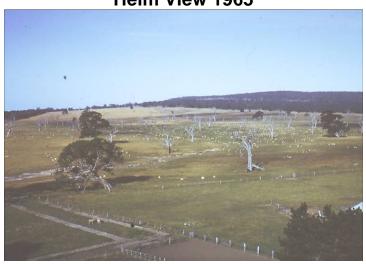
CLIMATE CHANGE

HEADLINES FOR THE MOMENT

Helm View 1965



Doomed by traders and stock exchanges or a glad tomorrow?



Helm View 2000

About the writer

Bruce dropped out of tertiary education in 1964 to farm Merino sheep and Hereford cattle on Helm View, a family farm near Hamilton in Western Victoria. He remained a member of a unique and successful family partnership until 1997 when the farm was sold. Bruce then managed Helm View and 10 additional farms purchased by the new owners until 2002.

In his earlier years Bruce worked on and off-farm as a sheep shearer to supplement farm income, shearing over 200,000 sheep - he is no stranger to physical labour. Bruce has been a pioneer in many innovative farm practices including performance recording in both the sheep and cattle industry. He ran a Hereford stud at Helm View and the partnership sold bulls for 20 years at an annual on-property auction sale. In 1990 Bruce developed a new sale method called the Helmsman Auction System which is now used widely in Australia and New Zealand.

In 1985 the family became involved in the Potter Farmland Plan (PFP). The PFP was an internationally acclaimed demonstration project aimed at increasing community awareness of land degradation problems and methods by which to tackle them. Bruce has inter-changed ideas with over 20,000 visitors to the farm in succeeding years and has developed a deep interest in exploring ways towards sustainable farming.

In 1993 he was awarded the Medal of the Order of Australia (OAM) for services to farming and landcare. In October 1993 he was invited to attend an Inter-Government Conference on the Convention on Biodiversity (ICCBD) in Geneva, Switzerland as the only non-government spokesperson to directly represent environmentally concerned farmers.

In June 1994 Bruce attended the second ICCBD conference in Nairobi, Kenya and then spent 6 weeks travelling through five East African countries. Bruce believes he has gained immensely from exchanging views with many non-government organisation representatives and kindred spirits from around the world.

Whilst in Nairobi Bruce was introduced to a women's group living in the heart of a huge slum settlement and working on primary health care. Subsequently Bruce and his wife Lyn developed a direct community aid project with the help of extended family and friends to support the women in their work. Their "Working in the Hot Sun" project evolved into a re-settlement scheme which raised \$140,000 and contact continues to this day. He considers this the greatest privilege and learning experience of his working life.

When Helm View morphed into Jigsaw Farms in1997 the new enterprise involved 45,000 sheep, 1,200 cattle, some grain crops and massive development and revegetation schemes. In his time on Helm View and Jigsaw, Bruce oversaw the establishment of hundreds of thousands of trees and shrubs covering up to 30% of some farms with the same objective for all farms over time.

Since 2002 Bruce & Lyn first concentrated on developing their own small 12 hectare block beside the old family farm applying permaculture principles and their practical experience from large scale farming. In 2006 they retired to central Ballarat and again put their life's experiences to use in renovating a small workers cottage on a 480 square metre block within walking distance of the CBD with emphasis on energy efficiency.

Over his life Bruce has developed an increased sense of urgency about the need for fundamental changes in global culture. He wrote about his developing thoughts in two unpublished documents in the early 1990's (*Living for the Future - with lessons from the Dreamtime and appropriate modern technology: and Farming With New Perspectives – working towards better agriculture*).

In writing this letter Bruce would like to share his thoughts about environmental, social and economic changes with you.

Member of The Australian Greens; Australian Conservation Foundation (ACF); Ballarat Renewable Energy & Zero Emissions (BREAZE); South West Environmental Action Group (SWEAG).

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21st February 2009

The Hon Kevin Rudd MP Prime Minister Parliament House CANBERRA, ACT 2600

DEAR Mr RUDD

I am a 64 year old grandfather honoured to have received the Medal of the Order of Australia (OAM) for services to farming and LandCare in 1993. I am compelled by my responsibility to my family to express my deep concerns regarding the Federal Government's inadequate policy on the dire threat of global warming. At the moment we dither while Rome burns.

This is a long letter on a subject which I rate as too important and involved to discuss in a few paragraphs. I urge you to take the time to read it. The content is based upon my extensive experience on environmental and social welfare issues which relate directly to global warming.

Along with my family I farmed beef cattle and wool sheep near Hamilton in the Western District of Victoria for 50 years. Despite my background my view of the world is anything but traditional and I travel far from the front gate as this letter progresses. My comments include both fierce criticism and constructive suggestions. They are made in the spirit of a response to your invitation in April 2008 to submit ideas to the Australia 2020 Summit.

Labor is too slow off the blocks

The urge to send this letter arose when the Federal Labor Government released its Carbon Pollution Reduction Scheme (CPRS) white paper in December 2008.

With that release Labor announced an unconditional carbon dioxide reduction target for 2020 of 5% on 2000 levels and a conditional target of 15% (conditional on levels of participation from other countries, in particular developing countries).

In doing so Australia reneges on its support at the United Nations 2007 Bali conference of a 2020 target of between 25% – 40% to reduce the risk of global warming beyond 2 degrees since pre-industrial times (or beyond 450 parts per million of carbon dioxide equivalent in the atmosphere). Labor claimed kudos for supporting the Bali target without committing to meet it. Come the moment and it appears political expediency has persuaded Labor to hoist a white flag.

Please note that even the 25% - 40% UN target only reduces risk of warming beyond 2 degrees. Attempts to stabilise at 2 degrees warming since pre-industrial times carry a 75% chance of exceeding 2 degrees and a 35% chance of exceeding 3 degrees of warming.

Australia also reneges on the core burden sharing principle of the United Nations Framework Convention on Climate Change which requires developed countries to lead the way on climate change mitigation because we caused greenhouse conditions in the first place and are better able to do something about it in the second place.

The 5% target, which I acknowledge is intended as a strategic starting point, lacks ambition. It is far too cautious when speed is of the essence. It is based on a predicted 3 degrees of global warming (or beyond 550 parts per million of carbon dioxide equivalent in the atmosphere).

What does this confusing array of targets and percentages and degrees mean in reality?

These figures imply that humankind must act decisively to avoid a disaster of unprecedented proportions. We must accept the upper range of least risk options to have a good chance of survival. If the high risk starting line target of 5% adopted by Australia is chosen by all countries humankind faces impending chaos and, according to some experts, possible extinction.

Not only would the 5% target destroy the Great Barrier Reef, the Kakadu National Park and the Murray-Darling river system as we know them. It involves more than the tragic loss of these and many other national icons. It would virtually guarantee a high rate of species extinction, rising sea levels, water scarcity, extreme weather events, mass migration of climate change refugees, more tropical diseases, a horrendous human death toll, and the atrocity of even more wars.

Incredible as it may seem, two spokespersons from opposite camps appear at times on the same side of the fence in the debate on this decision – unfortunately, the wrong side.

The Minister for Climate Change and Water, Senator Penny Wong, says the low target is all about protecting jobs! Minerals Council of Australia chief executive Mitchell Hooke agrees but goes further and complains the target would involve impossible costs in this time of financial crisis!

I like to think that Senator Wong is working to protect sustainable jobs but she does not spell this out. It would help Labor if she did. The Minister adds a note of pessimism when she comments that she doubts a strong global agreement could be reached during climate negotiations at Copenhagen this year.

Please note that if, by some wonder, the rest of the world does agree to the UN recommended 25% - 40% target at Copenhagen, Labor has not indicated any commitment to match them by exceeding the lowly 15% conditional target Labor set in the December 2008 white paper.

Some commentators less biased than Mitchell Hooke and his colleagues refer to the 5% - 15% target range as a suicide note.

The scientific community joined the chorus of dissent. Australian scientists Professor Andy Pitman and Professor Dave Griggs worked with the Inter-Governmental Panel on Climate Change (IPCC) and both agree that there is no credible evidence to demonstrate that a 5% target would stabilise the atmosphere at safe levels.

Every significant environmental group in the country, including The Australian Conservation Foundation, Greenpeace, the World Wildlife Fund, the Wilderness Society, and the Climate Institute voiced their strong opposition.

Community groups at the local level are equally vociferous in their dismay. I am a member of the Ballarat Renewable Energy and Zero Emissions (BREAZE) group and I add my opinion to the weight of their protest and all others. Our numbers are increasing rapidly day by day.

CARING FOR FINITE RESOURCES

When working as a farmer I accepted my OAM because it gave recognition for the need to protect, enhance and fairly share world's finite resources with all of humanity and all other living species – to live in a sustainable way. When one thinks seriously about this ideal one finds it involves more than first meets the eye.

Sustainable living cannot be accorded token regard. Unfortunately, Governments of both persuasions have committed this error. On the one hand Liberal and Labor Governments have given little to the environment, and on the other hand have continued to foster a level of gross over-consumption which demands more from the earth than it can sustainably provide.

I learned as a farmer with a strong environmental conscience to constantly assess basic finite resources upon which all living species on this earth depend – soil, water, biodiversity and atmospheric health. Tragically the health of all is in alarming decline.

I challenge anyone to name anything they use in daily life that is not originally sourced from soil, water, biodiversity or the atmosphere. It is not possible to do so. We are therefore, figuratively speaking, eating into our future at an unsustainable rate.

Turning the spotlight on agriculture

Agriculture has thus far avoided the full glare of the public spotlight in relation to environmental degradation and global warming. This should not be so. To avoid complicity I start with comment inside the farm gate, in my own backyard so to speak, before I reach further afield.

It is not that agriculture per se is the problem; but the way agriculture has been practiced is clearly a serious problem. It is time the "rose coloured" glasses view of Australian "clean and green" farmers in the "bush" battling to "feed the world" and "leaving farms in better condition" is consigned to history as the facts expose the fiction.

An honest appraisal of agriculture is important because of its enormous impact on the earth. This is due to the massive extent of its spread across the land surface. By comparison mining is but a dot, yet it has been "spotted" by the public environmental gaze to a much greater extent.

In my farming lifetime water has been grossly over allocated, soil loss by erosion has been horrendous, land clearing has exceeded revegetation efforts, Australia has the world's worst record of species extinction in the last 200 years and carbon dioxide emissions from farm soils has erupted alarmingly to lethal proportions.

These problems have not come from Mars.

None of this needed to be so, nor need be so in the future for we have at our fingertips the knowledge to do better. Conservative attitudes, vested interests and failed economics stand in the way of change.

Let me expand on one extremely important example in agriculture relevant to climate change to illustrate my point.

Building a carbon bank in the soil

Preventable carbon dioxide emissions from poorly managed farm soils in Victoria exceed the total emissions from coal fired electricity plants in this state. Are you aware of this alarming fact and its important ramifications? Methane emission from ruminant animals is a minor problem by comparison.

I was first alerted in 1990 to this situation by my friend Dr Ranil Senanayake, a world renowned systems ecologist, who has published peer reviewed papers on this subject. He explained that carbon is stored in the soil by the action of billions of microbes creating humus from decaying vegetable matter. The amount of carbon stored in soil totals twice that stored in plants and double that in the atmosphere. Modern agricultural practices in Victoria have disrupted this natural system to the extent mentioned above.

But there is a positive side to this concern. Unlike methane emission from ruminants it is possible in this case to rectify the problem. Ecologist Dr Christine Jones from the Australian Soil Carbon Accreditation Scheme explains that regenerative farming and grazing methods can rejuvenate microbial activity which forms new topsoil and locks carbon back in the soil.

We cannot put a burp back into a beast and, despite the rhetoric, we cannot collect carbon dioxide emissions from the coal stack and safely store it in the ground at a competitive cost and in time to save the planet. The prospect of successful geo sequestration is a dangerous red herring in which public money should not be invested in my view.

On the other hand, regenerative farming and grazing methods to return carbon to the soil are safe, immediately available and profitable. These methods have been practiced by some ecologically literate farmers for generations. Dr Jones said that people usually connect trees

and carbon but, "A 1% increase in soil carbon in just 10% of Australia's farmland could remove 10 years worth of Australia's Co2 emissions while a 4% increase in soil carbon could remove 40 years worth".

In terms of establishing efficient carbon banks farmers would be better advised to concentrate on establishing carbon rich soils rather than planting trees (this is not to say that tree and shrub establishment is not helpful in the carbon context and essential for habitat improvement).

I note that Labor's Caring for our Country business plan includes some funds to facilitate storage of carbon in the soil and I encourage you to significantly increase your support. Other wise Labor risks being over-run by the relatively inefficient Liberal "Green Carbon" initiative which includes the sequestration of large quantities of carbon in the soil through "biochar"- the conversion of biomass into charcoal which is mechanically incorporated in the soil. I suspect much better that microbes, not machines, do the work of soil improvement for us.

Include agriculture at its best: turf advice from the apologists

Conventional estimates allocate 14% of the nation's greenhouse emissions to agriculture which is second only to coal-powered generators. We are informed by scientific opinion that we have at best until 2015 to reach global agreement on decisive action to counter global warming.

Yet agricultural lobbyists have succeeded in persuading the Federal Government to exempt agriculture from its Carbon Pollution Reduction Scheme (CPRS) until 2015 (and possibly forever). The lobbyists argued that it was better to delay some years until more was known about measuring and accounting for carbon emissions and absorption involving soils, vegetation and crops on farms. This was a spurious argument! Knowledge is never complete and, as I have indicated, in this case we know enough to act now.

How can a decision to exempt agriculture, even for five years (from 2010 to 2015), possibly be justified when agriculture has such a vital role in environmental welfare and global warming? Agriculture at its best has much to contribute in the "walk against warming" but is a villain at its worst.

To its limited credit the Labor Government has foreshadowed in the December 2008 CPRS White Paper on climate change policy that mitigation measures costing at least \$25 a tonne of carbon may be imposed on farmers sometime post 2015. The National Farmers Federation response is to immediately join the queue requesting the government to offset the extra costs imposed on farmers. The rural press wails "all pain, no gain".

But what is the sense in simultaneously applying a penalty on the one hand and compensation on the other? Unfortunately this flawed process will appear as a continuing theme as this letter unfolds.

In my view, agricultural practice and political representation largely stands condemned as a national disaster. The apologists for the status quo in agriculture are as guilty as the CEO's of the corporate world when they succumb to self interest and bulging remuneration packages (recently so roundly condemned by you). Their advice and influence should be turfed out and we should start afresh as soon as possible, this time guided by better information.

I take care to note here that I acknowledge with the utmost respect the many farm carers who have done their bit, joined the LandCare movement or worked independently to improve farming practices against the odds. LandCare is failing not because of their efforts.

I believe that if LandCare is to flourish it is in desperate need of the following:

- A stronger ethical motive;
- More support from all sectors of the Australian community, including rural and urban.

- More funds from the Federal Government. Ten years after LandCare began it would still cost up to \$60 billion to arrest salinity and soil and vegetation loss according to the late Rick Farley (ex National Farmers Federation executive director, 1987-1995, and cofounder of LandCare). In 2000 Rick proposed a one percent national landcare tax to raise \$30 billion over ten years with the balance made up of contributions by business and landholders, some of which would be labour costs. His estimates provide a good indication of the scale of the problem even as funding from both Liberal and Labor Governments has fallen far short of the mark.
- A more determined effort to dig out the root causes of degradation (including political and economic ineptitude).

Unless engagement in on ground works is concurrent with engagement in the elimination of root causes of degradation much of the well intentioned efforts at ground level will be blown away by overwhelming negative forces.

CONTRIBUTING IN OUR BEST WAY

Many millions of fellow global citizens have acted to mitigate global warming well in advance of the general public and the laggard Australian Federal Government.

These inspirational souls from all walks of life are not single minded or irresponsible people as much of the vitriol directed to the green movement would suggest. They are well informed courageous individuals who have wittingly "walked their talk" in advance of general opinion because they believe theirs is a sustainable way.

The pre - emptive action of the reformers has not diminished their comfort or well being and in that sense they have not sacrificed themselves for the public good; they have shown what is possible. Their exemplary example is inspirational and precisely the attitude required of the Australian Federal Government and the general public in the struggle against global warming.

In my case I was inspired and helped along with my family to plant hundreds of thousands of trees and shrubs, to improve habitat for other species over hundreds of hectares, to share my experiences in talks with thousands of community members on and off farm within Australia and overseas, and to develop a personalised community aid project with a women's group in Kenya.

My wife and I have retired from farming to live in Ballarat and are renovating a small workers cottage within walking distance of the CBD. We have installed water tanks to collect 32,000 litres of rain water and are water self sufficient. We have installed solar hot water and solar electric panels and grow much of our own food. Double glazed windows re-orientated to the north and insulation completes our home renovation picture. We recently rationalized from two cars to one and have two bikes. We are not wealthy and live on a combined pension.

Mr. Rudd, do you expect people who have contributed in their best way to environmental security to stand quietly by whilst political representatives persist with inadequate actions which continue to drive the earth at ever greater speed towards the brink of catastrophe? Can you sense our depth of frustration and determination to seek more appropriate political decisions?

Evidence based decision making

I would not expect my opinion or actions alone to be persuasive on this matter. I would, however, expect the absolutely overwhelming weight of global scientific opinion to be utterly persuasive. As you well know, scientific opinion warns of catastrophic consequences unless massive remedial action is taken with the utmost urgency.

I have read a library of environmental literature over a period of many years including the acclaimed books "The Future Eaters" and "The Weather Makers" by Professor Tim Flannery.

Tim is one of Australia's most eminent scientists and was deservedly accorded the honour of being named as an Australian of the year in recognition of his achievements.

I have deep respect for Tim's commitment in putting his career on hold in recent years to devote his talents to a review of the latest scientific literature on the subject of global warming and to articulate his informed opinion to the general public. His opinion is not influenced by a vested business interest, but by the interests of all species living on this earth.

In his quarterly essay, "Now or Never: A Sustainable Future For Australia?" Tim suggests ways of avoiding what he sees as the more likely outcome which he outlines below:

"I think there is now a better than even chance that, despite our best efforts, in the coming two or three decades Earth's climate system will pass the point of no return. This is most emphatically not a counsel of despair, simply a statement of my assessment of probability."

Professor Ian Lowe is president of the Australian Conservation Foundation. On the last day of 2008 Ian wrote that:

"I am not exaggerating in saying the survival of civilization is at stake."

Guided by the science

The Labor Government initially made much of its claim that it would be guided by the science. If only this was the case. In reality Labor has first articulated a policy based on outdated science and since moved to a position of disregarding it.

The Club of Rome, a think tank on the environment, has warned for 35 years of the inevitable consequences of growth and the world took too little notice for too long. Gradually warnings from other sources added weight until finally the penny began to drop.

The United Nation's Intergovernmental Panel on Climate Change (IPCC) came out in their fourth and latest report in 2007 and stated in unequivocal terms (for scientists nothing is 100% certain) that climate change is human induced and dangerous. The IPCC is an understandably conservative body of scientific opinion as it was required to reach a consensus amongst approximately 2000 highly qualified scientists from around the world.

The world began to take notice of the IPCC's warnings simply because such a weight of numbers couldn't be ignored despite objections from the sceptics and the luddites.

In the meanwhile scientific opinion and climatic events have moved on rapidly. Tim Flannery and Ian Lowe are aware of this, hence their increasingly dire warnings.

Evidently warming in the Arctic region is releasing methane from tundra and ice into the atmosphere, which in turn increases warming and causes further methane releases – a deadly cycle. A cycle which could set in train an unstoppable surge in temperature – or, in other words, the point of no return that Tim Flannery is so concerned about.

Methane is a most deadly greenhouse gas, much in excess of carbon dioxide though it doesn't hang in the atmosphere as long. The emission of methane from melting ice and tundra is confirmed by a recent surge in methane levels in the atmosphere from a previously stable level.

Alarmingly, the melting of the Arctic polar ice cap is proceeding decades ahead of predictions by computer models calculated only a few years ago (the years up to the fourth IPCC report, 2007). This means the reflective capacity of the ice caps is diminished beyond expectations.

To illustrate another dramatic example of hastening warming I turn to the slopes of Mount Kilimanjaro where in 1994 I stood and pondered the ice cap which by then had receded by 80% in a century (I believe it has completely gone now). This is a grave concern in itself but I wonder

with dread what will happen to one billion people plus in an arc from Pakistan to China as the ice sheets melt much faster than predicted from the Himalayas over the next half century.

Floods and drought will both rage in the lifetime of my children and grandchildren. The tap will be turned down on the great rivers which provide life support to billions of humans and other species in Asia. I try, but fail, to imagine the consequences of the Indus, Ganges, Brahmaputra, Irrawaddy, Mekong, Yangtze and Yellow Rivers, all with their source in the Himalayas, drying to a comparative trickle in the dry season. Clearly, the problems to come in the Murray-Darling basin would be dwarfed by an unimaginable magnitude in Asia.

What truly alarms me is that members of the Federal Government are aware of these facts. I understand that the Rudd Government is keen on evidence based decision making. How much evidence do you need before you will act in accordance to the level of threat? I ask the Labor Government to take responsibility for explaining this situation to the electorate instead of attempting to justify a paltry 5% CPRS target.

I believe we do not have the time to pursue the "soft entry" option that Labor speaks of but for the moment the Government proceeds without the courage of conviction.

THE ROOT CAUSES OF HUMAN INDUCED CLIMATE CHANGE

As an ordinary citizen I first began communicating my concerns about global warming 25 years ago. I wonder now at the audacity of the captains of business and politics in calling for more time and compensation in acting against global warming in 2009 and beyond when the same warning signals were available to them long ago.

It occurred to me then that humans must collectively, each and every one of us, take responsibility for the way we organize our lives and conduct our politics. After all, although we humans induced climate change, we are endowed with the power of reason which should enable us to rectify the situation.

The environmental warning signs indicated clearly to me that it is simply not possible to cure the ills of environmental degradation within a dysfunctional economic and political system which is itself the primary cause of the problem. A piecemeal, ad hoc approach on a farm here or a catchment there, a LandCare brand, a recycling system somewhere else, limited attention to house building regulations, the way we live and draw on the earth; all do not cut the mustard.

At first I was quite a lonely voice in sharing this opinion with the broader Australian community but in 1993 and 1994 I attended the Inter Government Committee Conventions on Biodiversity (ICCBD) in Geneva and Nairobi as a non government observer (the only farmer present!). To my delight I found that colleague NGO's from around the world were unanimous and insistent in putting the same view to Governments as a first priority if biodiversity was to be protected.

So, oceans apart but the same clear message. In the words of the NGO's (to spell out what I mean by dysfunctional economic and political systems) they insisted that the root causes of social and environmental degradation included:

- Massive over consumption by the few
- Horrendous poverty suffered by the many
- Flawed national accounting systems
- Unfair trade
- Unfair ownership and exploitation of minority groups
- Population explosion
- Crippling debt

We are all still projecting the same urgent message which continues to fall on deaf ears. Instead of taking personal responsibility for these root causes we appear to be placing too many eggs in an Emission Trading Scheme (ETS) basket. We are hoping ETS will work within and

across countries, but it is only one questionable tool in what should be a very large climate policy basket.

Gambling on the future of the planet

I hold grave concerns for the effectiveness of the proposed ETS which seemed to temporarily acquire near universal support (if reluctant). Criticism of ETS is now on the rise but Labor still defends it. In my view there are serious flaws and dangers in the Cap and Trade system in which is placed a naïve faith in the market to correct a problem that the market created.

A nightmare scenario rears its ugly head. Imagine a poorly regulated ETS with inadequate caps and targets (as you will be aware this has already been the case in the first European model). Many major polluters, despite their complaints and well deployed red herrings funded with bulging wallets, can in fact easily afford to purchase a licence to pollute (a carbon permit) and proceed as before and more. Too many corporations and too many countries support ETS because they want to make a profit, not because they want to secure a safe future.

I can envisage the spectre of market manipulators who have invented terms and financial devices such as derivatives, naked short selling, covered short selling, leveraging, bear markets, bull markets, credit default swaps, and splicing and dicing directing their unscrupulous talents to gambling on a cleaner atmosphere and the future of this planet!

Fleecing the public

Sadly, we have all experienced the nightmare outlined above and worse. Duplicitous governments of both persuasions have dishonored Australia's integrity on global warming issues in the last two decades.

Unfortunately, too many politicians are as adept at deception and manipulation to serve their own perceived interests as the most clever market manipulator on the planet. They persist in attempts to fleece the public and all too often succeed at the cost of social and environmental welfare.

Worse than mirror the weaknesses of public greed and self interest they magnify them. To substantiate my comment I note the following examples.

The tricky Howard Government

The Howard Governments claim to have met its emissions target agreed to at the conference in Kyoto 1997 is disingenuous. Howard makes this claim despite the fact that the Liberals subsequently refused to ratify the agreement.

Howard attempts to have his cake and eat it too. He claims credit for refusal to ratify the Kyoto agreement in order to protect jobs in Australia on the one hand, but on the other hand claims credit for meeting the target! Where is the logic in that wriggle?

In fact, to the Governments shame, Howard negotiated a special deal on our behalf, claiming concessions for the heaviest per capita polluters in the world because of our dependency on earning foreign exchange from the export of fossil energy (read coal and gas), primary agricultural products and minerals. In desperation at the eleventh hour, for the sake of a deal of some kind, negotiating countries caved in to a miserable ransom and conceded an 8% increase on 1990 levels in Australia's case when other countries agreed to a 5% or greater reduction.

And worse trickery followed. Howard's claim to have met the target is dubious. It is based on carbon credits claimed for legislation previously enacted by State Governments to prevent further clearing of trees in Queensland and Western Australia post 1990 but pre Kyoto 1997.

This belated but welcome legislation was designed to protect the environment and prevent further destruction of habitat for non human species. It was not motivated by carbon emission reduction targets. It was welcomed by land carers such as my family because we were

engaged in a losing race at the time. As fast as we planted trees they were being felled at a rate many times over elsewhere in Australia.

In the meanwhile, without the undeserved credit allowance, Australia's actual emission of carbon dioxide into the atmosphere increased to the day when Howard was thrown from office (and since). Good riddance. I reject the Governments dodgy accounting in this example.

The even trickier Rudd Government

The Rudd Governments 5% unconditional pollution reduction target is deception on a more grand and demoralizing scale. It is bad enough that this target is based on reduction from 2000 levels, not 1990 levels. But there is worse to come. The facts at the moment are as follows.

In 2000, Australia emitted 553 million tonnes of greenhouse gases. In 2020, by Treasury's own estimate (which was calculated before the December, 2008 watered down proposal in the white paper), Australia will emit 585 million tonnes of greenhouse gases! How can this be? How does an estimated 32 million tonnes *increase* fit with a paltry 5% reduction target??

It turns out that the Rudd Government has committed to cut its *emissions allocation* by 5%. This is a subtle but important difference to commitment to actual emission cuts achieved in Australia. It leaves room for companies to purchase unlimited permits from other countries, import them and have them subtracted from our emissions tally.

This is taking advantage of the Kyoto Protocol's Clean Development Mechanism (CDM) which is not a bad concept in itself. Developing countries agreeing to introduce cleaner technology or reduce deforestation will be the likely source of emission permits. The problem is that the permits will not be subjected to the mandatory checks and regulation recommended in the Garnaut Climate Change Review Final Report (September, 2008) commissioned by the Rudd Government itself. The permits are expected to be plentiful and cheap.

The merit in the ideal is that there are no national boundaries in the atmosphere and a tonne of emission saved is a tonne saved, regardless of where. But the mechanism is creaky, the accounting is dodgy and Australia will effectively avoid its obligation. Companies will buy a cheap licence to pollute as before, or more, and make a profit from the exercise.

Mr. Rudd, the average citizen (I include myself here) struggles to understand the basics of the Emissions Trading Scheme (ETS), never mind the intricacies. In you they trust. If they think at all about ETS, or the Carbon Pollution Reduction Scheme (CPRS) as you prefer to call it, (which infers an actual reduction), they think it will work.

Is this a case of false advertising? It is easy to pull the wool over the eyes of those with a limited understanding of the mechanics of the scheme. I would like to see the Government do more to explain the CPRS in plain terms.

A merry go round policy on solar household subsidies

The merry go round policy shifts on the \$8000 solar electric subsidy announced by Environment Minister Peter Garrett during 2008 are a case in point. The repeated changes in policy (one under the Liberals and two under Labor) have left the public confused and disappointed.

In its May, 2008 budget Labor lowered the rebate eligibility for the \$8000 subsidy from households earning less than \$150,000 to \$100,000 because they said too many were applying! Still not satisfied, the Government will scrap the rebate for them too from July 2009 because again they say too many are claiming it! Apparently the old scheme cost Labor more than they were prepared to fork out to better protect the environment.

As best we understand the new policy (December 2008), energy retailers will be temporarily required to purchase 5 times the number of Renewable Energy Certificates (REC's) as previously for systems installed between mid-2009 and mid-2012. The energy retailers are

obliged to cop this hike to meet the target of purchasing 20% of their power from renewable energy providers by 2020.

It seems the energy retailer payout may return a 1.5kW system household energy provider in Southern Australia about \$5000 which represents quite a drop on the current \$8000 subsidy. This is not good news for households seeking assistance to install solar electric systems.

The news does not improve. From 2012, the payments will shrink rapidly, returning to old levels by 2015. There will be no wealth cap on the households selling REC's, so rich households are free to sell to energy retailers. But, worst of all, the energy retailers are permitted to add the cost hike onto the household electricity bill in order to recoup their money. This means the wealthy, the energy retailers and the big power generators/polluters are the winners.

The losers include lower-income home owners and renters. To illustrate this point and the complexity of the policy allow me to quote a "tongue in cheek" protest letter to The Age by John Henry from Niddrie:

"Let me get this right: renters and lower- income home owners who can't afford to install solar panels will subsidise those who can afford to install solar panels by paying a higher electricity price levy so that energy suppliers can recoup subsidies paid to solar panel households. Yeah, that's fair."

The Government CPRS white paper is so ineffective and convoluted that it insults all who have put a solar panel on a roof, ridden a bike to work, purchased a rain water tank, installed a solar hot water system, or earned a REC in any other way. Why should renewable energy certificates and carbon credits be traded from those that are doing the right thing to those that are doing the wrong thing with a net zero result in reduction of emissions?

I call on the Rudd Government to scrap the current policy on solar incentives and introduce the gross feed in tariff proposal put forward by The Australian Greens which is more simple and effective and need not cost the Government a cent. A German version of the Greens proposal has worked remarkably well.

Labor cannot see the forest for the trees

As far as Labors intention to purchase carbon permits from developing countries is concerned Australians would do well to repay the huge debt (not generally acknowledged) we owe to developing countries by compensating them for saving forests, full stop. But Australians would do even better by protecting more forests in this country.

Should they wish for example, Labor could find ways to halt Gunn's in their proposal to convert Tasmanian forests to chips and then pulp for export. Instead, Minister Peter Garrett resorts to "legal speak" to defend his position on this issue and in doing so hides behind the legal gowns of his predecessor, currently Liberal leader of the opposition, Malcolm Turnbull.

Australians would also do better by planting more trees and establishing carbon sinks in the soil here in Australia where our record of deforestation is amongst the worst in the world. Unfortunately, Labor's current carbon sink forest scheme is based on the failed Liberal model. I acknowledge the good intent but when will we learn from past mistakes?

First hand experience tells me that Labor cannot see the forest for the trees and the legislation is misguided. I support the objections of The Australian Greens and the renegade Nationals who unfortunately were not able to block the bill because it was supported by the Liberals (their brainchild in the first case).

The tax break incentive introduced by the Rudd Government to encourage carbon sink forests lacks adequate regulation backed by mandatory requirements. It will give the big polluters looking for carbon offsets an unfair leg-up at the expense of the land, food security and regional communities.

I know this because it has already happened with the blue gum for pulp industry in the Western District of Victoria. I witnessed, and along with many others, predicted the problems associated with the lightning quick establishment of this mono-cultural industry in a region where I lived for 60 years.

When we retired to Ballarat my wife and I felt some relief in that we no longer were surrounded by the sprawling mono-cultural blue gum plantations which encroached on the region we loved and had tried to improve. At least we were proud to have left a legacy of revegetation involving mixed species covering hundreds of hectares over which not one blue gum was planted.

But there is no escape from modern mono-cultural ventures. In travelling other regions one observes the almonds, olives, grapes, dairy, beef, cotton, (you name it), and water industries afflicted with the same problems.

All these industries received a massive injection of funds from Managed Investment Schemes (MIS) based on tax breaks. The MIS schemes were introduced by the Howard Government in its first term of office. These schemes were promoted by unscrupulous speculators who over estimated establishment costs, yield and sale price all for their own perceived benefit. The speculating companies gobbled up land and water at inflated prices which bore no relation to the real commercial world.

Apparently 6 billion dollars of tax payers money has been diverted into the MIS sector in the past decade without audits by Government on whether the right trees are grown in the right areas or on projected yield and price. The speculators became in the process one of the biggest private owners of water rights in Australia.

Too many holes in the water rights bucket

The history of trading in a water rights bucket with too many holes in it is a tragic one which Labor, to its credit, is attempting to rectify but unfortunately with too little success and urgency.

The MIS sector bought 80 – 85% of all tradeable water in the Murray-Darling Basin in 2006 according to Robert Belcher, chairman of Sustainable Agricultural Communities Australia. Huge dams were filled by MIS companies as the rivers dried up.

The CSIRO calculate that one hectare of irrigated plantation will consume 1.5 megalitres (0.6 of an Olympic swimming pool) of water per annum over and above what would be consumed by non irrigated farmland. This amounts to a huge quantity of water over the entire Basin. In 2006 the plantation area in the Basin absorbed about 750 gigalitres (300,000 Olympic swimming pools) more water than the same area would if used for grazing.

The new Murray-Darling Basin Authority in its current format is unlikely to help the Basin any time soon enough. It is considered by many as a farce. It doesn't come into effect until 2019. This is far too late – and in any case it is a toothless tiger to boot. Its authority will be subject to veto by any state. The appalling parochial record of the Victorian State Labor Government at the moment is matched by every other State. This has been the case since federation!

The Federal Labor Government is also not helping much. It is too timid in enacting its water rights buy back scheme which is full of holes according to the Wentworth Group of Concerned Scientists. They argue that the Governments scheme is working too slowly for the benefit of the rivers and the farmers, virtually ensuring prolonged suffering on both counts.

For example, in 2008 the Minister for Climate Change and Water, in conjunction with the State of NSW, purchased, on behalf of the general public and the environment, land and water rights from a company in NSW (which had not activated its water rights for years because there was too little water in the river). Not a bad outcome for the environment so far.

But within days another company (perhaps even the same company) purchased property and water rights further upriver over the border in Queensland. On that property the water

entitlements had not been activated for decades and the river was flowing. Can you guess the company's intentions? Guess the net gain/loss of water for the Warrego/Darling river system.

Can the Government explain to me why the public is expected to pay exorbitant compensation rates (in the tens of millions of dollars) demanded by water barons like Cubby Station in Queensland in order to extinguish freely allocated water entitlements (Cubby is on the market)?

Cubby and their colleagues have had their day in the sun as far as I am concerned. Various governments over many decades have been culpably negligent in over allocating water rights to water barons who have in turn recklessly robbed river systems of their life support in order to grow unsustainable crops under irrigation. Whatever profits they have made in the meanwhile is literally water under the bridge, but to profit now from inflated compensation payments is unconscionable.

Dealing in empty buckets and hot air

At this very moment the chickens are coming home to roost without the help of the Government. Instead, greed has forced the hand of the market and the environment and together they are bringing the speculators to account.

Many MIS speculating companies, including Timbercorp and Great Southern, are on the point of declaring bankruptcy (the CEO's and managers having lined their pockets). As always, the public is left holding the crying baby (read land and water). The companies blame the financial crisis for their woes and refuse to accept responsibility for their own questionable actions. They are coming up with schemes to save their backsides which would do the most slippery moguls of Wall Street justice. This includes yet again sale of land and water rights.

The under scrutinized carbon permit trading business in forests is in danger of replicating the pitfalls associated with the massive over allocation of water rights in Australia. Ironically this over allocation and trading scandal has been exposed by the drastic consequences of drought linked with global warming.

The Murray-Darling basin is dieing testament to the inadequacies of too many politicians, farmers and financiers alike. The unscrupulous members of society do not confine their activities to splicing and dicing credit. They deal in empty buckets and hot air.

Revisit a transparent carbon tax and regulation option.

I believe that a direct tax on carbon emissions complemented by strict regulations and incentives should be revisited. A carbon tax appeals as a more controllable, transparent and effective option and is now proposed by a growing number of economists.

The international price of carbon has currently dropped to around \$15 a tonne which is well below the local \$25 start-up value budgeted for by Labor. Currently Labor is not proposing a limit on the purchase of international carbon credits. This could throw Labors December 2008 forecasts for the CPRS in 2010, including compensation packages, out of the window and illustrates the dangers of relying on the vagaries of the open market.

I think polluters should be penalised with an increasingly heavy tax burden and the proceeds distributed to compensate the poor, reward those that do the right thing, retrain the unemployed and displaced and foster the renewable energy industry.

FROM LITTLE THINGS BIG THINGS GROW

I believe at this moment humankind confronts simultaneously our greatest ever challenge and greatest ever opportunity. As the world warms the world is also in economic meltdown. Perversely, that the economy is diseased is good because misguided economic and political systems are the root cause of the more serious global environmental degradation aforementioned.

A wonderful opportunity now exists to redesign economics and politics to serve the interests of environmental and social welfare, not the other way around as has been the case. In fact I believe if society returns to the old economic order post meltdown the prospects of overcoming the global warming threat are gone with the wind.

But from little things big things can grow. What follows is an example of a process in forward planning on farms but with wonderful implications for the country and the world.

In 1985 fifteen farmers searching for improvement in farming practices were selected to be involved in the Potter Farmland Plan (PFP) demonstration project in the Western District of Victoria. The PFP was part funded by the Sir Ian Potter Foundation and part by the farmers themselves.

Preparing a Whole Farm Plan was integral to this process and my family was involved as one of the participating farms. One of our responsibilities was to share our experience with the wider community and I have since exchanged ideas with over twenty thousand people who visited our farm and many more besides. I have been privileged to be able to learn in this informal way.

A principle involved in the new farm planning process was to engage in a holistic exercise to begin with. On paper we were encouraged to temporarily remove all human imposed structures and beliefs from the farm, good or bad. The idea was to plan afresh on a completely clean sheet, this time taking particular regard for the environmental needs of soil, water, biodiversity and atmospheric health. I called it my dreaming sheet.

Once the ideals (which may well include much of what existed) were drawn on the clean sheet they were compared with the existing situation. Decisions were then made on how best to marry the ideals with reality in terms of what was possible. Considerations such as cost, time scale, priorities, etc. were taken into account.

Unfortunately we did not strictly adhere to this fine principle in practice. We did not start from a clean sheet.

We did remove some internal structures such as fencing which was not sensitive to land type, water flow or vegetation to prepare our dreaming sheet for the planning process. But we left it still cluttered with inherited farming enterprises (some appropriate, some not), flawed economic and trading systems (ditto), over water use, excessive energy consumption, rising carbon emission levels, social welfare issues, a rapidly declining rural population, unfair land ownership and small farmer rights, poverty and food affordability issues.

In addition we failed to look far beyond the farm boundary and question what we were producing and for whom. We failed to seriously consider the potential of native Australian products. We failed to look into our home and question our personal use of energy. We failed to develop skills in communication and conciliation.

All were left on the table in the "too hard basket" without being put under the microscope. We planned around them and came up with what amounted to little more than a revegetation plan with a LandCare brand and questionable sustainability claims attached.

I believe the Governments CPRS white paper is similarly diminished by a failure in applying good planning principles. Today we desperately need a Whole Globe Plan drawn on a clean dreaming sheet. At least we could start with a visionary Whole Australia Plan with the potential to deliver a secure, peaceful and fulfilling future.

A VISION FOR AUSTRALIA

Mr. Prime Minister, there is no better, more pressing occasion than the present to do a Whole Australia Plan starting with a clean sheet. You will recall in this exercise one can introduce ones ideals without inhibition. This exercise is just on paper; reality and compromise come later. Now we are planning for a new century with its unique challenges. We have the benefit of

hindsight and we are not obliged to include the worst of the old world in our plan. However, we have the luxury of including the best. We must at all times give priority to the needs of environmental welfare.

There are some obvious ideals but in my view none more so than the admiral goal of peace and security for all. We could explore the ideal of an Australia charged 100% by renewable energy. Next on the drawing board might be a revised national accounting system. Another critical ideal in my area of expertise would involve a revised agricultural system. We could plan for a generous Australia more willing to work alongside developing countries. And I would love to help the natural world recover good health. There are countless other examples which we do not have time to explore here but if we could achieve the ideals listed we would be well on the way to avoiding the destructive consequences of a warming world.

Peace and security

The ideal of peace and security is welcomed by all but the relatively few amoral warmongers and vested interests of this world - the very people we need to defeat. But in order to develop and maintain peace and security we must first identify and assess the greatest threats to its existence.

At this moment there is one threat, and only one, that stands above all others like never before. That is of course global warming. Most environmental analysts advise that unless the world acts decisively and in unison within the next decade we face at least chaos and at worst possible annihilation as a species.

At this same moment most military analysts agree that there is no sign of a genuine arms race in the South-East Asian region and that there is little prospect in the next couple of decades of armed state-on-state regional combat that might involve Australia.

Yet current expenditure on these two threats to our security is massively out of kilter in favour of military over warming.

Likewise, most defence strategists would acknowledge when it comes to the crunch that terrorism is not a threat in the same league as state-on-state war. We have raised the threat of terror to a height way above its ability to deliver a knockout blow. Our irrational fear of terrorism has been ruthlessly manipulated for political gain.

Of course every death in the attack on the Twin Towers in New York, or in Bali, or anywhere else where Australians were not involved, was a tragedy and we should do our best to prevent a repetition.

But by the same token, every death from lack of clean water or a mosquito net magnifies the tragedy of terror-induced death by a factor of millions of people every year, most of them children. Thousands of human beings die around the world every single day having succumbed to preventable diseases. We should do our best to prevent those deaths too by delivering assistance proportional to the threat. Lip service has not served the needs of those souls.

Dreadful poverty on the scale experienced on this earth by over two billion people is quite obviously a primary threat to environmental and military security. I believe that if humankind does overcome global warming and provide clean water to every citizen (compatible goals) we are more likely to protect security and peace than ever in the history of humankind. So far we are failing miserably.

Therefore, in my ideal plan there is not a warship, attack plane, tank, or nuclear warhead in sight. The nuclear bomb is the most powerful and destructive weapon ever devised by humans. But it is totally and utterly useless in the fight against global warming as it is also in the challenge of providing clean water to every human being on this earth.

Furthermore, the gun or bomb has never satisfactorily resolved a dispute. The jackboot on the throat of a nation has never quelled the human spirit.

Yet, to my knowledge, no large nation has ever had the courage to give one hundred per cent to the alternative to the gun. A genuine and selfless peace offering to the environment and to humanity at large remains an untested option as we stand on the brink of our destiny.

I believe it is time to throw the last dice. A dice that most people have only dreamed of, a few have dared suggest and one that cautious and pragmatic people have always rejected.

Accordingly, I advocate a massive diversion of funds currently allocated to the defence budget across to the climate change budget. This pre-emptive tactic could prevent many conflicts from erupting because global warming issues could be better addressed with fairness and equity – a win-win result.

You will note that in my practical plan, the one that matches ideal with reality, I have not entirely disbanded the defence forces (though I was tempted). I have instead drawn in a drastically trimmed defence force. In doing this I acknowledge political reality and concede the need to retain a reduced defence force capable of contributing to peacekeeping and humanitarian operations.

Old jobs in traditional defence could be relocated into global warming defence without too much imagination or disruption and the same, or more, money could stimulate a recessed economy.

Why not in practice a green peace deal for global security? Why is this ideal pilloried by the public majority and the vested interests as naïve and dangerous? Why does Labor tread the populist path at this most insecure time in history?

If the trillions of dollars devoted globally to a phony war on terror in just the last decade alone had instead been spent on preventive action against global warming the battle would be over already; checkmate in the battle for peace and security.

The Labor Government was not responsible for Howard's decisions on defence over eleven years but has chosen to follow his lead by continuing the practice of increasing defence spending by 3 per cent a year above inflation. Howard was proud of the fact that the defence portfolio was the only one not to face the razor gang under his watch and the Rudd Government shadows him.

New spending predicted by analysts in the upcoming white paper on defence is vast and fuels the possibility of a regional "small" arms race when none exists at the moment. The defence white paper is due for release in April so funding for new destroyers and bombers can be included in the May budget.

Current defence expenditure is 1.8 per cent of GDP and tipped to rise to somewhere between 2 to 2.7 per cent of GDP.

These small percentages involve enormous amounts of dollars. We are talking about the possibility of a current 22 billion dollar annual allocation to the defence budget being raised by anything up to 50% despite demands by the Defence Minister to cut cost overruns, waste and inefficiency by 1 billion dollars a year. This could involve a hike to around 30 billion dollars a year. The cost of the 100 strike fighters on the RAAF wish list alone stands at 16 billion dollars. The navy wish list includes 6 new submarines for another 16 billion odd dollars.

By comparison, Garnaut estimated that a 25 per cent carbon pollution reduction target would cost somewhere between 0.1 and 0.2 per cent of GDP.

Why are we peddled the line that we can't raise the bar on action against global warming because it is too expensive? The money is in the bank, just deposited in the wrong department.

I ask the Rudd Government to redress this alarming disparity in assessment of security risk and associated misallocation of revenue.

Renewable energy

Australia is blessed with such a plethora of wonderful renewable energy options (and knowledge) that I am convinced it is entirely possible to completely energise this country with a combination of "renewables" in a matter of decades should we choose to.

My opinion on the potential of renewable energy supply is supported by experts in the field such as Professor David Karoly, Dr Mark Deisendorf and many others. It is not a "pie in the sky" option and I stand firmly behind it. In an ideal plan no other option comes within a bulls roar.

Our list of renewable energy options includes all the best basics - solar thermal, solar photovoltaic, geothermal, wind, water (wave, tidal and hydro) and bio-electric from vegetative residue. A combination of all these options provides the prospect of more than ample base load power. Australia has multiple and excellent site prospects for all these sources.

To tide us over during a transition phase we can draw on extensive reserves of natural gas which we currently export by the tanker load (which mostly serves to fill the pockets of foreign corporate investment, overpaid CEO's and Government coffers).

Nuclear energy is not an option in my opinion. Put quickly and simply – too expensive to build; too slow to build; too risky to run; too expensive to de-commission; too demanding of fossil energy in construction, maintenance and destruction; too risky to store waste; too risky that uranium is used for the wrong purpose; and too limited in supply of uranium. Note that, should the world decide to go full speed on the nuclear road, it is estimated that only 50 years supply of first grade uranium remains in the earth (mostly in Australia and Canada).

Why invest so heavily in a short term future when solar supply is limitless and Australia is the most sun drenched continent in the world?

To give an indication of the potential for solar thermal alone, let me outline one project that excited me in 2004 when I first read of it, and still does. Project pre-feasibility studies had been successfully completed by 2004. A smaller prototype built in Spain in 1982 had operated successfully. The company behind the proposed Australian solar power station (EnviroMission) estimated establishment costs at the time to be one billion dollars and proposed that it be constructed near the national electricity grid in sunny Wentworth in south west NSW.

A giant receptor dish 7 km in diameter would collect hot air and funnel it through 32 turbines at the base of a 1 km high tower and generate 200 megawatts of electricity. EnviroMission's long term aim is for a series of plants across Australia: 48 would be enough to provide all the countries needs. Forty eight billion dollars over fifty years amounts to ten billion dollars a decade – quite affordable under the circumstances and priorities discussed in this letter.

I certainly don't propose for a moment that all eggs go in the one energy basket, but this project demonstrates the enormous potential of solar power if only resources were directed accordingly. Another project of similar magnitude is the upcoming Ausra Australia proposal to build large solar plants in at least two Australian states worth more than \$1 billion with the capacity to power a city the size of Canberra.

In addition to meeting domestic demand Australia should be raising exports in renewable technology and materials, a field in which we were once leaders but have since fallen behind Germany, Spain, Japan and California. In a tragic reversal of fortune Australia now forfeits billions of dollars in investment and thousands of jobs because overseas companies wishing to invest in Australia are discouraged. These investors go in preference to less sunny countries like Canada with more favourable tax incentives and regulation in support of renewable energy.

Much solar development overseas is based on Australian research drained from this country because of lack of support here. Former Sydney University professor David Mills moved to California two years ago to establish the successful Ausra company. A former University of NSW student, Dr Zhengrong Shi became China's first solar billionaire and his former professor Martin Green's award winning thin solar panels are now manufactured in Germany.

Exciting projects in the pipeline are not limited to solar technology. My brother has enthused about the wonderful potential of geothermal energy in Australia for at least the last twenty years. As it has turned out his enthusiasm was well justified.

Remote sites in South Australia's Cooper Basin show enormous potential with pilot programs in train. But Victoria may prove to have even better prospects for two reasons. Firstly the best sites in Western Victoria and Gippsland literally sit under major power transmission systems. Secondly vast aquifers of ancient brackish water lie trapped between a blanket of sedimentary rock and deep beds of hot granite which has already super heated the water to 145 degrees. It just needs pumping to a plant at the surface where the heat is extracted to drive turbines and the water is returned to its aquifer through re-injection wells.

Victoria has the potential to become one of the world's greenest base load energy suppliers. Two companies (Greenearth Energy and Hot Rock) are competing for start up funds to develop their sites. Hot Rocks spokesmen say there is enough geothermal power within their tenements to generate up to 5000 megawatts, which would provide almost all of Victoria's electricity needs. Greenearth Energy spokesmen say their Gippsland deposits could produce many hundreds of megawatts at the doorstep of Melbourne and Geelong.

Hot Rock's managing director, Dr Mark Elliott, says he has never been involved in a project like this one which ticks every conceivable environmental box. That is every box except serious government support. My brother is dismayed at this lack of support along with me and many others. How can the Rudd and Brumby Governments justify their indifference?

If Australia was charged with renewable energy supply we would be well on the way to weaning the country from an unsustainable dependency on a diminishing supply of oil. Out with petrol and diesel driven vehicles and in with electric driven vehicles (or other renewable ways of propulsion) is my recommendation. Simple as that, no worries mate!

It could be done ditto with my comments on renewable energy.

The renewable energy option eliminates any need whatsoever (I believe there never was one anyway) for fueling vehicles with ethanol derived from food crops. This is a socially unjust option; in fact, a culpably negligent option which should be legislatively stymied as soon as humanly possible.

It is grossly inefficient to feed massive amounts of grain to animals in preference to humans. The practice of feeding grain to vehicles is even more crazy. In the process of converting grain to ethanol a greater quantity of natural oil is consumed than quantity of ethanol fuel produced. In the meanwhile humans starve to death and the planet begins to boil.

The Rudd Government condones such irresponsible practice by its complicity in protecting vested interests without giving effective duty of care consideration.

For example Labor chooses to prop up "last century" manufacturers with a 150 million dollar grant to Holden on December 23rd, 2008, to build a local made four cylinder petrol or dieselinjected car. The funding is from the Governments 6 billion dollar car plan and will come from funds allocated for "green" car production.

By what stretch of the imagination can a four cylinder petrol car be considered as a "green" car fit for the 21st century? In 1957, when I was 13 years old I purchased in partnership with my brother a 30 year old utility to drive around the farm when spotlighting rabbits to earn pocket money. The Rugby was a four cylinder petrol fueled vehicle! It was only marginally less fuel efficient than the new Holden product will be 92 years later!

Surely the Government of today should direct incentives (and jobs) to manufacture of vehicles fueled by solar generated electricity, compressed air, compressed natural gas, hydrogen, or other means on the drawing boards that would be appropriate for a truly green 21st century car. And perhaps Labor might regulate to ensure that the Government car fleet comprises only

green cars as a replacement for the 6 cylinder fleet that the Government clung to for too long in an attempt to prop up unsustainable jobs.

There are multiple examples of miss allocation of funds away the renewable energy sector but I will give only one more. Labor recently announced a 500 million dollars grant to the Victorian Government to subsidise the completion of a by pass around the city of Geelong and in the same breath a paltry 500 million dollars incentive grant to the renewable energy sector.

The by pass funding on road works is repeated almost ad infinitum around the country. The renewable energy funding is not. As the tennis player John Mc Enroe used to scream at the umpire, "Are you serious?"

So we need to discard the old and bring in the new in a hurry. There is not a technical problem, nor an impediment of time scale (should we respond with utter determination). The obstacles are coal, coal, and coal all wrapped up in oil and vested interests, money, jobs, ignorance and a fear of change.

Fear and conservative attitude can only be overcome with education which must be provided in spades by the Government. The money and alternative jobs will also only come with Government leadership. At the moment the Government is not in the game; not even on the bench.

Instead the Government proposes billions of dollars be directed to compensate the carbon guzzling industries (against coach Garnaut's advice). Should those funds be directed in preference to replacement jobs in the renewable industry we would be ahead in the game (and heeding coach Garnaut's tactics).

It is worth listing the "compensation industry" here to again illustrate a Government at cross purposes – a Government that takes and then gives away again. Every dollar raised by emissions trading will be returned to the fossil industry, houses and businesses, no strings attached. That is, believe it or not, 23 billion dollars taken and 23 billion dollars given back with no funds spared for incentives to the renewable industry.

The breakdown of compensation handouts reads as follows. Six billion dollars to compensate 40 heavy polluting industries exposed to competition from countries without carbon charges! Four point four billion dollars to cut petrol taxes by as much as emissions trading raises fuel prices! One point four billion dollars to compensate coal fired power stations that will be displaced by gas! One point seven billion dollars to compensate coal mines and finally ten billion dollars to compensate households (some worthy, some not)!

Funding directed to supporting research into the "clean coal" myth is similarly misplaced and again would be better spent on renewable energy. The burning of coal to generate electricity in Australia should be wound down by mid century.

Any coal leaving Australia in the meantime should be heavily taxed on an escalating scale as a disincentive to coal burning anywhere and the proceeds directed to good purpose. There would be little gained if Australia was to shut down our coal fired plants yet continue to export the problem overseas for the sake of the almighty dollar.

For example David Spratt (co-author of "Climate Code Red") writes in The Age newspaper:

"And when coal flows from two new export infrastructure projects announced in 2008, (in NSW and Queensland), the addition to global emissions from burning that coal (overseas) will be an amount each year greater than Australia's total greenhouse emissions, cancelling out the planned reduction by 2020 many times over".

If the world is to survive the global warming challenge it must wean itself from coal and oil. In this optimistic scenario the market for coal and oil is only short term anyway. And in a pessimistic scenario perhaps even shorter!

In my opinion it is possible to phase in the ideal of renewable energy and phase out coal and oil. Leadership from the Government is clearly the key to opening the door to this possibility, but where is the key?

A new national accounting system

Australia, (indeed all countries) desperately needs an accounting system which better indicates overall national welfare than gross domestic product (GDP).

GDP merely measures monetary exchange within a country. It does not measure the effects of such exchange on the environment. It does not measure the informal, unpaid economy. Yet GDP data is presented daily by the media and sadly misinterpreted by the public. The unequivocal inference is that growth in GDP is in the national interest without giving due regard for the negatives.

There are many dramatic examples to illustrate the limitations of GDP as an indicator of national welfare. It measures the revenue exchanged from electricity generated through the Yallourn brown coal chimney stacks but does not measure the carbon dioxide emissions from the stacks and the warming atmosphere. It measures money exchanged as cotton is grown on the banks of the Darling River but does not measure the dead fish and the spread of eutrophication as the river turns green and dries to a trickle. It measures the money swaps at Crown Casino but does not measure the broken lives of the addicted gamblers in the lower socio economic strata. It measures the cash exchange between the paid workforce and retailers but does not measure the unpaid work of parents looking after their children or the Red Cross volunteer.

Most of the workforce is hoping to escape the economic meltdown having retained their jobs without altering the old accounting system. If this is the case they will have jumped from the frying pan into the fire, from economic meltdown to ecological meltdown.

We need a tool box full of more sophisticated measuring tools.

Before we select new tools it is worth taking a closer look at the weaknesses of the old so we can avoid past mistakes. Politicians from governments of both political persuasions, at both state and federal level, have misled a gullible and greedy public. As the economic meltdown caught fire they claimed that the Australian economy was well managed and well insulated from Wall Street. Blind Freddie could see the flaws in their claim as well as smell the smoke.

The Federal budget may have been in the black by 20 odd billion dollars in May 2008. But Governments have consistently passed the buck from public to private hands, none more so than the Howard Government. Howard erased red budgets by transferring debt to the private sector and mercilessly reducing expenditure on education, health and the environment. All Governments push and cajole the private sector to grow fat by consuming more and more. The private sector responds all too willingly by going deeper and deeper into debt.

As a result, the level of personal debt and the trading deficit (foreign debt) has risen to record highs, not just in Australia but in comparison with the rest of the world. Australians have viewed the resources boom as manna from heaven but we have handled the boom unwisely and given new meaning to the term fools paradise.

On the domestic front the cost of a typical Melbourne house has risen to seven times that of average annual income according to Dr Steven Keen, Associate Professor of Economics and Finance at the University of Western Sydney. A factor of three times is considered safe. Since 2003 Australian house prices have more than doubled and we now rate amongst the world's 12 least affordable housing markets. Expenditure on consumer goods has ballooned. We spent roughly 50% more on consumer electrical imports and 70% more on imported food in the years 2003 – 2007 inclusive. The Howard government announced personal income tax cuts each of those 5 years. Tax breaks soared from \$50 billion to \$73 billion. By 2003 Australia's household saving ratio turned negative for the first time since records were kept. We were in aggregate spending more than we earned and in doing so living beyond our means.

As fast as mining generated cash came in to the government coffers Howard shoveled it out to be spent. The Liberals formalized their approach to economic management by adopting the campaign slogan in their last term – "go for growth". This was no news to anyone.

On the international trading front deficits have been recorded year after year for more than a decade. We have reached a level of foreign debt well above 1990's levels when Labor Prime Minister Keating compared Australia to a "banana republic". The Liberal party lampooned Keating with a "debt truck" touring Melbourne's streets denouncing Labor's \$200 billion foreign debt. But after eleven years of Liberal rule, the debt had exploded to \$600 billion and was expanding by \$200 million a day according to Peter Martin, economics correspondent for The Age. So since 1997 our foreign debt has tripled. What we pay out for imports over and above what we receive for exports now amounts to roughly 6% of our GDP. Access Economics estimates our current account deficit jumping to a dizzy 9% of GDP next financial year.

To service this debt Australia is highly dependent on exports of primary products into a global economy in meltdown. In 2008 Labor heaped false hope on false hope that China would save us by continuing to gorge our coal and other mineral products. Yes, that's right, the very same China that won't reduce their emissions according to Australia!

But China has not avoided the global meltdown and its economy is sliding into disarray by its own admission. The rate of economic growth has halved in the last year. If China's boom does not restart then likewise the extent of Australia's reliance on its abundance of resources may not be resumed. An opportunity to save and invest wisely has been wasted. In contrast Norway accrued a current account surplus with earnings from their North Sea oil boom and is perhaps the most secure of all nations from attacks by financial markets according to Peter Martin.

Peter explains that our current account deficit is many times the level of Asian countries caught up in last decade's economic crisis and still we continue in the same vein. He conjectures that our Reserve Bank carries only small reserves of foreign exchange and our much vaunted legal and banking system may not save us.

We may well have four of the eleven banks in the world to carry a triple A rating, but they look remarkably like a sitting duck in the path of cyclone Tracy to me. For my money we do not have a well managed national economy safe from the ravages of Wall Street despite the reassurances of our politicians from both sides of politics.

More fool the consumer as long as their gluttonous behaviour does not deplete finite resources. But of course it does and it fuels global warming. The average citizen must accept responsibility for their greedy lifestyle. Their cumulative impact on the earth is inestimably more damaging than all the obscene remuneration packages put together by greedy CEO's. One could reduce every corrupt CEO and politician's package in the world back to minimum wage level and it would make but an atom of difference to the problem of over consumption.

The Government and the private sector alike remain addicted to the mantra of GDP, jobs and growth. In December 2008 the Rudd Government drew on the surplus and released a \$10 billion stimulus package to pensioners, parents and carers urging them to go out and spend it on anything, just spend it in a frenetic Christmas spree, no strings attached. According to Labor it doesn't appear to matter if the money is spent on goods that are dragged from a protesting earth in a process that emits carbon dioxide into a warming atmosphere!

This addiction has induced a state of schizophrenia. We want to abate global warming but Governments raise revenue from taxes on oil which fuels it. We want to save water but private authorities have a vested interest in selling more water. We want to burn less coal but the energy retailers have a vested interest in selling more electricity. We want to reduce emissions from cars but the more cars sold the more government revenue from sales tax rises. We won't reduce imports so we must increase exports of finite resources. We want to save trees but Gunn's wants to export pulp and woodchips harvested from native forests. The examples in environmental conflicts of interest are endless.

This is also the case in social welfare where the analogies with environmental welfare are direct and instructive. We want to reduce violence in the home but the government raises revenue on the sale of alcohol. We want to help the poor but the pokies rip them off and Packer and the Government profit. We seek peace but we make money from munitions manufacture.

The really sad thing about all these examples is the short term and illogical approach taken by both public and private interests. In the long term the cost of mitigation, the enormous cost of treating the illness caused by the action, is greater than the temporary profit. Society and the environment would both be much better off by any measure of profit or health if preventive action was taken in the first place.

This is exactly the same with global warming. The more GDP is pushed as a way out of the economic meltdown the further into the fire of global warming we fall. The old tools have more holes in them than my old socks and they smell as badly. We need a new green economics for a new green age.

One example of a new tool, an extra indicator of value on the instrument panel, is the suggestion from the Wentworth Group of Concerned Scientists forwarded to the Government in May 2008. The report is titled "Accounting for Nature – A Model for Building the Natural Environmental Accounts of Australia".

In their document the scientists ask many fundamental questions, including the following two:

"Why is it that the latest speculation on a .25% increase in interest rates receives front page coverage in our daily newspapers, yet the most comprehensive assessment of the health of the world's eco systems ever undertaken by science was largely ignored?

Why is it that whilst our environmental assets account for more than 40% of the total value of Australia, changes in their value are not included in measurements of national income?"

The Concerned Scientists propose that:

"The National Environmental Accounts of Australia would catalogue our natural capital in a way that can both inform policy and guide future public and private investments at a local, catchment, statewide and national scale, across the Australian landscape".

Similarly many green economists have proposed a Human Development Index (HDI) to monitor and report on a range of human welfare indicators. As far back as 1990 the United Nations Development Program's HDI challenged the narrow parameters of GDP by incorporating widely available statistics on literacy, life expectancy and purchasing power.

In her book "Paradigms in Progress – Life Beyond Economics" Hazel Henderson writes:

"The new indicators should remain disaggregated, distinct and politically transparent, so that average TV viewers can respond to them, especially at the ballot box during election times".

I can see no plausible impediment to the implementation of these ideals

In discussing a national accounting and financial system let's place a few examples of better directed expenditure and regulation on the table. That is, expenditure and regulation that could boost both economy and ecology.

Firstly. As I understand it, the Rudd Government has for-shadowed in the CPRS white paper that the long over due pension increase to come in the May budget will be funded in future by drawing on revenue from emission trading.

I object to this source of funding which could otherwise be more effectively directed to climate change mitigation or specific financial support for those people not able to meet the financial cost of doing so (some, but not all, pensioners). Adequate support for pensioners, carers, and unemployed (numbers of all will increase) is an obligation of Government which should be financed largely from general revenue (perhaps except the global warming induced component).

The way Labor appears to have it figured at the moment is to have the public purse compensate polluters so Labor can extract revenue from the polluters to fund an increase in social security payments! This money is tainted and I don't like the sniff of it.

Secondly. The simple but profound slogan "Reduce, Re-use, Recycle" presents almost limitless opportunity in this extravagant country. What about cutting consumption by 40% by 2020? Australians have massive amounts of fat to cut, both metaphorically and literally.

We are on average the most greedy and most obese people in the world at the moment. So far the little attention we have accorded the three R's slogan has gone in reverse to the priority order suggested by the slogan. We have achieved a small amount of recycling, ditto re-use and a zero amount of reduction.

My wife ejected plastic bags from her shopping trolley 25 years ago and has pushed the three R's barrow with gusto ever since. No wonder she is frustrated that the Minister of the Environment can't seem to be able to find his way out of the plastic bag dilemma (which he has not managed to ban) to fight other environmental battles.

Thirdly. What about more strict regulations to control the built environment, both domestic and commercial? There is an endless list of opportunity in this field. Low cost, energy efficient housing for the Aboriginal community, homeless, unemployed and low income people should be first priority.

Fourthly. Speaking of the Aboriginal community brought to mind what should be a top priority expenditure item. No more excuses. The Rudd Government did the right thing by saying sorry to the stolen generations as soon as you took office and you brought tears and hope to the eyes of many, including mine.

Much remains to be done though, and the Rudd Government is proving just as disappointing in this field as in the post Bali 2007 signing of the Kyoto Protocol field. The two outstanding challenges to over come if Australia is to mature as a nation are the twin issues of global warming and reconciliation with indigenous Australia.

Fifthly. What about displaying more imagination than the traditional infrastructure spending on roads and bridges just to maintain jobs and boost output of products for consumption and export in an unsustainable way. I would not commit one more cent to one more road or bridge than is already on the table.

A massive increase in expenditure on public transport and trains for commercial haulage is a preferable ideal. And lash out on pedestrian and cycle traffic expenditure. Spend more on these options than you propose to spend on roads and bridges and we might get to somewhere sustainable at last and create jobs in the process.

Sixthly. And I haven't even started in the fields of health and education. There are mountains of opportunities to spend and create real wealth here.

Lastly. Now I am out of time and money. But regulation takes little of either. We should direct change towards sustainable living practice as rapidly as possible through regulation. Just set targets and say no to polluters. Say no to advertising alcohol. Say no to the munitions manufacturers. Say yes to a treaty with Aboriginal Australia. Say yes to the carers. Say yes to the teachers and nurses.

I acknowledge the vital importance of jobs and economics. I have visited Kenya for extended periods and slept and worked in the slums at a time when there was negative economic growth (GDP). I observed the terrible consequences first hand. But economics must be the servant of environmental and social welfare, not the other way around. The earth cannot cope any longer with gross over consumption just for jobs sake. I say this for the umpteenth time because it bears repeating. The Rudd Government and the majority of the public seem to turn a deaf ear.

I know this because I have lived my 64 years in Australia and watched the public eating soil, water, biodiversity and atmospheric health as if there was no tomorrow. Our appetite may be self fulfilling unless we go on a rapid reduction diet.

In this regard the Government is clearly at cross purposes. The informed public has to suffer the ignominy of the Minister for Climate Change and Water, of all people, publicly defending the patently inadequate 5% target by saying it is all about jobs without any qualification!

The times demand a courageous and fierce voice on behalf of the environment. Senator Penny Wong and Peter Garrett carry this responsibility in Australia. I am frustrated and disappointed in their public performance to date.

If we are to spend, as spend we should, to boost the Australian economy in a time of global depression there are limitless opportunities in the green fields of environmental and social welfare, especially and particularly because of global warming.

A new direction for agriculture

I am still comfortable with the change in direction for agriculture that I developed during my years of planning on our family farm. Not coincidentally, if such a shift in direction was to occur it would make a significant contribution in the fight against global warming. As humanity floods from country to city, the lights dim in rural regions and glare in urban regions. The glare heats the globe.

My plan involves a fundamental shift in agriculture and lifestyle towards decentralisation, independence, community, harmony with nature, diversity and restraint. When I discussed the new direction with farm tour groups they pretty much unanimously supported it. They just did not know how to make the change within the current economic and trading system. And they were correct in identifying a huge obstacle which blocks more productive options.

As a means of by passing the economic and trading obstacles I strove to improve existing monocultural (single enterprise) systems whilst introducing complementary systems on the way to creating new polycultural (mixed enterprise) systems. I planned to revitalise rural communities with a more sophisticated eco-system practice of agriculture. I gave emphasis to local production and consumption within the limits of nature to provide for the long term. And I urged a greater use of native Australian products.

And make no mistake, my plan envisages a greatly improved output of agricultural produce and involves more people in the process.

My family has been swept up in the exodus from rural to urban living but I think of us as relatively privileged economic refugees in the most centralised country on earth. I am more worried about the consequences of the industrial and genetic broom sweeping through the Asian, African and Latin American countryside. My plan seeks to resettle and revitalise rural areas, not only in Australia but the rest of the world too.

My plan involves hard decisions but we have the benefit of hindsight and should use it. It is dangerous to cling to old ideals brought to Australia over two hundred years ago from Britain and supplemented by inappropriate introductions from other foreign countries in the intervening years.

Let me give some more intimate and local examples to illustrate my comments about inherent dangers in some aspects of the old and the new and the need to discard them.

My family was intimately involved first in the dairy and then in the beef and wool industries over a period of 67 years. In the 1980's my good friend and veterinarian, Dr. Mike Blockey, said to me when reflecting on the dairy industry that he saw "Great stress on the cows, on the land and on the farmers". Mike is a brilliant animal and land management consultant in the dairy, beef and wool industries. His comments applied equally well to all three primary industries.

Mike is a fierce critic of the use of objective measurement and genetic manipulation purely for the purpose of selecting for growth, for measuring output without due consideration for input costs on the animals and the land. (I raise this not the least because there are clear parallels to be drawn with mismanagement of the economy). He has prepared volumes of information on more sensitive and appropriate evaluation techniques which better fit native Australian needs.

Does the public swallow the line, hook and sinker too, that farmers, genetic engineers, chemical corporations, fossil fuel industries etc. are all altruists looking out for the public good? We can accept that they have a vital role to play in the future but we need to be aware of their bias and inject a stronger notion of ethics into the office and the laboratory. Their motive is generally in making profits, not in feeding the world in a sustainable way.

The "green" revolution of the last century has morphed into the "gene" revolution of this century. There were and are some benefits involved in these revolutions which should be acknowledged. But the tragedy of humankinds' misguided attempts to dominate nature, with all the demonstrable disastrous consequences, has been put on steroids with the gene revolution.

A debate rages as I write about the inherent dangers in extreme genetic engineering techniques. To safely and ethically modify organisms within a species present difficult enough challenges for scientists and ethicists. But the risks are exponentially raised with the challenges involved in cross species genetic modification which is currently being researched and practiced.

I believe it is not necessary to take these risks. We have at hand many safe options which are not being realized, whether in economics, renewable energy, or agriculture.

I believe there is no justification for the retention of one beef feedlot (or any other animal feedlot for that matter) in Australia. Feedlot beef, particularly the exported variety, is the most grossly inefficient form of meat protein available to humans. It comes at exhaustive cost in terms of soil, water, biodiversity and atmospheric health which is effectively what we "eat" when we tuck into a steak from a feedlot. It is stuffed with fossil fuels and toughened by rejection of animal rights.

Eighty percent of the worlds' population can't afford a steak. Yet over 60% of grains grown in the world are fed to domestic animals and then, via the slaughtered animal, to rich humans. If such inefficient forms of production such as the one outlined (there are plenty of other examples) were abandoned, any need to resort to the extreme and dangerous genetically engineered food options afoot would be eliminated (if ever there was one).

The public is being taken for a ride here. I am not sure they understand that in compensating major polluters the public purse is supporting the feedlot industry. From paddock to plate, beef is more efficiently and justifiably produced off non irrigated pastures, all things considered.

My family thought deeply about these issues. Consequently we did not oppose modest consumption of meat but we did reject inappropriate means of producing meat for human consumption. After thirty years of pioneering involvement in objective measurement in the beef industry and development of a successful annual bull sale largely tailored to suit feedlot needs, we pulled the plug on a profitable direction we were not comfortable with on an ethical basis.

I mention this because throughout this document I call for a radical change in direction for many industries, from military to coal and including agriculture. The challenge involved in these decisions is not something that I have not experienced personally.

This is why I chose to highlight the beef industry and not the more commonly raised cotton and rice industries which deserve equal scrutiny along with many other questionable enterprises in terms of sustainability.

Many of them were not included in my plans for the future and neither were futile attempts to prop up the status quo.

My plan does not, for example, retain a drought subsidy. For over twenty years there has been talk of weaning the farming public from drought subsidies. The philosophy behind the talk is that it is high time that farmers adapted their systems to cope with the natural course of events, including droughts, in the driest inhabited continent on earth. I agree, but it has been all talk and no action. What about it Labor?

And my plan does not include deserting a degraded environment in south, east and central Australia and proceeding to repeat mistakes by expanding a failed farming culture in the northwest (this is not to deny some potential for appropriate development in the north).

What are the plans of the Labor Government in this regard? Labor recently announced support for further development of the Ord river scheme in the Kimberly region. What sort of development? Did I hear rice and cotton, or did my ears deceive me?

If perchance you think by this stage that I am well and truly around the bend, that I am off on another planet, I respectfully suggest you do as I do in this situation. Firstly, take yet another careful look at the state of the environment under the existing system and, secondly, remind yourself that there is not another planet to escape to.

My plan for a new direction in agriculture involves a warm embrace of native Australia. It would introduce a way of farming and living suited to the twenty second century and my grandchildren would be around to experience and enjoy it.

A more generous Australia willing to share with the world

I devote this section to the developing world because it is so important in the struggle against global warming. I wish to highlight the weakness of the concern that we should wait for the developing world to act against warming. In fact the developed world owes both a carbon debt and an economic debt to the developing world. We are indebted to them because for centuries we have built our wealth at their expense.

Yet this form of debt is generally ignored and instead we give focus to overseas aid. Australia's record in this regard bears scrutiny as it is not one to be proud of.

Australia's contribution to Overseas Development Assistance (ODA) is a meagre 0.3 per cent of GDP (and much of that is trade related with inbuilt benefits for Australia). Labor has set a goal of 0.5% by 2015. That goal falls well short of the 0.7 per cent target recommended for rich members of the Organisation for Economic Co-operation and Development (OECD).

Australia is one of the least generous contributors to ODA which gives a lie to the "fair go", "generous nation" image that Australia hypocritically self promotes.

To illustrate one of many ways in which we have taken advantage of developing countries I bring your attention to the rights of small farmers.

My eyes were opened to the issues of small farmers' rights by colleague NGO's at the conferences on bio-diversity in Geneva and Nairobi, 1993 and 1994. Developed countries generally fail to acknowledge that small farmers in the developing world, and in particular women farmers, are still responsible for producing the greater part of food consumed by humanity. Though given less than half a chance they are still great protectors of biodiversity – better in general than the bulldozer and the chemical plough.

The odds are tough for them because the developed world has not hesitated to exploit the developing world in every way imaginable. We have used all the modern industrial worlds' technological and legal wizardry to plunder their genetic resources and prosper at their expense.

I became more aware of the extent of biological exploitation at discussions on such issues as:

- Intellectual property rights for whom? (Overwhelmingly the developed world and rich corporations own the "patents" on genetically modified organisms. Many small farmers can't access or can't afford modified seeds taken from a region without permission or payment this is referred to as "bio piracy".)
- In-situ, ex-situ: forgetting the farmers? (Genetic resources are overwhelmingly stored and controlled by the developed world.)
- Threats from the test-tubes: towards a protocol on biosafety. (Who is responsible if a genetically modified organism escapes the laboratory? What if it can't be put back?)
- Agricultural biodiversity in the convention. (Who protects biodiversity on farm and who
 gives recognition of the rights of farmers and local communities over their genetic
 resources and indigenous knowledge?)

To bring this bio-wizardry to an Australian context I need to introduce you to the Consultative Group on International Agricultural Research (CGIAR). Not many people in the world have met CGIAR and have awareness of the astounding influence this group has on the well being of humankind and all other living species on the earth.

The CGIAR group works with basic food crops like rice, wheat, potatoes, maize and beans but also works with fish, livestock and forests. Genetic collections controlled by CGIAR are said to provide the enhanced germplasm that feeds more than half the world's population.

CGIAR portends to democracy and transparency in representing 51 countries. More accurately only four countries (Australia, Canada, UK, and USA) hold half or more of all key staff and nominated posts. The "Group of Four" dominates every phase of CGIAR activity. Its vast gene banks and huge plant breeding programs are supposed to be dedicated to meeting the needs of small farmers in Asia, Africa and Latin America and to an extent they do.

Yet this is not the full story. There is general recognition that the reverse flow of benefits to the Group of Four is enormous. In fact the benefit of CGIAR to Australian agriculture over the past twenty years (from 1994) was no less than three billion dollars. In return Australia customarily gives CGIAR about four million dollars per year – a most lucrative commercial deal.

Given the debt owed by Australia to the developing world and the unfair disparity in living standards between the two worlds I think it is a bit rich to insist that Australia's action against warming is dependent upon the developing world doing more!

A hand to help nature towards the glad tomorrow

Unfortunately nature cannot articulate in written or spoken word its desperation at the damage that the practice of agriculture and the demands of our extravagant lifestyles have caused. Nature can, however, paint a picture more graphic than our most accomplished artists.

I do not understand how the Prime Minister and the Minister for Climate Change and Water can return from visits to the Murray Darling at various spots from source to mouth, having literally pointed along the way to extensive degradation of the river, be visibly moved by the sight of it, and yet announce such a small target in response to global warming.

On the other hand I can understand Judith Wright's more despairing and eloquent response way back in 1970 when she translated natures' picture into verse with remarkable foresight. Judith was born to a family involved in agriculture for generations but her love of the land was not blind to the impact of farming and grazing. She became a great Australian poet and lifelong activist advocating reconciliation with all of Australia's natural ecology, including fellow black Australians.

Judith was troubled by the insensitive white invasion of Australia and the brutal consequences when she wrote the following poem:

Australia 1970

For we are conquerors and self-poisoners more than scorpion or snake and dying of the venoms that we make even while you die of us

I praise the scoring drought, the flying dust, the drying creek, the furious animal, that they oppose us still: that we are ruined by the thing we kill

Judith also wrote the following questioning poem to Oodgeroo Noonuccal (Kath Walker), her sister poet and Aboriginal friend:

Two Dreamtimes

I am born of the conquerors, you of the persecuted. Raped by rum and an alien law, progress and economics,

are you and I and a once-loved land, peopled by tribes and trees; doomed by traders and stock-exchanges, bought by faceless strangers

Oodgeroo penned a poem of hope in reply:

A Song of Hope

See plain the promise,
Dark freedom-lover!
Night's nearly over,
And though long the climb,
New rights will greet us,
New mateship meet us,
And joy complete us,
In our new Dream Time.

To our fathers' fathers The pain, the sorrow; To our children's children The glad tomorrow.

That a black Australian can respond with such generosity and hope after two centuries of persecution is testimony to her peoples' moral triumph. It demonstrates an almost unbelievable resilience and is an inspirational symbol of natures' ability to rebound if given even half a helping hand.

I think we desperately need a new vision for Australia if Oodgeroo's song of hope is to bear fruit. My involvement in the Potter Farmland Plan in the 1980's put me on a springboard in thought about a revolution in agriculture and lifestyle. In my retirement on a sunny day I still adjust my ideals on life and the positive role that agriculture could play in uplifting nature and global welfare. My plans were not intended to be set in concrete. They need to be fluid and adjustable if we are to reach "the glad tomorrow".

WILL THE RUDD GOVT LEAD A FAIR DINKUM REVOLUTION?

I believe no less than a fair dinkum economic, social and environmental revolution is required if Australia is to play its part in developing a new "green age" safe from the ravages of global warming. Am I living a pipe dream or is there a light at the end of the tunnel?

I am convinced it is entirely possible to reach the light on the proviso that Australians decide to move with persistence and determination in that direction. What is required is an education campaign to build a groundswell of public awareness and a will to change. Indeed, Mr. Rudd, a worthy and well directed education revolution, one that complements the laptop for every secondary student. In this the Government has the leading role but unfortunately a dismal record despite the rhetoric.

I respectfully ask the Australian Government to

- Provide the leadership to activate fundamental change in our economic, social and environmental behaviour
- Embark on an effective awareness raising campaign to alert the majority of the general public to:
 - 1. The seriousness of the situation
 - 2. Most importantly, the exciting and positive options already at hand
- Regulate more effectively to control the harmful habits of irresponsible consumers and polluters - the worst in the world on a per capita basis
- Re-allocate a major portion of the defence budget to the fight against global warming
- Set a target of 100% renewable energy provision in Australia by 2050 and channel the necessary incentive funds to the appropriate bodies to achieve this goal
- Introduce a domestic and commercial gross feed in electricity tariff Australia wide as proposed by The Australian Greens
- Wind down the export of coal from Australia and eliminate by 2050
- Scrap the proposed CPRS and introduce a carbon tax and more stringent regulatory controls
- Develop an improved national accounting system which promotes a green economy and full employment
- Include agriculture in the mainstream effort to avoid a greenhouse planet
- Extend a more generous hand to the developing world
- Increase financial and regulatory support for environmental rehabilitation
- Set a target of 40% reduction in carbon pollution by 2020 and 90% reduction by 2050.

You cannot be in the black unless you are green

Why oh why would a responsible Government not give global warming a national emergency priority number one status? Why isn't every decision in cabinet taken through the prism of meeting desperate environmental needs?

The two most senior posts in cabinet below that of Prime Minister should be those of Minister for Climate Change and Water and Minister for the Environment (without any other responsibilities).

One often hears the anti green comment, "you can't be green if you are in the red". The truth is "you can't be in the black unless you are green". Real capital is stored in the form of earths' finite resources. At the moment unreal money floods through Wall Street to join real money in Main Street in a torrent which erodes earths' capital.

A victim of asbestoses would not take advice from James Hardie

Surely a citizen with a serious health ailment would consult a medical specialist with expertise in the area of concern. One would not expect the citizen to consult a non-medical person with a vested interest in a business which is known to be the cause of the ailment. In other words, someone suffering from asbestoses would not take advice from James Hardie.

It seems the Rudd Government sees this differently if the list of industry leaders invited onto a high level consultative committee to shape Australia's energy policy beyond 2030 is any guide. The list included Shell, Rio Tinto, Xstrata Coal, BHP Billiton, Santos, Woodside Petroleum, AGL Origin Energy, the Energy Supply Association of Australia and the Australian Petroleum Production and Exploration Association.

The renewables industry did not get a seat. In Judith Wrights words are we doomed by traders and stock exchanges bought by faceless strangers?

Australian National University adjunct professor and energy consultant Hugh Sadler is quoted by The Age reporter Royce Miller on his opinion as to who has real clout under Labor:

"The green groups have absolutely no influence and the big industries and key unions, and in particular the AWU, completely wipe the floor with them."

According to Don Henry, president of the Australian Conservation Foundation:

"From our observations, the Government probably spent 100 times more time talking with industry than they did with the community sector."

The Governments climate change advisor Ross Garnaut described the fossil fuel industry's lobbying against his recommendations as "unprecedented."

Unsurprisingly then, the industry association representing the big players in coal, oil and manufacturing, (the deceptively named Australian Industry Greenhouse Network), has had a field day in the last twelve months. Over that period the Rudd Government has dramatically modified its policy on global warming.

The Government has lost momentum and is fast losing the respect and goodwill of the environmentally concerned public. The Government has one foot jammed hard on the brake and the other timidly on the accelerator. As a result wheels spin madly, heat is generated and forward momentum is incremental at best.

We have come to a bizarre situation where the public is effectively required to compensate the worst polluters, many of whom who can afford the luxury of buying permits to pollute as before or alternatively pass the cost of the permit onto the consumer. Or worse, receive free permits from the Government to pollute. Both means of compensation are against the advice of the Garnaut report.

Voluntary household energy reductions should be treated separately from industry greenhouse emissions, otherwise householders are limited in ability to participate in adaption to climate change. If this were the case voluntary carbon reductions could easily provide another 5% cut in emissions in addition to the current target according to Chris Dunstan, a Senior Research Consultant at the University of Technology's Institute for Sustainable Futures.

My wife and I do not appreciate bearing costs that industry would otherwise be compelled to take on. We object to a polluter purchasing, or being given, Renewable Energy Certificates (REC) on the back of our efforts. In protest, and as a counter tactic, we have decided to purchase the number of REC's that we have earned. We will lock them securely in our home, safe from the grasp of those that want to buy a licence to pollute. It won't save the planet but it is all we can do to force the cost of carbon credits to a higher level.

In order to pay for the REC's, perhaps Lyn and I could draw on the Rudd pre Christmas handout to pensioners which, as I explained earlier, we refused to spend on a frivolous goods item wrapped in Christmas paper.

MY REPLY TO PUBLIC CONCERNS ABOUT CLIMATE CHANGE POLICY

As the Federal Government has clearly given a sympathetic ear to the self serving pleas of the polluters and those who urge caution on taking positive action to counter global warming I would like to address the common concerns raised by them.

Renewable energy will be cheaper than coal, all things considered

We sit like a frog in water being brought to the boil and refuse to jump because of perceived cost. As the earth cooks nothing irks me more than the lethally foolish notion that cheapest is best. How often do we hear the comment that energy supply must be cost competitive? That the swag of renewable options is too dear in comparison to coal? This is a classic example of dodgy accounting at the expense of the environment.

It is like comparing apples with oranges. When comparing the two options the full costs of coal burning (and nuclear too for that matter) should include establishment costs, time of establishment, maintenance costs, economy of scale when in full production, safety issues, health issues, expected life cycle, and replacement costs.

This is not generally the case. The public is presented with a notional cost of a kilowatt of energy per hour delivered to the household from an ageing coal power station in full production mode. This cost is compared with renewable energy costs at a stage when the renewable industries are in their infancy, still suffering from labour pains and yet to reach full potential.

Even if coal proves notionally cheaper in the short term it has the certainty of creating havoc in the long term (already in evidence). This should be considered along with a host of other ramifications before a decision in favour of either is reached. Let me illustrate my point by way of an analogy in which coal is replaced by food.

Imagine a choice of feeding your family from one of two food providers, a green provider or a red provider. Initially both green and red sources are said to satisfy all requirements in terms of taste and nutritive value, but red is cheaper than green by 50%. On this basis I imagine you would choose red over green. I did.

Over time, however, information on the safety aspects of the two food sources is scientifically enhanced.

An overwhelming number of doctors advise that they have established that red food is naturally laced with tiny traces of arsenic. It tastes okay and you will probably survive if you continue to consume it. The problem comes with the accumulative build up of arsenic which will, with a 90% probability, kill your grandchildren.

If the odds are defied and your grandchildren cling to the 10% chance of survival doctors say that they will continue to confront an unpleasant odour and thick pall in the air which is known to emanate from elements in the contaminating red food source. These effects are already shown to have a serious detrimental effect on the health of asthma sufferers, in some cases lethal and in all cases expensive to treat. They will only get worse.

The doctors advise that the green food is completely safe.

Technicians advise that in the future it is possible that the arsenic may be removed from the food but it will be very expensive to do so and almost certainly be too late to help your grandchildren. The arsenic would be difficult to store safely after removal in any case. In addition the technicians advise that the supply of red food is limited.

In contrast the technicians assert the supply of green food is assured and unlimited. Independent economists advise that you can afford the extra cost of the green food, especially if you eat less which will help you because you are overweight (confirmed by the doctor). Even better, the economists indicate that the cost of the green food will reduce over time and those who were producing the red food can be retrained to produce the green. There will be plenty of work for them as demand for the green alternative increases exponentially.

The red food provider, who is a business person, advises you that the criticisms of red food provided by specialists in their field and based on the best available objective data is nonsense. The red food provider continues to emphasise that the red product is still 25% cheaper than the green alternative.

The local politician sits on the fence and attempts to please all the public all the time in a vain effort to protect his/her political support.

Is cheapest best in this analogy? I can only imagine you choosing the green food. I did. And I would select green ahead of red if it was ten times the price.

The Rudd Government should not favour coal over renewables simply on the basis of notional price, a revenue stream for Government coffers, and a perceived need to prop up unsustainable jobs to protect votes. All things considered renewables win by a country mile.

We can afford the cost of aggressive action now

The Government commissioned Garnaut Report (and the Sir Nicholas Stern Report in Britain) clearly states that decisive action now is affordable and in fact a minor component of overall GDP.

In fact Garnaut estimates costs between 0.1% and 0.2% of GDP, depending on the target; or put another way, only one tenth of one percent of GDP for the 5% CPRS target by 2020! Why all the scaremongering about cost?

In addition Garnaut illustrated that the cost of a 25% reduction target was little different to the cost of a 5% target! Then why not aim for a 25% target (or more)?

Why wasn't Garnaut asked to model a 40% target so that at least we would know if there was a significant difference in cost if we aimed at the most ambitious target recommended at the UN's 2007 Bali conference?

Of profound concern is that these assessments, astoundingly, do not include the economic costs of biodiversity loss and species decline/extinction in this century (I will comment on the ethics later). Humankind utterly depends upon sun's energy and the web of life on this earth which it supports. We destroy that web at our economic peril.

At a time when we are looking to spend money to boost the economy it seems inconceivable that we should not grasp the opportunity to spend on the environment for a win – win outcome.

Global warming and economic meltdown are in the same race

It is essential in the "walk (run) against warming" that the economic meltdown is appropriately dealt with at the same time. It is not a matter of dealing with one before the other as both are entered in the same race towards a sustainable finish line.

The Government commissioned Garnaut Report (and again the Sir Nicholas Stern Report in Britain) clearly demonstrated not only that we can afford to act now but also that the cost of delayed mitigation will be astronomical by comparison with decisive action now.

That is to say failure to act appropriately now would cause a double negative. More environmental degradation later (perhaps beyond repair) means higher mitigation costs later (perhaps unaffordable).

It doesn't take much imagination to add up the costs. To mention a few:

- Replacement of flooded built environments in coastal areas
- Loss of tourism revenue the Great Barrier Reef is doomed under the 5% target
- Water storage for humans, domestic animals and plants
- Health care
- Fire damage
- Storm damage
- Millions of environmental refugees more than Christmas Island can accommodate
- Wars

We need to run a good tactical race. This is not a marathon. Usain Bolt is the athlete of choice in an explosive world record 100 metre dash to the finish line.

Overcome warming and create sustainable jobs and full employment

We need at this time to overcome the fear of job loss by concentrating on creating new sustainable jobs. Through history many industries, businesses, and associated jobs have come and gone, mostly without compensation. This time we can do better.

In fact my family experienced first hand the challenge of coping with the harsh reality of declining terms of trade in agriculture driving the axiom "get big or get out". I will briefly outline our personal history in order to compare job loss in agricultural industries with potential job loss in the coal industry

My parents commenced their farming careers as dairy farmers in the Adelaide Hills, South Australia in the 1930's. Within 15 years they lifted milking cow numbers from 10 to 120. But by 2009 there is barely a dairy herd to be seen in the Adelaide Hills. Hundreds of dairy farmers became redundant from the 1950's onwards as dairying shifted to irrigated regions and dairy herd numbers exceeding 1000 became common by the turn of the century.

My parents shifted to wool sheep and beef production in Victoria in 1947. Again they were successful for 50 years, during which period two younger generations joined their innovative and competitive farming partnership. But we could not defy the odds forever and in 1997 we sold our farm to wealthy investors who proceeded to purchase another 10 farms in the district which displaced another 10 families.

All the while the price of wool and beef declined in real terms. The number of wool sheep in Australia has halved over the last decade and with them went many small farmers. So we were not alone in joining the exodus from the land despite the fact that in the last half of the 20th century farm efficiency improved to the extent that output increased 2 ½ times and real costs per unit of farm output declined. In those 50 years the farm workforce fell from 488,000 to 398,000. The number of farms of economic size declined from 205,000 to 124,000.

In our families case we can atypically establish in all honesty that, because of our environmental inclinations and the establishment of habitat for other species in the form of hundreds of

thousands of trees and shrubs, we did leave our farm in better condition than when we found it. We became "privileged economic refugees" and received no compensation as we left our farm.

In fact we witnessed the impact of Howard's Managed Investment Scheme (discussed previously) which distorted the value of land after we sold in 1997. Within 8 years neighbouring, unimproved properties sold for 3 times the value per hectare of our sale.

Such inflated prices may have enabled some farmers to retire from the land in the last few years all cashed up and with dignity but they make it nigh on impossible for the next generation of young farmers to purchase properties and make profits in the real, wool, beef, timber, dairy etc industries not backed by tax distortions.

By comparison, coal is another story.

Coal is a limited resource and the burning of it to generate electricity cooks the planet. Wool is a renewable resource and the production of it need not harm the earth. There are alternatives to coal but not to milk. Relatively speaking, the coal industry does not employ many workers. The coal industry has enjoyed a monopoly in the power generation industry and has grown complacent in the process. On the other hand wool, dairy and beef are exposed to national and international competition and are consequently lean and hungry industries.

By virtue of the differences illustrated between the agricultural and coal industries I believe it is not reasonable that the coal industry be retained in the interests of the few at the expense of the many, including other species. The vested interests of the agricultural, mineral, manufacturing industries, and in fact any polluter at a personal level, have no ethical right to hold a country to ransom for the sake of jobs and profits. Unsustainable industries and lifestyles can't be justified when viable alternatives exist.

At the moment the black coal industry employs approximately 30,000 people, 98% of them in NSW and Queensland. It is possible to imagine that those jobs could be redeployed over a 50 year period when 100,000 workers in agriculture were displaced over a similar period of time in recent history and with little support. And the agricultural example is far from an isolated one.

At this time, with planning, compassion and compensation appropriately applied, polluting jobs in industries such as coal and a myriad of others must go and quickly.

Alternative green jobs and income, from both domestic and foreign exchange, can and must be created.

Assertive climate action will give Australia a competitive advantage

This new century challenge demands a new school positive attitude to opportunity. The assertion that Australia will be at a competitive disadvantage if we act unilaterally is hammered by the old school from the last century in a misguided effort to protect their vested backside.

If Australia was to act alone (and it won't in reality because many countries have acted ahead of Australia) then the catastrophic impact of global warming will descend and hit Australia particularly hard because we are one of the most environmentally vulnerable countries on earth. But I contend that if Australia takes the hard (but demonstrably affordable and achievable) decisions now we would be in a much better position to cope with the dreadful consequences than otherwise.

It is transparently apparent that if by 2050 Australia was 100% charged by renewable energy, had an energy efficient built environment, an efficient public transport system, a massively reduced dependency on oil, electric charged vehicles, an agricultural system adapted to the changed environment, and was water efficient, consumption efficient, waste free etc we will cope much better in any scenario.

This is a no brainer, come on Australia come on, yes we can!!

Australia must support the developing world – immediately will do

I have had the privilege of working with and learning from the poorest of the poor. In my case this happened with a women's group in Nairobi, Kenya. But the women's group represents the struggles of more than 2 billion people worldwide living on less than \$2 a day without access to clean water, adequate food and shelter, paid jobs or any form of social security.

As a consequence of my privileged experience I believe the argument to wait for developing nations to contribute more before Australia acts is indefensible and abhorrent.

Poor people, living mostly in developing countries, contribute a tiny fraction of carbon dioxide pollution per capita compared with the average Australian citizen. Victoria's recently released State of the Environment Report is a damning expose of our unsustainable living standards. The State appointed Sustainability Commissioner, Ian McPhail, pulls no punches and explains that if everyone lived liked Victorians we would need four planets to support our rapacious appetites. This option is not available to us.

We Victorians are living in the dirtiest polluting state in the dirtiest polluting country in the world on a per capita basis and we demand that other poor countries do more to reduce their level of pollution. Talk about the pot calling the kettle black!

Affluent Australians (with, of course, some notable exceptions) appear not to appreciate the implications of the gross and unsustainable disparity between the rich and poor countries of this world. If 20% of the worlds richest citizens (overwhelmingly residing in developed countries including Australia) continue to consume 80% of the worlds resources there is no prospect of a fair and peaceful future and a cooperative and effective attack on global warming.

But bald statistics are heartless and numbers can fail to stick in ones head. In contrast the experience described in the next few paragraphs is burned in my brain for ever and illustrates my point more clearly.

In 1994 at the international convention on bio-diversity in Nairobi, Kenya I observed politicians and bureaucrats from 150 odd countries at work over 14 days. They flew in, took advantage of 5 star luxuries, turned a deaf ear and blind eye to NGO appeals about the priority of addressing gross over consumption and poverty and flew out. In the meanwhile biodiversity has continued to decline.

Post conference I met a women's group living deep in the heart of the slums and their inspirational chairlady, Lydia Kinyua. My family and friends have since established a direct community to community aid project to support the women in their extraordinary efforts to survive and improve their lot in life against seemingly impossible odds. In doing so the women's group teaches many lessons.

I began to better understand first hand the importance of fair and equal access to clean water, nutritious food and shelter when I lived in the slums with the women as their guest for a short while. It is a pity that every attendee at the ICCBD was not with me to help the women in their daily routines which included voluntarily cleaning public toilets literally a-swill in human excrement by gathering it in buckets, tipping it in the gutter and sweeping it for 150 metres directly into the river (no other option). Some women where mercilessly beaten by their husbands for doing this work and then preparing the family meal. But they persisted because no one else in the world was going to take responsibility.

The women's group has clung together over 14 years of challenge after challenge. A number of women have died, succumbing to aids, malnutrition and disease. A greater number of children have died. The women have stared down corruption, withstood tribal conflicts, been thrown in jail, been raped, and as a result of recent political turmoil been forced to flee their homes. But never have they lost hope or sight of their goals. With our help they have formed a cooperative and purchased land to settle on, attended capacity building workshops, and extended contraceptive and primary health care knowledge amongst the community which is achieving a declining birth rate.

The one constant in this story is the amazing leadership qualities and courage shown by the chairlady of the women's group. Without her strength the women's group would not have been born, never mind succeeded in the spectacular way that it has. Lydia is a small, slender, self-developed, highly intelligent woman of the slums. I have literally put my life in her safe hands numerous times as I have returned to Nairobi on four more occasions since 1994.

Lydia has a quick wit and a delightful turn of phrase, often speaking in metaphor. On the last occasion when I left her in Nairobi I was concerned for her welfare. I asked her if she felt she had enough strength left in her skinny body to carry the load of leadership. Lydia laughed and immediately replied, "I may be physically skinny, but I am mentally fat".

Mr. Rudd, will you grasp the opportunity to carry the load of leadership as courageously and as resourcefully as Lydia? Or will Australia become a mentally crippled country?

Will you continue to insist that Australia does little and sits and waits for the women's group in Nairobi and two billion more poor citizens around the world to continue to carry us on their backs in addition to their own burden? Despite the odds, the birth rate in Kenya (and China and some other developing countries) is dropping. In defiance of the odds, the level of consumption in Australia is rising. Who is dragging the chain?

Over the last two centuries Australians and other developed countries have contributed the lion's share of total greenhouse gases. The only fair long term solution to global warming is carbon pollution parity per capita on a global scale. In this regard Australians have further to go than any other country and only a foot flat to the floor on the renewable energy accelerator will get us there.

China outstrips Australia in action against warming

China has already demonstrated its credentials on action against warming big time, outstripping Australia's effort many times over. This story is not generally told in the biased local media which prefers to demonise China by highlighting their building of one new coal fired power plant each week.

Australians of this view are again at cross purposes. On the one hand they want China's extraordinary growth to continue in order that the Australian economy is protected from recession. They want the coal and mineral export boom to China to proceed as before.

But on the other hand they say we should not act aggressively against global warming unless China does too. Do they expect China to import coal from Australia and not burn it just on our account ("clean coal" technology is decades away, if ever)?

I would like to bring more balance to China's record on anti-warming action with two examples.

Firstly, China has taken draconian but effective steps to reduce the birth rate in China. By comparison Peter Costello urged the opposite in Australia – he advocated one baby for mum, one for dad and one for the country.

In addition the intake of skilled migrants to boost our economy has been deliberately boosted in recent decades at a time when asylum seekers were shamefully imprisoned on Christmas Island and else where under the so-called Pacific solution.

Australia has done this by choice without considering the sustainable "carrying capacity" of this country, which is grossly irresponsible in this day and age. As a result Australia's population is on track to grow by 48% between 1990 and 2020 – from 17 million to 25 million.

Labor's next step in this saga is a sorry attempt to make political mileage from the projected population increase in Australia. Labor shifts from comparing gross reduction in emission targets to per capita reduction in emission targets. To suit its case Labor chooses to compare Australia with the European Union.

Let's put Labor's spin under the microscope with the help of Tim Colebatch, The Age, 17th December, 2008. The important point to consider here is the figures that really count. That is gross emission figures. You won't read of them until I quote them at the end of Labors case.

Labor makes the case that the percentage reduction planned per capita in greenhouse emissions, 1990 – 2020 by the EU is 27% and by Australia is 34%. One up for Australia according to Labor – there is a marginal difference in Australia's favour.

But hang on, reduction from what level of emission per capita? At the moment Australians emit two and a half times more carbon dioxide per capita than our friends from the EU. And it is estimated that by 2020 the difference will still amount to 100% in favour of the EU - 8 tonnes per capita emitted in the EU compared with a whopping 16 tonnes per capita in Australia.

In other words Labor's version of comparable reductions is interpreted in a self serving way to adjust for Australia's rising population. I note in addition that the EU population growth is accelerating faster than predicted as migrants flood in (many of them non skilled) which will reduce the margin that Labor does claim even in percentage reduction in emissions per capita.

Now I give the gross emission figures. On this count the EU has committed to an unconditional gross reduction of 20% and a conditional gross reduction of 30% by 2020 which compares more than favourably with Australia (5% and 15%).

If Australia chooses to bring in more migrants to increase economic growth, then Australia should pay the full environmental price. And if Labor wants to play this game why doesn't it compare per capita carbon dioxide pollution with the average Chinese citizen? It obviously doesn't because that comparison is unfavourable to Australia.

The second illustration of China outstripping Australia in the climate policy stakes is China's commitment to a massive expansion of solar and wind energy on top of an impressive start already well ahead of Australia. China aims to improve energy efficiency by 7%. China has closed down 2300 inefficient small coal mines. China has imposed more significant regulatory constraints on the most emissions intensive industries than has occurred in Australia.

Garnaut makes a point of spelling out these and more efforts by China in his report. He also draws attention from Goliath to David; or from China to Australia's closest neighbour, Papua New Guinea. It turns out that Papua New Guinea is preparing an analysis of ambitious targets: a reduction in emissions of 50% by 2020, and carbon neutrality by 2050.

Far from being a leader it appears that Australia will not catch David, never mind Goliath, unless we put our act together.

Non human species have rights and we ignore them at our peril

As I have mentioned, we have no moral right to expect to live at the expense of the worlds' poor people. Nor do we have a moral right to live at the expense of other living species. Non human species are unable to speak for themselves. In this debate on global warming we have taken a human centric view of a world populated by an unknown number of species, but dominated by humans who, at their peril, continue to ignore the rights of other species upon which we all depend.

How many Australians appreciate for example our utter dependence on the non-vertebrates of this world? David Attenborough illustrated this point when he explained that if all ants and bees were exterminated overnight the human population would not survive for longer than a few months! Alternatively if humans were exterminated overnight many other species would breathe a sigh of relief.

Viewed through the eyes of a bee or an ant or a locust (if by some stretch of the imagination they had the power of reason that humans have) we humans could only be seen as a plague

upon the earth, greater than any in history, and many times more malignant than a combination of all the locust plagues ever experienced by humans.

Tim Flannery writes in *The Weather Makers* that:

"...if we act now it lies within our power to save two species for every one that is currently doomed. If we carry on with business as usual, in all likelihood three out of every five species will not be with us at the dawn of the next century".

This problem is much bigger than the devastation projected to occur to the Great Barrier Reef, Kakadu and the Murray-Darling combined. Humankind has no right to cause such carnage.

This is a time for inspired leadership

I stand with fellow citizens who seek inspiration. The Labor Government's claim to have set the correct middle course between the left and right of opinion does not hold water.

Labor has veered to the right. The difference between Labor and Liberal policy on global warming is now approximate to the flow of water in the Darling River – almost nothing and drying up fast.

This is not a time for averages, nor the lowest common denominator. This is not a time to be influenced by the ill informed and the greedy self servers.

This is a time for inspired leadership on climate change policy and the Labor Government is the only one who is in a position to provide it. The Liberal party never did and never will. The Australian Greens would but do not have the numbers. This is Labor's one and last chance.

WARNING SIGNS AND THE LAST CROSSROAD

Mr. Rudd, my family and many others are doing our best to do the right thing against an overwhelming tsunami of counter forces. Can you begin to appreciate our frustration as we stand at the cross road with a little sign still clinging insecurely to the pole pointing left to hope and a huge sign bolted on pointing right to despair? How many generations of genuine, well informed citizens have experienced the frustration of warning signs thus far ignored in their journey in life?

To illustrate my point I reflect with respect upon generations of my family and their contributions to environmental, social and economic welfare. My grandmother was born to worry and care for four children as a single parent. As the great depression loomed she said to her young family, "We've mucked up a beautiful world".

My father took on the burden of worry and he said to his three sons and anyone else who would listen for the rest of his life, that the economic system was corrupt. That banks and financial sharks were committing usury (the practice of lending money at exorbitant rate) to misguided purpose. My mother was born to hope and care. She wove the principle of family love and unity of purpose tightly into the family fabric. It was her last wish that this should continue.

Lyn and I are blessed with two fine sons, Greg and Robert. Both were raised on our family farm, graduated from tertiary education on the environment and moved on to establish careers in that field. Greg recently initiated an ongoing family discussion about the case for an optimistic or a pessimistic outlook on the future. We ponder over the influence of different attitudes on the prospects of positive change. Robert describes his position as a "despairing optimist". Greg has recently despaired and reluctantly declared himself a pessimist.

Greg and Roberts' partner/ wife and my wife are equally concerned and equally contributing to a better future. Importantly, no one gives up as they gently coach my four grandchildren in the essentials of a life governed by environmental, social and economic responsibilities.

My concern is that profound that I am advising my family to prepare for a future in which the need for them to act with understanding, support, compassion and a clear conscience will be greater than ever. This is because I believe the world as we know it likely will not exist and chaos and catastrophe will descend.

What option does a family have but to work against such an awful scenario with as much vigour as they can muster whilst hope of a more secure and peaceful future remains?

Headlines for the moment

Mr. Rudd, I am sure you have donned your political armour and read the headlines in recent weeks. You will withstand the battle of the moment. I do hope that you can join with Senator Wong and Minister Garrett and with good teamwork turn the moment into a glad tomorrow.

Behind the head lines most of your critics, myself included, acknowledge that you entered Government with the best of intentions. We respect your talents and can see that you and your colleagues have worked incredibly hard (too hard in fact). We don't envy your task. We understand that the reality of Government is immensely difficult in the face of fierce criticism from all sides and compromises must be made.

But you can't please all of the people all of the time and now comes the critical moment.

You ratified the Kyoto Protocol as promised. You have stuck with your projected CPRS starting date of 2010. You have put some carbon pollution reduction targets on the table, although patently inadequate.

However, I believe we must trust that other countries will act with integrity. As many have done so ahead of us we should follow their fine examples. I believe we have an ethical responsibility to clean up our act regardless of what any other country does. We need to do the right thing, to set an exemplary example, to have a clear conscience and be able to hold our head high.

Hopefully a Labor Government will play its proportionate part in building a new green age.

GOODNESS AND PEACE

And so I sat and worked on this letter Christmas morning 2008 as an atheist, without recourse to prayer. Instead I drew on my spiritual connection with all species on this earth and appealed to goodness. My Quaker Christian brother joined me in Christmas celebration and assured me that this amounts to the same as prayer. I could not think of a more worthwhile Christmas gift for my family.

At this most critical time in humankind's history my wife and I want our grandchildren to know that generations of my family proudly stood to be counted with the minority clarion call for fundamental change before it is too late.

As John Lennon sang "You may say that I am a dreamer, but I am not the only one. I hope one day you will join us and the world will be as one".

Mr. Prime Minister, can you please change course and in the process help not just my grandchildren but all people and all species on this earth?

May goodness and peace be with you.

Yours sincerely,

Bruce Milne, OAM

Julia Gillard, Deputy Prime Minister; Minister for Employment and Workplace Relations; Minister for Education; Minister for Social Inclusion

Senator Penny Wong, Minister for Climate Change and Water

Peter Garrett MP, Minister for the Environment, Heritage and the Arts

Tony Burke MP, Minister for Agriculture, Fisheries and Forestry

Catherine King MP, Federal member for Ballarat



"I may be physically skinny but I am mentally fat" - Lydia Kinyua

Mr Rudd, will you grasp the opportunity to carry the load of leadership as courageously and as resourcefully as Lydia? Or will Australia become a mentally crippled country?