Tec is aiming to raise between \$5 million and \$7.5 million in the IPO. which would be in addition to the line of credit. The IPO is at 20 cents per share, and if the minimum \$5 million is raised \$2.4 million will go towards building and operating the demonstration plant and \$1.7 million on working capital. The balance is for R&D and IP.

If the full \$7.5 million is raised, the company will be capitalized at \$52.6 million, but have net assets of only \$6.8 million. The dominant shareholder, with 76 per cent of the shares, will remain Teco.Bio LLC, which has 200 million shares. Teco.Bio is owned 50-50 by two companies that are controlled respectively by Messrs Stroud and McConchie.

It is always interesting to see how much of a company entrepreneurs are willing to share and how much they keep for themselves. It is a matter of balancing what they think their contribution is worth, how much they are raising, and what they may need to raise later.

\$7.5 million is not a huge raising. At 20 cents per share their 200 million shares would initially be valued at \$40 million or \$20 million each. That seems a lot for

Algae.Tec's Capital Structure If It Raises \$7.5 Million

Shares	Number
Shares on issue at date of Prospectus	222,291,667
Shares offered pursuant to the Offer	37,500,000
Shares to be issued to Empire Equity Limited ¹	3,125,000
Shares to be issued to Wise-owl.com Pty Ltd ²	200,000
Total Shares on issue at completion of the Offer ³	263,116,667
Market Capitalisation at Offer Price ⁴	\$52,623,333
Options	Number
Options on issue at date of Prospectus	Nil
Options issued pursuant to Offer	Nil
Total Options on issue at completion of the Offer	Nil
Maximum number of Options issued to GEM immediately prior to listings	52,623,333

a company with a long way to go to reach first revenue.

It could indicate an inflated valuation of the business by the entrepreneurs, or that the entrepreneurs expect to raise more capital down the track and want to minimize their dilution.

There will be dilution. Up to 52.6 million options will be issued to GEM if the IPO is fully subscribed. These five year options are exercisable at 75 cents.

If the line of credit is fully drawn, the additional shares could also significantly dilute shareholders and perhaps have a downward effect on the share price. The prospectus is not clear on the extent of the possible dilution, as that will depend on the price at which the shares are issued. If the average price was 50 cents that would equal 40 million shares.

The company does say it will need to raise addi-

tional funding to fully commercialise the system so further dilution is likely in the medium or long term, particularly if and when it gets to full scale plants with possibly up to 1,000 reactors.

Meanwhile, there is a two year escrow period on the founders' shares. Their company, Teco.Bio was founded in 2008 and has office in Atlanta, USA and Perth. Its aim is to create and implement "long-term value-added, renewable and sustainable energy solutions".

Stroud and McConchie spent seven years investigating algae and biofuels before developing the McConchie Stroud System over the last three years. Mr Stroud said they have spent \$5 million so far in cash and kind.

In April this year they assigned all of their intellectual property rights for the McConchie Stroud System to Teco.Bio. An Australian patent has been applied for over what is said to be one key aspect of the system, and additional process, equipment and utility patent applications are in progress.

However, this is more a head start than a formidable barrier to entry as other systems can be designed.

The commercialization of the technology has a number of other risks. In a small number of circumstances the licence for the system can be terminated, in which case the company would no longer be able to use the system. The company says commercialization is reliant on keeping Messrs McConchie and Stroud as employees. With Teco.Bio holding 76 per cent of the shares, there may be limited liquidity. And the technology's ability to produce commercial scale volume and at a cost competitive price needs to be proven.

Mr Stroud was a founding shareholder and non executive director of Natural Fuel at the time of that company's IPO and became managing director. He

resigned in November 2007, and two years later in November 2009 Natural Fuel was placed in administration. Mr Stroud has worked in the biodiesel industry in Australia, Europe and US, and was also the founder of Biofuels Corporation plc, a European biodiesel business that listed on Alternative Investment Market in 2004.

Mr McConchie is an executive director of Algae. Tec. He has 35 years experience in chemistry and chemical engineering, related technologies and international markets.

Algae. Tec's managing director is Peter Hatfull, who has 30 years experience in senior management. He was managing director of metals recycler CMA Corporation and resigned in January 2008.

With its algae angle, Aqua. Tec is an environmentally interesting IPO. The company has many key elements already in place, but that should not diminish what still needs to be achieved. For the next few years it will be a high risk speculative investment for the venture capital end of an equity portfolio.

Bioenergy Float Canceled

Bioenergy developer Altus Renewables (Eco Investor December 2009) has withdrawn its initial pubic offering after raising only half of the \$12 million it had sought. The company said it is pursuing the private equity route and a European fund has shown interest. The company's first project is a proposal to build a 50,000 tonne per annum densified fuel pellet plant at Queensland's largest sawmill.

Had the IPO been successful, Altus Renewables would have been a much needed addition to the ASX's small number of bioenergy stocks.

Features

How investors can work out if a company has potential environmental assets and how those might influence its cash flow and share price

Sally Burns
Managing Director
Sigma Global

1.1 Global Environmental Markets

Globally, environmental markets and regulation continue to develop at a rapid rate predominantly due to the increased risks presented by climate change and the desire for energy security. Policy measures such as the Kyoto Protocol, the European Union Emissions Trading System and other similar schemes under development notably in the US, Japan and Australia, are increasing the demand for and supply of environmental assets created through environmental market mechanisms, particularly from projects in developing countries. Environmental markets present both risks and opportunities for companies, and investors should be informed and aware of the impact these may pose on future or current investments.

The environmental markets include the carbon markets, as well as markets for renewable energy and energy efficiency. Environmental assets created under these schemes include carbon credits, renewable energy certificates and energy efficiency certificates (including white certificates).

While the global financial crisis has had an effect on the environmental markets, their overall value and size

Page 9

continue to grow. The market drivers that have propelled the environmental markets since their inception (as shown in the box) continue to exist as strong influential factors for investment. For example, according to Bloomberg New Energy Finance, global investments in renewable energy in 2009 totalled US\$162 billion. Investment from China alone totalled US\$34.6 billion.

Within the greater framework of environmental markets, the markets for carbon credits (the carbon markets) are the most buoyant. The markets were catalysed by the adoption of the United Nations Framework Convention on Climate Change in 1992 and the creation of the Kyoto Protocol in 1997. In 2009 they were worth nearly €91billion globally and growth in 2010 is expected to take this value to €121 billion.

As part of the overall due diligence process, investors need to consider how environmental markets and regulation can influence the profitability of a company both negatively and in many cases, very positively.

Considerations for investors include how a company may be:

- Under obligations to comply with certain directives (existing or under development), such as to reduce greenhouse gas emissions, which may incur costs.
- Open to opportunities to generate additional revenue streams through implementing environmental market or policy based mechanisms.
- Not completely aware of their risks and/or opportunities which may influence their cash flow and share price.

Investors should feel comfortable that companies are fully aware of the risks and opportunities presented by current or future environmental markets and regulation to ensure:

- All opportunities to reduce costs of compliance re-

Environmental Market Drivers

- Energy security
- Climate change mitigation
- Fossil fuel dependence reduction
- Clean technology demand
- New investment opportunities
- Asset portfolio diversification
- Corporate Social Responsibility/ Triple Bottom Line reporting
- Reputation enhancement

lated activities are identified and implemented.

- All opportunities to generate additional revenue streams are identified and implemented.
- The correct value of activities undertaken are added and considered as part of the share price.

1.2 How do companies (and investors) know if there are risks and opportunities presented by environmental assets?

A comprehensive review of the company's business plan and operations is required to understand the potential risks and opportunities presented by current or future environmental markets and regulation. The review enables an understanding of how the company may be exposed to risk now and in the future, and how and where they can generate opportunities.

Sigma Global works with investors to take a complete look at potential investee companies and existing investments to ensure that adequate consideration of the risks and opportunities is taken into account. This work involves not only reviewing the company to un-

derstand their position within environmental markets and how they are affected by regulation, but also developing and implementing strategies to reduce risk and develop opportunities.

The work Sigma Global carries out with investee companies includes the following:

- Development of an overall picture of risks associated with inclusion under compliance schemes worldwide;
- Creation of options for reducing compliance costs where present;
- Analysis of the environmental benefits found in existing activities, technologies and products;
- Analysis of the potential to incorporate new environmental benefits in existing activities, technologies and products;
- Design and implementation of measures to monetise environmental benefits through environmental markets;
- Assessment of whether the business plan may need amending based on added costs, additional revenue streams and benefits derived from environmental assets:
- Integration of value estimates into financial forecasts and other financial instruments; and
- Development of structures for managing environmental assets that maximise value.

It is through this process that a company's full risk and opportunity profile can be derived and the impact on overall cash flow and share price can be understood.

1.3 Papyrus Australia - A Case Study

Sigma Global has partnered with Papyrus Australia Ltd (ASX: PPY) to explore their opportunities in environmental markets. From work already completed, it is



clear that opportunities for Papyrus Australia in environmental markets are as diverse as the numerous environmental benefits conveyed by its technology in comparison to traditional approaches.

Papyrus Australia has developed a patented technology platform that produces sustainable paper, veneer and panel products that are commercially competitive with standard wood-based products and with superior attributes. The Papyrus Technology has been proven through operation of a factory in Australia that produces commercial quantities.

The Papyrus Technology uses waste banana tree trunks from banana plantations as the source of fibre. Banana tree trunks are renewable and plentiful and are currently viewed as a problematic agricultural waste stream. The environmental benefits of this technology are abundant and include:

- Use of renewable and fast growing banana tree trunks, no forest based fibre;
 - Reduced deforestation;
- Reduced greenhouse gas emissions through improved agricultural waste treatment;
- A fraction of the energy requirement of standard wood based product manufacturing;
 - Opportunities for using renewable energy as part

of the process;

- No formaldehyde glues used in the panel manufacturing process;
- No water used in production, manufacturing process produces water as a by-product; and
- No effluent or pollution.

The Papyrus products also have significant benefits in comparison to standard wood based products. These benefits are:

- Products have natural water resistance, fire resistance and UV resistance:
- Products are stronger in comparison to standard wood-based products;
- Panel products have true isotropic physical properties allowing for improved construction methods, including the ability to screw into the edges of panels;
- Products require no sanding and less sealing and coating;
 - Panel products are non-permeable;
- Products are interchangeable with standard woodbased products; and
- Products are superior due to the preservation of the natural attributes of the banana tree trunk.

Papyrus Australia is likely to be able to generate revenue from the sale of environmental assets created directly as a result of the environmental benefits outlined above. Potential opportunities for Papyrus Australia exist across a number of environmental markets and regulation.

For example, particular environmental benefits may open opportunities to generate carbon credits under

market based project mechanisms. Accredited carbon credits created from the Papyrus Technology are also expected to be viewed as high grade as they will likely be generated in less developed countries and the community benefits and high degree of additional environmental benefits from the operations will add value. This means they will be in higher demand.

As another example the Papyrus Technology, in addition to the carbon markets, may also create opportunities in renewable energy markets through its environmental benefits.

Once fully understood and implemented, the benefits of utilising environmental markets and regulation will add considerable monetary and reputational benefits for Papyrus Australia. These added benefits will contribute key value to the overall company cash flow and are potentially large enough to positively impact the share price.

1.4 Strong Performers

We are currently in an era of increasing policy development and regulation around matters such as climate change, renewable energy deployment and energy efficiency standards. Companies that have a comprehensive understanding and strategy around their risks and opportunities in this area and adequately manage and implement the strategy will perform better than those that don't.

This is a key consideration for all investors and applies to almost all companies including large resource companies, technology providers, energy companies, manufacturers, agricultural companies and financial institutions.

Ms Burns can be contacted on 02 8005 1278

ASX 300 Companies

APA Leads As Income Security

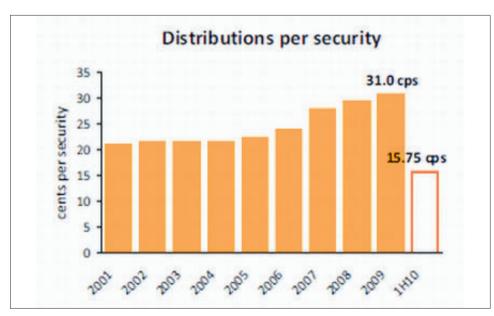
Gas pipeline owner APA Group (ASX: APA) has proven itself to be perhaps the leading environmental income security, with a history of steady and rising distributions since its listing on the ASX in 2000.

The company's annual distributions have grown from 22 cents in 2001 to 31 cents for 2009, and the group has now announced an estimated distribution for 2010 of 32.75 cents per security. This is based on a first half distribution of 15.75 cents and an estimated second half distribution of 17 cents.

APA said the 2010 distribution is an increase of 5.7 per cent over the previous year, and is consistent with its guidance of a minimum 5 per cent growth.

Since listing in 2000, APA has grown its market capitalization from \$0.49 billion to \$1.95 billion. The value of its assets have grown from \$1.3 billion to over \$8 billion. Its gas transmission pipelines have grown from 7,000 kilometres to 12,700 kilometres, and it now also has 23,000 kilometres of gas distribution pipelines. Where it carried 25 per cent of Australia's domestic gas it now carries



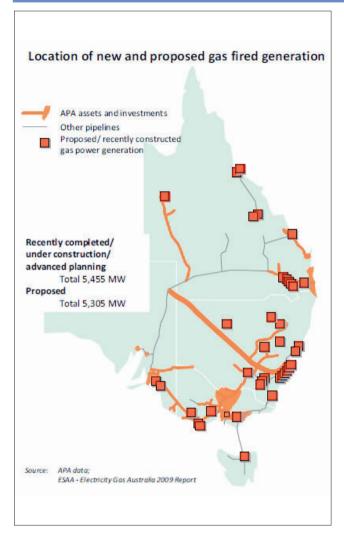


APA's Distribution History Per Security

East Australia pr	oven and probable gas rese	rves (PJ)
	End 2000	End 2009

TOTAL	9,450	33,990
NSW coal seam gas	0	2,469
QLD coal seam gas	0	23,458
Qld (Bowen/Surat)	108	204
SA (Cooper)	3,435	1,151
Vic (Gippsland, Bass, Otway)	5,907	6,709
	Ena 2000	Ena 2009

Source: APA Group



over 50 per cent.

Its unit price has also shown steady growth, rising from \$2 at the June 2000 IPO to around \$3.60 today, after reaching a high of \$5.03 in 2006 before the global financial crisis.

Meanwhile, the group continues to expand its network capacity and is to build the 61 kilometre first stage

APA Group From IPO in June 2000

	June 2000	June 2010
	Infrastructure owner and manager	Integrated operating business
Market	\$0.49 billion	\$1.95 billion
capital		S&P/ASX 100
Assets owned / operated	\$1.3 billion	>\$8 billion
	7,000 km	12,700 km
	gas transmission	gas transmission
		23,000 km
		gas distribution
	Transporting 25%	Transporting > 50%
	of domestic gas	of domestic gas
Employees	6	1,100
Operator	External (Agility)	Internal

of a pipeline looping project from Young to Wagga Wagga in NSW. This should be operation by the end of September 2010.

APA's future is also supported by the strong growth in east coast gas. Thanks to coal seam gas, from 2000 to 2010 total east coast proved and probable gas reserves jumped from 9,450 petajoules to 33,990 PJ.

AGL to Fast-track Wind Farm

AGL Energy (ASX: AGK) plans to fast-track the final approvals for development of the Macarthur wind farm in Victoria following passage of the Renewable Energy Target (RET) by the Senate.

The wind farm will be one of the largest in the southern hemisphere and will be developed with joint venture partner, Meridian Energy.

AGL said the legislative changes to the operation of the RET will provide greater investment certainty for

the renewable industry. Under the changes, the RET scheme will be split into two markets: one for large-scale renewable energy projects such as wind farms, and one for small-scale technologies including solar PV.

AGL is part of the winning \$100 million project consortium for the Smart Grid Smart City demonstration project in Newcastle. The consortium is led by Energy Australia and includes IBM Australia, GE Energy, TransGrid, Newcastle City Council and the NSW Government.

AGL will steer the development of products, services and pricing structures to help customers better manage their energy consumption. It will recruit customers to take part in different trials and identify barriers and solutions to help customers achieve sustained changes in how they use energy. This will range from in-home displays, interactive home area networks and electric vehicles to micro generation such as solar PV and ceramic fuel cells.

AGL has also upgraded its expected underlying net profit after tax for 2009-10 to between \$420 million and \$430 million, compared with the previous guidance of \$390 million to \$420 million. The revised guidance is based on unaudited figures for the eleven months to 31 May.

AGL has proposed to acquire gas company Mosaic Oil NL at 15 cents per share or 1.01 AGL shares per 100 Mosaic shares.

Some of Mosaic's largest shareholders support the offer or have accepted the proposal, conditional on the Mosaic board agreeing to unanimously recommend the offer. This would give AGL 12.8 per cent of Mosaic.

AGL managing director Michael Fraser said "The underpinning rationale for this investment is the crea-

tion of a gas storage business as part of AGL's integrated strategy underpinned by contractual arrangements with the BG Group that will support the development of their Curtis LNG Project."

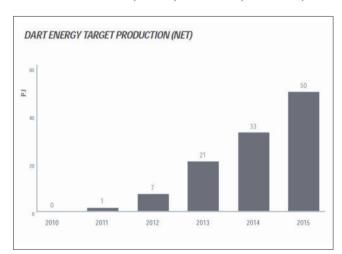
The gas storage project would be at Mosaic's depleted Silver Springs gas fields in the Surat Basin in central Queensland. It is anticipated the facility will be operational by April 2011. QGC will contribute capital to support development of the facility.

More Dart Details

With the release of its acquisition scheme booklet, Arrow Energy (ASX: AOE) has also released a demerger document for its international coal seam gas spin-off, Dart Energy, showing it could achieve commercial production rates by 2011.

Arrow said Dart Energy begins from a position of strength as it is already larger than Arrow Energy was in early 2007.

Dart has total exploration acreage of 9,611 square kilometres in China, India, Indonesia, Vietnam, and



Australia. New geographies are under consideration.

The first reserves certifications should be during 2010, and it is targeting 125/500 petajoules (PJ) of 2P/3P (probable and possible) net reserves by the end of 2011.

It aims to achieve commercial production rates during 2011, and gas sales could commence by the end of 2012. The company is targeting 50 PJ per annum net production by 2015.

Arrow says Dart Energy is a continuation of Arrow's international expansion strategy. It is underpinned by the same management team that developed Arrow Energy, and a quality asset base close to high value gas markets and infrastructure. Each of its markets has strong upside for growth, pricing and resource potential.

"Dart Energy also believes that it will be possible to replicate the success of the Australian and the North American industry in markets of Asia, Europe and Africa. Indeed, in many respects the nature of these markets presents an even more attractive commercial CSG prospect than the US and Australia," it says.

Arrow shareholders will vote on the company's takeover by Shell and PetroChina, and the demerger of Dart Energy, on 14 July.

If the demerger proceeds, Dart will be an early stage micro cap company with a lot of potential but no revenue. Developing its business will take capital, and it has indicated that it is seeking to make a placement before listing, and will likely undertake an additional capital raising although this will be at least three months after listing. The combined capital raisings will be about \$75 million.

CSIRO Confirms BlueGen Carbon Savings

A CSIRO report has confirmed significant carbon savings from the BlueGen gas-to-electricity generator being commercialized by Ceramic Fuel Cells (ASX: CFU).

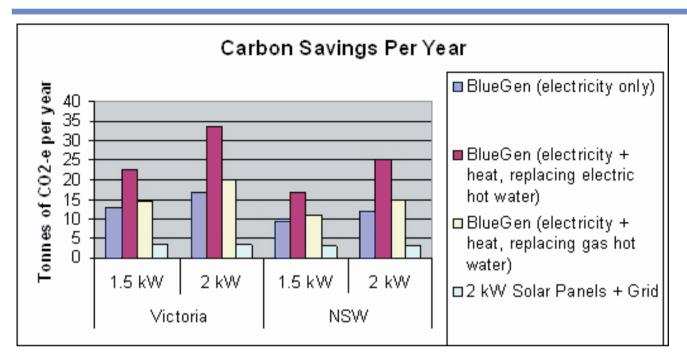
A 2-kilowatt BlueGen unit can save up to 33 tonnes of carbon dioxide a year when replacing power derived from brown coal, says the report. The average Victorian household produces around 10.7 tonnes of greenhouse gas emissions each year from the home. A home with a BlueGen unit can offset all of these carbon emissions and more.

By comparison, a home with a 2-kilowatt solar panel using the grid as a back-up can save 3.2 tonnes of carbon dioxide a year, says the company.

The report - Desktop Greenhouse Gas Emission Comparison of the BlueGen Fuel Cell Unit with Other Means of Providing Electricity and Heat to Australian Homes - is good news for Ceramic Fuel Cells as it tries to persuade government that its technology should receive a feed-in tariff or similar benefit for the electricity it feeds into the grid.

Managing director Brendan Dow appeared on ABC TV's 7.30 Report last month and made the point "We don't get a feed in tariff so people that generate electricity in their homes using our Blue Gen won't be eligible to be paid for the electricity that they put back in the grid."

Fortunately, government support overseas and from Australian consumers appears strong. In good news for investors, Mr Dow also said "If I had 10,000 units available right now today, I could sell all 10,000 units really easily."



And soon after the CSIRO report and 7.30 Report story, the Victorian Government commenced a review to look into expanding its feed-in tariff to include low-emissions technologies such as Ceramic Fuel Cell's.

Victoria has a standard feed-in tariff equal to the retail price of electricity or about 20 cents per kilowatt hour. This is for electricity fed into the grid from wind, solar, hydro and biomass generators of up to 100 kilowatts capacity. It also has a premium feed-in tariff of 60 cents per kilowatt hour for solar systems up to 5 kilowatts capacity.

The review will consider the cost effectiveness of extending the feed-in tariff to low-emissions technologies including fuel cells and electric vehicle batteries.

"The cost of a 2 kW fuel cell is expected to fall from around \$30,000 currently to around \$8,000 in volume production. An alternative objective for extending the

feed-in tariff to low-emissions technologies could therefore be to accelerate volume production," says the Government's consultation paper.

Submissions are sought for the review.

Meanwhile, the rollout of the technology continues with Ceramic Fuel Cells licencing its solid oxide fuel cell coatings technology to NexTech Materials, a leading US based developer of high efficiency and low emission electricity generation units for homes and other buildings.

Ceramic Fuel Cells' technology protects metal interconnect plates from chromium poisoning and is useful for other developers of solid oxide fuel cells.

NexTech will offer commercial solid oxide fuel cell interconnect coating solutions based on Ceramic Fuel Cells' formulations. NexTech has customers in 35 countries including fuel cell researchers, developers

and manufacturers.

Ceramic Fuel Cells will receive a royalty from Nex-Tech Materials' sales, creating an additional revenue stream from the intellectual property.

The revenue stream is likely to build up as NexTech creates the offering and penetrates the market. Ceramic Fuel Cells said the big market is in volume production. Although many solid oxide fuel cell companies need this sort of solution, they are unlikely to buy directly from Ceramic Fuel Cells, whom they see as a competitor, but are happy to buy from a third party supplier like NexTech.

The patent and the licence last until 2016, and the additional revenue stream is effectively at no marginal cost.

US Sale for DUET

DUET Group (ASX: DUE) is to sell its 29 per cent interest in US electricity distributor Duquesne Light, and aims to have the sale completed by the end of 2010.

DUET said the sale would simplify its asset portfolio and help it to fund growth or capital management opportunities.

The sale would enhance DUET's focus as an environmentally positive business as Duquesne also owns small interests in coalfired power stations.

If the sale proceeds, DUET's assets would be 60 per cent of the Dampier to Bunbury Natural Gas Pipeline in WA, 25.9 per cent of WA Gas Networks, 79.9 per cent of the Multinet gas distribution business in Victoria, and 66 per cent of United Energy Distribution in Melbourne.

Thus most of DUET's assets would be in gas and the balance in electricity distribution.

DUET will pay a final distribution for the half year to 30 June of 10 cents per security, bringing the 2009-10 full year distribution to 20 cents. It expects the upcoming December half distribution to also be 10 cents.

New MD for Geodynamics

Gerry Grove-White, the managing director of Geodynamics (ASX: GDY), has resigned after three years in the role.

Geodynamics said it will seek a new managing director to focus on the key deliverables of commissioning the 1 MW Power Plant and the work program for the investment decision and roll-out of the planned 25 MW Commercial Demonstration Plant.

Dr Jack Hamilton, a non-executive director since 2006 and former head of Woodside's North West Shelf project, is the interim managing director.

Geodynamics said that under Mr Grove-White's leadership it concluded the Origin Energy joint venture farm-in, secured Tata Power and Sunsuper/ Sentient as cornerstone investors, drilled the company's deepest well at Jolokia and was awarded a \$90 million REDP Grant from the Federal Government for the development of the 25 MW Commercial Demonstration Plant.

Martin Albrecht, the chairman of Geodynamics, will retire from that role at the November annual general meeting. Mr Albrecht joined Geodynamics at its inception in 2000, and has offered his services post retirement to support the company's development.

The chairman elect is the current deputy chairman, Keith Spence.

Infigen Proceeds With Sixth Local Wind Farm

As foreshadowed in May's Eco Investor, Infigen Energy (ASX: IFN) is to proceed with construction of the 42 MW Woodlawn wind farm adjacent to its Capital wind farm near Bungendore, NSW. It will be Infigen's sixth Australian wind farm.

Woodlawn is expected to be completed in the second half of 2011, with total engineering, procurement and construction costs of around \$100 million. The wind farm will comprise 20 Suzlon 2.1 MW turbines which Infigen has already acquired, and Suzlon Energy is also the project's turnkey engineering, procurement and construction provider.

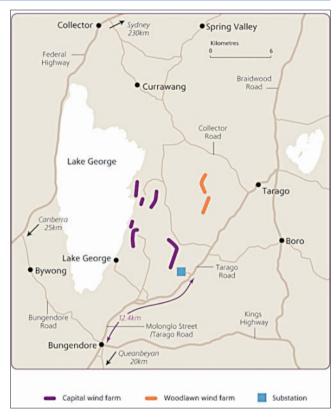
Sales arrangements for the output are under discussion. Infigen has a NSW retail electricity suppliers licence to directly supply electricity retailers, major industrial electricity consumers and wholesale market participants.

Managing director, Miles George, has welcomed the passage of the enhanced Renewable Energy Target,

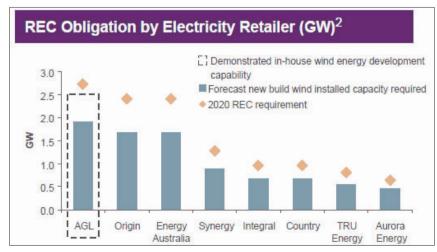
and expects Infigen to be a key provider of the mandated Large-scale Renewable Energy Target (LRET).

Wind energy is expected to account for around 70 per cent of the target, and it is estimated over 8,000 MW of additional installed wind energy capacity could be required over the next ten years.

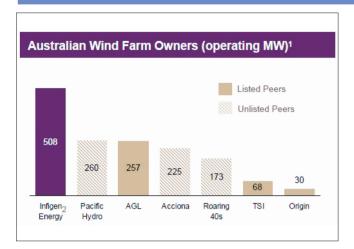
Around 80 per cent of mandated requirements is expected to be supplied by third parties such as Infigen. "Few of the liable parties under the RET legislation



Location of Woodlawn Wind Farm in NSW.



Page 16 Eco Investor July 2010



have any significant presence, experience or expertise in the wind energy industry. Independent renewable energy developers and operators are likely to supply the bulk of the mandated renewable energy requirements and we're very well placed among these competitors," said Mr George.

The contract market should revive following the LRET passage and the oversupply of Renewable Energy Certificates (RECs) removed, he said.

Mr George said Infigen's current security price attributes no equity value to its US business nor to the attractive growth prospects for the Australian business. Infigen has completed its on market buy-back program, having bought 5.3 per cent of its stock or 42 million securities for \$35.6 million at an average price of 84.7 cents each. It now has 760.3 million securities on issue. With the end of the buyback, Infigen's shares have drifted lower to below 75 cents.

The estimated final distribution for the June 2010 half is 2 cents per stapled security. It is expected to be fully tax deferred.

TSI Fund Shortlisted for Solar Thermal Project

The proposal to convert the coalfired Collinsville Power Station in north Queensland into a solar thermal plant, put forward by its owner Transfield Services Infrastructure Fund (ASX: TSI) and consortium partners, has been shortlisted in the Government's \$1.5 billion Solar Flagships Program.

The consortium partners, Transfield Services, Transfield Holdings and Novatec, propose to use a new technology to convert the Collinsville Power Station into a 150 megawatt solar thermal plant.

This would be done by replacing the existing coal fired boilers with a solar field of more than 1 million square metres. Novatec's Linear Fresnel solar field technology including banks of parallel rows of mirrors would be used to generate steam, which would then be superheated by gas firing before entering turbo generators.

The Government has short listed eight projects under the Solar Flagships Program – four for solar thermal and four for solar photovoltaic. Announcement of the successful solar thermal and solar photovoltaic projects is expected in the first half of 2011.

Meanwhile, the take-up rate for the retail component of TSI's recent capital raising was 32 per cent, raising \$8.8 million of the \$30 million that was sought and underwritten. Another \$80 million had previously been raised from institutional investors.

Parent company Transfield Services Ltd subscribed for the remaining 29.8 million new securities under the retail offer, bringing the total amount invested by TSE in the TSI Fund under the equity offer to \$43.2 million. TSE's holding in TSI has fallen to 44.5 per cent, down

from 47.5 per cent before the offer.

TSI chief executive, Steve MacDonald, said "The proceeds of the equity offer, in conjunction with the \$191 million proceeds of the sale of the Mt Millar Wind Farm and the extension of corporate-level debt maturity to 2015, position TSI Fund to deliver attractive and sustainable distributions to securityholders."

The Fund's forecast final distribution for 2009-10 is 4 cents per security.

Transpacific Chairman Says Goodbye

Transpacific Industries (ASX: TPI) founder Terry Peabody has resigned as chairman of the company. Transpacific had previously announced that he would step down as executive chairman and become non-executive chairman.

Mr Peabody said "After 27 years I have decided to retire as a director of TPI, to allow me to focus on other business opportunities with which I am involved. It is the right time for me to step aside as the executive team is more than capable and ready to lead TPI." Mr Peabody said he would remain as a shareholder.

The new non-executive chairman is director Gene Tilbrook.

White Energy in ASX 200

Cleaner coal technology developer White Energy Company (ASX: WEC) has moved into the S&P/ASX 200 Index in the latest quarterly rebalance. Inclusion means the stock meets listing, size and liquidity criteria.

In Indonesia, PT Kaltim Supacoal (KSC), which is jointly owned by White Energy and PT Bayan Re-

sources Tbk, has overcome engineering issues and increased the throughput rates of upgraded coal from 30 to 50 per cent of plant capacity.

The moisture content of the feedstock coal has been reduced from 35 per cent to a range of 10-12 per cent. WEC said this improves the calorific value of the coal from 4,200 kilocalories/kg (GAR) to approximately 5,800 kcals/kg. The target is 8.5 per cent moisture and a calorific value of 6,100 kcals/kg.

KSC has constructed an initial 1 million tonne per annum coal upgrading plant at Bayan's Tabang mine in East Kalimantan, and is now ramping-up production at the plant. It recorded its first coal sale in May with further sales continuing.

Emerging Companies

International Move for CO2 Group

Australia's postponement of an Emissions Trading Scheme (ETS) has pummeled the share price of carbon sink developer CO2 Group (ASX: COZ), but the commencement of New Zealand's ETS this month has created a new opportunity for the company.

CO2 Group has extended its carbon forest sink planting service to New Zealand, its first international expansion. The announcement helped CO2's share price pick up some of the losses since the Australian ETS was delayed.

CO2 said a key feature of NZ's ETS is the ability to generate and sell carbon credits into the international carbon market, which in 2009 had a market value of US\$143 billion.

At present CO2 cannot access international markets from Australia and is unable to grow carbon forests for international clients except for their Australian needs. The New Zealand move will allow it to service the international needs of international clients.

A new company, CO2 New Zealand, has been formed, with CO2 Group holding 45 per cent and the balance held by two partners: Maori commercial development company Tukia Group, and New Zealand investment and advisory firm Carbon & Energy Partners.

Tukia Group is the land manager of 176,000 hectares of existing forest lands in the central North Island region. It will provide CO2 New Zealand with approximately 5 million New Zealand Emissions Units (NZUs) by the end of 2010, and access to undeveloped land.

CO2 New Zealand will trade the NZUs and develop new sustainable carbon forests on behalf of outside investors.

Tukia Group's chairman, Lennie Johns, said "Some of our land lies bare and idle, while other portions are at risk of erosion. Reforestation can help restore an environmental balance to these lands while also delivering an economic return," he said.

Tree types to be planted will be pines, spruce and eucalypts, which are grown commercially in New Zealand. Due to the better climate and fewer fires, marginal land in New Zealand can provide a higher carbon yield than in Australia.

CO2 New Zealand will generate carbon credits in the form of NZUs and Assigned Amount Units (AAUs) that can be sold in NZ and in international carbon markets.

Tukia conducted a global search for the best organisations to help it deliver its carbon strategy. "Both our organisations are leaders in our own countries in developing large, long-term commercial reforestation projects," said Mr Johns.

CO2 Group chief executive, Andrew Grant, said the expansion comes at the end of a long review process of suitable growth opportunities.

New CEO For Greencap

Greencap (ASX: GCG) has appointed a new chief executive, promoting Andrew Meerman, who was chief executive of Greencap's largest subsidiary, Noel Arnold & Associates Pty Ltd. He was also previously a director of Greencap for two years to September 2009.

Greencap has over 4,000 clients and is cautiously optimistic that it can grow its revenue by up to 15 per cent in 2010-11.

The group is performing strongly and recent contract wins include \$0.75 million for environmental services to the Indonesian mining industry, a biological survey in the Pilbara region of WA, work on the Northbridge rail hub in Perth, and a large contract for asbestos audits for the Department of Defence in the NT and northern WA.

Australian Ethical Investment has increased its holding in Greencap form 11.9 to 12.9 per cent. The shares, which in early 2005 traded as high as \$3, recently hit an all time low of 6.6 cents and remain at around that level.

New Recycling Factory

Recently listed Chinese plastics recycler, Novarise Renewable Resources (ASX: NOE) has acquired land and commenced construction of its new production facility in Fujian Province, China. The location is 40 kilometres from Novarise's current factory. The tenure for the land use right is 50 years, expiring in 2060.

The land use right contract with the Matou Town Land Bureau is for 200,630 square metres and a purchase price of RMB 30,090,000. The company will pay an additional RMB 15,049,500 for earth works.

Construction of the facility will be initially financed by funds raised under the recent initial public offering.

Construction commenced last month. The production workshop and warehouse are expected to be complete by February 2011 and the office, research and development centre, staff accommodation facilities and canteen to be completed in May 2011.

The facility will produce fibre-grade recycled polypropylene (PP) pellets, and have a production capacity of 75,000 tonnes per annum. Production should begin in April 2011.

Micro Cap Companies

Cash flow Acquisition for Cell Aquaculture

Cell Aquaculture (ASX: CAQ) has established an operational food processing, value-adding, packaging and marketing subsidiary called Cell Aqua Foods Pty Ltd.

A new facility has been established in Perth for the subsidiary, which is based on Cell Aquaculture's acquisition of the assets, customer base, product range and distribution network of an existing food processing business. The distribution network covers numerous

supermarkets, restaurants and catering customers.

The existing food range includes deserts through to prepared meals and some seafoods. The acquisition gives Cell Aquaculture a platform to develop its product range and distribution, and director, Peter Burns, said the plan is to distribute the company's cultured barramundi through the subsidiary.

An award winning chef has developed a range of smoked and value-added barramundi products that Cell Aquaculture has successfully test-marketed in local supermarkets under its Eco-Star brand, and commercial scale production of these products is commencing.

Chairman Perry Leach said the subsidiary is "a major step forward for Cell Aquaculture and represents the establishment of the final part of our vertically integrated 'Hatch to Dispatch' business model. Having now successfully proven the hatchery, fabrication and grow-out parts of our business model, the areas of processing, branding and distribution of produce is a lucrative segment that we have spent many years researching."

On the financial side the subsidiary gives Cell Aquaculture instant cash flow. The company has not indicated how much cash flow it expects, but any cash flow would be welcome given that in the December 2009 half it had revenue of \$0.34 million and made a loss of \$0.4 million.

Mr Burns told Eco Investor the company will release more revenue details in the new financial year, but meanwhile it has some major contracts pending that could affect its level of revenue and how quickly it can move to profitability. If all goes well it could be profitable by the end of the year.

Mr Leach said that after developing local and na-

tional markets for its products, the facility will aim to export produce, with exporting a prelude to establishing farming and processing operations in those regions.

Meanwhile, the planned international rollout of the company's land based aquaculture system continues.

In Singapore, Cell Aquaculture and its Singapore partners have identified and are assessing a site to develop a large scale premium species production facility for the local live seafood market. A 50-50 joint venture company, CellMore (S) Pte Ltd, has been formed with a funding commitment of S\$5 million (\$4.15 million) to establish the first stage of the production farm.

On South Africa, the company said the process of establishing a 2,000 tonne per annum facility with its South African partners has been slow, but a number of potential sites for the project are being considered.

Cell Aquaculture is also looking to develop production facilities in Malaysia and Europe.

The establishment of sales and revenue, new products, and progress on its overseas expansion are welcome developments following the company's setbacks in recent years and the difficulties encountered by the broader aquaculture sector.

A February \$2.4 million placement by Dutch based private equity fund, Linnaeus Capital Partners, which gave it 12. 3 per cent of the equity, helped Cell Aquaculture reach cash at 31 March of \$3.1 million. However, the acquisition cost of the subsidiary and Cell Aquaculture's new cash position have not been released.

Mr Burns said the company is now moving from its R&D phase to its commercialization phase. As it receives approval for its overseas projects a new capital raising is a possibility, but it does not expect to do so in the immediate future.

Planning Approval for Metgasco Power Station

Metgasco (ASX: MEL) has moved closer to commercializing its gas reserves with approval from the NSW Department of Planning to develop its Richmond Valley Power Station near Casino in northern NSW.

The 30 megawatt natural gas and coal seam gas powered station will power 30,000 homes in the northern rivers region, and with significantly lower carbon emissions than coal fired electricity.

It will also enhance security of supply for the region, and reduce line losses from transporting power over long distances to northern NSW. Metgasco said it could also provides support for wind and solar generators when these are unavailable due to lack of wind and sun.

The power station will consume 2.3 petajoules (PJ) of gas per year, which will be supplied from the Casino gas project including the recently discovered King-fisher conventional gas field.

The power station is expected to "monetise" 34 PJ over the 15 year life of the project. Metgasco has gas reserves of 397 PJ of proved and probable (2P) reserves in PEL 16 - sufficient to supply the power station for over 150 years, which is "well beyond the expected life of the facility".

The station will be connected to the existing power line network via the Casino/Lismore interconnector about 800 metres from the power station site. Metgasco has acquired the land for the project and has received subdivision approval from the Richmond Valley Council.

The final investment decision on the project is subject to progress on commercial negotiations and board approval.

If it proceeds, the estimated capital expenditure is \$40 million.

Managing director of Metgasco, David Johnson, said "The Richmond Valley Power Station will allow Metgasco to generate our first gas sales and is a critical first step in moving from being an explorer to producer."

Metgasco plans to further exploit its resource by selling gas into the local and southeast Queensland gas markets, and for the NSW and Queensland electricity markets. It is in discussion with several prospective customers, it said.

The company is planning to build the 145 kilometre Lionsway Pipeline from Casino to Ipswich in Queensland. The Environmental Assessment will be lodged with the NSW, Qld and Federal Governments next quarter.



Location of the Richmond Valley Power Station near Casino in NSW.

Meanwhile, Metgasco has appointed its deputy chairman Nicholas Heath as chairman. He replaces founding chairman Dr Peter Power, who is retiring.

Leonard Gill is a new non executive director. Mr Gill has over 30 years experience in the energy industry, including power generation, energy trading and risk management and energy retailing to large customers. He was previously chief executive officer of TXU Australia, now TRUenergy, and is currently the chairman of Alinta Energy.

Share Consolidation for Intec

Waste recycler Intec (ASX: INL) is to consolidate its shares on a one for 10 basis to improve its capital profile and share price.

Managing director, Philip Wood, said the company had just over 1 billion shares and the consolidation will aid overseas capital raising and improve share trading and liquidity. The share price is currently around 0.4 cents so the consolidation would see the shares trade at around 4 cents each.

Shareholders voted on the consolidation at an extraordinary general meeting on 30 June where they also ratified a convertible note issue and the issue of shares to La Jolla Cove Investors Inc. La Jolla is a US private investment company that provides financing to small and mid-sized public companies.

The first La Jolla note has a face value of US\$1.5 million and was drawn down in six US\$250,000 monthly instalments. Interest is 4.75 per cent per annum payable monthly. The note must be repaid by 16 November 2011 unless converted to shares at any time. La Jolla has converted a majority of the debt into shares and all of these have been sold on-market.

A second US\$1.5 million convertible note to La Jolla, under the same terms, will also be drawn down in US\$250,000 instalments on a month by month basis.

Following the consolidation and before any conversion of the second note, Intec's shares on issue will fall from 1,027,333,736 to 102,733,400.

Intec will use the capital from the notes to fund its operation and for the development of current projects, particularly in Australia and China.

Carnegie Share Valuation

Broker Patersons has valued Carnegie Wave Energy's (ASX: CWE) shares at 13.6 cents each based on a sum of parts estimation. The value is a small premium to their current on market value of 9 cents.

The valuation includes a \$59.6 million assessment of the asset value of the CETO technology, and a net present value of \$168.2 million for Carnegie's short term pipeline of four projects, giving a combined value of \$227.7 million.

The broker expects that the net present value of Carnegie's four projects in its pipeline would be \$588.1 million, and Carnegie's share of project funding at \$280.4 million, of which \$110.2 million would be new equity. The share price to raise this is assumed to be 12.5 cents. This would slightly more than double Carnegie's shares on issue to give the estimated value of 13.6 cents per share.

Patersons says there are many variables outside Carnegie's control that could adversely impact any valuation estimate. The next foreseeable major alteration to its valuation will be when Carnegie announces the results of the Garden Island commercial demonstration.

The broker rates Carnegie a speculative buy.

	Garden Island	Reunion Island	NH 1	NH 2	TOTAL PIPELINE
Project Capacity (MW)	5.0	15.0	50.0	50.0	120.0
Total Project capital Cost (\$m)	49.1	125.0	354.3	320.3	848.6
Less: Grant funding (\$m)	12.5	41.7	0.0	0.0	54.2
Less: Debt funding (\$m)	0.0	68.0	283.4	256.2	607.7
Required Capital (\$m)	36.6	15.3	70.9	64.1	186.8
Project NPV (\$m)	-15.2	62.8	256.4	284.1	588.1
CWE share	100%	49%	49%	49%	
CWE Share of project NPV (Sm)	-15.2	30.8	125.6	139.2	280.4
Project NPV adjusted for timing					168.2
CWE Share of NEW Capital (Sm)	36.6	7.5	34.7	31.4	110.2

	\$m
Assessed CETO asset value	59.5
NPV of short term project pipeline	168.2
Total value estimate	227.7
CWE Share of NEW Capital (\$m)	110.2
Assumed Issue Price (\$)	0.125
Existing shares on issue	797.8
New Shares	881.4
Estimated total shares on issue	1,679.2
Estimated value per share (\$)	0.136

First Commercial Jatropha Crush for Mission NewEnergy

Mission NewEnergy (ASX: MBT) has crushed its first commercial quantity of Jatropha oil from its Indian farms and shipped it to its biodiesel refinery in Malaysia. Mission said it aggregated 1,500 tonnes of seed from across India, and that this may be the single largest ever compilation of Jatropha seeds.

"The achievement of this milestone clearly demonstrates Mission's logistical capability to harvest commercial quantities of Jatropha from the network built over the last three years. This volume of harvest provides confidence that Mission will become feedstock self-sufficient utilizing Jatropha oil," said managing director, Nathan Mahalingam.

"Having validated the economics and viability of Mission's vision to become a fully integrated biodiesel company with a sustainable supply of captive feed-stock, we turn our focus to continuing to increase the harvest volume while lowering per unit costs," he said.

Mission has so far extracted and shipped 188 tonnes of crude Jatropha oil (CJO). This was done utilizing only basic oil expelling techniques, and solvent extraction methods now being introduced should increase oil yield from 16 per cent to 20 to 30 per cent.

Mission's cost base for Jatropha-based biodiesel, landed in Houston USA, is about US\$64 per barrel or US\$1.53 per gallon. This is a 34 per cent discount to the current price of Ultra Low Sulfur Diesel (refined diesel fuel), which trades at a premium to unrefined crude oil.

This cost basis does not include the proposed Biodiesel Blender Credit in the US, which would further lower the cost to around US\$23 per barrel or US\$0.54 per gallon.

Dyesol Raises \$12 Million

Solar cell developer Dyesol (ASX: DYE) has raised \$12 million by placing 12 million shares at \$1 each to international and domestic institutions and sophisticated investors.

The proceeds will fund working capital so Dyesol can address new opportunities in its key markets of Germany and US, said executive chairman, Richard Caldwell.

The continuing investor confidence was quickly followed by a new collaboration with CSIRO to develop higher performing dyes. The two year project has up to \$1.17 million of funding from CSIRO's Australian Growth Partnership (AGP) program.

Dyesol and a CSIRO team will aim to leverage Dyesol's knowledge of ruthenium based dyes and CSIRO's modeling and research capability to create intellectual property in the dye solar cell (DSC) photovoltaic market for Dyesol's exclusive use.

If the program is successful, Dyesol has flexibility to repay CSIRO with equity and/or a royalty.

Dyesol has appointed a Global Chief Executive Officer, Clemens Betzel, who is responsible for the group's global operations.

A law graduate, Mr Betzel began his working life as a diplomat for the German Foreign Office, and later joined United Technologies Corp. as President, International Operations, Europe. More recently, he was President of an early stage UK based third generation solar energy company during its manufacturing start-up and commercialisation stage.

He recently participated in a Dyesol board sponsored strategy and business planning workshop that set

a three year framework for the strategic business growth of the company. Mr Betzel will now be responsible for implementing the strategy.

The collaboration between Dyesol Inc and Pilkington North America (PNA) has resulted in the formation of a new company, DyeTec Solar (DTS). DTS will be located in Ohio near PNA's corporate R&D centre.

The partners said DTS will develop configurable manufacturing equipment for mass manufacture of Building Integrated Photovoltaics (BIPV), Automotive Integrated Photovoltaics (AIPV), and interior photovoltaic generating glass based products, powered displays and security devices.

This should enable downstream suppliers in the global glass market to mass manufacture high performing dye solar cell based products.

BIPV is the single largest market followed closely by AIPV. Nearly 50 million tons of flat glass are produced annually, of which 90 per cent is used in buildings.

Professor Michael Graetzel, the father of third generation dye-sensitised solar cells and chairman of the Dyesol Advisory Board, is the 2010 Millennium Prize Laureate.

The Millennium Technology Prize, said to be the world's largest technology award, is Finland's tribute to life-enhancing technological innovation. Previous winners have included Tim Berners-Lee, inventor of the World Wide Web, professor Shuji Nakamura, inventor of new revolutionary light sources, and professor Robert Langer for his invention and development of innovative biomaterials for controlled drug release and tissue regeneration.

The International Selection Committee awarded the

prize to professor Graetzel for his invention and development of dye-sensitised solar cells, known as 'Graetzel cells'. The committee said "The excellent price/performance ratio of these novel devices gives them major potential as significant contributor to the diverse portfolio of future energy technologies. Graetzel cells are likely to have an important role in low-cost, large-scale solutions for renewable energy. Besides photovoltaics, the concepts of Graetzel cells can also be applied in batteries and hydrogen production, all important components of future energy needs."

Boost For Cleaner Brown Coal

Environmental Clean Technologies (ASX: ESI) has taken a step towards the large scale commercialization of its cleaner brown coal technology with a license agreement with Vietnamese company Thang Luong Investment and TinCom.

The agreement to fast track the commercialisation of ESI's Coldry technology is being described as the largest trade deal between Vietnam and Victoria and could lead to exports of over \$1.5 billion by the early 2020s.

The Coldry technology is able to dewater brown coal and turn it into black coal equivalent (BCE) pellets with reductions in CO2 emissions of between 5 and 15 per cent.

The technology means existing brown coal power stations can use a blend of Coldry pellets and brown coal without major capital expenditure. ESI says a 10 per cent blend of Coldry into the Victorian power stations would meet the previously proposed 5 per cent cut in emissions by 2020 without the need to modify the

power stations boilers.

The pellets are not dependent on a carbon price to be cost-effective.

A joint venture vehicle, Victoria Coldry Pty Ltd, will treat and export Victorian brown coal to Vietnam. Stage 1 is the construction of a 2 million metric tonne per annum plant which should commence production by early 2014.

The licence agreement is a huge financial step forward for ESI, which is a pre-revenue business and runs at a loss. The company is forecasting initial revenue of \$10 million a year based on a \$5 per tonne royalty.

By 2020 the partners aim to be producing 20 million metric tonnes per annum, which at the same rate would increase revenue to \$100 million a year.

There would also be a potential dividend from its 10 per cent stake in the joint venture. ESI has 10 per cent undilutable free carry equity in Victoria Coldry Pty Ltd.

However the later stages of the project depend on Victoria delivering rail and port infrastructure upgrades.

Also, there is along way to go with construction of stage 1 at Loy Yang power station having an estimated cost of around US\$400 million.

The agreement is the culmination of nearly two years work, and will see TinCom become a shareholder in ESI.

Victoria Coldry Pty Ltd will have the exclusive licence to manufacture and market Coldry BCE pellets in Victoria for 5 years and Vietnam, as well as non-exclusive rights for plant construction in Indonesia and the rest of Australia. ESI retains the right to build Coldry production capacity at its own facility in Victoria.

ESI chief executive Kos Galtos said the project has broad implications for the company and for Victoria, the Gippsland region and the environment.

Low rank brown coals emit much more CO2 than black coal but after being dewatered into black coal equivalent (BCE) pellets, their CO2 emissions fall in line with black coal, reducing their environmental impact.

Another benefit is that every tonne of brown coal processed by the Coldry plant will recover up to 1000 litres of water. ESI says the water is 'Class A' and suitable for industrial applications without costly treatment. Using this water in a power station can reduce the power station's use of local river water by up to 20 billion litres a year.

Mr Galtos said the signing of the license agreement is a milestone in the commercialisation of the Coldry technology "as it creates substantial value for our shareholders and delivers a whole new industry for the state Victoria."

Comment

Cleaner coal can be a contentious issue because so far the level of carbon-cleanliness leaves much to be desired (Eco Investor Aug 2009). But that doesn't mean companies shouldn't try; in fact they need to try harder as coal will be part of the economy for the foreseeable future.

So far there are only two cleaner coal companies followed by Eco Investor, White Energy and Environmental Clean Technologies. This is because both have patented technology that can reduce carbon emissions compared to untreated coal. The level of carbon savings is not huge, but it is enough to make a difference and to

be encouraging. The companies should be judged on if and how they continue to improve their technology.

ESI's deal is opposed by some environmental groups, who are against the export of brown coal.

In its defence ESI said the treated brown coal is cleaner than black coal exported from Queensland and NSW.

Eco Investor would be against the export of all coal, if it were feasible. But at present it is not.

Until it is, all coal should be judged by its carbon emissions. It is not logical to oppose brown coal that is cleaner than black coal unless one also opposes the black coal. It seems more rational to either oppose all coal exports, or to indicate what level of carbon-cleanliness is tolerable until something better comes along.

BluGlass Valuation Milestones

A report on the Technology and Market Potential of BluGlass' (ASX: BLG) Remote Plasma Chemical Vapour Deposition (RPCVD) technology identifies a number of valuation triggers' that could change the company's risk profile and increase its likelihood of success.

The report identifies five potential short term triggers that could boost the company's valuation.

- A cornerstone investor in BluGlass or a joint venture partner for a segment of the business.

This would bring a capital injection, market credibility, and perhaps additional skillsets as well as accelerate commercialisation and cash flows.

- Receipt of the first order for the RPCVD equipment or end product. This would establish market

credibility and assist with future equipment sales.

- Commissioning of a fifth generation tool that includes the key performance criteria from previous tools. The tool would be more reliable and flexible and accelerate other technology milestones.
- The demonstration of single crystal GaN and In-GaN on a newly commissioned tool. This would provide operational confidence.
- The production of device-quality repeatable high quality crystalline material with minimal defects. This would demonstrate to potential customers and partners that the technology works.

"The key valuation triggers that may occur in the next 12-18 months are: the first orders for equipment, the announcement of a cornerstone investor or joint venture partner to accelerate commercialisation, the proving of commercial material quality and device performance," says the report.

"Any one of these events will greatly reduce the risks of BluGlass successfully commercialising the RPCVD technology and has the potential to significantly increase its market value.

"BluGlass is in a position to emerge as a key CVD [chemical vapour deposition] equipment manufacturer comparable to Aixtron (NASDAQ: AIXG), a pure play CVD company, which has a current market capitalisation of over US\$3 billion."

The report says the RPCVD equipment technology has significant advantages over competing technologies for the manufacture of light emitting diodes (LEDs) and high efficiency concentrating photovoltaic (PV) cells for use in utility scale solar applications. These include being cheaper and environmentally friendly.

The technology has the potential to produce the world's most efficient solar cell with efficiencies of over 50 per cent, and more durable cells than many competitors.

While the LED market is forecast to grow at over 30 per cent per year until 2014, it "is served by two equipment suppliers that are struggling to meet the market demand." The two major suppliers have 90 per cent of global market share. "With significant increases in demand over the next few years, there may be options to either enter the market as third supplier with operational advantages or possibly to vertically integrate with a chip manufacturer to enable them to undercut their competitors and deny others access to the RPCVD technology," says the report.

Produced by Australian CleanTech (ACT), the report also examines the BluGlass technology and the company's target markets for LED and solar applications. It reviews market potential, risks, and milestones as well as valuation triggers.

New Chairman for Greenearth

The chairman of Greenearth Energy (ASX: GER), Simon Molesworth, has resigned after three years in the role. The company said Mr Molesworth is an internationally renowned environmental lawyer and environmental policy formulator, and wishes to spend more time on his advocacy activities.

Robert Annells, a founding non executive director of Greenearth Energy, is the new non executive chairman. Mr Annells is also chairman of PT Geo Power Indonesia, in which Greenearth Energy owns 40 per cent, and executive chairman of Lakes Oil Ltd.

Capital Raising for Green Rock Energy

Green Rock Energy (ASX: GRK) could drill its first geothermal well for the UWA Geothermal Project in early 2011 following an agreement with The University of Western Australia. The project is at UWA's Crawley Campus in metropolitan Perth.

The agreement includes an Offtake Agreement for UWA to pay Green Rock the value of the electricity replaced by the direct use of geothermal energy over the 20-year life of the project.

The agreement also enables Green Rock to acquire UWA's 50 per cent interest in the Geothermal Energy Permit GEP1 covering 143 square kilometres of Perth's north west inner metropolitan area and offer it to other parties to invest in the UWA Project and follow-on projects such as the QEII Medical Centre and Stirling City Centre.

Although UWA will pass on its interest in the Permit, it will remain on the title of GEP1. Green Rock said it is in discussions with possible partners who see potential for using the geothermal resource under Perth to cool and heat commercial buildings and replace electricity from the grid.

Stockbroker and corporate advisor Cygnet Capital is to lead a placement of 70 million shares to raise \$1.05 million at 1.5 cents per share for Green Rock. Cygnet will also underwrite a non-renounceable rights issue on a one-for-three basis at 1.5 cents per share to raise another \$1.6 million.

Cygnet will receive 25 million options exercisable at 2 cents per share and expiring on 30 June 2013, and 6 per cent of all capital it raises.

CBD Completes First Project

CBD Energy (ASX: CBD) will receive \$12.3 million in revenue over the next 20 years with the completion of its wind energy project on Chatham Islands, 800 kilometres east of New Zealand.

The build, own and operate project cost \$2.9 million and comprises two wind turbines integrated with the electricity grid and a diesel generation plant. The wind energy reduces the amount of diesel power required on the islands.

After 20 years CBD ownership will be transferred to the Chatham Islands Enterprise Trust.

Chatham Islands is CBD's first project to be completed. Other projects are in Australia and China.



Unlisted Companies

Manufacturing Vision for Spark Solar

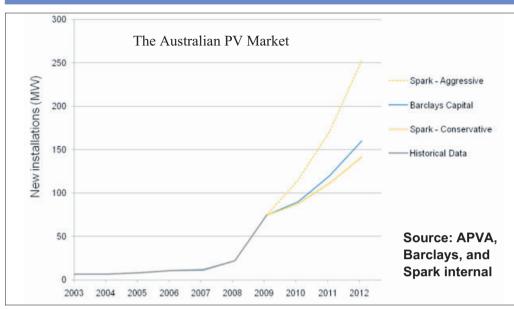
Despite some issues, many believe that solar photovoltaic (PV) energy has a bright future in Australia, particularly on the demand side. The State based feed-in-tariffs are popular and already there is a shortage of solar panels and inverters. The Renewable Energy Target should add to demand.

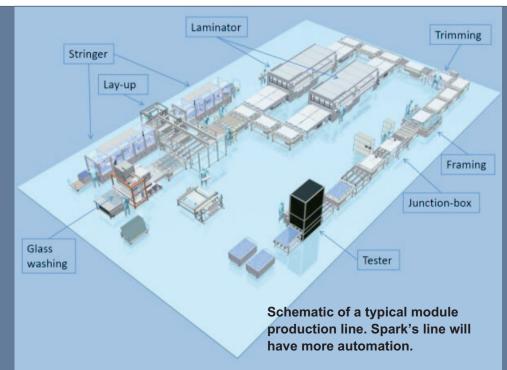
One industry participant who is very positive about the PV market is Dr Michelle McCann, the interim chief executive and technology director of Spark Solar Australia. With the industry's strong demand and fast growth now met mostly by imports, Dr McCann believes there is an opportunity for a local supplier. Spark Solar has been working towards becoming an Australian manufacturer since its formation in 2007.

The company's original plan (Eco Investor Mar 2009) was to raise \$60 million to build a high-tech solar cell manufacturing facility. But the large amount it sought combined with the global financial crisis meant Spark Solar has had to scale back its ambitions, or at least adopt a step-by-step approach.

The company is now raising a more achievable \$7.5 million to set up a high-tech solar panel assembly plant in Australia. The plan is to rent a factory and import state of the art assembly equipment to build solar modules or panels. Dr McCann said it will not be a simple screwdriver operation but somewhere in between assembly and sophisticated manufacturing.

Spark has some intellectual property in the design and assembly of the modules, and the panels will suit the high ultraviolet and high temperatures in Australia.





They will be cheaper than imported European and Japanese panels, and only marginally more expensive than Chinese panels.

The initial annual output will be 25,000 modules, equivalent to 6 megawatts or enough to power 1,300 households. Production can be increased to 30 MW without further equipment purchases.

At a later date and when the time is right, Dr McCann says the company could again look at moving up the value chain to manufacturing solar cells. This would fulfil its original plan and improve profitability.

Meanwhile, step one is to raise the capital. If successful it can finalize a supply agreement with one of three possible solar cell suppliers, select a factory and set up production. Dr McCann said Spark has also identified a chief executive, a senior energy industry executive who will commence when the capital raising is complete.

Production and sales could be within seven months of installing the production equipment.

Spark has off-take arrangements for the planned production volume in the first years, and the plant is expected to become profitable in the first full year of operation. Spark says its projections are modest and it can win a 9 to 10 per cent share of the market in its first years.

For investors, it says it could return the full investment amount in not much more than three years of operation.

Spark's project has Major Project Facilitation status from the federal government, which means it is seen as significant to Australia.

At present Australia has only two local solar panel manufacturers, the listed Silex Systems in Sydney and the privately owned Australian Solar Manufacturing in Victoria. If successful Spark would be the third.

The \$7.5 million equity raising is aimed at sophisticated investors. \$4.9 million of the capital would be used for the production lines and capital expenditure, and \$2.3 million for operational expenditure, leaving \$0.26 million for contingencies. Another \$0.45 million of debt funding would be for working capital.

Although it is still a small base, the Australian PV market is growing strongly. 22 MW of generation capacity was installed in 2008 and 75 MW installed in 2009.

Another advantage is that labour would be less than 5 per cent of total costs and Australia has a lot of solar expertise that could be drawn upon.

Unlisted Funds

New Chief Investment Officer for Australian Ethical

Australian Ethical Investment Ltd has promoted James Jordan, its Head of Research, to the position of chief investment officer.

Australian Ethical's chief executive officer, Phillip Vernon, said Mr Jordan "has been a key part of the investment team for a number of years and is highly respected both internally and externally".

Mr Jordan joined australianethical in 2006 as an equities analyst and was acting chief investment officer for much of 2008 "overseeing strong investment performance by the investment team during what was a challenging period for the markets".

He was appointed Head of Research in late 2008 and has since had responsibility for all analysts within the team and is said to have driven significant improvements to australianethical's investment disciplines, research processes and valuation methodologies.

Help us protect Australia's endangered wildlife

Australian Wildlife Conservancy (AWC) is an independent, non-profit organisation dedicated to the conservation of Australia's threatened wildlife.

Over 80% of AWC's staff work in the field implementing onground programs including feral animal control, weed control and fire management.

Log on to www.australianwildlife.org to find out how you can join us in our fight to save Australia's natural heritage. Prior to australianethical, Mr Jordan was for a long time a senior economist with the Commonwealth Government, including a senior adviser on taxation and superannuation policy, among other areas.

Coming Events

Seventh Responsible Investment Conference

The Responsible Investment Association (RIAA) is calling on the finance and investment sector to face the challenging issues that will dominate the investment landscape in the years to come - climate change, energy security, water scarcity, food production, financial market reform, governance in emerging nations, an ageing and growing population and affordable health-care.

"These economic themes are now growing in size and complexity and will undoubtedly impact future earnings," said Louise O'Halloran, executive director of the RIAA. "The critical question is - do you, as an investment professional, have the information and the skills to price the risks and identify the opportunities that are shaping our economies in the 21st century?"

To assist professionals in superannuation funds, funds management and financial advice sectors acquire this knowledge and learn more about a new model of investment best practice, the RIAA will hold its 7th International Responsible Investment Conference in Sydney on 14 and 15 September.

Over the two days, delegates will have the opportunity to hear from globally leaders in responsible investment, network with fellow investment professionals

who strive to better integrate ESG issues into their investment models, participate in master classes and learn about the industry's latest tools and resources.

The Conference features international speakers:

- Professor Ruyin Hu, Director of the Research Center of Shanghai Stock Exchange,
- Alexis Krajeski, Associate Director of Governance and Sustainability at F&C,
- Mike Dieschbourg, CEO of Global Currents (a Legg Mason company),
- Matthew Kiernan, Chief Executive of Inflection Point Capital Management,
 - Ian Simm, CEO of Impax Investment,
- Lisa Woll, CEO of the US Social Investment Forum.
- Hugh Wheelan, Editor and Co-founder for Responsible Investor,
- John Rubino, cleantech analyst, journalist and author of Clean Money, Picking Winners in the Green-Tech Boom.

The Conference will also see the launch of the Academy for Responsible Investment, the world's first online centre for responsible investment education and training, and delegates will be eligible for discounted enrolment fees by attending the conference launch.

Three master classes are designed for institutional investors and financial advisers. These will feature many case studies from superannuation funds, fund managers and financial advisers demonstrating leadership in responsible investment. The case studies will explore the journey taken by these organisations and individuals and provide delegates with practical action plans for their own RI strategies.

See www.responsibleinvestment.org.