

## Review of the 5th AustralAsian Cleantech Forum 2009

31 March - 2 April, Park Hyatt Hotel, Melbourne

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You are standing in a large, tiered ballroom. Round white linen tables fill the space, armchairs resting on stage by the dais, video screens flanking the arrangement. A series of beautiful concentric circles meet in a collection of tear drops above.

Several booths encircle the outside foyer, three more nestled beneath the grand staircase. Depending on your timing a quality lunch buffet or sugar fixes such as little custard filled chocolate pastries and a flow of decent coffee were close by, the Hyatt staff delivering imperceptibly good service.

Through the crowd and across the hall the Fairmont room posed a secondary and smaller location for the last day of the conference, companies pitching concurrently between both spaces. A film crew next year would be a worthy addition.

Every company offered something of great interest that I imagine you could leverage into your existing networks; <http://www.cleantechology.com.au/index.php?page=Showcase>

### Network, network, network.

The calibre of guests was quite incredible, all happy to put forward their capacities and contacts to those they met. The value in speaking of 'interests' versus 'positions' was obvious, as attendees built visions of collaboration that involved people, values and future goals, rather than simply stating their personal lines in the financial sand.

Amongst this helpful resources were spread across the tables such as **Jenny Cosgrove's** Equities Research paper for **WilsonHTM**; "Investing in Cleantech is not about being green. This is an emerging industry responding to changing financial and economic conditions ... the speed at which cleaner energy systems are adopted will be driven by economic fundamentals..."

This sentiment was echoed by every panellist on the successful side of a Cleantech venture.

### People in the mix

On the cusp of Gen-Y and X, I am being forgiven day by day for not having seen a recession, the internet playing a role in shaping my perceptions on the heart of Western Capitalism through pieces such as the [Creature from Jekyll Island](#) and the [Credit of Crisis Visualised](#).

Alongside my fellow entrepreneurs, the audience contained an incredible amount of tax payer's money, represented by the nation's Superannuation fund managers, their advisors, analysts and Government departments, with lashings of private equity in the mix.

When combined with the subdued classical surrounds of the Park Hyatt, balmy evenings, networks of global quality and amazing technology, this was a genuine arena to realise opportunity. As **Peter Bregman** (Harvard Business.org) says "Small companies with low overhead, reliable owners, a small number of committed employees, personal client relationships, and sustainable business models that drive a reasonable profit are the great opportunity of our time."

### Our Cleantech companies;

["Creative Water Technologies"](#) enable up to 97% of water content to be recovered as clean water from highly contaminated waste streams cost effectively... up to 100% of contaminants can be extracted as dry compounds... in some cases separated by specific gravity into pure dry fractions for reuse or sale".

That is pretty impressive in my book. Contrast to [Red Flow](#), promoting proprietary flowing electrolyte batteries with integrated energy storage systems, no toxic heavy metals, non-perishable, 1/3 of the capital cost and 1/6 of the weight of traditional lead acid batteries.

[Daintree](#) are saving companies energy through wireless mesh networking, allowing them to monitor and control lights and other resources. [Australian China Clays](#) are billing their “Green” kaolin based cement as the way forward, and [Senviro](#) are an environmental sensor company focused on low cost capacitance based soil moisture sensing.

[Zeo International](#) work in Materials and Nanotechnology, [Jatol](#) are looking to harvest Jatropha oil as a sustainable feedstock for the burgeoning global biodiesel industry, and [Cetus](#) are rounding out ten years of development on their Marine Energy system.

[Engine Air](#) and [Neurosys](#) were pitching the development of air motor technologies alongside ‘utilising the world best practice in Environmental design to develop an energy supply principle that powers zero emissions and creates revenue instant architecture utilising the Di Petro motor’. A big concept aimed squarely at China. In the background Dateline are reporting that Warren Buffet has taken 10% of [BYD](#) (Build Your Dreams; Chinese Electric-Petrol Hybrid Automaker) for 230 million. Do all roads really lead to Rome?

[HydroGen](#) are looking to modular, pontoon based tidal power stations for energy production, [Pritchard Power Systems](#) on the other end of the scale focused on a COMET backed steam engine for biomass-to-electricity conversion.

I was a big fan of [Ingenero's](#) business model, a proven formula in the US for those interested in fitting solar to their commercial applications; the company requires zero capital investment and offers no ownership risk to customers.

[GeoBrick](#) are ‘building a low carbon future’ through production that uses 60% to 90% less Green House Gases than traditional kilns, meeting or exceeding relevant Australian building Standards. TAG Technology spoke of nano-scale additive that slows heat movement directionally, applications including paints and textiles that have shown a heat reduction of up to 6 degrees,

The CSIRO showcase made up seven private companies focused on Early Stage Venture Capital funding. They ranged from OptiCool in the energy efficiency space, through to Bioderived Polymers and Flexible Electronics in the new materials space, Thermoelectrics for energy generation and ECoult for storage. Mitigen were presented, then Landguard Pesticide Bioremediation for the agricultural sector.

[SunEngy](#) are chasing price parity with fossil fuels through industrial scale installations of patented sun tracking Liquid Solar Array Technology (LSA), a listed geothermal energy exploration company known as [Greenearth Energy](#) were also gaining lots of interest.

[Quantum Dot Solutions](#) were pitching the “a new state of matter (O.R.M.E.)” combined with “biogenic residue and live interactions of symbiotic consortia known as extremophiles“. This got a scientist or two pretty riled up contrasted against them having roots and grass that were clearly benefitting from the process compared to the control samples at the front of the stage. What do you think of this one? I was fascinated.

Stand outs in presence and capacity were the CEO of [Atlantis Resources Corporation](#) **Timothy Cornelius**, a Gold Event Sponsor and a guiding light for those us chasing success in the Cleantech industry, alongside **Sylvia Tulloch**, Managing Director of [Dyesol](#); technology and materials provider to the solar manufacturing industry.

Do you see a great future in this offering? Leave a comment or feel free to email me and discuss.

**Remember to find specifics here** <http://www.cleantechnology.com.au/index.php?page=Showcase>

### **Three streams of consciousness**

Flowing through this event was the wide-eyed fixation of the inventor, a gleam in the eye that often clouds a capacity to turn an idea or small business into something scalable, a majority of presentations not having an "ask" such as "I am seeking an amount of millions in exchange for this much of my company".

Secondly a reality check of Cleantech only being viable when an idea either solves a problem or meets a genuine need in growing markets was consistently stated by international forum participants.

Thirdly, and if combined with the second stream most importantly, a view that Cleantech was a genuine way to harmonise our world and reduce the impacts of Climate Change.

*Speaker summations are taken from notes and are not comprehensive, they are facts I found meaningful and hope they interest you. To anyone referenced please feel free to jump in the discussion and extend or correct what I have outlined here.*

### **Opening Address by chair (Peter Casetellas, Managing Director, Cleantech AustralAsia)**

Climate change is stalking us, a globally produced and developed phenomenon with tightening mandates and regulatory requirements. This is a boon for the green jobs market and education, new emerging companies revolving around the 'Chindia' (China and India) factor leading to market growth prospects. On the downside, credit and global finance is in turmoil, economic and government management being questioned, the fallout being impacts to personal wealth.

The Capitalist model is no longer supporting people as hundreds of millions drop below the poverty line... Our current financial system has been a time bomb and solutions are needed now, moving us from predictive knowledge exchange to action.

The stakeholders of this action are Politicians to align trade, aid provisions and finance; Investors and Venture Capitalists to realise opportunities and make a commitment; Entrepreneurs to convert their ideas. These are the ingredients, when combined with energy, passion, humanity and commitment it will enable us to act.

### **Welcome by Susan Riley (Deputy Lord Mayor, City of Melbourne)**

Future Melbourne lays out the plans for our Eco-City. Carbon Sinks and Water Catchment alongside an Ecological Business District will be the nexus of our Eco-Community. We seek Zero Net Emissions by 2020; this requires extensive projects between business and government. Retrofitting 1,200 buildings alone will save over 300,000 tons of emissions per annum.

As a decade of retro-fitting relates to between six thousand and eight thousand jobs, the stars are in alignment for Clean technology.

### **Opening keynote: Hon Peter Garret (Minister Environment, Heritage and the Arts, Commonwealth Government of Australia) on Government Leadership in catalysing the growth of Australia's dynamic Cleantech industry**

The severe nature of the global economy should be contrasted to Australia's strengths such as the banking sector. Fundamental economic reform will invest in infrastructure, people and tax reform, providing a growing employment base and allowing more Australians to share in our actioned economy.

We are acutely vulnerable to climate change in Australia and there is an existing momentum towards change. It can be said "The future is purchased by the present".

Actions to support jobs now involve investing in relevant and emerging economies, an example being environmentally sustainable architecture, tied to a twelve million investment in schools.

We need to find the fastest and most cost effective way of doing things. Thus a framework for co-ordinated action must exist, a nation-wide response.

Chasing 20% renewables target by 2020, the Renewable Energy Fund for technology demonstrations and the Energy Innovation Fund will support this.

Australia has the potential to be the 'Clean Energy Hub' of ASIA, as we stand at a tipping point and a turning point in our world. We assert that Australia is the place for Cleantech Investment.

It is the time for wise, well-targeted investment in deliverable, achievable technology.

**Keynote: Tom Soto (Managing Director, Crator Equity Partners USA & Executive Office of the President Barack Obama, Co-lead of the White House Council on Environmental Quality Transition Team) on President Obama and the future of Cleantech**

*President Obama playing over the screens... "Now is the time to act. We need to break our oil addiction, the consistent roller coaster from uncaring trance as we fill up our SUV's at the low times, to shock and protest as the price spikes."*

There is a liquidity requirement of privatised pension funds to draw on in support of the credit crisis.

Shareholder value is a result, not a strategy. We are writing a new chapter in a new novel, evident by appointments such as Ken Salazar, a water lawyer for over a decade.

Through EESA, the Emergency Economic Stimulus package, we have a catalyst for mitigating and responding to climate change. Currently America spends 700 billion per year importing oil.

In 2008 Cleantech investments were up 38% from 2007 levels, California passing AB32 to cap Green house gas emissions, a sign of the times and indication that we want to create the jobs of the future; that is why we like President Obama, he thinks big, we like big.

**Ivor Frischknecht of Starfish Ventures** asked Tom if he saw an "Apollo" project for Cleantech, unification towards a common good, **Julian Poulter** of the **Climate Institute** wondering if "the US were dragging their feet at the G20". In respect to both Tom focused on Cleantech being a product of commercial reality, the sector evolving as it makes fiscal sense for markets to take on lower emitting technologies and products.

**Sean Lucy, Head of Carbon Solutions Group, nabCapital:**

Mandatory renewable energy targets have driven the sector, Government, Industry and Finance needing to provide a response commensurate with the scale of the problem. This requires an environment where innovation can flourish, something that will be key to a successful roll out of policy.

Moving us to our Mandatory Renewable Energy Targets (MRET) at the least cost is our goal. Supply chain innovation is a key part of this; "We will back business innovation".

**Catherine Woodcroft (CEO, Australian Private Equity and Venture Capital Association Limited)** spoke of the need for infrastructure facilitation to support green technology, the goals being achieved "through collaboration...".

**Ian Robertson (Trustee, Local Government Super Scheme and Chair Australia Institute of Superannuation Trustees)** on the Role of Super Trustees in advancing sustainable development;

Cleantech is a critical area for Institutional investors. A transition to super guidelines that factors environmental, social and governance perspectives is now a focus.

The World Wildlife Fund stated by 2050 that Australia could have a completely renewable industry sector for half the cost of the bailout. Ian quoted Lenin "VI, not John", going on to state the requirements of positive change as renouncing short-termism and challenging the orthodoxy of financial and non financial concepts.

To accept that "The fundamental responsibility of attending to climate change is all of our responsibilities. We must challenge the limits".

### **Panel discussion on Challenges and opportunities in Cleantech investing for super funds**

**Louise O'Halloran (Executive Director, Responsible Investment Association of Australia)**

**Kristian Fok (Deputy Managing Director, Frontier Investment Consulting)**

**Helga Birgden Head of Responsible Investment, Asia Pacific, Mercer)**

**David Atkin (CEO, Cbus)**

We face significant risk and need to find the right and best way to value companies and projects. As of Christmas 2008 the world has recognised the need to re-evaluate energy production and consumption.

We need twenty to sixty billion invested to meet our renewable energy targets. Eighty five to one hundred and ten million barrels of oil will be used per day in the next decade.

The Cleantech sector is to be fuelled by big, significant investment in infrastructure, supported by a rising energy price and highlighted the merit of specialist advisors to the sector. Through understanding the risks and tapping an innovation pool, institutional investors should focus on Cleantech funds that demonstrate quality management and advisors. A team close to the scientific community that understand the regulatory risk, who also have deep technology knowledge.

For super funds a member engagement strategy that focuses on active sponsorship in opposition to investment performance would provide a balanced outcome.

Cleantech is the new technology bubble, a place where more funds are switching.

Risk management is about seizing opportunity.

Funds intent on operating and making money need to jettison median returns, Cleantech portfolio allocations rising from 5% to 15%.

In March 2009 the Chinese Government defined the way to overcome Climate Issues as 'mobilising capital'.

### **Panel discussion on the Key drivers behind global Clean Technology transfers**

**Rajnesh Trivendi (Director Investment Banking, Yes Bank, India)**

**Kerry Rooney (Head Clean Energy, Austrade, Australia)**

**Christian Jensen (New Energy Finance, a great resource for those seeking Cleantech information)**

**Timothy Corneilus (CEO Atlantis Resources Corporation).**

**Glenn Fozzard (Senior Investment Advisor, Intersuisse / Phillip Capital)**

We are facing an old world and new world contrast. New Investment in Cleantech this year is zero public money, Private Equity is tending to fill the gap. 80% of all funding whether private equity or venture capital is done in the US. For Cleantech, feed in tariff deals have confirmed pay back and periods. The US are spending \$66 billion and China \$59 billion respectively in stimulus.

Over 2,000 Carbon Capture and Storage (CCS) projects are going on under the radar.

Deal flows have quadrupled for investors; it is a good time to stimulate your investing in early stage companies.

Companies' intent on IPO in 2009 or 2010 may need to sit on their knitting. It's a good time to get better people and premises at low cost. For companies seeking expansion capital, they may have to swallow nasty terms or cut back.

You have to look overseas. You have to operate in supported legislation.

Startups need to integrate into larger value chains, to "bundle" with established processes. Companies can facilitate export rather than simply taking it overseas.

We are coming from an Anglo-Indian focus on Consumption and this will be a battle for us. India faces a fifty two gigawatt energy shortage expected by 2010/11, 7% of the countries solid waste being treated and 60% being compostable or recyclable. This presents a massive opportunity, companies investing 250 - 300 million quarterly in the Cleantech space.

Australian business plans do not focus on effective growth.

We should look at market realities, target one, segment it, show growth and scalability.

Have a low cost-curve where available.

Investment goes to supported environments; Asia, US and Europe.

To gain investment, show a pipeline with a robust ROI and pre-purchase agreements from credit worthy customers.

Ensure your plans are investment ready and you are prepared. This is consistently not the case in Australian companies that approach investment.

An opportunity exists to transfer skill sets from automotive, aerospace and defence personnel, gaining a high tech manufacturing bonus for applicable companies.

Entrepreneurs need to prove "Yes, this can be done at a cost effective price". Show a concept, a prototype and then a product. Remember to partner, you cannot do it alone. It is about your ability to do business with the people in the market you are entering that matters.

Structure your investments to suit your customers. Ignore traditional capital raising. Ultimately you cannot make Australian numbers stack up.

It is more than simply a project pipeline; it is about the management and the potential size of the market for the concept in twelve to eighteen months time.

### **Back to basics**

**Tom Soto** brought us back to developing new markets in frontier economies and how we access capital to do this. "No war ever brought prosperity", and with the redistribution of war funds spent on Iraq and Iran, a cleaner future may be possible. California birthed an electorate as a result of the need to innovate from an economic low. Through this we are beginning to see an almost concurrent and ongoing growth from non-profit and social communities.

This push is being driven by awareness raising through Defensive Communities such as Greenpeace and National Carbon, it is ignorant of the Cleantech sector to not acknowledge these groups.

We need to be more constructive in our plans for developing economies. We have widely known applications for new technologies to fill commercial market opportunities, now we need to create capital self sufficiently, factoring in the very environmentally conscious new youth; 'Gen-Z'.

Usually it takes two generations to shift a culture. We don't have that long.

### **..in closing**

It was inspiring to hear Oliver Yates, Global Head of Climate Change for Macquarie Bank reach out to the small business end of the market during his time on stage, then leading to the energy and commitment displayed by Daniel Almagor, CEO of Engineers without Borders, and Larissa Brown, Executive Director of the Centre for Sustainability Leadership "Change occurs through a collective..".

The energy of a youthful approach to 'saving the world' was similarly displayed by Erin I-Ping Kuo of PCG Asset Management, delivering an impassioned voice to her time at the conference; "Change is up to each of us ... rather than waiting to see what happens".

My hat goes off to the sponsors and the great service of the Hyatt, as well as the Castellás brothers for pulling it all together alongside their awesome event organisers Terrapinn; as they say "Use your brain!"

### **That's a wrap!**

Cleantech is the way of the future; a growing industry with relatively infinite scope, where new methods and technology allows us to rethink the why and how of every process invented by our species, letting us account for social and environmental factors as we move forwards.

I quote Chogyam Trungpa as an ethos to support our innovative spirit, a position that may align our global community and let us realise improvement based on commercial viability; to meet genuine need in growing markets.

"When human beings lose their connection to nature, to heaven and earth, then they do not know how to nurture their environment or how to rule their world-which is saying the same thing. Human beings destroy their ecology at the same time that they destroy one another. From that perspective, healing our society goes hand in hand with healing our personal, elemental connection with the phenomenal world."

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### *Reference:*

Creature from Jekyll Island (G. Edward Griffin) - <http://www.youtube.com/watch?v=7auQEXTWomA>

The Crisis of Credit Visualised: [www.crisisofcredit.com](http://www.crisisofcredit.com)

Why Small Companies Will Win in This Economy (Peter Bregman) - <http://tinyurl.com/d5pacz>

Perspective of the Obama Administration - <http://tinyurl.com/4bh9qs>

A great place to conference: <http://melbourne.park.hyatt.com>

The perfect hosts for your next event: [www.terrapinn.com](http://www.terrapinn.com)