

# About PEOPLE

Sustainability - Business to Business- People to People

Volume: 02 Issue: 01



How Can Australia



Be Sustainable

# From the editor

## Choosing the path to sustainable futures

I have been banging away at showing people how to create energy efficient and sustainable lifestyles for the last 35 years. This has only become easier during the first decade of the 21st century as the spectre of climate change has reared its ugly head. Whether you believe it or not is a matter of your point of view and your access to the facts at hand.

What I have recognised since returning to Sydney from the country in 1972 and seeing the air pollution from automobiles and industry, is that there has to be a better solution to what is still a major problem in all cities across the planet.

To that end this magazine is attempting to bring all the aspects of sustainability together through the stories and articles presented in a positive, uplifting and solution focused way.

As with any new publication that enters the market place, one has to find readers from that existing market. The magazine has to become sustainable within its own right and exist in a market that is in the trend of being web-based.

I believe that there are people like me who are looking for information to enable them to become an integral part the future sustainable economy. I see sustainability opening more doors then it will close.

I appreciate the fear that people have for change and of the unknown. This magazine will provide information

to help people make those decisions to overcome their fears

I believe we look forward to a fantastic future. It all comes down to what individuals and society believe is possible and our ability to overcome the limitations that restrict our potential for dramatic change.

We all have expectations about the outcomes we desire as individuals and in different societies. What we need to do is find the areas that we all have in alignment so that we can leverage off that alignment.

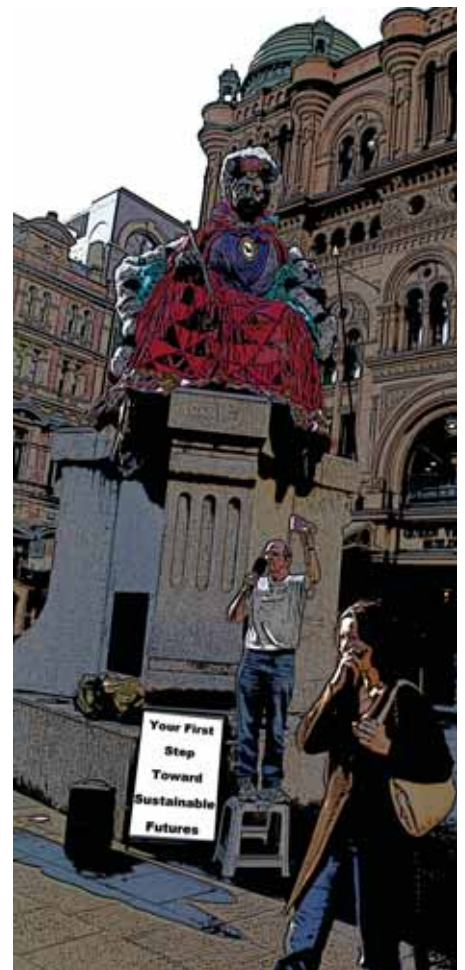
We have to look for the positive and the opportunities that will make our collective futures possible. It has always been clear to me that entrepreneurs will play a major part in our future for they are the ones with a vision that includes wealth creation.

There are issues about our ability to maintain continuous growth with the finite resources that our planet provides without considerable development of technologies not even known to us yet.

Humans have become disconnected from the natural cycles of our planet. We are just another animal that shares this planet with many others but we have been given a brain which we have to use for the benefit of all species - we owe it to our children and their children's children and for the many generations of humans to come.

*Whatever the mind can conceive and believe it can achieve.*

Will you make the right choice?



It is all ABOUT PEOPLE!

Ian Cleland  
Editor



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## Letters to the Editor

### Green Stars for product certification schemes

by Robin Mellon

The Green Building Council of Australia (GBCA) was interested to read the 'Corporate Culture' article in the third issue of 'About People', and to read the comments about the specification of furniture, textiles and leather for Green Star projects.

The GBCA is Australia's leading authority on green building, and was established in 2002 to develop a sustainable property industry in Australia and drive the adoption of green building practices.

In 2003, we launched the first Green Star environmental rating tool for buildings. Green Star evaluates the sustainable attributes of building projects based on nine categories, including energy and water efficiency, indoor environment quality and materials. Today we have certified more than 220 projects around Australia, including offices, schools, shopping centres, industrial facilities and residential dwellings. We have more than 320 projects registered to achieve Green Star certification.

In 2009, we released a new Assessment Framework for Product Certification Schemes, as part of the GBCA's ongoing inclusive and transparent review of Green Star. The new Assessment Framework was introduced to clarify best practice benchmarks and establish expectations for manufacturers and suppliers of fitout products, as well as for the certification schemes that are recognised through Green Star. We expect the Framework will also reduce the costs of product certification for manufacturers and suppliers as well as the costs and commercial barriers associated with Green Star fitouts.

In the past, only Good Environmental Choice Australia (GECA) certified products were 'deemed to satisfy' the requirements of the material calculator credits in Green Star rating tools. This has now changed, and applicant schemes were invited to make a submission against the full scope of the Framework from July 2009.

As a result, we are pleased to confirm that two schemes have already received recognition under the Framework. The Carpet Institute of Australia's Environmental Certification Scheme was the first to be recognised in March 2010. This was followed by ecospecifier's GreenTag Green Rate Process Application in May 2010.

The GBCA can now provide equal recognition for all schemes, provided they meet the strict criteria of the Framework. Two other product certification schemes have submitted documentation and announcements of their compliance will be provided on the GBCA website ([www.gbca.org.au](http://www.gbca.org.au)) in the coming months.

Robin Mellon is the Green Star Executive Director of the Green Building Council of Australia



Link to: About People magazine No03  
[www.aboutpeople.com.au/Pdf/ap\\_No03.pdf](http://www.aboutpeople.com.au/Pdf/ap_No03.pdf)

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# Lessons in leadership from the visionaries of solar energy

By Di Worrell



Australia's solar-energy industry led the world from the 1970s through the 1990s. Although the government's disinclination to commercialise this advantage made us forfeit that lead, several visionary Australians have looked beyond this temporary setback and pursued the technology offshore with tremendous success. Their example can teach us much about the realities of sustainable leadership.

One of these has been David Hogg and his leadership of Pacific Solar. The former NSW energy authority Pacific Power and the University of New South Wales established Pacific Solar in 1995 as a joint venture to commercialise the photovoltaic (PV) technology pioneered by Dr Martin Green and his team at the UNSW. PV technology is composed of thin layers of silicon film that convert sunlight to electricity. As a senior executive in Pacific Power I watched this solar story unfold with great interest through the lens of leadership, change, and sustainability.

We isolated Pacific Solar strategically from Pacific Power in many ways, the exceptions being reporting to the board and funding. Its location, management structure, accountabilities, incentives, business systems, and staffing were independent in order to foster a culture of entrepreneurship and innovation. Pacific Solar sourced its research team from some of the brightest scientific minds available globally, including Dr Zhengrong Shi, one of Dr Green's former students, to oversee the technology's further development.

Despite this partnership's enormous potential for leading the global renewable energy industry, local government decision makers lacked foresight, and sold Pacific Solar to overseas interests. The venture re-emerged in Germany in 2004 as CSG Solar, with David Hogg again at the helm. What was a blow to the solar movement in Australia provided the impetus for a momentous opportunity for the technology. The German government has been a welcoming and gracious host and has invested heavily in the technology, which is spreading rapidly across Europe.

Pacific Solar's Dr Zhengrong Shi, aka The Sun King, went on to establish a solar manufacturing plant in China called Suntech, which he listed on the New York Stock Exchange in 2005. It is now the world leader in solar technology, supplying more than 80 countries, including Australia, and has made Dr Shi a billionaire. David Hogg is once again working with Dr Shi, having been appointed COO of Suntech in 2010, which is now the majority owner of CSG Solar.

Dr Green is now the head of the UNSW's ARC Photovoltaic Centre of Excellence and maintains a close working relationship with Suntech and Dr Shi. He received the 2010 CSIRO Eureka Prize for Leadership in

Science, which acknowledged him as the world's "father of photovoltaics". Dr Shi, meanwhile, was a finalist in the 2010 Zayed Future Energy Awards for vision, leadership, and innovation in renewable energy and sustainability.

Dr Shi, David Hogg, and Dr Green stand out among the visionaries, scientists, entrepreneurs, managers, and their supporters who are making their mark by offering a newly receptive global market solar technology as a viable alternative to fossil fuels.

Their stories offer organisations at least seven lessons about leadership and sustainability in a context which is far more than just "green". These are that we need:

1. Long-term vision that has excellence as its uncompromising objective and that holds fast in the face of resistance.
2. Drive, discipline, and the ability to innovate and then take the idea through to global commercialisation.
3. The courage and tenacity to embrace risk and overcome setbacks.
4. The agility to respond rapidly to market opportunities.
5. The capacity to inspire trust and engender results from supporters.
6. Credibility resulting from a track record of consistent achievement.
7. The longevity to see a vision survive and thrive beyond any one individual.

It appears that solar technology is reaching the coveted "tipping point" where an idea transforms into the makings of a movement. Clearly credit goes to the technology, but even more to the leaders who are making it happen.

A former Pacific Power senior executive and now Principal of Worrall & Associates, Di Worrall specialises in leadership, strategic HR, and organisational change. A consultant and executive coach, she is the author of *A Climate for Change – the secrets of leadership and change in modern organisations. What works, what doesn't work and what you can do about it that will get the results you want.* For a free chapter and other articles about leadership and change in modern organisations, go to: [www.climateforchangebook.com/wordpress](http://www.climateforchangebook.com/wordpress)



# Women in business

In Australia, the green building movement only gained momentum after the Sydney Olympics in 2000 received worldwide recognition as the 'Green Games'. With venues and facilities that established new benchmarks in design excellence and best practice in sustainability, Australia's property and construction industry demonstrated that green buildings were indeed achievable and practicable.

But at the time, the industry had no metrics or agreed methodology to measure green building practices, no assessment tools and no benchmarks for best practice. There was no organised approach to knowledge-sharing or collaboration. Nor was there any way for the industry to promote or profit from green building leadership.

In 2002, a group of green building pioneers recognised the need for an independent organisation to develop a sustainable property industry in Australia and drive the adoption of green building practices. The Green Building Council of Australia (GBCA) had arrived.

Today, the GBCA has more than 900 member companies who work together to support the Council and its activities. The GBCA promotes green building programs, technologies, design practices and processes, and operates Australia's only national voluntary comprehensive environmental rating system for buildings - Green Star.

According to Chief Executive, Romilly Madew, the Green Building Council of Australia has always been 'about people'. "The shift towards more sustainable building practices was driven by industry. We recognised the need for a national tool which would support the creation of high performance green buildings – and got on with the job of developing it."

Ms Madew has been involved with the Council since 2005, when she first started working on its Dollars and Sense 2006 publication. When Maria Atkinson, who was the Council's first Chief Executive, returned to Lend Lease in 2006, Ms Madew took the helm.

Since 2006, Ms Madew has helped the GBCA triple its membership, quadruple its profit and confirm its role as a leader in



**Romilly Madew**  
Chief Executive, Green Building Council of Australia

the global green building movement.

As Chief Executive, her biggest business achievement has been growing a small industry association with just a handful of staff into an influential, internationally recognised organisation of more than 60 staff in five offices around Australia tackling one of the biggest issues we face today – reducing greenhouse gas emissions.

"While it's not easy being green, Australia is certainly demonstrating that it is getting easier," Ms Madew says. "Our industry has come a long way since Green Star was launched in 2003. From zero to more than 280 Green Star rated buildings, more than 440 projects registered to achieve Green Star ratings, and a council that is now second only to the US in terms of size."

Ms Madew is passionate about the Green Building Council of Australia and her role within it. She says it's a job 'made for her'.

"I was not sure what I wanted to do when I left school – so I did a Bachelor of Agricultural Economics at Sydney University – or as my mother would say, I did a degree in rowing.

"I decided to undertake a thesis on the cost benefit analysis of a Land Care project in Western NSW – to the angst of my Professor who did not think Land Care would ever be relevant. While it was some years

before I moved into a 'green collar' job, this experience certainly shaped my thinking."

After university, Ms Madew went on to BellSouth as a graduate trainee – becoming the National Order Processing Manager with 25 staff before moving to Canberra to become the Marketing and Business Development Manager at Mallesons Stephen Jaques. Children, a winery with a 180 seat restaurant, as well as appointments on various tourism boards and committees followed. After a stint as the Property Council of Australia's ACT Executive Director and National Sustainability Executive Director, she moved over to the Green Building Council of Australia. In 2009 she was the national winner of the Telstra Business Women's Awards in the Community and Government category.

So, what does the future hold?

"The future growth areas for the green building industry will be in green refurbishment and retrofits, sustainable cities, regulation and an expansion of green building in the Asia Pacific," Ms Madew says.

"Australia now has the skills, tools, government support and regulatory framework to build new green buildings - and both industry and government are now demanding tools to green existing buildings. The industry is also seeking frameworks to develop sustainable precincts and residential communities."

Ms Madew sees the green building growth throughout the Asia Pacific as a major opportunity for Australia.

"The Asia Pacific will provide opportunities for Australia to capitalise on its green building skills, experience and technology. Perhaps more importantly, we can help our neighbours with skills development and capacity building. By working together, we can ensure developing nations in our region learn from the mistakes of the past and ensure that, as they develop their economies, it's not at the expense of their precious environment."



# High Streets taking their destiny into their own hands

By John Tilston



In a globalised world often seen to be dominated by international brands, it is not always clear how smaller commercial shopping districts, without the global franchise stores, can compete in the modern world.

How do local shopping areas, serving their local communities, compete against the glamorous, super efficient malls managed by the likes of Westfield, Stockland or Lend Lease? These major players have developed the management of shopping malls to a fine art. They have used the economies of scale, their ability to generate "retail traffic" to drive their product, and, sometimes, have flexed their not inconsiderable corporate muscles in pursuit of their goals. It is exceptionally difficult for individual firms to compete against these retail machines.

There are, of course, some things to be done to make a small retail operator's offer compelling. Individual things. Distinguished service. Out of the ordinary stock, quirky specials and startling window displays. Many of these are not available to managers

of chain stores who must conform to corporate guidelines imposed from a distant head office.

But still, this leaves something missing from the equation. In the average commercial retail and business strip along a major road, there is no management of the whole street offering or the marketing of it as a collective entity as there is in Westfield or Lend Lease shopping centres, for example. Retailers and businesses are mostly at the mercy of passing vehicular trade, of people stopping to pick up a loaf of bread and milk or a DVD. And if there is no immediately available parking, there is often no sale.

This is a large part of the cause of the slow death, or "muddling through" at best, of our village centres around Sydney and elsewhere. This is no recipe for sustainable business, and by extension, healthy, locally based communities.

Some high streets are fighting back, following a model pioneered in Canada 50 years ago. They are

setting up "Business Improvement Districts" - the rather clunky North American term for areas where local businesses and commercial property owners get together to collectively 'manage their street': to apply the same sort of practices found in shopping malls to their streets, which range from special community-based events, through small beautification projects and added security, to co-operation on promotion, marketing and opening hours.

Funding is usually sourced from a special levy tied to rates administered (and directly handed over) by the Local Council. Every commercial property within the street's 'footprint' pays the levy to avoid free riders and to get buy in from everybody.

There are more and more areas in Australia looking to this model. Lane Cove was one of the first in Sydney to adopt the approach. Gosford has followed suit, The Entrance has a similar arrangement and Ettalong Beach on the Central Coast is in the process of setting one up. Other Councils - from Newcastle to Perth - are looking at encouraging local businesses to set up BIDs, as they are known.

These BIDs are not without their critics, especially those who believe local government should fund street activities from existing rates income, but the fact is most Council's are struggling to meet infrastructure maintenance costs, let alone spend money on business development.

And it seems undeniable that village businesses need to take their destiny into their own hands; to help make their high street sustainable and for their businesses to feed off the increased activity that comes from the collaboration and collective action.

BIDs have worked very well in shopping precincts in places as diverse as Vancouver, New York, Cape Town and London. Is Sydney next?

## Just a spot of coffee - just Campos

If you're looking for a great coffee when you are in Sydney, here are three venues that I think have great coffee and service. Steel Espresso corner of Wynyard St., and Wynyard Lane, Wynyard. ask for Manni or Aaron .



2kf in Mona Vale near the corner of Pittwater Road and Bungan Street. Phil has run 2kf for five years and has been producing great coffee and keeps it simple with a focus on the coffee.



This is where it all started from; the original Campos Coffee outlet 193 Missenden Road, Newtown. It was packed when I was there and I had not been in Newtown for years. I will be back!





# Sun Connect survey on solar panel perceptions

By James Strahan

We recently conducted a survey of over 2000 of our customers from around Australia on their thoughts on electricity and how they have fared switching to solar panels.

The purpose of the research was to determine our customers reactions to electricity prices and what exactly has happened with their electricity bills and photovoltaic panels since their purchase.

Only our Australian customers were called or emailed for this survey.

Why did you originally convert to solar?

- Electricity bill too high 55%
- Environmental responsibility 21%
- Long term investment and increased home value 11%
- Ability to sell excess electricity 7%
- Recommendation from builder or friend 6%

Do you think electricity prices will go up or down over the next 10 years?

- Up 92%
- No change 6%
- Down 2%

If up, by what percentage do you expect bills to rise over the next 10 years?

- 1% - 20% 15%
- 21% - 40% 18%
- 41% - 60% 28%
- 61% - 80% 25%
- 81% - 100% 5%
- 101%+ 9%

How much pain were your electricity bills causing?

- Severe pain 27%
- Moderate pain 56%
- No pain 17%

What was your quarterly electricity bill before solar?

- \$0 - \$200 6%
- \$200 - \$400 20%
- \$400 - \$600 31%
- \$600 - \$800 26%
- -\$1000+ 17%

What was your quarterly electricity bill after solar?

- \$200+ in credit 8%
- \$100+ in credit 14%
- \$0 - \$100 in credit 21%
- \$0 - \$100 27%
- \$100 - \$200 18%
- \$200-\$300 8%
- \$300+ 4%

## Findings

The survey suggests that many of our former customers have grave concerns for where electricity prices are heading and that over a quarter had severe problems affording their bills.

All of our customer's bills have been positively affected with one customer stating their most recent quarterly bill was \$505.00 in credit!

The unfortunate irony with solar is that as less and less people are buying off the grid electricity becomes more expensive for the remaining few with bills expected to rise between 6%-10% in 2011. Without this catch-22 not factored in, there could be some significant pain, especially for lower income earners who can't afford bills and are in less a position to afford the up-front investment in solar.

James Strahan  
Operations Manager  
Sunconnect



Why do 90% of us want to live a healthier and more sustainable lifestyle but only 10% are actually doing something about it?

Hello. My name is Trevor Keightley and I am the Founder & Executive Producer of Under The Sun TV (UTS-TV) a multi-channel and interactive broadcast television experience using the World Wide Web to deliver and share news, views, experiences and the how to of sustainable living.

[www.UnderTheSunTV.com](http://www.UnderTheSunTV.com)



We've done all the hard technical bits, gathered together a great team and now we're ready to launch - but we can't do this without you.

I'm here to invite the first 200 individuals and businesses to join with us as Founding Members. The financial contribution to become a Founding Member is \$500.

The funds that you contribute will be spent on the production of graphics & story content, promotion, PR, launch elements and administration as we head towards the launch set for the week commencing 25th April 2011.



# Rammed Earth and Modern Sustainable Architecture

By Giuseppe Calabrese



If you are still associating Earth Building with an unstable hut made of mud in a poor community in Africa, you need to get informed and read this article, as building with rammed earth has become the material of choice amongst governments and the wealthy wanting to be innovative and preoccupied with the environment and promoting the use of sustainable materials worldwide.

The misconceptions associated with Earth Architecture is that many assume it's only used for housing in poor rural areas - but there are numerous examples of modern airports, embassies, hospitals, museums, and factories that are made of earth worldwide. Earth is possibly the ultimate green building material, three billion people live and/or work in an earth building: an abundant and an inexhaustible natural resource.

How do we meet the challenges of comfortable safe buildings whilst reducing the energy used in construction, heating and cooling of buildings, improve indoor air quality and longevity of buildings and reduce toxic waste to landfill?

How do we raise the living standards of poorer people and maintain ours without depleting resources, increased environmental degradation and loss of biodiversity?

How do we future proof our buildings against spiralling energy costs and shortages?

How do we build homes, enjoy our existing lifestyle and reduce our need for fossil fuelled energy dramatically?

## Rammed Earth is the answer

Largely avoided since the arrival of its close cousin 'concrete' in the 1950s, Earth is now back in fashion as its ecological and aesthetic benefits attract the attention of an increasing numbers of contemporary architects and eco-builders. Industrial sectors devoted to earthen building are emerging at an impressive rate as this sustainable material wins over.

Since the 1970s, Western Australia has led the way in cement stabilised rammed earth building, with the technique now mainstream construction.

So what exactly is earth, earth building and rammed earth?

Earth can be considered as any uncemented or weakly bonded accumulation of mineral particles formed by the weathering of rocks; the type of soil depends on the rock from which the soil originates and the processes it has undergone since it was weathered.

Earth Building is the practice of building using unfired earth material. Earth is used to construct walls, floors, and in several cases, roofs and even furniture, fireplaces and ovens. It is a building technology with an 11,000 year old history and tradition, which is utilised worldwide today in contemporary architecture.

Rammed earth is a damp or moist earth, with or without any additive (mostly cement), that is rammed (tamped) in place between temporary moveable formwork. The layer is then compacted using a heavy rammer. The process is repeated until the formwork is full. The result is a solid masonry wall which does not have, and does not need, any cavity.

The modern rammed earth building community is split into two sectors, practitioners looking at cement stabilised rammed earth (5-10%), and more 'ecological' builders, who promote totally unstabilised rammed earth.

In some cases rammed earth may be considered as a weak concrete (due to the addition of cement as a stabiliser) as it's strength is comparable to modern concrete.

Earth building is a renewable technology because the material is simply borrowed from the earth for the life of the building and can be reused and recycled indefinitely as a building material or returned to the earth. The thermal mass of earth is commonly used to store both warmth and



coolth, balancing diurnal fluctuations in temperature in all seasons.

Earth building is an appropriate, renewable, sustainable technology, exactly what the world needs today to provide safe, durable, comfortable and desirable homes. The modern examples worldwide demonstrate how far the technology has developed and why it's a common choice building material.

Earth is simple and available to everyone – poor or rich alike. The material is durable (100 – 400 yrs plus proven in Australia, Europe, England, Middle East) offering longevity rivalling modern western housing (25-50 yrs, Australia). It is adaptable, being used for footings, floors, walls and roofs utilising many techniques.

It can be used to create buildings of any shape or style. It is raw and natural and has low embodied energy and can be used to achieve thermal mass and insulation by adjusting its density and thickness. The material is non toxic, non-allergenic, controls humidity, is fire, rot and-termite proof and therefore earth can be used to create safe and healthy buildings. Earth offers great sound isolation. The material is abundant and widespread, uses very little energy in the entire process from raw earth to building, is durable, and its properties make it an excellent choice for climate responsive buildings.

Rammed earth's sustainability credentials outshine any modern material in any life cycle analysis; from the embodied energy in creating the building through the reduced energy used in its long life, in maintenance, heating and cooling, to demolition and reuse.

Australia leads the world in modern rammed earth construction, both in quality and volume of projects built, thousands of houses have been built with this technology in Victoria and Western Australia not to mention in the United States of America.

## **What are the main advantages of using rammed earth?**

### **Sustainable construction**

Numerous are the benefits to the environment in using rammed earth compared to the more modern alternatives of concrete and steel.

### **Non existent CO<sup>2</sup> emissions**

The manufacture of cement requires the burning of limestone and produces CO<sup>2</sup> as a waste product. Around 10% of global CO<sup>2</sup> emissions are from the cement industry.

### **Thermal performance**

Acts to naturally regulate the internal temperature of a building. If a rammed earth wall is designed into the heating system of a structure, the energy required to both heat and cool the building can be greatly reduced, which further reduces the CO<sup>2</sup> emissions of the building.

Rammed earth naturally regulates the internal relative humidity of the building, producing an improved air quality. This contrasts greatly with air conditioning systems, which act to dry the air in a building and contribute to harsh working and living environments.

### **Structural performance**

Rammed earth is perfectly able to act as load bearing members within a structural system. The strength of dry, unstabilised rammed earth is close to 1MPa, a stabilized

wall can reach 15 MPa (standard for concrete is 20 MPa).

## **Embodied energy**

The inherent recyclability of rammed earth, and the reduction in CO<sup>2</sup> emissions during the lifetime of the structure, the high thermal mass and thus low operating costs all mean that rammed earth has a much lower embodied energy than comparable building materials.

## **Noise reduction**

The thickness and density of the walls mean that unwanted sounds such as traffic noise are kept out. Internal walls in rammed earth can also be extremely useful in providing sound insulation between areas with



**Form work set up to receive earth to be rammed to form wall panels**

different needs — for instance between living and sleeping areas, between a public or family room and a study area, or in party walls between townhouses. CSIRO tests indicate a sound transmission rating of over 50 decibels for a Rammed Earth wall of 250 mm.

## **Fire proof**

Earth simply does not burn. This is an ideal material for bush settings and leafy suburbs. CSIRO tests showed that a 250 mm rammed earth block wall achieved a four hour fire resistance rating. Also, being 300 mm thick and of monolithic nature rather than of block construction, no vulnerable mortar joints are present.

## **Cost effective**

Unlike most types of masonry, Rammed Earth walls don't need core filling or reinforcing - nor do they need plasterboard, plaster, paint or wallpaper. Saving money and energy when you build — and goes on saving them for years through the life cycle of the building.

## **Healthy and environmentally friendly**

Rammed earth is non-toxic, non-polluting and 'breathes' Clays within rammed earth soils are hygroscopic releasing and absorbing moisture in response to changing local atmospheric conditions:

Improving air quality, Completely removing asthma triggers, reducing respiratory diseases caused by 'modern' materials■

Giuseppe Calabrese is an architect and director of Sydney-based Architetto Pty Ltd  
[www.architetto.com.au](http://www.architetto.com.au)

# THE PALE BLUE DOT

It's the twentieth anniversary of the famous "pale blue dot" photo – Earth as seen from Voyager 1 while on the edge of our solar system (approximately 3,762,136,324 miles from home). Carl Sagan's words are always worth remembering:

Look again at that dot. That's here. That's home. That's us. On it everyone you love, everyone you know, everyone you ever heard of, every human being who ever was, lived out their lives. The aggregate of our joy and suffering, thousands of confident religions, ideologies, and economic doctrines, every hunter and forager, every hero and coward, every creator and destroyer of civilization, every king and peasant, every young couple in love, every mother and father, hopeful child, inventor and explorer, every teacher of morals, every corrupt politician, every 'superstar,' every 'supreme leader,' every saint and sinner in the history of our species lived there — on a mote of dust suspended in a sunbeam.

The Earth is a very small stage in a vast cosmic arena. Think of the rivers of blood spilled by all those generals and emperors so that, in glory and triumph, they could become the momentary masters of a fraction of a dot. Think of the endless cruelties visited by the inhabitants of one corner of this pixel on the scarcely distinguishable inhabitants of some other corner, how frequent their misunderstandings, how eager they are to kill one another, how fervent their hatreds.

Our posturings, our imagined self-importance, the delusion that we have some privileged position in the Universe, are challenged by this point of pale light. Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity, in all this vastness, there is no hint that help will come from elsewhere to save us from ourselves.

The Earth is the only world known so far to harbor life. There is nowhere else, at least in the near future, to which our species could migrate. Visit, yes. Settle, not yet. Like it or not, for the moment the Earth is where we make our stand.



It has been said that astronomy is a humbling and character-building experience. There is perhaps no better demonstration of the folly of human conceits than this distant image of our tiny world. To me, it underscores our responsibility to deal more kindly with one another, and to preserve and cherish the pale blue dot, the only home we've ever known ■

## Carnegie Wave Energy

Carnegie Wave Energy Limited is focused on developing and commercialising its 100% owned CETO wave energy technology which is capable of producing zero-emission power and direct desalinated water.

CETO differs from other wave technologies under development globally by being fully submerged and generating power onshore rather than offshore. CETO has been proven at pilot scale and is now in its commercial demonstration phase.



**Buoyant actuator in water tests**

CSIRO suggests harnessing 10% of Australia's wave resource could meet half of its current energy demands. CSIRO says that the swell of the southern coast of Australia is estimated to be worth 1.3255 terra watt hours.

A full story will be in the next issue of About People and will focus on the development, testing of the CETO technology and the people behind its development.



**Commercial scale buoyant actuator**



# Your building's rising energy use - what's the culprit?

By Greg Godby

The Sydney firm specialising in energy audits "Logic and Form" recently attended the Institute of Strata Conference in Sydney and a common theme brought up by strata managers was concern about the rising cost of running their buildings.

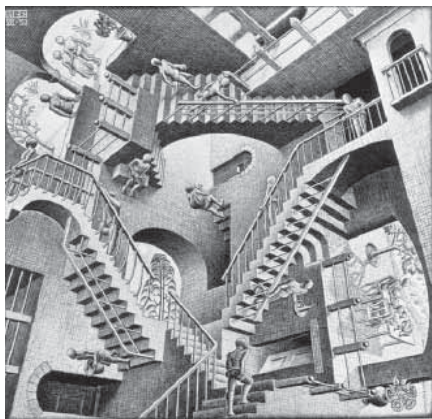
It is true that the rapidly rising costs of electricity, water and gas combined with the ageing of commercial and residential strata buildings, has added yet another load to the pile of responsibilities laid at the gate of strata managers.

It is safe to say these rising costs lead to a rise in rent leading to a rise in complaints in the managers in-box!

Unfortunately the problem is no longer a matter of turning off the odd light and making sure the toilet taps aren't left running, strata managers are increasingly expected to know the ins and outs of the mechanics of their building and to ensure everything is being done to run it in an energy efficient manner.

While many managers have a very good knowledge of their building, there are just as many that have inherited a building whose systems have been unmaintained, redesigned, equipment added and taken away, controls changed (numerous times) and eventually what they end up with is a plant room that looks like a picture by Escher and enough mechanical drawings to require a room of their own!

It is only right that body corporates and strata managers consider their responsibilities to their residents and tenants but with the best intentions it is notoriously difficult to stay on top of every piece of energy-saving technology that comes on the market. Thankfully, that difficult task has fallen to us, the energy auditors.



Is this your plant room

In fact, with strata buildings, the areas in which savings can be found are usually very similar; the main culprits being air-conditioning systems, cooling towers, exhaust systems and hot water heating. By looking at these systems **substantial savings really can be made**: In general, we can show an **energy reduction of up to 45%**.

## We have a maintenance contract on our building's systems

The benefit of an energy audit is receiving independent advice about your building's systems. Your maintenance contractors are required to do exactly that – maintain. They are not required to be proactive about suggesting ways of improving your system. And they face the same problem as all of us – who has time to be reading up on all the new energy saving technology?



Cooling towers have some of the best views

## Some areas of energy use to think about:

### Cooling towers

When was the last time you had your cooling tower independently checked? Not having a cooling tower that is up-to-date with current standards can actually be illegal! There is the risk of Legionnaires disease from towers that are not running properly, an unpleasant thought when you consider how many are running 24/7 blowing out particles of water all over the Sydney CBD! The fans that run in the cooling towers are often using up a large amount of electricity and an imbalanced tower can waste a lot of water. The options are there to improve the control of the system and/or the actual running of the system itself through upgrades. These can show huge savings on your electricity bills.

### Air conditioning

At a site of some offices rented out by a high fashion clothing brand the fashion forward office workers would have been horrified to see the state of the air conditioning system pumping out the air they were breathing in!

Once again it is very worthwhile getting an independent eye cast over your site's air conditioning system. Most systems are in a remote area of the building out of the way of the normal activity of the building. Often a system's vents may be blocked, dirty, or simply old and inefficient – this all leads to it being turned up higher or left on longer to reach the same desired comfort level and using more and more energy.

Savings can be achieved simply by ensuring all systems are cleaned and properly positioned with large savings made through better controls and new technology add-ons and the comfort of the tenants and residents will also be improved.

### Lighting

The technology in energy efficient lighting has improved rapidly; gone are the days of the flickering fluoro tube that takes hours to come on and requires night goggles to see.>

Also the cost of energy efficient options such as LED lighting has reduced considerably showing a much better return on investment. Couple this with motion sensors and there is really no reason that your building's lighting should be an energy burner. Currently the lighting accounts for about 25% of most building's energy, this can be reduced considerably with motion sensor monitoring to find out the real need for lighting in a room. Some recent audits have shown that on average forty percent of the time the lights are on no one is there!

## Exhaust systems

The not so silent assassin of your bank balance, exhaust fans chew up a large percentage of your buildings bill. Sound quality for your building and your energy usage can be vastly reduced by utilising correct controls, and new technology add-ons.

Bearing in mind the need for car park exhaust is a health and safety issue, CO2 monitoring is an option for ascertaining the actual demand for your car park exhaust – is it so fummy in there that you really need it running 24/7? More often than not this isn't the case and car park exhausts can be controlled to turn on only when needed.



## Hot water

Pools, spas, kitchenettes, shower facilities, toilets – whatever your building be it commercial or residential, hot water systems are large energy users and one of the most complicated systems to understand. The options for improvement of such systems are endless – solar hot water, heat pumps, pump inverters, the difficulty lies in determining which is right for your system. Bearing in mind that there are savings to be made through actions as simple as reducing the temperature your pool is heated to, it does not have to be an expensive exercise to save energy on your hot water heating.

## And the rest

Lifts, electrical appliances, kitchen equipment, bathroom fittings, garden irrigation, the thermal load of buildings... in conclusion there is a lot to consider when trying to reduce your energy and water bills. However this shouldn't put you off considering energy efficiency, it simply means there are a lot of areas for improvement. This can often be achieved through cost free changes or low cost improvements to your building.

## Fix and reduce building overheads

Having a professional auditor come in and provide you with the right advice can not only reduce your running costs and keep more money in the bank; as a building manager or owner you can budget for the improvements you need to make and have clear idea of the payback periods you can achieve.

## Create Your Dream Sanctuary reveals designers' insights

Create Your Dream Sanctuary was written by interior designer, motivational speaker and sustainability advocate, Victoria Miller-Wise. It is a practical design guide that inspires success, love, energy and wealth in your home or studio office.



As a best-selling author and dynamic award-winning designer who demonstrates an entrepreneurial edge in business, Victoria has an innate sense of how people and their surroundings interact. In this book she reveals her insights into what our home and work environments truly need to encompass to promote wellbeing in all areas of life. Victoria inspires readers to raise their awareness and appreciation of the way we all live and interact with each other, our surroundings and the planet. Readers will master the skill of embracing their true essence and expressing their 'soul purpose' through the purposeful creation of their surroundings.

"This book helps to open up the designer inside of you so that you may create your home beyond a set of architectural plans – and learn to avoid the common pitfalls of design. It will give you the skills to trust in yourself and your intuition to be able to design your home to be an expression of what is uniquely you, while offering the skills to ensure the home is practical for simple, everyday living;" Fiona Jones best-selling author and property developer.

Kate St James, FDIA is an interior designer, president of the Australian Architecture Association and magazine editor. Having operated her own design practice for many years, Kate is a well-known personality in the architecture and design world in Australia. It was these qualities that prompted Victoria to ask Kate to write the foreword and a chapter for the book. Kate's passion for sustainability in design and the way in which we live is the focus of her contribution, elevating our awareness of environmentally sustainable design leading towards a more sustainable future.

"We live in a fast-paced world where time is limited due to the myriad activities we need to include in our days: work, study, children, relationships, household chores, shopping, cooking and entertaining, travel and exercise." Said Kate. "Taking time out to do all the research for a home design project can see you putting it off forever, or finding that it's just too hard. That's where 'Create Your Dream Sanctuary' comes in: the hard work is done for you by someone whose life has been spent helping others create their perfect living environments."

Victoria has a deep understanding of how easy it is to create a Dream Sanctuary. Her generosity in sharing her knowledge and talent with others will inspire readers to create their own dream sanctuary.

[www.createyourdreamsanctuary.com.au](http://www.createyourdreamsanctuary.com.au)



LEFT:  
Victoria Miller-  
Wise



RIGHT:  
Kate St James



# The People versus Nature: Floods, infrastructure and planning for climate change

By Peter Fagan



The current flood events in Queensland and northern Western Australia are causing havoc and creating hardship for residents, farmers and industry alike. Right now, it is a matter of survival, but as soon as the danger passes, getting things back to some semblance of normality will be the imperative. Understandably so - communities need to return to their livelihoods as quickly as possible.

There is, however, another side to this issue in the context of planning for a future in which natural disasters occur with increasing frequency and on a greater scale.

In the 11th January 2011, the Australian Financial Review contributed to the discussion by publishing an opinion piece discussing the need for more dams to mitigate the impact of future flood events and capture water for use during periods of drought. The response from some politicians has been predictably short-termist: now is the time to focus on the immediate needs of the affected people.

Yet, by deferring the discussion we risk losing sight of the future and repeating the mistakes of the past.

We need to future proof our cities and towns by planning for and building infrastructure that has sufficient resilience to withstand natural disasters. Here, I am not just referring to flood mitigation infrastructure whatever that may be (dams, levees or a combination of the two). Damage to transportation, power, telecommunications, water, wastewater and other community infrastructure has been enormous. When rebuilding begins, priorities will need to be set and compromises made.

As this occurs, we need to be conscious of the balance between short-term goals and expediency and the longer term sustainability of our communities. A solution may be in the form of temporary repairs (unsealed roads, for example) while the longer term planning is completed.

Australia's engineering standards and methods traditionally rely on historic data to design infrastructure that meets our immediate needs and is unlikely to be impacted other than in exceptional circumstances.

Climate change alters this markedly in that the historical data is no longer relevant or reliable.

As we start to rebuild and repair, we should be, wherever possible, factoring in new design standards and allowances for the climate change-driven events that are inevitable.

*About the Author: Peter Fagan has more than 35 years of experience and is MWH's Asia Pacific Sustainability Practice Leader. His extensive experience spans the technical and organisational aspects of sustainability through public and private sector roles, including more than 30 years with New South Wales' largest water provider.*

*Mr Fagan currently serves as a member of the Technology and Sustainability Standing Committee of the University of Sydney's Warren Centre for Advanced Engineering.*



Web Site <http://www.alcas.asn.au>

The Australian Life Cycle Assessment Society (ALCAS) is Australia's peak professional organisation for people involved in the use and development of Life Cycle Assessment (LCA).

ALCAS was established in 2001, and became an important milestone in Australia's development of LCA. It was incorporated to promote LCA and sustainable development, and to coordinate the rapidly growing professional community in Australia.

A not-for-profit organisation, ALCAS has individual and corporate members from industry, government, academia and service organisations. We welcome membership from people interested in the practice, use, development and interpretation of LCA.



## Half a billion dollars cut from solar programs to pay for flood

The Prime Minister has just announced cuts totaling \$495 million to offset flood reconstruction budget spending. Cuts are targeted at:

- Solar Flagships
- The Solar Hot Water Rebate
- The Solar Homes and Communities Program

### Solar Flagships - \$250M Cut

The Solar Flagships program forms part of the Clean Energy Initiative and provides grants to support the deployment of large scale solar energy generation projects in Australia. The Government will reduce its funding for the Solar Flagships program by a total of \$250 million across the forward estimates period, with \$190 million of this to be re-phased to beyond the forward estimates. Impact on underlying cash balance 2010-11\$m

### Solar Hot Water Rebate - \$160M Cut

The Renewable Energy Bonus Scheme – Solar Hot Water Rebate provides a rebate of \$1,000 for a solar hot water system or \$600 for a heat pump hot water system and is available to help eligible home-owners, landlords or tenants to replace their electric storage hot water systems. The Government will cap funding from this program resulting in a saving of \$160 million over two years.

### SHCP - \$85M Cut

The Solar Homes and Communities Plan (SHCP) provided rebates of up to \$8,000 for the installation of solar photovoltaic systems. The program ended in June 2009 and residual rebates are still being processed. The Government will cap the amount remaining available for outstanding claims, allowing \$85 million to be redirected to the flood recovery effort.

## NSW Solar Bonus Scheme

Following the announcement by the NSW Government that the Solar Bonus Scheme was 'probably' already subscribed, the solar industry in that state has been in turmoil.

As at October 2010 there was 193MW of installed PV in NSW. According to industry feedback we understand that applications now exceed 323MW, and industry has the capacity to install around 2MW per day.

That means that in around two and a half months the installed cap will have been reached.

It also means that around 10,000 customers will miss out on the feed in tariff scheme, (although they will still be eligible for net metering to offset the electricity they use).

The government has indicated that the first customers to connect before the cap is reached will be accepted. However, we have also been advised that as at last week one of the major power suppliers did not have solar meters at any of its four depots across the state.

To 'qualify' for the Solar Bonus Scheme customers needed to show they had paid a non-refundable deposit to an installer. As you know installers use these funds against orders of components. It is likely that orders well in excess of \$50 million have been made against systems that may not qualify for the scheme.

AUSES is campaigning on behalf of the industry and is talking to the opposition and greens about the impact this decision has had in NSW.



John Grimes CEO of AUSES speaking at Solar Crisis public meeting in Sydney - October 2010



# TIPS ON RENOVATING

By Linda Haefeli

So you have decided to renovate. As well as more space, new kitchen, bathrooms and finishes would you like to reduce your carbon footprint too?

Buildings contribute around 30% Green House Gas emissions. If all new and renovated buildings were designed to encourage the end users to live an ecologically sustainable lifestyle which includes the elements of passive and active design, recycling of waste, consideration of the type of transport used and food gardens, a considerable decrease in our carbon footprint can be achieved. Questions to ask:

## Planning:

How big should the renovation be? If we are efficient with the size of the renovation, can we save money which can be used for PV's, water tanks, ESD features?

Have we designed for durability and re configuration?

## Site Analysis:

How will we affect the neighbours by this renovation?

Can we keep significant features of the local ecosystem such as trees, rock outcrops?

Have we minimised the disturbance of the existing ground?

## Passive Design:

Can the orientation of internal and external living rooms maximise solar access, daylight?

Can we maximise cross-ventilation utilising cooling summer breezes and ceiling fans so that air conditioning is not required?



Balmain House; Shaun Carter, Carter Williamson Architects

Can thermal mass be provided to absorb winter sun then release the heat when the sun moves away?

Have you considered the most suitable type of construction for your location?

## Energy:

Can we conserve energy by using maximum daylight so that lights do not have to be turned on? Be aware of where energy is being used. Turn off standby switches, computers, appliances at power points'

Have you considered the most suitable type of construction for your location?

Do you shading of windows with eaves, awnings, external blinds, external louvres to minimise heat gain in summer?

**Buildings  
contribute around  
30% Green House  
Gas emissions**

## Insulation:

Insulation is one of the most important considerations to achieve thermal comfort in your home.

The standards required are modest. If more high performance insulation is installed in the walls, roofs and under floors your house will perform so much better so that the need for air-conditioning is eliminated.

## Lighting:

Are you aware of the different sources of energy efficient lighting available now?

Dimmers reduce the lighting levels and power consumption.

Movement detectors are usually known for external lighting control but can be easily employed internally.

## Heating:

Has the design of the renovations minimised the need for air conditioning through the passive energy design principles – orientation, thermal mass, wall and roof construction, insulation?

Have you considered hydronic heating – water reticulated pipes in wall-mounted radiators or placed into the floor? Heating can be through a gas boiler or solar panels or heat pump.

## Sustainable materials:

Consider selection of materials with regards to embodied energy used in production, transportation kilometres – FSC timber, recycled timber, locally produced materials,

Selection of materials with minimal off-gassing and toxicity – low VOC paints, boards, adhesives, sealants, insulation.

## Waste Reduction:

Will building waste be recycled on site?

Have you allocated space in the garden for composting waste?

## Salvage and Recycling:

Can elements of the existing building be reused?

Will demolition materials be separated on site and then taken to recycling depots?



Photovoltaic & solar thermal array

## Renewable Energy:

Will you install Photovoltaic (PV) panels on the roof for the electricity needs of your family? You can become your own power provider and with the feed-in tariff be reimbursed for that electricity.

## Water

Will you install solar hot water?

## Conservation and Landscaping:

Will you provide tanks to collect rainwater and grey water from laundry and showers?

Water efficient toilets, taps, shower heads

Will the landscaping include indigenous low maintenance planting?

Have you allowed space for food gardens to generate your own food produce?

The above is by no means an exhaustive list of all the questions that can be asked in order to reduce your carbon footprint when planning to undertake the renovation of your home.

Select your architect or designer that has a proven track record in the area of sustainable design one that can realise your dream of a house that lives and breathes according to the environment – that works by opening windows and



Evergreen living townhouses

James Cooper - Sanctuary Design

adjusting shades to cool down and to keep warm allows winter sun to warm up thermal mass which radiates heat at night. A house that you can operate for thermal comfort rather than rely on power hungry air conditioning.

Further information: place text below in Google search  
Pittwater Sustainability Principles and Checklist

# A journey to Good Earth



by James Vosper

I have had a long-standing interest in the environment having grown up surfing in South West England's clean but freezing waters during every school break. Reading surfing magazines meant becoming familiar with breaks like Narrabeen and Lennox Head and a desire to visit Australia was born. This contrasted to an inner city life in London at a school with two thousand boys and regular punch ups on the terraces at Arsenal Football Club.

Upon leaving school, and being fascinated by the natural world, it seemed a natural progression to complete a degree in Environmental Management from the University of North London. After three years of constant good times and competitive sport (and some work) graduation came as a shock with employment in anything environmental disappearing due to government cuts. A sojourn to Europe proved an attractive diversion and three best mates bought a 1966 Jaguar and headed off to France and Germany before eventually settling in Holland.

Returning to the UK a friend mentioned that a TV station was looking for a statistician to work in marketing. Landing the job led to stints at Yorkshire TV, Thames TV and Europa TV in the Netherlands. The commercial side of TV is very conservative and any mention of the environment at that time was tantamount to labelling oneself as a "Communist".

Noticing that advertising agency people drove better cars than people in TV and didn't wear suits, a move to the legendary Ogilvy & Mather agency in London to work on brands like Ford, Shell and American Express seemed attractive. However, the yearning for a better environment to raise a family never subsided. Two more agencies and one broken leg later and an application to migrate to Australia was finally approved. After a month-long visit to Australia in 1991 the decision was made to take the plunge.

A year later in November 1992 Sydney's Northern Beaches population grew by four as the Vosper family arrived. Employment was found as MD of a major advertising agency. A passion for all things new led to consulting to Pay TV and then management and marketing in several internet and entertainment companies.

A few years ago sustainability moved in from the periphery of business development and it seemed that there was an opportunity to become involved in sustainability by combining environmental and marketing knowledge. Hence Good Earth was born with a view to providing clients with advice on how to reduce their environmental impact by improving energy efficiency and changing behaviour.

Good Earth was then approached by Enigin, a UK based company that designs and produces state-of-the-art equipment that both monitors and reduces energy consumption. By monitoring energy consumption businesses are able to see where and when energy is being used. Behaviour can then be modified to be more energy efficient. By displaying the data staff are motivated to save and visitors to the premises are made aware that the organisation is acting responsibly toward the environment.

It is Good Earth's position that organisations that take measurable action and communicate that action effectively will be the ones to gain most over the coming years.

James Vosper CEO of Good Earth Resources  
[www.goodearth.net.au](http://www.goodearth.net.au)





# Book Review

## Green Nanotechnology -Solutions for sustainable and energy in the built environment By Geoffrey B. Smith & Claes G Granqvist

### Features

- Links basic nanoscience concepts with examples of where they can impact energy efficiency, energy supply, and relevant environmental issues, including water supply
- Offers a multidisciplinary perspective with an emphasis on applied physics and engineering
- Presents the information in an accessible format with simple mathematical equations and clear explanations
- Discusses basic nanophotonics and how to tune material responses to what the environment has to offer
- Contains numerous figures, photographs, tables, diagrams, bulleted lists of summary points, and references to further reading.

### Summary

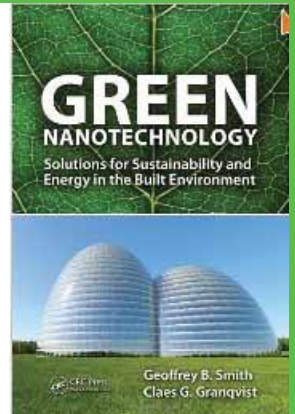
A first step in developing a clean and sustainable future is to think differently about everyday products, in particular how they influence energy use. Green Nanotechnology: Solutions for Sustainability and Energy in the Built Environment explores the science and technology of tiny structures that have a huge potential to improve quality of life while simultaneously achieving reductions in the use of fossil fuels. This book examines energy flows in nature and how the optical properties of materials can be designed to harmonize with those flows.

It then discusses the properties that can be achieved in real materials to take advantage of nature's energy flows.

The authors cohesively examine a number of topics, highlighting their applications and the significance of their nano features. They provide a cursory discussion of well-reviewed subjects such as nanostructured solar cells and turn their attention to timely topics such as methods for preventing excessive temperature and approaches to passive cooling. The book identifies key materials and elucidates how their properties can be understood in terms of contemporary materials physics and chemistry. It concludes with a detailed description of a scenario for future buildings that use much less energy while also providing better comfort.

A valuable side effect of most nanotechnologies is that they inherently put us in closer touch with the natural world. With broad coverage of how nanoparticles impact energy use in the built environment, this book opens readers' eyes to a fascinating vision of how technology and nanoscience can merge and lead to commodity-scale products that help preserve our planet.

For Video on radiative cooling presented by Geoffrey Smith & Angus Gentle go to About People website.



By Alain H Chazelles

In House Group 3 is a leading community in the building industry with fresh ideas and creativity driving its members to a bright and fulfilling future with a new way to do business!

The key words in this group are Quality and Sustainability! These are embedded in our DNA.

Are you interested in future events. In House Group 3 have been running events and seminars for the building and property industry for the last three years and are renowned for bringing architects, designers and investors together with suppliers, trades and professionals. ■

Contact details: Alain Chazelles  
Mobile: 0438 614 218  
email: [info@inhousegroup3.com.au](mailto:info@inhousegroup3.com.au)



Eco Challenge - hosted by InHouse Group 3

Capital Wind Farm at Bungendore near Canberra

# HENRY GEORGE

## Social Philosopher and Political Economist

By Dr Joseph Milne

"Men like Henry George are rare unfortunately. One cannot imagine a more beautiful combination of intellectual keenness, artistic form, and fervent love of justice."

**Albert Einstein**

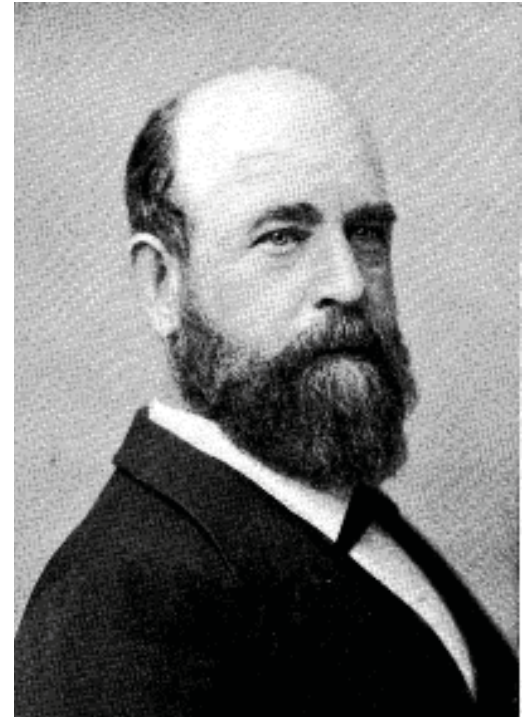
"This is a very important book. This is a step forward of equal importance to the liberation of our serf's. This is the liberation of the earth from private ownership."

**Leo Tolstoy**

If man lived according to natural law he would be free to enjoy the full realisation of his gifts and innate aspirations. But to live according to natural law means that the laws of nature must be observed and reasoned through. This is particularly the case with the natural laws of human society and the creation and enjoyment of wealth. That there is poverty in any society, or limits on the actualisation of any individual's talents or vocation is a clear sign, from nature, that a society is ordered in some way against natural law. Human society is part of the ecosystem just like every other part or aspect of the world or the universe and nature has made provision for the human species in the total order of things just as with everything else. This natural order extends from the simple needs of food and shelter all the way through all strata of society, in all its institutions, its government, its culture and its spiritual aspirations to transcendent truth. But unlike the other creatures of the earth, human society is not attained blindly through the mechanical laws of instinct, but only through the human power of reason and vision. Man is the thinking being, and only through thought and the intelligent understanding of the nature of things can man attain his proper place in the order of nature. Without such thought man is not yet human. As the reflecting being man can only come to his humanness through reflection, and such reflection is the calling of man within the ecology of the universe.

The question of how man ought to live within the natural order of the universe has been a central question of all genuine philosophical enquiry and of religion. Yet the insights of the great philosophers and saints have not yet been grasped by the generality of mankind, and so mankind lives blindly within his cosmic setting and calling, discontent because his intelligence tells him faintly that something profound is amiss in the ordering of society. Man knows he is not yet truly himself or free. This knowing is the calling in his own nature to discern the true nature of society within the natural order of things.

The study of natural law is the essence of all true learning and the heart of every discipline. Social philosophy and political science are two disciplines that seek out the natural laws of human community, and one of the most important thinkers here is Henry George who discerned in his major work *Progress and Poverty* those natural



laws which govern the creation and exchange of wealth which assure the easy provision of every human being of their needs, and beyond their needs the infinite scope of human talents to the mutual benefit of all and even of nature herself.

It is an extraordinary thing that this understanding of nature is open to immediate observation and reflection, yet societies remain blind to it and therefore in poverty and discontent, imposing false notions upon nature, forcing nature into unnatural paths and failing to see the inevitable and easily predictable consequences. Failing to observe natural law, nations vainly put their trust and hopes in ideologies which are not rooted in reality, or in leaders who will take care of things for the majority. Yet it is an obvious truth that man can only live and interact with the world about him according to the degree to which he can clearly see it. If man thinks wrongly or blindly, so he will live, for how man thinks manifests in how he lives, not the other way about.

In *Progress and Poverty* Henry George explains the reasons why, as society progresses and the economy grows, poverty arises in its midst as land monopoly gradually absorbs the natural social revenue and begins to cripple the creation of new wealth, and how taxes placed on production further cripple the economy. In order to illustrate this process in detail, he carefully analyses the three factors of production, land, labour and capital, showing how these are almost universally misunderstood. He goes on to clarify all the major terms of economics, such as wages, economic rent, interest, value, money and so on, again showing how these fundamental factors are misunderstood by economists.

George goes on to explain how, through the abolition of all forms of taxation on production or on wages, a society has a natural revenue which arises through land value, a value created by the community as a whole and therefore rightly belonging to the community. This economic rent is the proper source of revenue for government, and cannot be hidden or exploited either by land owners or government itself. It is natural and just, and therefore does not inhibit the creation of wealth in any way, and removes entirely the curse of unemployment which land monopoly directly causes.



He explains how only a just society can be a free society, opening the way to unimaginable human creativity, free of economic booms and slumps, in which everyone may enjoy the full fruits of their labours, either working for themselves or for an employer. A just society is one in which poverty is entirely eradicated and in which nobody lives on the fruits of another persons labour. In such a society government need only be minimal since no intervention into production would be required and free trade would be the norm.

In *The Science of Political Economy*, his last work, he explains the working of the economy in even greater detail, illustrating how erroneous theories distort economic understanding and how all attempts of governments to remedy the problem of poverty are doomed to failure owing to false notions of the economic factors, no matter how well intentioned. This book also explains how vested interest in land monopoly has deliberately distorted the academic study of economics in the universities.

In a free society, regulated by self-evident natural law and justice, work would no longer be the struggle for the

basic necessities of physical life it now is, even in the richest countries. The provision of essentials, such as food, clothing and housing, would require only the minimum of labour to secure, after which "work" would take on a higher dimension beyond the mere accumulation of goods. Leisure would be increased and so all people would have the time and freedom to pursue interests beyond their economic needs. Each human being would be able to reach their full stature through their natural gifts, through culture or whatever social pursuits they might desire. In such freedom crime would fall to a minimum and full human health, physically, mentally and spiritually would be raised, since the causes of most ills would be removed.

### Recommended Books by Henry George:

**Progress and Poverty**

**Social Problems**

**The Science of Political Economy**

### Editors Note:

The articles on Henry George written by Dr Joseph Milne from the University of Kent, UK is a reprint taken from the internet. The topic discusses taxing land and removing tax on labour and capital. This to me would appear to be an ideal solution to an issue I have pondered for a long time. I have seen that taxing one's labours and capital (capital being the tools of production) is a great disincentive to creating wealth through one's own efforts.

Land's value is after all determined by the people that want to live in a particular place not by the land itself unless it has a resource that people want. The value in the land is developed by a whole society not the person who develops the land.

There is an opportunity in Australia this year to look at this issue given that the Australian federal government is holding a tax summit. It would be appropriate to have all the issues on the table not just those that the current government sees as appropriate.

I see the issue of proper tax reform (not just window dressing) as important to developing our sustainable futures

If this topic is of interest to you we would like to have your comments. You can send them to the following email address: [taxreform@aboutpeople.com.au](mailto:taxreform@aboutpeople.com.au) and we will publish them on the About People website.



# **“The future belongs to those who believe in the beauty of their dreams...”**

## **“Ceasius World”**

This story is dedicated to all the dream fighters....

This is not a story about a dolphin or a seagull, nor a story about finding a philosophic stone, this is my story.

I don't have any idea what is going to happen with this story but if it can help at least one, just one person to not give up his or her dreams; to keep dreaming and fight with all their heart it will be worth it...

## **Letter to a friend**

Well I'm back in Sydney - welcome to reality - ready to confront 2004 full of energy.

This year is really important to me. I really want to achieve several goals and most of them are decisive for my future life.

I'm going to apply for residency in Australia. Yes!

I have been working really hard for this, almost three years and I am almost there. Well it is a long story but I feel like writing it down now, to encourage myself for this New Year.

It is just that I don't know how to start but I'm remembering how hard it was to leave my country, how difficult it was to leave my family, to leave my friends and a really stable economic situation.

I remember that I sold all my stuff, everything that I really liked and all the things that took me time and effort to collect; things like my plants, my truck and my dog Draco. I had to start again with nothing, just a dream in my pocket. (This reminds me how good it was to read the Alchemist by Coelho)...Wow what years!!!

The first year was really hard, especially because nothing was certain. I just knew that I didn't want to be in Peru anymore. It is not because I don't like my country, I love it! But, I couldn't stand to be there any more...well, not for now.

My country is one of the most beautiful countries I have ever been to. It has beautiful beaches, huge mountains and the amazing Amazon. Rich in natural resources, culture and beautiful people. It has everything; minerals like gold, silver and copper -



plants like Uña de gato and a bunch of medicinal plants that maybe could be the cure for the most horrible disease. It also has the most amazing animals in the world like the pink dolphins, pumas, monkeys and cholos con revolver. More than that, its ocean is rich in sea animals too, and also has the most variety of and perfect waves in the world...wow what waves...

I remember going backpacking with my brother and friends up the mountains... just with an old map, hungry for adventure.

In Peru, you can be in the middle of nowhere in just five hours and see people who live in the mountains far away from civilization. They even live without electricity, just in small primitive houses. You will see some chickens around





and maybe some mountain goats...

Sometimes these Serrano's people cannot even speak Spanish, just the kechua that is one of Incas languages and you will be just as surprised to see them as they are; amazing people...

Peru is a beautiful country but the system and the mediocrity of some people make the country a place where poverty is a national symbol and frustration is its loyal partner. There are not many opportunities in Peru. You have to create your own. Being creative is a big part of the culture.

We grow up being creative: Being creative can be confusing sometimes especially if you think about survival skills.

It is very interesting that you can go to the street and always find something that makes you think; wow that's creative...I love it.

I love it when you are in a bus and suddenly these small kids jump in from the back door without being noticed by the driver. They locate themselves strategically and when they get in the right position, they start their show.

First they start with a short speech in order to capture the attention of the passengers... "Ladies and gentleman while you are having a trip I WOULD like to sing a song that I really like and I hope you will like it to"

They take out of their pockets a couple of objects and hold them with their hands like holding a big grenade and start to raspar them making a rips, rips, rips sound and then sing. If you really look close the objects are just a couple of shells from the beach... the sounds are magic - it is magic my friend.

I have friends that come from the best private schools in Peru, with bachelor degrees and masters from the best universities not only from Peru but also overseas, with a lot of very good connections and contacts, but still looking for a job after almost two years.

Peru is not like other countries where you can get a job as a waiter or in a cafe where you can get some money and survive... only poor people do that in Peru because that kind of job does not pay much money. It is working your head off for nothing, and at the end you can afford just to buy your lunch and dinner for the day...

I have a lot of friends desperate, depressed and frustrated: It is really sad just looking at them. It is difficult to explain to you; you have to be there and live there to understand how it is. I just reached a stage where I could not stand seeing all that poverty and the frustration without being able to do anything.

I remembering going to work every day, and at every traffic light there were easily, 10 small five-year-old children begging for money. I'm still remembering their faces; all dirty from the smoke of the cars. It looked like they had not had a hot shower in their entire lives.

Some people are used to this; some people are more sensitive than others and some people are very hard.

Unfortunately I am not a good example of the last one and I could never get used to it. It was like watching a sad movie every, every day my friend...every day.

I remember arriving at my house exhausted after having passed all these children. I felt impotent, unable to do anything. I tried one day to give one dollar to every child who knocked on my car window. I spent \$100 dollars that day. It was nice but they were there again the next day, same children, same traffic light, and same dirty faces.

So I decided to look for my own happiness and then try to help all the people who were around me. I read that no-one can help anyone if they are not happy with their own lives first. So here I am reaching for my dreams.

But believe me, leaving my country wasn't easy. As South Americans, we are not used to travelling much, not because we don't want to but because we are not a rich country. So everything is more expensive for us. It is not only difficult economically but also because of the close relationship and attachment that we have with our family and friends. So the impact of leaving home is almost double compared with people who come from other cultures or developed countries.

My father was one of the main opposition. He didn't want me to leave and he constantly tried to discourage me as much as he could. He tried so many different ways that you could never imagine. I had one of the biggest fights with him before I left. We hurt each other so much that day that the injuries in our hearts took long a time to heal.

Some of my friends didn't help either. I remember words like "are you crazy, you have everything here, a beautiful flat, nice car, excellent job - you are even your own boss and with an excellent salary.

What are you talking about, why do you want to leave all this; you do not know how many people would love to be in your shoes?"

I just flatly refused to believe that this was all that life could offer. I knew, and I constantly day dreamed, that there must be another kind of life out there, better than that one I had.

Please do not misunderstand me, I am really thankful to have all this but I want more. I read this one poem that I believe can help to make you understand a

little better, it goes something like this:

"I know that all men dream; but not equally.

I know that those who dream by night in the dusty recesses of their minds, awake to find that it was just vanity.

But the dreamers of day are dangerous men, that they may act their dreams with open eyes to make it possible...

## End of Part one

*If you do not want to wait for the next issue click on the link below:*

<http://www.aboutpeople.com.au/Pdf/Ltaf.pdf>



# THE TOTONACAS

## Spokespeople of a millenary identity

By Marijose Cruz

*Time flies faster and faster*, a phrase that many of us have assimilated into our lives, whether consciously or unconsciously, as a consequence of living in a society that appears to be moving at an accelerated pace, always hurrying us to move on to whatever comes next. It is in this constant focusing on our future achievements that we find ourselves detached from those eras when time was understood differently. However, to think that we are all victims of the same circumstances would be a product of a limited vision. In reality, there are human groups scattered around the world that remain conscious of their identity and spend a significant part of their time honouring their roots through dance, chanting and a series of rituals and traditions that connect them to their essence, reminding them of where they come from, who they are and what their reason for being is.



Mexico offers an example of this because of its millenary cultures that are coexisting in the 21st century. It is through the eyes of more than twelve million indigenous people (representing more than sixty ethnic groups) that we can savour the incredible path of their history along with their sense of belonging and transcendence over time.

It was in the midst of the Dreaming Festival of 2009, an annual event that celebrates indigenous communities from Australia and around the world, that my dear friend and talented photographer Verónica Domit and myself, met Cruz, Mario, Marcelo, Ricardo, Alejandro, Servando, Octavio, Andrés, Inés and Esperanza, ten people from a Totonaca community in Mexico, who travelled a long distance to offer dances and typical ceremonies from their culture to more than thirty thousand people.

Most of the Totonaca population is located in Totonacapan, the centre of Mexico's Gulf Coast and the Sierra Norte Poblana (in the states of Veracruz and

Puebla). Living amongst the mountains, caobas and ceiba trees, the Totonaca communities have traversed history from their pre-Hispanic methods of cultivation and vanilla scents around the area, to the creation of the sacred city of "El Tajín" (900 AC), where more than one hundred and fifty buildings are still standing.

The Totonacas have remained close to their cultural roots and continue renovating their spiritual essence through their language, the use of traditional medicines and the rituals, dances and ceremonies of pre- and post-Hispanic arrival such as the case of the "voladores" (flying men – this ritual has been acknowledged by UNESCO and listed as an Intangible Cultural Heritage of Humanity), "guaguas" and "negritos". Children from their communities attend a special school where the language, Totonaco, is taught as well as a variety of cultural traditions that serve to reinforce their past while giving meaning to their present and their future. The effort that students and teachers dedicate to achieving this reality is impressive due to the fact that those who attend are doing so in addition to their daily obligations such as going to formal school, working in the fields and completing family related chores. The majority of them travel very long distances to participate in these encounters that preserve the Totonaca spirit.

The Totonacas are spokespeople of a millenary identity and at the same time they are sole witnesses of the restructuring of Mexican society throughout history. They are a people wise enough to have dedicated a great deal of time towards integrating their past into the current context.

I feel lucky to have met them. I also believe that to discover the core of our true essence we must go deep inside ourselves and that this is fundamental to our existence. Without this as a foundation, we are susceptible to act in a less empathetic manner than we perhaps intend.

Octavio Paz (Mexican Nobel Prize for Literature) once said, "we need to root ourselves." That is to say, far from hiding, we need to show the world who we are. On the personal level, knowing our own selves profoundly can make the difference in the course of our life. The same happens with a community, a country and with the Earth. By contributing to the preservation of our own traditions, we affirm ourselves and keep the capacity to recognize 'the other' with awe.

As a consequence of the special encounter we had with the Totonacas in Australia, a book was printed with Veronica's beautiful photos and the compelling stories of the Totonacas (narrated by them). A short documentary film was made. To watch the trailer you can visit the web site or by email: [mj@chaparritastories.com](mailto:mj@chaparritastories.com).

**From La Chaparrita Stories**

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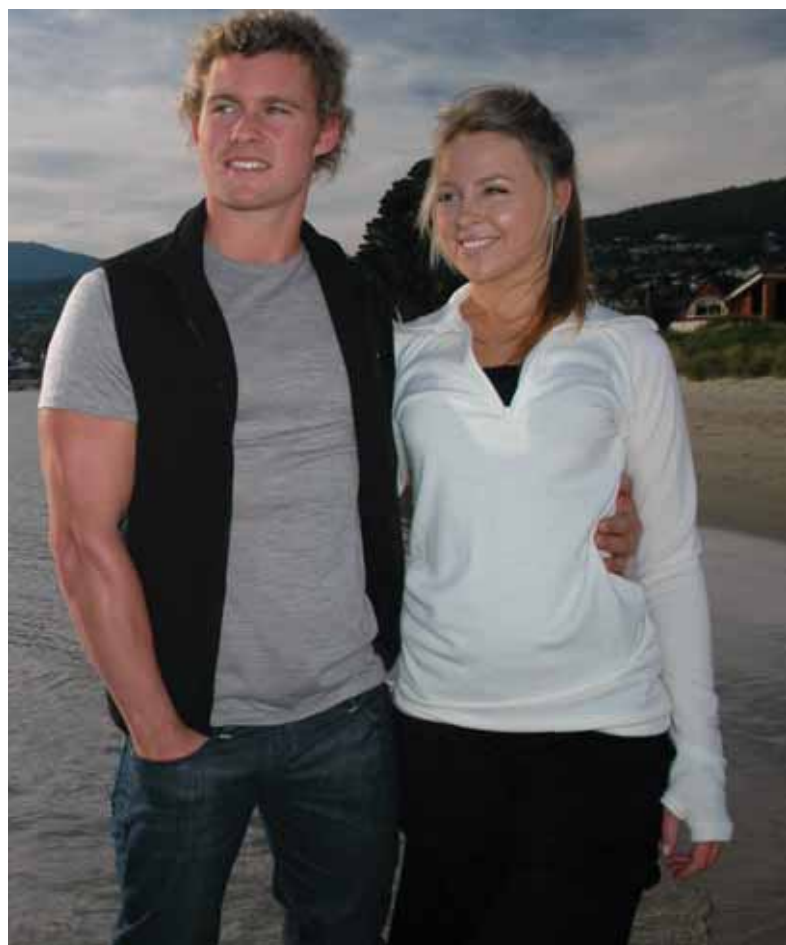
# Smitten merino

Smitten merino was born out of a desire by Nicola and Carl Mason to create a business using renewable and sustainable Australian superfine Merino wool fabric coupled with local Tasmanian manufacture to create world class modern Merino clothing for the fashion and adventure markets. The Masons saw a gap in the market for their Merino range and have taken their dream to reality with Smitten Merino.



Nicola created a range of lightweight classics designed to layer so women can look good without bulk and stay warm when it's cool. In summer a single layer of light weight merino is cooler than any other fabric especially great in hot humid conditions. Nicola firstly designed the woman's fashion range which consists of classics like wrap dresses, scoop dresses, scoop tops, wrap tops, cardigans, leggings, yoga pants, jackets, hoody wool fleece dresses and many more. Carl, a keen adventurer, convinced her to then design an outdoor unisex range consisting of T-shirt, long sleeve crews, zip neck tops, hoodies, boxer shorts and much more. They enlisted a local team of high profile adventures to help test and develop the range in extreme conditions. Smitten Merino thermals are now worn by Tasmanian Police Search and Rescue and Antarctic Australia. Don McIntyre and crew recreated the Captain Bligh 4000 mile trip in the open boat across the Pacific Ocean this year and were also wearing Smitten Merino. Also Eric Phillips (only person to have skied the four major ice shelf's) has taken Smitten Merino to the Arctic and Antarctic and is intending with Pat Farmer to take Smitten from the North to the South poles next year (check out [www.poletopolerun.com](http://www.poletopolerun.com)).

Nicola and Carl are originally from WA but made Tasmania their home in 2004. Having made the move, they were eager to start a new business that was local and sustainable. Carl had studied Environmental science and Nicola had designed her own clothing since her teens but worked in



children's counselling. Nic and Carl had both been wearing New Zealand made Merino wool thermals since moving to Tasmania and had become Merino's biggest fans. No other fabric can match the Merino qualities such as silky soft feel with no itch or scratch, the lack of odour after being worn for days on end, fast drying, non-ironing, warm when wet, long lasting, machine washable and made from natural, renewable and sustainable fibre.

After establishing a source of local and mainland Australian Merino, Nicola and Carl built up their range and started to sell their clothing online and through stores strategically positioned around Tasmania. Local sports and adventure people are now happy to buy Smitten rather than Chinese-made New Zealand brands and many Tasmanian visitors buy some Smitten and find it exceeds their expectations and go on to buy more pieces online at [www.smittenmerino.com](http://www.smittenmerino.com).

## Editors Note:

The company Smitten Merino is an Australian company I found when visiting Tasmania who manufactures super fine merino garments in Australia. I was buying Icebreaker a New Zealand company who used to manufacture in New Zealand but who has now moved production of its Icebreaker range to China. I was not a happy camper!

About  
**PEOPLE**  
Sustainability - It is all About People

## What is in the next issue of About People magazine:

- Stories on three companies walking the talk of sustainability.
- 100% Renewable campaign - Beyond Zero Emissions
- Carnegie Wave Energy - the full story -
- Integrating renewable energy sources and electric vehicles into the electricity grid
- Two stories - carbon trading & carbon farming
- Hepburn Wind community wind project
- Ceasius World - Part 2
- Why buy gold or silver as an investment
- And several other articles to be determined



# Eco Villages on the Moon


A pictorial essay with pictures, few words and a surprise ending



This is a building in an  
EcoVillage Resort in Africa




And here's something from  
an EcoVillage in Wales



Yet I am reminded of an old and wonderful saying:  
Whatever the mind can conceive and believe  
it can achieve. Surely there's room for some  
visionary dreaming on the way to our destination!  
There used to be another old saying when I was  
very young. You've got as much chance of doing  
that as putting a man on the moon. Well . . .  
what's up with that?!!!  
Whatever else I may have achieved, hopefully you  
got this far and if one picture is worth a thousand  
words then this is equivalent to a ten thousand  
word essay . . . And much easier to read.



Currumbin Gold Coast  
Hinterland Queensland



I tend to think of EcoVillages  
more like this. But of course  
that's an abstract notion and  
idealized



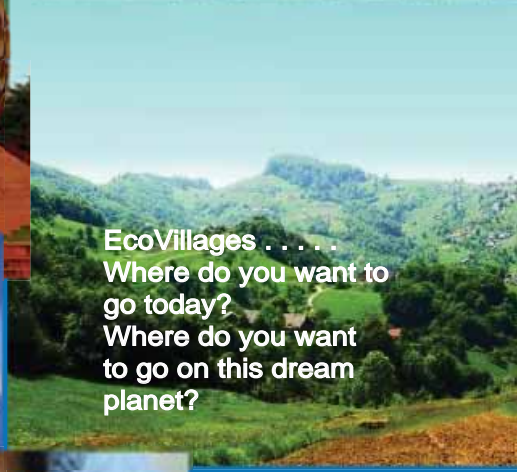
Findhorn Scotland




Auroville, India



Eden Project



EcoVillages . . . . .  
Where do you want to  
go today?  
Where do you want  
to go on this dream  
planet?



There is a tribe  
in South America  
called the Shuar.  
They were never  
conquered by the  
Spaniards and  
are called "the  
unconquered  
ones". The Shuar  
have a saying.

THE WORLD IS AS  
YOU DREAM IT  
  
ARE YOU READY?



DREAM . . CHANGE . . THE WORLD  
IS READY FOR YOU NOW

By  
Simon Richard Bull  
Quantum  
Results Coach