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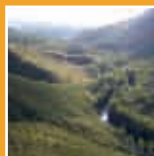
CLIMATE CHANGE

- Ten Reasons Why Climate Change May Be More Severe Than Projected
- Election Year Climate Politics
- Australia Isolated at United Nations
- Carbon Quotas

**feature
articles
include**



'Inhabited'
Photo
Exhibition



Tasmania's
Southern
Forests



Beyond
Coal



Green PC - Computers to empower disadvantaged and reduce e-waste.

How does it work?

We receive used computers and hardware from organisations that are updating their computer systems. Our technicians clean, upgrade and test the machines. Computers become available at affordable prices to disadvantaged individuals and not-for-profit organisations. All computers are internet-ready and have a 12 month warranty. Internet, training and helpdesk are also available.

Why do we do it?

Green PC provides many positive social outcomes:

- empowering people through access to technology
- creating training and employment opportunities
- recycling e-waste and reducing landfill.

Purchase or donate PC?

Please visit our website at www.greenpc.com.au or call us on 1300 306 645.

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Chain Reaction is produced in Melbourne and
Katoomba. We acknowledge the traditional
owners of these lands and the fact that
Indigenous land has never been ceded.

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The board provides big picture thematic and political advice to the CR editors,
advice on themes for future editions, as well as helping to ensure that a
broader range of sectors/ constituencies are represented in the articles.
The CR editorial team are still responsible for content, editing and
design and so any problems, omissions or other failures are ours!

EARTH NEWS

Australian Youth Climate Change Coalition Launched

In November 2006, the Australian Youth Climate Change Coalition was formed at a national summit in Melbourne attended by 60 people representing 35 different organisations. The Coalition aims to ensure that the federal government takes climate change seriously, rather than just making vague statements, launching token projects, and backing off from real action.

Summit organiser Anna Rose said: "Global warming is the biggest threat my generation faces. We've come together here in Melbourne to create strategies to communicate the concerns we have to politicians and business to make sure they actually take some serious action before it's too late. Australia must sign Kyoto and commit to legally binding carbon emission reduction targets, rather than distractions like nuclear, geosequestration and 'clean coal'. The fossilised government needs to invest in our future through renewable energy."

The five action priorities decided upon by the Coalition are: organising youth climate conferences; a national day of youth mobilisation on climate change; a schools and universities strategy; an election strategy; and a cultural campaign to educate and mobilise youth.

More information: <http://youthclimatecoalition.blogspot.com>

Victory for Endangered Species

The December 19, 2006 Federal Court decision on the Bob Brown vs. Forestry Tasmania case is a victory for Australia's

forests and wildlife. Justice Shane Marshall's judgement in the Federal Court means that logging at Wielangta in Tasmania – and in other areas where it endangers rare and endangered species – is outside the law.

The judgement criticises Forestry Tasmania and its expert witnesses, who claimed that logging, burning and chemical applications at Wielangta do not harm Tasmania's Wedge-tailed eagle, the Swift parrot or the Wielangta stag beetle.

Greens Senator Bob Brown said: "This is a watershed for Australia's forests and wildlife. No doubt, though, the woodchippers and their Labor and Liberal backers will be furious. We must expect an angry reaction like that which followed the High Court decision which saved the Franklin River on 1 July 1983."

More information: www.bobbrown.org.au
The Federal Court judgement is at: www.austlii.edu.au/au/cases/cth/federal_ct/2006/1729.html

Clean Energy Solutions to Climate Change

The Wilderness Society has produced a report on clean energy solutions to climate change being adopted in Europe. The paper focusses on a number of European Union Member States that are dealing effectively with their Kyoto Protocol target and have rejected nuclear power.

The report notes that Europe is on track to meet its Kyoto Protocol target, it has implemented the world's first multi-national emissions trading scheme, and European leaders have recently endorsed a 15-30% reduction target by 2020.

On the other hand, the United States, with 103 nuclear power reactors, has the world's largest domestic nuclear power industry yet it has steadily rising greenhouse gas

emissions, and extremely high per capita emissions, due to the absence of an effective national policy framework to tackle climate change.

More information: Nuclear Free Solutions to Climate Change, www.wilderness.org.au/campaigns/nuclear



Australian Nuclear Reports

Three reports were released in late 2006 advocating an expansion of Australia's uranium industry:

- The government-appointed panel headed by Ziggy Switkowski advocated an expansion of uranium mining and the introduction of nuclear power. Its report is at www.pmc.gov.au/umpner. The EnergyScience Coalition was formed to counter the Switkowski panel – see www.energyscience.org.au. Greenpeace has also commissioned expert reports to counter the Switkowski report – see www.greenpeace.org.au.
- The Uranium Industry Framework is

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- The Uranium Industry Framework is a federal government-established body comprising representatives of industry, federal and state governments, and the Northern Land Council. Its report is at: www.industry.gov.au/uif.
- A federal House of Representatives committee released its report, 'Australia's uranium: Greenhouse friendly fuel for an energy hungry world', in December. The report is at: www.aph.gov.au/house/committee/isr/uranium.

Indigenous World Uranium Summit

The Indigenous World Uranium Summit and Nuclear Free Future Award was held



News

Friends of the Earth Australia

Friends of the Earth Australia is a federation of independent local groups. You can join FoE by contacting your local group (see page 47). For further details on FoEA, see: <http://www.foe.org.au>. There is a monthly email newsletter, which you can subscribe to via the FoEA website.

National Meeting

People from Adelaide, Blue Mountains, Brisbane, Byron Bay, Bunbury, Hobart, Melbourne, Newcastle, Stawell and Sydney converged on Douglas Scrub on the coastal plains south of Adelaide for the FoE Australia national meeting in January.

This meeting had a strong focus on continued organisational development, including new campaign planning models, a restructure of the overall management of the organisation and plans to update and implement a new strategic plan. We also looked at how we can further consolidate the links between the FoE International strategic planning process and the realities of working as an environmental justice organisation here in Australia. We welcomed a new member group from south west WA. There is also a new regional contact in Byron Bay.

We thank Georgina Williams for welcoming us to Kaurna country, and to Sophie, Joel, Shani, Peter, Kathy and the others who organised such a great meeting. Regionally produced food featured strongly. Thanks also to FoE Adelaide for organising a successful public

meeting in Adelaide immediately before the national meeting, on the theme of the 'new, the nasty and the needed' – nanotechnology, nuclear and renewables.

The mid year meeting will be held in Victoria.

FoE Kuranda

Kuranda is nestled on the Atherton Tablelands inland from Cairns in far northern Queensland. FoE Kuranda is entering a new stage in its campaign to stop the four lane highway which is planned from the coast up onto the tablelands. This road will not only greatly increase traffic flow up into the mountains and impact on local World Heritage listed rainforest, it will also facilitate the opening up new areas to massive urban development.

FoE is asking people to write to the new minister for the environment, calling for him to stop this unpopular and unsustainable project.

For details please see:
<http://www.foekuranda.org>

Nanotechnology Project Update

The serious toxicity risks associated with nanotechnology are starting to receive international attention (although unfortunately to date very little attention here in Australia).

The past few months have seen the first ever local regulation of nanotechnology introduced in Berkeley, California, USA, where researchers and manufacturers will now have to include nanomaterials in their hazardous materials assessment. In response to a growing outcry over the environment and health risks associated with nanoparticles of silver, the United States Environmental Protection Agency has also announced recently that it will move to introduce the first ever national regulation of a nanotechnology product. The US EPA will soon require products that contain nano silver and that make anti-bacterial claims to be regulated as pesticides - including washing machines, clothing, refrigerators and food containers. However despite a small number of "world first" nanotechnology regulations, the vast majority of the thousands of nanoproducts on the market remain unregulated. Despite scientific studies demonstrating the potential for nanomaterials to be toxic for the



FoE Australia National meeting, Douglas Scrub on the coastal plains south of Adelaide, January 2007



Thanks!

- To Poola Foundation (Tom Kantor) fund for supporting the Beyond Nuclear Initiative again in 2007.
- to Donkeywheel Foundation for supporting the FoE Nuclear Freeways Project.
- to Jacqui Geia and the organisers of the Falls Festival for taking on the anti-nuclear message at this years festival.
- to Polly Buchorn for editing our new climate justice primer and the team at The Works (design studio at RMIT) for donating their time and producing such a wonderful publication. Thanks especially to Emma Brindal, Michelle Braunstein, Josie Lee and the others in the climate campaign who devoted such time to this project.
- to Pat Mackle and Avant Card for their support for the nanotechnology postcard and renewable energy book.

environment and humans, manufacturers are not required to undertake safety assessment of nano ingredients before the commercial release of their product. This is in complete violation of the precautionary principle, leaving workers, the public and the environment exposed to poorly understood risks.

Australia's own Nanotechnology Strategy Taskforce states that nanotechnology "has the potential to fundamentally alter the way we live". FoEA recognises that given the scale of predicted social change associated with nanotechnology, it is crucial that civil society be involved in decision making about its introduction. It is also essential that nanotechnology's broader social, economic and democratic implications be given equal consideration alongside issues of toxicity risk.

We look forward to an exciting year of campaigning for the democratic control of nanotechnology and precaution-based management of its risks. Please get in touch if you are interested in getting involved with the project.

Georgia Miller
georgia.miller@foe.org.au
<http://nano.foe.org.au>

Em(power)ing Change: Clean Energy Solutions to Climate Change



This new booklet, a collaboration between FoE, the ACF and Poola Foundation, is a great summary of clean energy options for Australia. It is being distributed nationally via Avant Card. You can also get copies from your local FoE group or jim.green@foe.org.au

Please support FoE!

Friends of the Earth Australia is a national environmental justice network. We work on a range of local, national and global projects and campaigns.

Individuals can support us and get involved by joining their local group (see inside back cover). We are also seeking direct financial help for our national level work – our campaigns, projects and other national activity (see page 47 & 48 for a full list).

For further details, please see:
www.foe.org.au/mainfiles/contribute.htm



News

*Friends of the Earth
International*

Friends of the Earth International (FoEI) is a federation of autonomous organisations from all over the world. Our members, in 73 countries, campaign on the most urgent environmental and social issues, while working towards sustainable societies. For further information, see: <http://www.foei.org/>

Friends of the Earth - A Global Vision of Sustainability and Solidarity

In October 2006, the FoEI meeting held in Abuja, Nigeria, signed off on a new vision statement and strategic plan. This was a significant point in a three year process of reflection and planning that has seen a profound re-working and evolution of how we work (see CR# 95 for an overview of how this process came about).

FoEI is unique amongst the large global environmental organisations because of its federation structure, based on a 'one country, one vote' model. As the network grew over the past decade, with more and more member groups joining from the global South, the federation has continued to evolve into an environmental justice campaign organisation. This means it reflects the concerns of people around the world, rather than just those in the rich and industrialised North. We welcomed a number of new full member groups at this meeting, including Bangladesh, Bolivia, Honduras, Nepal, Sierra Leone, and Swaziland. In addition to signing off on the vision document, a substantial reworking of our main campaigns and projects over the next two years will see a more strategic overall approach

to achieving change through our international work. This will see a restructuring into the following key areas:

- food, agriculture and GMOs
- climate and energy
- forests and biodiversity
- international financial institutions, trade and corporates
- oil, gas and mining

Human and environmental rights, gender and ecological debt are seen as being key underlying principles we should be applying in framing our campaigns and projects.

The strategic plan sees FoEI developing its work in four key areas:

- organising/mobilising on environmental and social justice issues,
- resisting – directly engaging in defence of ecosystems and communities,
- engaging in the transformation to sustainable societies, and
- building the organisation so it can do all of the above most effectively.

Increasingly, FoEI is seeing national member groups collaborating on the regional level. Australia is part of the APO, or Asia – Pacific – Oceania, which sees member groups stretching from Palestine and Bangladesh, up to Nepal and Japan, and down through Indonesia to Australia and New Zealand/Aotearoa.

The APO region is incredibly diverse, both in terms of the issues confronting us and the economic and political realities we operate within. Yet there is a strong and growing sense of collaboration and goodwill between the groups and a desire to work more effectively on areas of shared concern. In April 2007 there will be a regional meeting in Indonesia focused on strengthening our work on climate change. During the year, FoE Australia hopes to build our relationships with our nearest neighbours, especially PNG and Indonesia. There is also the need to work with others in the region, for instance Filipino communities who are impacted by Australian mining companies and Indigenous communities in Malaysia being displaced by palm oil plantations, which are being created for the benefit of first world consumers.

The 21st century will witness an unprecedented globalisation of environmental issues, through the impacts of climate change and the relentless demand for resources by a global middle class. In

these times, meaningful solutions will be firmly rooted in local realities and opportunities yet based on an international perspective and mutual links of co-operation and solidarity. In this sense, FoEI offers an incredibly inspiring and effective forum for local and regional campaigns. We would welcome your involvement in this work.

Cam Walker

For further information, please contact the FoE Australia international liaison officers: Damian Sullivan and Georgia Miller (see page 49 for contact details).

FoEI - Our Vision of the Future

A peaceful and sustainable world based on societies living in harmony with nature.

A society of interdependent people living in dignity, wholeness and fulfillment in which equity and human and peoples' rights are realised.

A society built upon peoples' sovereignty and participation, founded on social, economic, gender and environmental justice and free from all forms of domination and exploitation, such as neo-liberalism, corporate globalisation, neo-colonialism and militarism.

Our Mission

1. To collectively ensure environmental and social justice, human dignity, and respect for human rights and peoples' rights so as to secure sustainable societies.
2. To halt and reverse environmental degradation and depletion of natural resources, nurture the earth's ecological and cultural diversity, and secure sustainable livelihoods.
3. To secure the empowerment of indigenous peoples, local communities, women, groups and individuals, and to ensure public participation in decision making.
4. To bring about transformation towards sustainability and equity between and within societies with creative approaches and solutions.
5. To engage in vibrant campaigns, raise awareness, mobilise people and build alliances with diverse movements, linking grassroots, national and global struggles.
6. To inspire one another and to harness, strengthen and complement each other's capacities, living the change we wish to see and working together in solidarity.

Climate Change Election



EMMA BRINDAL

Climate change is poised to become a key issue in this year's federal election in response to a dramatic shift in public awareness. For the first time, we are likely to see the major parties campaigning hard on this urgent issue.

Last year, the Howard government finally acknowledged climate change as an issue of real concern. However, the government's attempts to improve its credentials have largely been an exercise in greenwashing.

As an "alternative" to the Kyoto Protocol, the government set up the Asia Pacific Partnership on Climate Change (AP6). The AP6 is a very poor alternative, however, as it has no emissions targets or timelines and will not deliver a net reduction in emissions.

Kyoto is the only international agreement that offers any hope of preventing dangerous climate change and the Coalition's continued refusal to ratify it exposes its unwillingness to act on this issue. Labor has promised to ratify Kyoto although its reasons for doing so are somewhat dubious with shadow minister Martin Ferguson saying that ratifying Kyoto will "strengthen our arm at the bargaining table" in post-Kyoto negotiations.

A strong indicator of the political commitment to address climate change is the proposed levels of greenhouse emissions reductions. So far Labor looks the better of the two major parties, promising to reduce emissions by 60% on 2000 levels by 2050. Leaving aside the credibility of this promise, Labor's target still falls short of the reductions required for Australia to do its part in averting

catastrophic climate change. The minimum reduction required - promised by the Greens - is an 80% reduction by 2050 on 1990 levels (as opposed to 2000 levels).

Scientists warn that we have only ten years in which global emissions must peak and then rapidly decline. To allow Majority World nations to increase their emissions before contracting them, Australia must be making deep cuts now. This timeframe exposes one of the major flaws of the government's supposed 'solutions' to climate change. It would take at least 15 years for nuclear power and geosequestration (if proven) to come fully on stream - time that we do not have. Aside from this, the 'civil' nuclear industry must be rejected outright because of the repeatedly-demonstrated link to nuclear weapons programs. As former Prime Minister Paul Keating noted last October, any country with a nuclear power program "ipso facto ends up with a nuclear weapons capability".

Labor and Liberal see eye to eye in relation to geosequestration, or carbon capture and storage. However, geosequestration is unproven on a commercial scale, expensive, energy-intensive and potentially dangerous. It is simply a justification for continued reliance on dirty coal, a reliance which cannot continue in a carbon-constrained world. Any party serious about addressing climate change needs to get out of the coal pit.

The government is attempting to distract us from real solutions by singing the praises of nuclear power and geosequestration, and



a raft of sustainable and renewable technologies exist which, along with energy efficiency measures, can deliver the required emissions reductions. The technologies are here – it is only the political will to implement them that is lacking. In addition, the fossil fuel industries receive up to \$9 billion each year in public subsidies. By shifting these subsidies into renewables, Australia can start moving away from coal and embrace real solutions to climate change, yet neither of the major parties are willing to take this basic but necessary step.

Both major parties are likely to be pushing for a national emissions trading scheme. We must be very wary of the kind of schemes that will be proposed – Howard’s taskforce into a trading scheme is made up entirely of industry representatives, with no scientists or environmentalists. Any emissions trading scheme will only be effective with a whole suite of other measures, caps on emissions, an appropriate price on carbon and reductions consistent with decreasing emissions 80% by 2050.

The focus of addressing greenhouse emissions has mostly been on Australia’s domestic emissions. However, we are also responsible for greenhouse emissions in many Majority World nations through the Australian government’s official export credit agency, the Export Finance Insurance Corporation (EFIC). According to Aid/Watch and the Mineral Policy Institute, EFIC spends \$1 supporting the export of renewable energy for every \$100 spent on fossil fuel exports. This is an urgent issue which has not yet been addressed by either of the major political parties. Government policy must require EFIC to commit to an 80% cut in emissions on 1990 levels and to support investment in renewables.

When it comes to the human rights dimension of climate change, the ALP has differentiated itself from the Liberal Party. In January 2006 it released a discussion paper titled ‘Our Drowning Neighbours’ which recognises that climate change will create many climate refugees in the Pacific and that some nations such as Tuvalu are likely to completely disappear. The paper proposes that Australia help to develop a coalition of Pacific Rim countries willing to accept people displaced as a result of climate change and that it should work within the United Nations to ensure appropriate recognition of climate refugees in new or existing conventions. If these proposals were to become government policy, Australia would be leading the way in climate change policy that acknowledges and responds to the protection of human rights. As for the minor parties, the Democrats policy includes accepting climate refugees in Australia. The Greens are yet to announce their position on climate refugees although Senator Christine Milne actively supports their recognition.

As part of a regional response to climate change, Australia must also increase aid to enable Majority World countries to adapt to the changing conditions that climate change will bring and to promote renewable energy and energy efficiency in these countries. The increase in aid to 0.36% of Gross National Income announced by the Howard government in 2006 is inadequate because not only is it still well below the internationally agreed 0.7%, it is much less than the amount required to enable Southern nations to adapt to climate change. On top of any increases in aid, Australia must contribute to the Adaptation Funds for “developing” countries under the United Nations Framework Convention on Climate Change. To date, Australia has not contributed.

Overall, the Democrats and the Greens are demonstrating the kind of policies that are required for Australia to address climate change. While the promises of the ALP are somewhat better than the current government, its unwillingness to take on King Coal means it cannot make the necessary emissions reductions. However, with more and more people telling our politicians that they must act, it will be increasingly difficult for the major parties to ignore the groundswell of public opinion for real change.

Friends of the Earth will be working with other environmental groups to ensure climate change is a key issue in the build-up to the federal election. For further information, to get involved, or to support our work, please see: <www.foe.org.au>.

Emma Brindal is the co-ordinator of the FoE Australia Climate Justice campaign.

Ten Reasons Why Climate Change May Be More Severe Than Projected

BARRIE PITTOCK

Uncertainties in projections of climate change have long been recognised by climate change scientists. Scientists have tended to focus on central estimates within the range of uncertainty, while the so-called sceptics focus on the low end, and environmentalists emphasise the high end of the range of possibilities. Prudent policy requires a risk management approach where risk is a product of both the probability and magnitude of possible effects.

The balance of evidence from recent observational studies across different fields and disciplines by and large points to developments at the upper end of the range of possibilities. This suggests that we should be taking the more extreme possibilities more seriously.

This paper focusses on recent observations and modelling studies which together strongly suggest that the risk of more serious outcomes is greater than was understood previously.

1. The climate sensitivity.

In its report in 2001, the Intergovernmental Panel on Climate Change (IPCC) assumed that the climate sensitivity (the global warming after a doubling of pre-industrial carbon dioxide concentrations) is in the range of 1.5°C to 4.5°C. However, recent estimates of the climate sensitivity, mostly based on modelling, constrained by recent or paleoclimatic data, suggest a higher range, around 2°C to 6°C. This throws into doubt the low end of the IPCC range and suggests a much higher probability of warmings by 2100 exceeding the midlevel estimate of 3.0°C that many scientists consider may lead to “dangerous” levels of climate change.

2. Global dimming is large but decreasing.

Reductions of sunlight at the Earth's surface by atmospheric pollution particles are diminishing as particulate emissions are brought more under control, thus decreasing the cooling effect of particulates. Greenhouse gas emissions, especially of carbon dioxide (CO₂), have a cumulative effect, and thus continue to have an increasing warming effect, whereas the cooling effect of particulate pollution is highly responsive to reductions in sulphur emissions, since particles have a short lifetime in the atmosphere.

3. Permafrost melting is widespread.

Observations show rapid melting of permafrost, or frozen ground, which is expected to increase. This reduces the albedo, or reflectivity, of the surface and will likely lead to emissions of CO₂ and methane. These are positive feedback effects that may have been underestimated.

4. Biomass feedbacks are kicking in.

Observations of soil and vegetation acting as sources rather than sinks of greenhouse gases suggest an earlier than expected positive feedback (amplification of warming) in the terrestrial carbon cycle. A 2005 study published in the Proceedings of the National Academy of Sciences attributes an observed decreased summer uptake of carbon dioxide in middle and high latitudes due to hotter and drier conditions, which cancel out increased uptake in warmer springs.



5. Arctic sea ice is retreating rapidly.

Rapid recession of Arctic sea ice has been observed, again leading to a speeding up of global warming as reduced reflection of sunlight increases surface heating. Some scenarios have the Arctic ice-free in the latter half of this century. How serious and irreversible this and other potential “tipping points” in the climate system may be is a complex question, discussed thoughtfully in a review by Gabrielle Walker in *Nature* (v.441, pp.802-805). If a positive ice-albedo feedback kicks in to accelerate regional or global warming it might contribute to other parts of the climate system also reaching critical points, notably Greenland and the North Atlantic thermohaline circulation (see below).

6. Changes in air and sea circulations in middle and high latitudes.

Different rates of warming at low and high latitudes in both hemispheres have led to increasing sea level pressures in the middle latitudes and a movement poleward of the middle latitude westerlies. This partly explains the observed and projected drying trends in winter rainfall regimes in Mediterranean-type climatic zones in both hemispheres, including southern Australia. This change has also strengthened the major surface ocean circulations, including the Antarctic Circumpolar Current. These changes will significantly affect surface climate including sea surface temperatures and storminess, may already have accelerated melting in Antarctica, and may have preconditioned the South Atlantic for the formation of tropical cyclones.

7. Rapid changes in Antarctica.

Rapid disintegration of ice shelves around the Antarctic Peninsula, and subsequent acceleration of outlet glaciers point to the role of surface meltwater in ice shelf disintegration and to the role of ice shelves in retarding glacier outflow. Strengthening and warming of the Antarctic Circumpolar Current may add to Antarctic ice sheet disintegration by enhancing local warming, preventing sea ice formation, and undercutting ice shelves.

8. Rapid melting and faster outlet glaciers in Greenland.

The Greenland Ice Sheet is at a generally lower latitude than Antarctica and has widespread marginal surface melting in summer. The area of surface melting has rapidly increased in recent years, notably since 2002. Penetration of this meltwater to the lower boundary of the ice is thought to have lubricated the flow of ice over the bedrock and led to accelerated glacier flow rates. Melting of tidewater glaciers from the bottom, pushing back the grounding line, may also be contributing to acceleration of outflow.

9. Tropical cyclones may already be more intense.

Some observational analyses point to a rapid intensification of tropical cyclones over recent decades. However, modelling of tropical cyclone behaviour under enhanced global warming conditions suggests only a slow increase in intensity that would not yet be detectable given natural variability. The record hurricane season of 2005 in the Caribbean region has prompted debate on whether the modelling or more extreme observational analyses are more likely correct. While the observations have their limitations, it is also clear that the modelling to date has not been detailed enough to fully reproduce tropical cyclone behaviour, nor perhaps the effects of subsurface warming of the ocean.

10. Changes are occurring in the North Atlantic Ocean.

The North Atlantic has a complex current system with the largely wind-driven Gulf Stream splitting into the North Atlantic Current that heads north-east into the Norwegian Sea, and a subtropical recirculating arm, known as the Azores and Canary Currents, which turns south. Relatively warm but highly saline surface water in the northern arm tends to sink to a depth of several kilometres in three regions – the

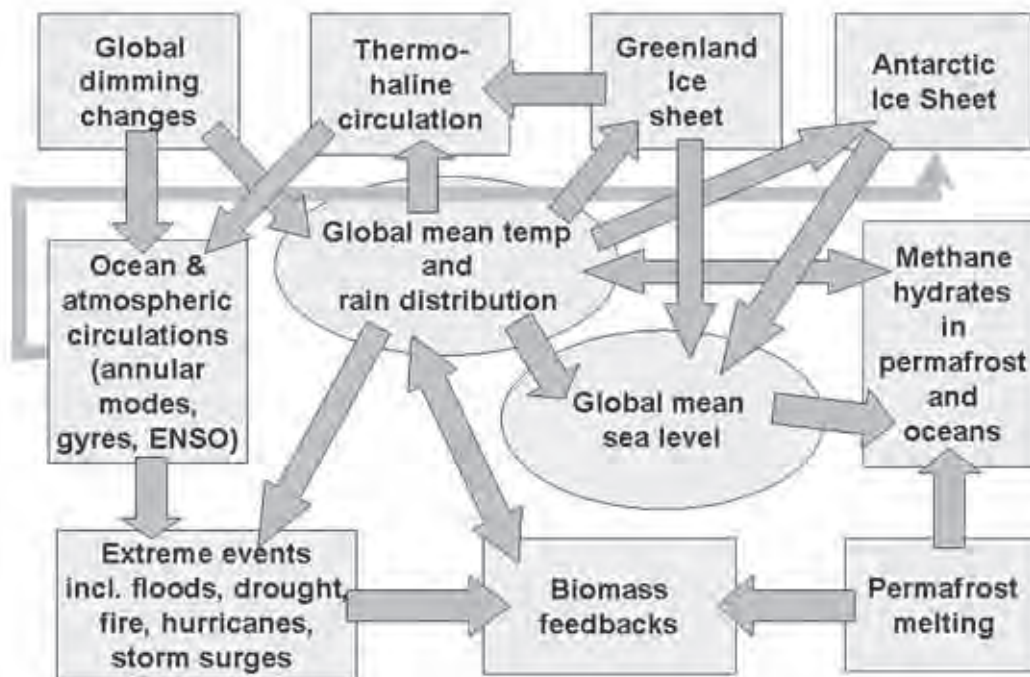


Figure 1. Links between parts of the climate system include feedbacks that may accelerate climate change and its impacts. Observations suggest some of these feedbacks may already be operating.

Labrador Sea, south of Iceland, and between Greenland and Norway. The north-flowing arm transports heat from low latitudes to high latitudes, tending to warm north-western Europe. Observational reports indicate a significant freshening of the Arctic Ocean and a possible slowing of this regional sinking, or 'thermohaline' circulation. Any slow-down could be accentuated by reductions in particulate-induced cooling, which presently strengthens the overturning. A slow-down in the thermohaline circulation has long been projected in climate models, but most models suggest that this is not likely until well into the twenty-first or twenty-second century.

DISCUSSION

The above lines of evidence (supported by well over 100 recent scientific papers), while not definitive and in some cases controversial, suggest that the balance of evidence may be swinging toward a more extreme global warming outcome. While some of the observations may be due merely to natural fluctuations, their conjunction and in some cases positive feedbacks (from permafrost melting, biomass changes, Arctic sea ice retreat, and melting of Greenland) are causes for concern.

Some of the links between major elements of the climate system are shown in Figure 1. Several of these links indicate positive feedbacks. Overall they illustrate the need to consider the whole system, not just its individual parts in isolation.

The observations and linkages suggest that critical levels of global warming may occur at even lower greenhouse gas concentrations and/or anthropogenic emissions than was considered justified in the IPCC report. The observed changes in Greenland and Antarctica suggest that a more rapid rise in sea level may be imminent, as has been observed in recent years, while several of the points suggest rapidly occurring regional impacts are imminent. Taken together, they increase the urgency of further improving climate models, and of action to reduce emissions if we are to avoid the risk of unacceptable levels of climate change.

Dr. Barrie Pittock is an Honorary Fellow, CSIRO Marine and Atmospheric Research. This is a condensed and updated version of an article that appeared in EOS [Transactions of the American Geophysical Union], on 22 August 2006. A longer, referenced version of this article is posted at <www.foe.org.au/climate>.

Australia Isolates Itself at Climate Change Negotiations Yet Again



A team of climate change campaigners from Friends of the Earth International at the two-week UN negotiations in Nairobi

STEPHANIE LONG

In Nairobi, Kenya last November, nations around the world commenced annual negotiations on the Kyoto Protocol. To coincide with the beginning of the negotiations, Australian environment minister Ian Campbell issued a media statement claiming that the Kyoto signatories agreed that a new agreement was necessary as the existing Kyoto Protocol was not working. Campbell boldly stated that Australia was going to Nairobi to commence negotiations on a “New Kyoto”.

However there is no “New Kyoto” and the only occasion it was mentioned at all in Nairobi was in Senator Campbell’s four-minute High Level Statement to a near empty room at 8pm. The Australian government proved yet again to be completely out of step with the 168 nations that have ratified the Kyoto Protocol and are committed to thrashing out commitments for emissions reduction, technology transfer and adaptation funding for the second phase of Kyoto which starts after 2012.

Claiming that there was “great enthusiasm for Australia’s position on New Kyoto” in the face of such meaningless engagement in the international negotiations indicates the real intention of this media stunt: to mislead the Australian people into believing that the government was actually participating in any meaningful form in the Kyoto Protocol.

A senior Australian public servant, Howard Bamsey, is co-chairing the “Dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention” (the ‘Dialogue’), which is a two year process that began in 2005 at UN climate talks in Montreal. The Dialogue is simply a forum to raise issues and discuss ideas that explicitly will not result in any binding agreements on climate change actions. It is this chairing role which the Australian government is basing its media spin on, but in reality this role has little substance to the development of future Kyoto Protocol agreements.

The Australian government’s prime criticism of the Kyoto Protocol is now focused on the lack of emission reduction commitments taken by rapidly industrialising countries such as China. Conversely, on a per capita basis, Australia’s remain the highest in the world at 27 tonnes per person (carbon dioxide equivalents) whereas China’s per capita emissions are a mere three tonnes per person. China is strongly committed to reducing the greenhouse intensity of their economy with an ambitious mandatory renewable energy target of 15% by 2020. This vastly overshadows Australia’s paltry 2% mandatory renewable energy target by 2010.

The Kyoto Protocol is at a very sensitive and vulnerable stage as the international community is preparing to embark on a new round of commitments and burden sharing for the post-2012 period. Climate science and economics has greatly improved since the first commitments under the Kyoto Protocol were negotiated which indicate the necessity to radically upscale the level of emission reductions and invest in adaptation for the most vulnerable nations. It is deeply unhelpful that Australia continues to attempt to distract these essential negotiations with selfish short-sighted economic aims in mind.

Stern Review

Australia’s continuing inadequacy on both domestic and international climate change policies marks a stark contrast with recent warnings about climate change, such as those in the recent ‘Stern Review on the Economic Impacts of Climate Change’ that identify Australia as the most vulnerable developed nation to climate change. The Stern Review estimated that unabated climate change of over the coming century will result in \$3 trillion in losses and damages. The World Bank has estimated that climate change will result in \$10-\$40 billion in damages alone each year.

The Stern Review concludes that reducing greenhouse gas emissions is cheaper than absorbing the costs of the impacts of climate change. Considering that the government has already spent over \$1 billion in drought relief for farmers this year, these costs should be front and centre of the Australian government’s motivation to ratify Kyoto and to contribute instead of harming negotiations for the Protocol’s continuation.

Even more striking is the statement made by Indonesia during the Nairobi talks that 200 of their islands are at risk of being lost due to sea-level rise which could displace 100 million people (half the population of Indonesia) by 2050-2070. Representatives of the Maasai peoples, nomadic herders that live on the Northern Kenya plains, reported that the past three years of drought has led to losses of 10 million head of cattle. Without cattle, Maasai are without food and without income.

Australia was not alone in failing to recognise the significance of the Stern Review, nor able to hear the many examples of how climate change is devastating the livelihoods and health of communities across Africa. It was extremely disappointing that further work was not completed on a thorough review of the first commitment period of the Kyoto Protocol and countries didn’t take the opportunity to put on the table initial emissions reduction figures for industrialised countries.

The urgency and economic imperative to act on climate change has never been more apparent. Industrialised countries must be prepared to accept emissions reduction targets of 30% by 2020 and as much as 90% by 2050. The international community must continue to recognise the contribution of countries of the global south in efforts to reduce the greenhouse intensity of their economic growth and development. In addition, the impacts of climate change on developing countries who have not been historically responsible for human-induced climate change must be compensated for with adaptation funds.

All of these obligations can and must be packaged into the post-2012 phase of Kyoto to ensure that governments meet the obligation of the UN Framework Convention on Climate Change of stabilisation of greenhouse gases in the atmosphere before we hit dangerous climate change that threatens ecosystems, food security and sustainable development.

As the Tuvaluan delegate said in Nairobi, “where else in the world have we been asked to decide the future of whole nations?”

Stephanie Long observed the two-week UN negotiations in Nairobi with a team of climate change campaigners from Friends of the Earth International.

Carbon Credits

Central to Preventing Catastrophe

DAVID SPRATT & DAMIEN LAWSON

The really inconvenient truth is that the world is charging towards uncontrollable climate heating when dramatic temperature rises become unstoppable. It is now too late for half measures; only bold and sweeping changes and quickly-executed deep cuts in our carbon emissions can steer us away from that fatal moment.

This global emergency requires us to be set aside other priorities in a struggle to prevent catastrophe.

The seriousness of our circumstances is articulated in a recent report by Christian Aid and EcoEquity: “the pace of our response has been profoundly inadequate ... and the science now tells us that we’re pushing beyond mere ‘dangerous anthropogenic interference with the climate system,’ and are rather on the verge of committing to catastrophic interference. Given the slow progress to date, a heroic effort will now be required to have a high likelihood of averting a climate catastrophe, which the emerging consensus takes to mean keeping overall planetary warming below 2°C”.

The report shows that emissions must peak in 2010, and then drop off at a resolute 4% per year to keeping atmospheric carbon dioxide concentrations below 420 parts per million. Yet “even with this almost inconceivable effort, we would still be exposed to an alarming 9-26% risk of exceeding 2°C” (see Figure 1).

Such a target means a challenging program of action in the developed world that would end the period of affluenza in which we have splurged our way to gross overproduction of carbon emissions, massive environmental destruction, and increasingly commodified identities.

We cannot wait decades for promised new solutions such as clean coal, and measures adopted at the Kyoto rate are simply too little, too late. Painless voluntary reductions, the drip-by-drip

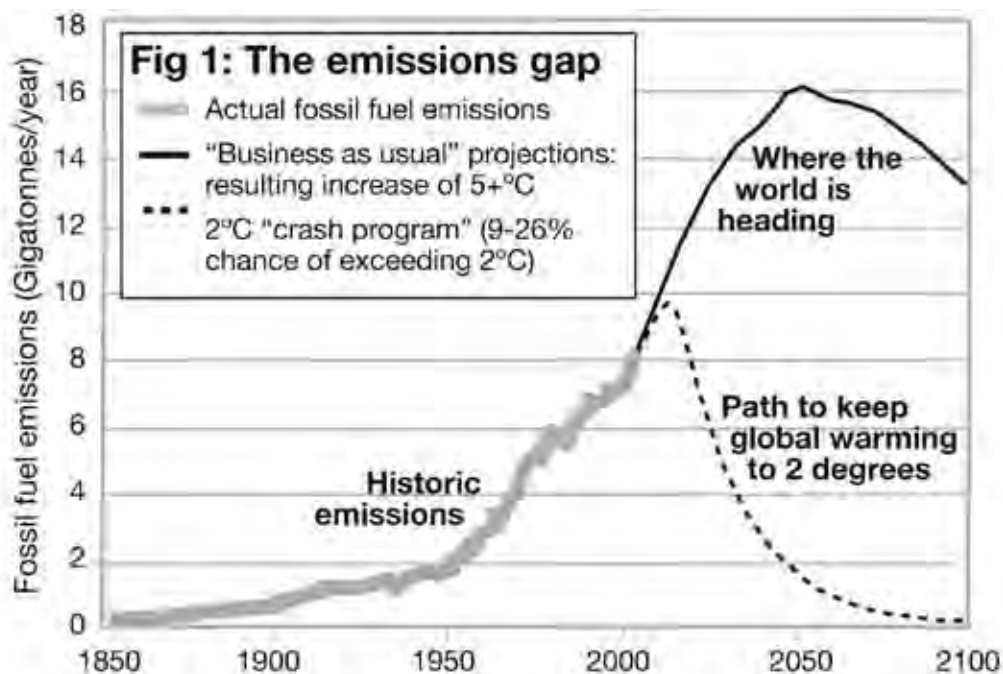
implementation of more efficient and renewable technologies and carbon trading will not do enough, soon enough.

This will also not be achieved by vague political promises or even the recent Walk against Warming rally demand of “20% renewables by 2020”. Electricity consumption in Australia is predicted to increase 36% between 2005 and 2020 and 8% of electricity already comes from renewables, so the demand for “20/20” will likely produce an increase of 13% in electricity generation from non-renewable sources by 2020.

As a movement we need to put global need above political acceptability. Soft-peddalling on policy will not prevent runaway climate change, only emergency measures will work.

Constraining atmospheric carbon levels to little more than the present level requires major economic structural adjustment: state regulation for low-carbon policies and practices, the virtual elimination of high-carbon luxury goods including air travel, and wholesale redevelopment of housing and transport. It is time to declare a sustainability emergency requiring us to harness our resources to prevent temperature rises that will mark us as the first species in history to have consciously created the conditions for its own mass destruction.

A plan strongly supported by the British environment minister David Milliband for “cap and share” carbon credits is the only solution guaranteed to achieve the required reduction in greenhouse gas emissions, because it mandates an absolute and decreasing limit to carbon use (fuel, electricity and air travel), year by year. By putting the primary focus on cutting energy *demand* (by carbon credits) rather than on energy *supply*, the scheme avoids the pitfalls of “20/20” and policies that mainly focus on more renewables. This problem was recognised in the European Union’s January 2007 World Energy Technology



Source: Historic emissions/BAU path: GCP Report No 5/2006 www.globalcarbonproject.org
 BAU based on 2001 IPCC report scenario. 2°C “crash program” path: Athanasiou, T, S Kartha, P Baer, 2006. “Greenhouse Development Rights”, EcoEquity/Christian Aid (www.ecoequity.org)

Outlook which predicts that if current emission trends continue, atmospheric CO₂ will build to a level that will provoke catastrophic consequences, and this would happen despite a “massive” growth in renewables after 2030 – including rapid deployment of new technologies like offshore wind – which would simply be “too late”.

From Dangerous to Catastrophic

The size of the problem is daunting but so is the threat. In addition to the 0.8°C global mean temperature rise so far, gases already in the air mean a further 0.6°C global warming is ‘in-the-pipeline’, slowed by the ocean’s thermal inertia. So a 1.4°C rise is inevitable, which will wipe out most of the world’s coral reefs. Further rises will happen quickly given the present trends as global carbon dioxide emissions, the main cause of global heating, are rising at an increasing rate. Half of all human atmospheric carbon emissions have occurred in the past 30 years and the world is now producing double the atmospheric carbon the biosphere can absorb.

James Hansen, Director of NASA’s Goddard Institute for Space Studies, says that “we must close that gap (between the science and the policy-makers) and begin to move our energy systems in a fundamentally different direction within about a decade, or we will have pushed the planet past a tipping point beyond which it will be impossible to avoid far-ranging undesirable consequences.”

Global warming of two to three degrees, he warns, would produce a planet without Arctic sea ice, a catastrophic sea level rise of around 25 metres, and a super-drought in the American West, southern Europe, the Middle East and parts of Africa. “Such a scenario threatens even greater calamity, because it could unleash positive feedbacks such as melting of frozen methane in the Arctic, as occurred 55 million years ago, when more than ninety per cent of species on Earth went extinct,” Hansen states.

Already a 2°C rise means, amongst many other impacts, a 40% chance of the triggering the irreversible melting of the Greenland ice sheet and 10% species extinction (see Figure 2). A lower target of 1.5°C is highly desirable if we are to adopt

the precautionary principle, which requires us to stay on the statistically safe side of triggering an uncontrollable chain of temperature rise events. This is not a bet where losing means we are simply out of pocket; it is a Russian roulette where a lack of suitable precaution is deadly. Practically speaking, more than 1.5°C is inevitable, so the need is extremely urgent for greenhouse gases to be massively reduced from their present levels; talk about letting them rise further is a suicide note, even if written by Sir Nicholas Stern, former World Bank chief economist and author of the recent influential report to the British government on climate change.

Stern Measures

The celebrated Stern report canvasses ways to keep the rise to under 3°C, but as the November 2006 report “High Stakes: Designing emissions pathways to reduce the risk of dangerous climate change” by the Institute for Public Policy Research points out: “3°C include an increase in the number of people affected by water scarcity to two billion; agricultural losses extending to the world’s largest exporters of food; the loss of the world’s most bio-diverse ecosystems including most of the coral reefs, and irreversible damage to the Amazon rainforest, which could result in its collapse. Particularly worrying is the likely transformation of the planet’s soils and forests into a net source of carbon, causing an additional 2 to 3°C rise in temperature, and an increase in the likelihood of other abrupt changes in climate, such as the slowing-down of the Gulf Stream and the loss of the Greenland and West Antarctic ice sheets, which together would raise sea levels by 12 metres.”

Stern’s bet on three degrees is calamitous and a death warrant for the biosphere as we know it, even if the execution takes some time. Around 3°C is the threshold for the mass destruction of ocean algae, which both pump down CO₂ and produce dimethyl sulphide, a key compound connected to the formation of clouds. Evidence from Greenland and the Arctic becomes more pessimistic week-by-week as the Arctic floating ice fades away. The capacity of soils to absorb carbon dioxide is already decreasing as temperatures rise. Positive feedbacks will push the increase past 4°C, destabilising the tropical rainforests into scrub or desert and adding to atmospheric carbon. Melting permafrost will release huge volumes of methane, a powerful greenhouse gas, from thick layers of thawing peat. Each so-called “positive feedback” event amplifies the previous event and triggers the next.

James Hansen says that if total temperature increases can be kept under 1.8°C, positive feedbacks will be “moderate” but if “global warming becomes larger than that, all bets are off ... there seems to be a dichotomy. We either keep the warming small or it is likely to be quite large.”

Rationing the Future

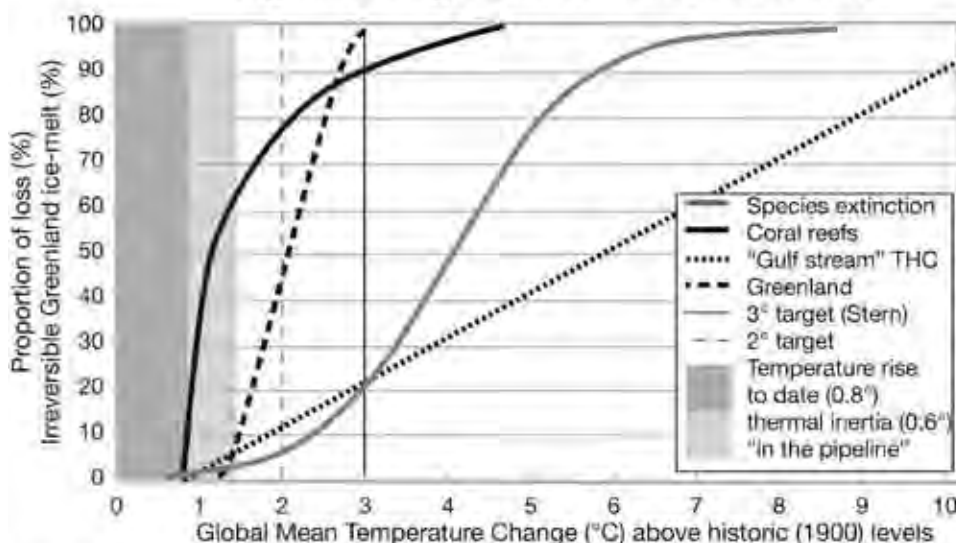
Each year six billion people on earth produce an average of four tonnes each of carbon dioxide, whereas to stop increasing atmospheric carbon dioxide levels, the global figures need to drop very quickly to two tonnes per capita. In Australia we are each currently producing six times the global average. Even by 2030, as the earth’s carbon sink (capacity to absorb carbon dioxide) falls due to feedbacks and world population increases, our average level of emissions will need to contract to about one tonne each of carbon dioxide just to stabilise greenhouse gas levels, let alone the need to cut them, which means that in Australia we must in the first instance cut our present emissions by 94%.

Carbon rationing or carbon credit is the only realistic way to achieve this.

The British Environment minister David Milliband says “the challenge we face is not about the science or the economic ... it is about politics”. Carbon credits, he says, “limit the carbon emissions by end users based on the science, and then use financial incentives to drive efficiency and innovation” and are necessary because “essentially, by 2050 we need all activities outside agriculture to be near zero carbon emitting if we are to stop carbon dioxide levels in the atmosphere growing”. Currently reports are being prepared for the British government on how carbon credits might be implemented.

The “cap and share” or “carbon credits” scheme works as follows:

1. An authority independent of government, like the Reserve Bank, sets a total carbon emissions budget for the country each year, which is decreased by 3-4% each year in a series of downward steps; in a decade emissions have been cut by 30-40%.
2. Because households are responsible for about 40% of emissions, 40% of the carbon budget is made available free of charge as an equal “carbon credit” (or ration) for each citizen on an electronic swipe “carbon card” which would be used to draw on your individual carbon credit balance each time you paid for household gas and electricity, petrol and air tickets. Unused credits can be sold.
3. For minor amounts of energy embedded in commodities purchased such as food and personal services, the carbon ration will already have been paid by the manufacturer, and its cost built into the end price for the consumer.
4. If a person lacks the carbon credits to cover a purchase or is an overseas visitor without a carbon credit, he or she could buy on the “spot” market at the point of sale, just as pay-as-you-go mobile-phone users top up their credit in order to make a call.

Fig 2: Damage curves as the heat rises

Damage curves for four key biophysical vulnerabilities: risk of species extinction, proportion of loss of coral reefs due to thermal bleaching, slowdown in North Atlantic thermohaline circulation and the probability of commencement of irreversible melting of the Greenland ice-sheet.

Source: Adapted from Jones, R.N. and Preston, B. L. 2006: "Climate Change Impacts, Risk and the Benefits of Mitigation: A report for the Energy Futures Forum" (CSIRO Marine and Atmospheric Research)

5. The balance of 60% would be auctioned to business and government in a market where the price would rise and fall such that the business and government demand for carbon emissions would not exceed the target for carbon emissions.

The change would be rapid and effective: when one's money and carbon budget are added together, suddenly renewable electricity would be cheaper than coal-fired power, everyone would want solar hot water and better insulated houses, the madness of excessive use of private cars would be rationalised, stores and offices would be lit by natural light and skylights rather than floods of lights.

Because both individuals and businesses can trade their carbon credit within the overall national carbon emission target, there is a financial incentive to switch rapidly to low-carbon technologies and for low-carbon innovation. If a new technology needs less of your ration, it will become more attractive. If having household solar hot water or panels allows you to cash in your unused ration, they become not just affordable, but desirable. Business has an incentive to make long-term, low-carbon investment decisions.

More information:

- George Monbiot, "Heat", Allen Lane, 2006. <www.monbiot.com>.
- EcoEquity <www.ecoequity.org>.
- Mark Lynas, "Why we must ration the future", New Statesman, 23 October 2006, <www.newstatesman.com/Ideas/200610230015>.
- Cap and Share <www.capandshare.org>.

WHAT ABOUT A CARBON TAX?

Carbon taxes are the strongest measure currently advocated in Australia, but they are unlikely to work deeply or quickly enough. On equity grounds such a tax is regressive and would disproportionately affect the poorer and those without means to reduce their impact on climate change. There is also no guarantee that taxes would produce the necessary structural transformation in the relatively short period of time required.

Inelasticity of demand for some carbon-based products means that people will pay more and their use will not drop sufficiently, as we have witnessed over the last decade with petrol prices. Those on higher incomes would simply pay the tax and continue with their carbon-rich lifestyle.

David Spratt and Damien Lawson are members of the Carbon Equity Project, email <info@carboneyquity.info>.

The Three Cs of Climate Justice: Contraction, Convergence and Compensation

RACHAEL MEAD

At a recent speech at the New York University School of Law, Al Gore was quoted as saying, "We are moving closer to several 'tipping points' that could ... within as little as 10 years ... make it impossible for us to avoid irretrievable damage to the planet's habitability for human civilization." According to witnesses the audience cheered. Considering the dire content of his message we can only assume that they were applauding the fact that their concerns about climate change were finally being voiced. However, it seems contradictory that the public should be so supportive of Gore's message while failing to address the issue at the heart of the problem – massively inequitable levels of resource consumption between the Minority and Majority worlds.

George Monbiot, British journalist and author of *Heat: How to Stop the Planet from Burning*, has analysed this contradiction and writes: "We wish our governments to pretend to act. We get the moral satisfaction of saying what we know to be right, without the discomfort of doing it. My fear is that the political parties in most rich nations have already recognized this. They know that we want tough targets, but that we also want those targets to be missed. They know that we will grumble about their failure to curb climate change, but that we will not take to the streets. They know that nobody ever rioted for austerity."

Monbiot tackles the question that should be the crux of the matter: how should the responsibility of the world's largest polluters differ from that of the Majority world, whose per capita emissions comprise but a fraction of those of the Minority world? The average US resident generates 10 times the greenhouse gas emissions of the average Chinese person, and about 30 times more than the average citizen of Bangladesh. To date governments and corporations of the Minority world or global north have favoured the 'business as usual' approach to tackling global warming. This approach assumes that current production and consumption rates can continue, relying on improvements and innovations to technology to assist in emission reductions. Emphasis is

placed on individual actions and consumer choices such as using compact fluorescent light bulbs, adjusting thermostats, purchasing "clean green" products and using carbon off-set schemes, bewitching the public into believing that with small consumer-driven changes we can keep our current lifestyles.

This completely ignores the fact that the luxury of these lifestyles is based on a legacy of exploitation and inequity between rich and poor nations. Rich Minority nations are now recognised as being responsible for the advent of global warming through their promotion of environmentally catastrophic levels of consumption and dependence on fossil fuels. Historically, the Minority world has used far more than its fair share of global resources, especially the atmosphere. The ultimate injustice of climate change is that those who have contributed least to the problem are those who are the most vulnerable to the impacts of climate change. Climate change is not just the world's most serious environmental threat; it is an environmental justice issue of equal scale.

Contraction and convergence: a fair share of the atmosphere

All of us, regardless of race, class, ethnicity or gender, have an equal right to a 'fair share' of environmental resources. Justice (or equity) must be at the core of our response to global warming and must entail a process that redresses historical inequities and avoids continuing the exploitation of the Majority world. Any international treaty on climate change must therefore enshrine a rights-based approach and be focused on per capita emissions targets – the 'environmental space with equity' approach.

The best process for achieving equal access to resources is the theory of contraction and convergence. The contraction and convergence model was originally developed by the Global Commons Institute in response to the recognition that those nations most vulnerable to the impacts of climate change were already impoverished by the economic



structures and practices of the nations responsible for the majority of greenhouse gas emissions. The model assumes that all people have a right to a fair share of carbon resources within ecological limits. In essence, each individual on the planet would be allocated an equal share of the sustainable use of the atmosphere.

Contraction and convergence theory proposes that a global emissions budget, within ecological limits, be calculated and reviewed annually. The Intergovernmental Panel on Climate Change (IPCC) estimates that the atmosphere can absorb 1.46 tonnes of carbon dioxide equivalents per person without lasting harm (currently Australians produce about 6.7 tonnes per person and US citizens produce approximately 10 tonnes per person.) The Pew Centre on Global Climate Change reported that in the year 2000 the global average for Majority world nations was 0.9 tonnes per person, well below the sustainable limit specified by the IPCC.

The model contends that at a specific point in the future, all nations need to reach the same level of per capita emissions – the level that the atmosphere can sustainably absorb. Rich nations which already use far more than their fair share of the atmosphere (at completely unsustainable levels) would adopt methods of reducing per capita emissions (leading to 'contraction') while those in countries which currently use less than their share of atmosphere are able to increase their per capita emissions in order to develop economically and achieve a fair standard of living. Eventually the various per capita emissions would 'converge' at an equal per capita level, where all people would be able to consume a fair share of resources, regardless of nationality.

Compensation

In order to incorporate historical and future responsibilities into an equitable model for addressing climate change, the contraction and convergence model has recently been extended with a third component – compensation. This extra component is designed to take into account the ecological debt of the north to the south. The global north owes the nations of the global south a major commitment of resources and assistance to mitigate the effects of human-induced climate change, given that the former has caused most of the problem and that the latter are most vulnerable to its effects.

Currently there are limited legal options for those Majority World countries highly vulnerable to climate change to seek compensation or redress. Where they do exist, the burden of evidence inequitably rests on the affected peoples rather than the historical polluters. In addition, these nations are generally aid recipients and dependent on financial assistance from such institutions as the World Bank and the IMF. The unfortunate reality is that these institutions do not assess the greenhouse impact of their funding, and have developed reputations for financing climate intensive projects at a significantly higher rate than renewable energy or climate change adaptation projects. For example, the Sustainable Energy and Economic Network noted in its 2002 report, *World Bank and Fossil Fuels: A Clear and Present Danger*, that the World Bank funds fossil fuel projects over renewable energy at a rate of 18:1.

At present, global carbon emissions stand at about seven billion tonnes, which is about one tonne per person. However as previously noted, the average US resident generates around 10 tonnes per capita. So to apply the contraction and convergence model and reduce the average northern citizen's emissions to a fair share means taking steps far beyond merely freezing greenhouse gas emissions. This would require close to a 90% reduction in emissions by nations of the global north and will clearly entail a fundamental, but not impossible, change to Minority world lifestyles, economies and institutions.

More information:

- J Roberts, *Accounting for Climate Injustice: Approaches, Unforeseen Consequences and Political Resistance*, <<http://ejl.snre.umich.edu/EJCC/PRESENTATIONS/workshop%20climate%20policies.pdf>>.
- Global Commons Institute <www.gci.org.uk>.
- Stephanie Long, "Market 'Solutions' to Climate Change: A Far Cry from Climate Justice", <www.foe.org.au/download/Market_Solutions_to_Climate_Change.doc>.

zero-minus-fast: The Best Target for a Safe Planet?

PHILLIP SUTTON

The emergence of 'tough' greenhouse gas reduction goals

The Kyoto Protocol calls for rich countries to cut greenhouse gas emissions by 5% compared to 1990 levels. The UK, South Australia and Victoria have gone for a 60% reduction by 2050, and California proposes a cut of 80%.

Typically, environment groups have gone for the biggest official goal on offer. The Climate Action Network Australia, representing 30 environment groups, echoes the UK government with a target of "at least 60% below 1990 levels by 2050". Recently, Friends of the Earth UK and journalist George Monbiot have recommended going further again with an average 90% cut for rich countries by 2030.

Choosing the best reduction target

With several 'tough' target on offer, which should we choose? To decide, we have to go back to basics.

We want to sustain people and other species, and to protect them the target has to actually do the job.

We have to choose a prudent risk level. You wouldn't fly in a plane that had more than a 1% chance of crashing. We should be at least as careful with the planet.

Even with greenhouse gases in the air now – 430-490 parts per million (ppm) CO₂ equivalent – ice sheets and glaciers are melting globally, there is serious drought, and extreme weather events and fires have been triggered. The most vulnerable – other species and poor people in developing countries – are struggling with the impacts right now. And this is with a warming of 'only' 0.8°C over pre-industrial temperatures. Even if no more CO₂ is emitted, the current gases will cause at least a further 0.5°C warming.

Biologists are worried that, based on damage already seen, a 1.5°C warming will be really damaging for nature. Climate systems are surprisingly unstable and the world is on the brink of runaway

heating because of 'positive feedbacks'. As things heat, less light is reflected to space, more methane and CO₂ is released into the air (from permafrost bogs, peat bogs, ordinary soils, and drying and burning bushland) and less CO₂ can be absorbed by the oceans and the land.

The result: more heating. A 3-4°C warming is likely to trigger runaway greenhouse heating, most likely keeping going until the globe is 8°C warmer. Such warming has not been experienced for millions of years. Under these conditions, most species become extinct and most people die.

The big impacts from climate change and CO₂ acidification of the oceans come from the impact on ecosystems, extensive desertification and sea-level rise (possibly as fast as one metre per 20 years if Greenland, then the West Antarctic ice sheets, are destabilised).

The earth system is complex and it often doesn't respond in simple ways, and despite growing knowledge, there is still uncertainty. In this situation it is necessary to talk about the probabilities of an event occurring rather than saying this is what will happen when X, of Y or Z occurs.

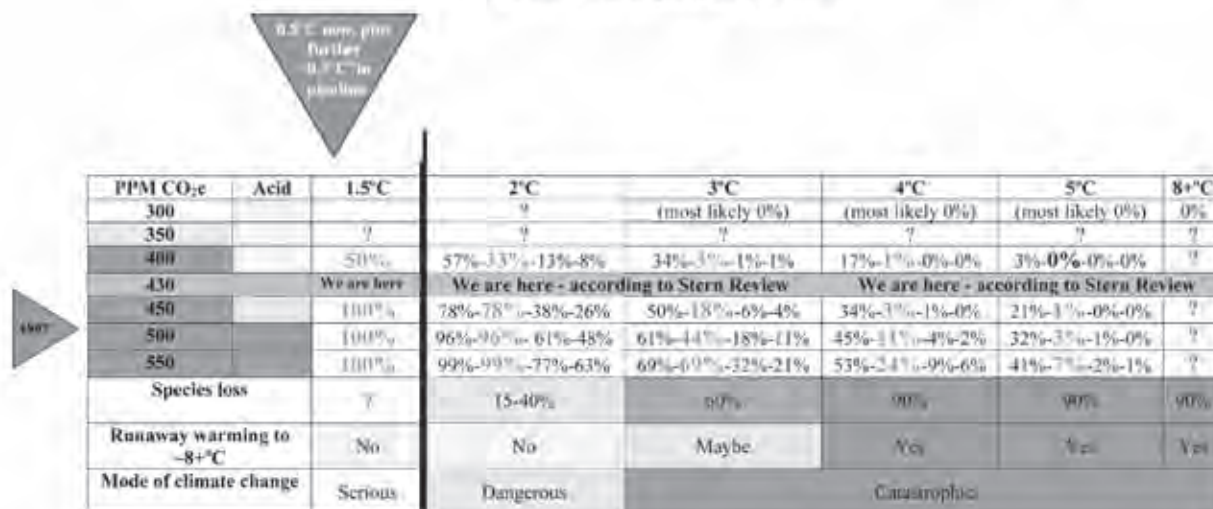
So, applying these ideas, what greenhouse reduction target emerges?

We will use the table to guide us to an answer. Down the left hand column we see atmospheric concentrations of greenhouse gases (expressed in terms of CO₂ equivalent). Then across the diagram, starting with third column from the left, are the probabilities that a particular warming will be exceeded.

In many of the cells there are four probabilities, taken unchanged from the 2006 UK government Stern Review. The four probabilities, running from left to right, illustrate the range of results from different computer models, from the highest to the lowest risk of exceeding a certain level of warming.

In the second column from the left is an indication of the impact of ocean acidification caused by the CO₂ component of greenhouse

What are the chances of *exceeding* a range of temperatures at a particular level of CO₂ equivalent?



gases. Up to about 400 ppm CO₂ equivalent, marine species everywhere are able to deposit calcium carbonate to make coral or shells, but after 500 ppm CO₂ equivalent calcium carbonate won't form in oceans across the world and the species die.

In the third last row is the probability of species loss, of all types, for each level of warming. The second last row is the probability of triggering runaway greenhouse heating (source: James Hansen). The final row gives a qualitative impression of the total seriousness of the impacts at each temperature level.

Thus equipped, we can now identify the safe zone within which the things we value can be sustained. Starting with the needs of other species: the British Government target of keeping CO₂ equivalent levels at or under 550 ppm is too high because when gas levels approach this threshold, marine ecosystems will be destroyed through acidification. And the UK/EU target of staying at or under 2°C is too high by at least half a degree. With the greenhouse gases in the air now we have a 50-100% chance of exceeding 1.5°C warming. So to give adequate protection to nature we can see that the current level of greenhouse gases in the air gives an unacceptably high risk of warming and thus of damage.

Focusing now on runaway greenhouse heating, this is the planetary equivalent of crashing a plane. It simply has to be avoided. The risk must be kept well below 1%.

Using the risk data favoured by the UK Stern Review, sourced from the UK Defence Department's Hadley Centre (i.e. percentages second from the left in each cell with four percentages) and looking at the 4°C warming column, we see that there is, at a minimum, a 24% chance of triggering runaway

greenhouse heating at 550 ppm CO₂ equivalent, at least an 11% chance at 500 ppm, at least a 3% chance at 450 ppm and at least a 1% chance at 400 ppm.

But note, the atmosphere is now already well over 400 ppm. So right now we have an unacceptably high risk of causing runaway heating of the planet – of 'crashing' the planet.

James Hansen, head of the NASA Goddard Institute, the leading USA climate research organisation, estimates that we have no more than 10 years to physically make the changes to the economy so that the business-as-usual scenario, that triggers runaway greenhouse heating, does not occur. If the business-as-usual warming occurs we have close to a 100% chance of 'crashing' the planet.

Taking all this together, the greenhouse gas levels in the air now pose an unacceptably high risk of damage to nature and an unacceptably high risk of triggering runaway heating. The only way to bring the risk down to an acceptable level is to cut greenhouse gas emissions to zero, to take the excess CO₂ out of the air as fast as possible, and to find environmentally acceptable ways to cool the planet. And the transformation of the economy from a business-as-usual structure to a sustaining structure must be physically accomplished within 10 years.

It is now clear that rich and poor alike must adopt the zero-minus-fast goal if we are to be practical about how we care for people and other species. Any lesser goal is unconscionable.

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Aboriginal Heritage Under Threat in NSW

BINNIE O'DWYER

For Indigenous people in Australia, cultural heritage is a direct physical and spiritual link with their historical and traditional association to the land. Its protection is of primary concern to many Traditional Owners around the country. Aboriginal peoples' rights and interests in cultural heritage stem from a strong recognition of spirituality, customary law and traditions. Traditional Owners see it as their duty, often having specific obligations, to protect particular places, objects and sacred sites.

The Department of Environment and Conservation (DEC) is the authority under the NSW National Parks and Wildlife Act 1974 (NPWA) for the protection of Aboriginal heritage in New South Wales. Under the Act, the definition of heritage is limited only to objects and declared Aboriginal places. It is an offence to collect, disturb or destroy Aboriginal objects or places without a valid permit or consent. Developers can obtain 'consents to destroy' under the NPWA when proposed work will cause damage or destruction to Aboriginal objects or places.

The Aboriginal perspective of heritage encompasses a range of physical and non-physical aspects of culture. However the content and significance of cultural heritage to Aboriginal people was not considered when the NPWA was enacted. It was more about collectors and archaeologists who were concerned by the unregulated exploitation of Aboriginal heritage objects.

The limitations of this have presented themselves over and over again when Traditional Owners wish

to protect sacred sites. Aboriginal perspectives do not rate against (usually) non-indigenous archaeologists or experts who have the law and science on their side. This narrow concept of what constitutes heritage dissociates Aboriginal people from their heritage.

Another major flaw with the NPWA is that ownership of Aboriginal heritage is vested in the Crown who retains absolute discretion over the destruction of that heritage. Section 83 of the NPWA states: "an Aboriginal object that was, immediately before the commencement day, deemed to be the property of the Crown by virtue of section 33D of the Act of 1967, and an Aboriginal object that is abandoned on or after that day by a person other than the Crown, shall be, and shall be deemed always to have been, the property of the Crown ..."

Aboriginal people have only limited legal authority for their heritage if they are native title holders or registered Aboriginal Owners on Aboriginal-owned conservation reserves. However, following some successful legal challenges, there are now procedural requirements that a community be consulted over the issuing of any consents to destroy. These consultations have not led to the refusing of any applications though.

Under the Act, Aboriginal people are all but powerless to prevent any activity which may result in the destruction of their heritage. The NPWA does not protect Aboriginal heritage, it merely regulates its destruction. Since 2000, over 1,200 consents to destroy have been issued. None have ever been refused and there has only been one successful prosecution by the DEC for the illegal destruction of any Aboriginal objects since the NPWA was enacted in 1974.

In an attempt to protect cultural heritage, Traditional Owners have had to resort to litigation. Recently on the north coast of NSW, Bundjalung Elders, Douglas and Susan Anderson have had success in the Courts. They have challenged two developments including a proposed housing estate and an eight metre wide, 600 metre long bitumen cycleway over land associated with a historically recorded massacre that took place in 1854.

Details of the massacre were passed down to the Andersons from their grandfather who died in 1961 aged 104. According to them, around 40-50 men,

women and children were initially killed in their camp at Shaws Bay in East Ballina. Survivors who fled north and west to the bush around Angels Beach were hunted down and slaughtered. It is estimated that around 300-400 people died.

For Aboriginal people there are three bases for assessing the significance of a place: traditional culture; the commemoration of historic events particular to their experience since invasion, and the physical archaeological record. As well as being a traditional camping place and burial site, the Angels Beach area is significant to the Bundjalung because of its association with the massacre.

In the case against the cycleway it was argued that Council failed to consider the significance of the site due to the massacre when making its decision to grant development consent. The Council repeatedly ignored the objections raised by the Andersons on behalf of the community, who as a last resort took the matter to the Land and Environment Court.

Justice Cowdroy set aside Council's approval stating that it was clear the cultural heritage issue of the massacre was significant and ought to have been adequately and comprehensively considered under the NSW Environmental Planning and Assessment Act 1979 (EP&A Act). This decision has set a precedent that in some circumstances cultural heritage issues are on a par with environmental considerations under the EP&A Act, acknowledging the importance of significant sites to Traditional Owners.

The massacre became a factual argument in the litigation against the proposed housing estate at North Angels Beach. The first challenge was to the issuing of the consent to destroy where the Traditional Owners argued that an anthropological report containing information about the massacre was not considered.

Justice Pain found that the extent of the cultural significance of the site could not have been appreciated by the DEC when making its decision without having regard to the report. She invalidated the consent to destroy on the grounds that the DEC failed to adhere to the objects of the NPWA by not applying the principles of ecologically sustainable development, specifically the concept of intergenerational equity. This principle means that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

A further challenge by the Andersons against the issuing by the NSW Minister for Planning granting development approval at North Angels Beach also centered on a failure to consider the significance of the site because of the massacre. Justice Biscoe stated that: "Revelation of the massacre would have breathed

life, death and tragedy into, and stripped the veil of the obscurity from the bland words 'high significance' ... and the revelation could have materially affected the Minister's decision."

The North Angels Beach proposed subdivision is on hold until they receive another development approval and consent to destroy. A second consent to destroy was issued and subsequently challenged in Court. The developers agreed to the orders that the consent be nullified without going to trial. However, the developers have reapplied for another consent to destroy, which has yet to be granted.

These legal victories have set a precedent for all Aboriginal people in NSW who had previously been powerless to prevent the routine and systematic destruction of sacred sites and other areas of significance.

All across the country, Aboriginal people continue to struggle for recognition of the brutal occupation of their land and to have the deaths of their ancestors honoured in a dignified way. The acknowledgement of the importance of the massacre site by three judges has been one step towards this goal.

The current legislative framework for protecting Aboriginal cultural heritage is fundamentally racist and needs a radical overhaul. One option is that a separate Aboriginal Heritage Act could be enacted which includes the establishment of an Aboriginal Heritage Commission. Under this scheme, ownership of heritage would be handed back to the rightful Traditional Owners who could then determine its significance and what level of impact, if any, is to take place.

Further, the Heritage Act, which covers European heritage, could be strengthened such that Aboriginal heritage is afforded the same level of protection as European heritage. The Heritage Council could have a separate Aboriginal Heritage Agency that would oversee Aboriginal heritage issues in consultation with the appropriate community.

However the political will to make this happen appears to be severely lacking. Aboriginal people in NSW and other parts of Australia such as in the Burrup Peninsular are up against intransigent government attitudes towards their culture. The current racist policies and laws are causing cultural genocide as much of the evidence of Indigenous occupation of this country is being wiped off the face of the landscape.

Binnie O'Dwyer is a member of Friends of the Earth and part of the Indigenous Justice Advocacy Network who represented the Andersons in the above cases.

Government attacks Aboriginal Land Rights Act

Jim Green

The Aboriginal Land Rights Act (Northern Territory) 1976 (ALRA) was the strongest piece of Aboriginal social justice legislation in the country. About half the land in the NT is Aboriginal land under the Act. However, the legislation has been seriously weakened by amendments pushed through the federal parliament by the Howard government.

On June 22, 2006 the government agreed to a Senate inquiry into the amendments but insisted that it report by August 1. Only one day of public hearings was held – in Darwin in July 21. So little time was allowed for written submissions that only 15 were received.

A cross-party Senate committee, including government Senators, expressed unanimous concern about the “totally inadequate” time for the inquiry into “fundamentally important” legislation, saying that it was “extraordinary” that stakeholders had little more than two weeks to prepare submissions. Despite those objections, government members on the Senate committee argued that the legislation should proceed.

Even Indigenous affairs minister Mal Brough agreed the Senate committee process “could have been done better” – but he continued to railroad the legislation through the parliament.

Proposals from the Central Land Council and others to split the Bill, such that the non-contentious aspects could be enacted and others considered in greater detail, were rejected by the government. The government cut short debate in the parliament on June 19, limiting debate to three hours. A petition with 22,260 signatures, calling on the legislation to be delayed, was ignored by the government.

Land Councils

The ALRA amendments significantly weaken the four NT Land Councils and undermine their independence. The Indigenous affairs minister assumes greater control over the level and usage of Land Council funding, through a number of amendments including removal of the statutory funding guarantee (previously fixed by statute at 40% of annual royalties earned from mining on Aboriginal land in the NT).

Central Land Council (CLC) director David Ross said in a May 31, 2006 statement: “We do not support the new funding arrangements which puts the Land Council’s funding at Government whim. It significantly undermines the CLC’s independence.”

The Indigenous affairs minister now has the power to delegate Land Council functions to other bodies. Northern Land Council (NLC) chief executive Norman Fry warned in a June 1, 2006 statement that development on Aboriginal land will be “choked by process and inefficiency” because of the delegation of Land Council functions to other, smaller bodies. Fry said: “These and other amendments are unfair and unworkable, strike at the independence of Land Councils, and are a recipe for litigation, dispute and possible international complaint.”

The ALRA amendments also facilitate the creation of new Land Councils if 55% of Aboriginal people living in an area want a new Council.

Mining

A number of changes to mining provisions in the ALRA were supported by the Land Councils and mining interests. However, the amendments also contain controversial mining provisions.

Before the ALRA amendments, Land Councils consulted Traditional Owners and the entire Council signed off on it when it was satisfied that the decision was fully supported at the local level. The ALRA gave Traditional Owners the right to veto mining. The amendments allow for different processes to be followed at the discretion of the Indigenous affairs minister.

David Ross said in May 31, 2006 statement that devolving decision-making about mining and commercial enterprises could encourage corruption and bribery: “As we have seen in other parts of Australia, it is easy to coerce poverty stricken people into making decisions when a bit of cash is splashed around and somebody says ‘sign on the dotted line’. It happens and this amendment opens the way for that to happen more often. ... The Minister will have to exercise a great deal of diligence in his administration of the provisions which provide for delegation to groups and new land councils. These very small entities are often highly susceptible to governance issues – especially in matters involving conflicts of interest.”

The Minerals Council of Australia also expressed concern about the delegation of Land Council powers to other bodies. The Council's submission to the Senate committee warned of an "extraordinary unintended consequence" whereby a developer must negotiate with multiple institutions responsible for making the same or related decisions regarding the same land – the result being "disjunctive processes, increased complexity, and inefficiencies to the detriment of all interested parties."

National Indigenous Times editor Chris Graham argued in Crikey on June 1, 2006 that one of the government's motivations with the ALRA amendments is to expand uranium mining: "It's no coincidence that most of Australia's uranium sits in the Northern Territory and on Aboriginal land. At present, traditional owners can veto mining on their land with the support of an independent, well-resourced land council. In the future, while their right to veto will be preserved, their capacity to enact it will be gone."

Peter Howson, former Liberal minister for Aboriginal affairs and now vice-president of the Bennelong Society, argued in the June 2005 edition of Quadrant magazine that the ALRA amendments were being driven by two factors – the failure of "Coombsian policies" and the government's desire to expand the uranium mining industry.

Land Leasing

Country Liberal Party MP David Tollner complained in the federal parliament on June 19, 2006 that: "When you travel around community after community on Aboriginal land in the Northern Territory nowhere do you see a market garden that grows fresh vegetables; nowhere do you see a butcher shop or a small abattoir; nowhere do you see bakeries. You do not see hairdressers; you do not see clothing stores – let alone a McDonald's or an Irish theme pub."

Mal Brough was scarcely any less offensive and condescending in characterising Aboriginal townships as abnormal. "This is about opportunity and choice and enables Aboriginal communities to operate like normal Australian towns," Brough said. He also likened Aboriginal townships to "communist enclaves" in parliament on June 19, 2006.

The government's policies and its rhetoric borrow heavily from far-right organisations such as the Bennelong Society (<www.bennelong.com.au>) and Quadrant magazine (<www.quadrant.org.au>). The Bennelong Society applauded Brough for his purported concern for Aborigines "locked out of the real economy by the ideology of separate and collective development".

To encourage the introduction of McDonalds and Irish theme pubs into Aboriginal communities, such that they might become

'normal' and 'real', the ALRA amendments encourage private ownership of homes and businesses. The ALRA amendments enable 99-year headleases to government entities over townships on Aboriginal land, with sub-leases subsequently to be made by that entity.

It is arguable whether private home ownership on Aboriginal communities will be beneficial, and in any event it is doubtful that it will eventuate given that the average annual income in remote NT communities is \$13,500.

The CLC did not oppose home ownership but argued that the ALRA already contained provisions allowing for home ownership. The CLC was more concerned about whole-of-community leasing and commercial enterprises. David Ross said in a May 31, 2006 statement: "We see whole-of-community leases by the Northern Territory Government on Aboriginal land as unnecessary, expensive and flawed. ... Leasing the entire community could also deprive the traditional owners of the benefits of commercial development in the future and runs the risk that commercial leases will be granted to businesses that the traditional owners do not want in their community."

The government claims that Aboriginal communities will not be forced into leasing their land. However, communities may be coerced or bribed. The Senate committee was presented with evidence of two occasions where funding for education and housing improvements was offered by the government in exchange for the community's agreement to enter into a 99-year lease. In one case, the government claimed that extra housing and a secondary college represented "special and particular benefits that would otherwise be unavailable".

Traditional Owners from North East Arnhem Land noted in their submission to the Senate committee that some traditional owners "may be inappropriately induced by short term financial gain to 'sign away' the traditional rights/interests of their children, grandchildren, great grandchildren, and great great grandchildren, and those of other clans with a traditional interest in this land."

More Information:

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- * Allison Rickett and Sean Brennan (UNSW Law School), Report on Parliamentary Process, <www.gtcentre.unsw.edu.au/news/docs/ALRA_2006.pdf>.
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Inhabited

Jessie Boylan - Photographer • Bilbo Taylor - Radio show producer



In 2005, then environment minister Brendan Nelson announced the federal governments decision to establish a nuclear waste dump in the Northern Territory. At the time he said "Why shouldn't people living in the middle of nowhere have a radioactive waste dump on their land?". This exhibition reveals the myth of uninhabited and lifeless places that is created by politicians and industry promoting nuclear activity in Australia.

Over a series of journeys organised by Friends of the Earth, photographer Jessie Boylan and radio show producer Bilbo Taylor gathered a series of portraits and audio stories of the people and places whose lives are directly impacted by the nuclear industry in Australia. Next to the life sized portraits are headsets playing the voice and personal account of each person photographed, allowing them to literally speak for themselves and also allowing the viewer to escape into another place, perhaps a station in the desert, around a fire in the outback, or a backyard in a small town, somewhere outside the gallery where these events have taken place.

Inhabited coincides with the 50th anniversary of the British atomic tests in Australia. It brings together stories of people whose lives

have been affected by the atomic tests in the 1950s, with those experiencing recent nuclear developments such as uranium mining and proposals to dump radioactive waste in the Northern Territory.

Traditional owners and Indigenous communities suffer most directly the impacts of the nuclear industry but their voices are the least heard. With the current nuclear debate the wishes of the inhabitants are too easily dismissed. Through the work of artists like Jessie, and organisations like Friends of the Earth, hopefully the voices will be amplified, and finally, really listened to.

In 2007 Inhabited will be showing at Dudley House gallery in Bendigo from March 20th-28th, and at Watch This Space gallery in Alice Springs as part of the ArtLandCulture Festival from May 4th-24th.

For more information contact:
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**Mitch & Nicki, Alice
Springs, NT, 2006**

When the Northern Territory nuclear waste dump was first proposed, Mitch established a colourful protest vigil on the turnoff to the Tanami highway. Mitch speaks up for family opposing the proposed Harts Range site and her daughters often accompany her on actions.

(opposite page)

**Yami Lester, Wallatina Station,
SA, 2006**

In 1953, Yami, a Yankunytjatjara man, was ten years old, living at Wallatina Station when Totem One went off, it was the first of a series of atomic bombs that the British and Australian governments were testing during the 50's and 60's at Emu Field and Maralinga in South Australia and Monte Bello Islands off the West Australian coast. He was blinded by the fallout.





**Kath Martin, Mt Everard,
Alice Springs, NT, 2006**

Kath, Traditional Owner and Athenge Lhere woman who has been working tirelessly to oppose the Commonwealth radioactive waste dump proposed for the Mt Everard site just 13km from her home, which has a sacred Arrernte site within the boundaries.



Kevin Buzzacott, Alberrie Creek Station, SA, 2006

Kevin, an Arabunna elder, has been fighting against Roxby Downs (Olympic Dam) uranium mine since its inception in the 1980's. The mound spring areas, which are dotted all across Arabunna land, are drying up due the mine sucking up 30-40 million litres of water each day from the Great Artesian Basin.

Avon Hudson, Woomera Missile Park, SA, 2006

Avon is a veteran from the Maralinga atomic tests from 1956-1959 in South Australia. Yyears later he became a whistleblower and exposed a lot of the lies that were kept hidden. The army personnel were never told of the dangers of radiation, and it is not until recently that the government have given those who are still alive free health care (for cancer related sicknesses).



Federal Environmental Laws Further Weakened

Jim Green

The federal Coalition government enacted the Environment and Heritage Legislation Amendment Act in December 2006. The legislation significantly amends and weakens the already-flawed Environment Protection and Biodiversity Conservation (EPBC) Act 1999.

The 409 pages of amendments were rushed through parliament with minimal opportunity for public or parliamentary examination.

The EPBC amendments weaken threatened species protection, reduce public and scientific input into environmental decision-making, increase Ministerial power and discretion while reducing Ministerial accountability, and do nothing to redress a number of long-standing problems with the EPBC Act.

The government's EPBC website says the aims of the amendments are to "streamline the Act with a series of amendments that will benefit industry, the economy and the nation", to "cut red tape" and to "provide greater certainty for industry".

Threatened Species

Organisations which had previously supported the EPBC Act and had played a role in its formulation - WWF-Australia, Humane Society International (HSI), and the Australian Democrats - have been highly critical of the amendments. Those groups have also become increasingly critical in recent years as the government has largely failed to use the powers of the EPBC Act to achieve positive environmental outcomes.

The amendments further weaken a threatened species protection regime which is already failing. HSI and WWF-Australia noted in September 2004 that the government has failed to keep lists of threatened ecological communities and critical habitat up to date. Of over 1400 threatened species, HSI and WWF-Australia noted, only four had their critical habitat listed by the government

on the EPBC Act Register, while over 500 threatened ecological communities were stuck in a backlog.

Instead of providing sufficient resources to redress the problem, the government is reducing its legal requirements to monitor and protect threatened species. HSI director Michael Kennedy said in a December 8, 2006 media release: "In effect these changes relegate real threats to species and communities to a secondary position behind the whim of the Environment Minister. Australia's biodiversity is at risk now more than ever, and now nominations to protect it will have to fall into a theme arbitrarily appointed by the Minister. Even if they fall into that theme, they still have to run the gauntlet of a 'priority assessment list', again which the minister has the right to amend on any grounds which he chooses."

HSI has 38 nominations for threatened species, ecological communities and heritage pending with the government. Fourteen are overdue, of which 12 were submitted in 2000.

The Australian Conservation Foundation (ACF) noted in its October 2006 submission to a Senate inquiry on the EPBC amendments that there is a backlog of 640 threatened ecological communities requiring assessment. While the government points to 250 threatened species recovery plans adopted under the EPBC Act, the ACF notes that many of these have not been reviewed and are years out of date. In 2004-05, the ACF notes, there were scheduled reviews of 20 threatened species recovery plans, not a single one of which was completed according to the statutory schedule.

Apart from the lack of political will, under-resourcing has been an ongoing problem. The ACF notes in its Senate submission that the environmental assessment budget for 2006-07 is \$13.8 million which is a \$1.3m decrease from the previous year, with a further \$1.6m reduction in 2007-08. This amount has to cover the assessment of 300-500 project referrals every year, monitoring and enforcement actions, as well as post-referral and post-approval monitoring of compliance with conditions. The ACF submission notes that the government is spending far less money each year on monitoring matters of national environmental significance than it spends on subsidising the consumption of draught beer (\$170 million).

Public Exclusion

The original EPBC Act included provisions for public involvement in EPBC processes including notifying the Department of actions that should be referred under the Act, providing other information about suspected breaches, taking legal action under the Act, and ensuring that administrative decisions are made in accordance with the law.

This public involvement is wound back by EPBC amendments which limit public nominations of threatened species and heritage sites. Nominations which do not come within arbitrary “themes” established by the Minister will be more likely than ever to be ignored.

An example of the importance of public input was the first significant successful legal enforcement action under the EPBC Act. This resulted from the efforts of a scientist, Dr. Carol Booth, whose successful legal action in relation to a threatened species of flying fox occurred in the context of governmental inaction.

The EPBC amendments will further limit public input by making it more financially risky for individuals and organisations to take out a legal injunction in relation to alleged breaches of the EPBC Act. This is achieved by the repeal of a section of the Act which prohibited orders for security for costs against parties seeking preliminary injunctions under the Act.

The EPBC amendments reduce the scope for appeals against Ministerial decisions. Ministerial power and discretion have been increased but accountability decreased. Andreas Glanznig from WWF-Australia said in a December 8, 2006 media release: “The amended EPBC Act will significantly reduce the ability of the public to ensure the Act is complied with and to challenge certain Ministerial decisions. The Minister will now have an extraordinary level of unfettered discretion.”

In addition to reducing public input, the EPBC amendments reduce the input of scientific advisory bodies in favour of still more Ministerial power. Michael Kennedy from HSI noted in a December 6, 2006 media release that: “These amendments take us, as a country, back to the 1980s in terms of public access to the courts, as well as ignoring the need for scientific objectivity when dealing with environmental issues. By giving up these fundamentals, the government has signalled a retreat to the days of unparalleled executive power and equally restricted public rights”.

Expect more examples of the EPBC Act being used in a partisan, political manner as was the case when the government refused permission for the Bald Hill wind farm in Victoria on what appear to be the specious grounds of its possible impacts on the orange-bellied parrot.

In a 2005 critique of the operation of the EPBC Act, the Australia Institute suggests that the listing of threatened species and ecological communities has also been politicised and that there are strong grounds for arguing the Minister is in breach of his statutory duty to ‘take all reasonably practical steps’ to maintain the lists of threatened species and ecological communities appropriately. The Institute noted that no commercial marine fish

species had been listed and that the Minister has listed only ten ecological communities when the available evidence suggests the total number of threatened terrestrial ecosystems and ecological communities is in the vicinity of 3,000.

A July 2006 paper from the Australia Institute states that of the approximately 1,900 development proposals referred to the Federal Environment Minister between July 2000 and July 2006, 76% were declared to be exempt from the regime, and of the remaining 462 applications only four were blocked by the Minister.



The Australia Institute noted in its 2005 paper that despite evidence of widespread non-compliance, the federal government had only taken two enforcement actions in five years. One

response from the government to the problem of unflattering statistics has been to stop publishing regular statistics on the operation of the EPBC Act.

The EPBC amendments fail to redress a number of long-standing flaws in the Act:

- The amendments do nothing to redress the problem that climate change is not identified as a matter of national environmental significance such that projects exceeding a certain level of greenhouse emissions automatically trigger the assessment and approvals provisions of the Act.
- Other key issues - such as major water projects or genetically modified organisms - do not automatically trigger the Act.
- Project proponents - rather than independent, expert bodies - write their own Environmental Impact Statements.
- The EPBC Act contains exemptions which make it inapplicable where it is most needed. For example, sections 38-42 of the EPBC Act exempt forestry operations conducted in accordance with Regional Forest Agreements. Another example is the exemption from EPBC compliance of activities related to site selection for a nuclear waste dump.
- The Act requires all relevant economic factors to be considered in project assessments, but some environmental issues are automatically precluded from consideration. For example, uranium mining companies need not concern themselves with the possibility that their product will find its way into nuclear weapons or into the hands of terrorists, and the coal industry need not concern itself with climate change.

More information:

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- Senate Inquiry into the provisions of the Environment & Heritage Legislation Amendment Bill 2006, <www.aph.gov.au/senate/committee/ecita_ctte/environment_heritage>. See esp. minority reports by ALP, Greens and Democrats. See also submissions e.g. from the Australian Network of Environmental Defender's Offices.
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TASMANIA'S SOUTHERN FORESTS -

Still Wild, Still Threatened

WILL MOONEY & WARRICK JORDAN

Take a look at a map of Tasmania sometime. You may notice a long, squiggly line snaking across the landscape, from the Central Highlands right down into Southwest Tasmania. This is the boundary of the Tasmanian Wilderness World Heritage Area, the border which demarcates a protected wilderness zone from the spread of 21st century "progress". Zoom in to Southern Tasmania and you will probably notice that the boundary line starts to curve and twist in a curious manner. Great chunks of wilderness, inherently connected to the world heritage area, have been left outside the perimeter. This front-line, which appears arbitrary, has relegated vast swathes of Tasmania's ancient tall eucalypt eco-system to the status of an undervalued, over-exploited commodity.

In these forested valleys that flow from Tasmania's World Heritage Area, a decades-long struggle between conservationists and the woodchip industry is coming to a head. In the Lower Weld, Upper Florentine and Styx Valleys, dedicated grass roots activists have established blockades and staged actions to hold back logging while highlighting the destruction of a world heritage valued landscape. Their struggle, against the ever-rapacious industry, public apathy and government mis-information has heralded a rising era of forest activism in Tasmania.

When the boundary of the World Heritage Area (WHA) was adjusted in 1989, governments colluded with the woodchip industry to excise thousands of hectares of pristine tall eucalypt and rain forest from the protected area. Vast stands of wilderness forests in the Lower Weld, Florentine and Styx remain open to woodchipping. These forests contain outstanding values such as giant Eucalypts, wild river systems, karst and cave systems, spectacular

waterfalls, numerous threatened species and significant indigenous and European heritage sites. Scientists and independent experts have recognised that these forests are of world heritage value and should be protected. Areas such as the Lower Weld and Upper Florentine have never been logged or roaded; they have evolved for millennia, following the breakup of the ancient Gondwana supercontinent. But now, under the cover of "Ecologically Sustainable Forest Management" and armed with fistfuls of federal government money intended for restructuring, the forestry industry is pushing roads into Tasmania's remaining unprotected wilderness areas in a last-ditch land grab before the death knell is sounded for old growth logging.

When, in 2004, the Coalition Government promised to protect tens of thousands of hectares of high-conservation-value forest, including the Weld, Florentine and Styx Valleys, activists and environmental groups were hopeful. However, while some of the iconic Styx was protected, the Lower Weld and Upper Florentine were left on the logging schedules. This broken promise kicked off a new round of campaigning and in-forest action. Activists in the Lower Weld, Florentine and Styx Valleys were spurred into action by a raft of destructive plans and proposals which would see these enchanting wild areas transformed into industrial logging zones. State owned logging company Forestry Tasmania has launched plans to smash new logging roads into ancient stands of old growth and rainforest, previously protected by their remote location. Logging and high-intensity burning will proceed to within 100 metres of the World Heritage boundary. A new Malaysian-owned veneer

Mill and plans for an old growth-forest-burning wood-fired power station at the entrance to the Weld Valley will heighten the impact on Southern Tasmania's forests, while the ever present threat of Gunn's proposed Pulp Mill in the Tamar Valley will have a devastating effect on Tasmania's entire forest ecology if it proceeds.

The Styx Valley, the iconised forest home of most of the world's tallest flowering plants, once again became a forests flashpoint as Peter "Peck" Firth braved subzero temperatures and explosive tree-felling, perched in a 75 metre Eucalyptus Regnans. As fellow activists conducted actions elsewhere in the Styx, attention was focused on John Howard's broken promises to the people and forests of Tasmania. After a Tasmanian record of fifty-one days, Peck was finally removed when the government wasted thousands of taxpayer's dollars and severely threatened his safety by dropping Police Rescue officers into his tree via helicopter.

In the Upper Florentine, activists have blockaded the construction of a logging road into Tolkien-esque rainforest since October, with constantly increasing numbers, evolving infrastructure and expeditionary actions into adjacent forests being undertaken. The Florentine campaign has involved a strong focus on highlighting the role of old-growth forests as invaluable carbon sinks.

The Huon Valley Environment Centre has campaigned for the Lower Weld for the past five years, with sustained direct action in the valley

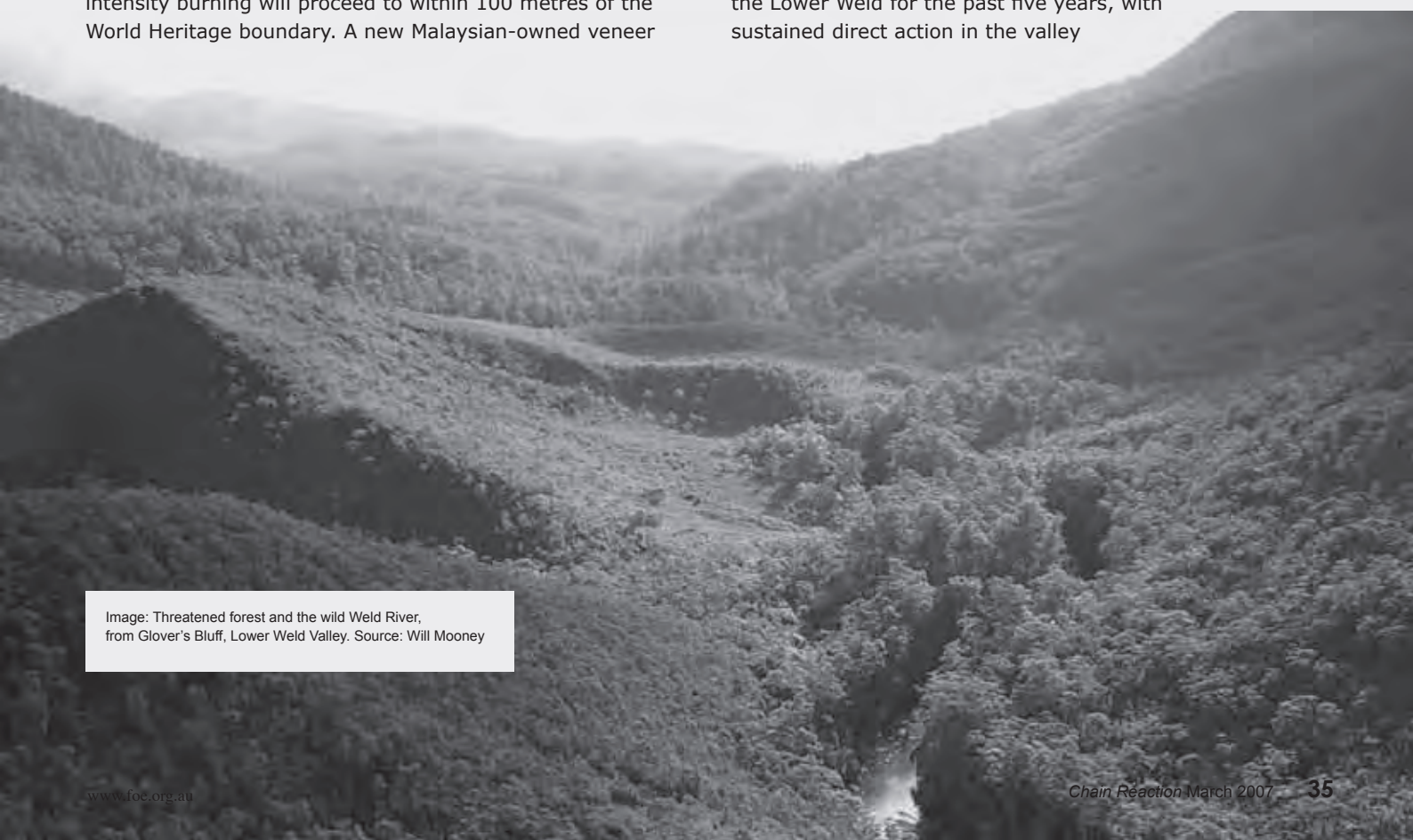


Image: Threatened forest and the wild Weld River, from Glover's Bluff, Lower Weld Valley. Source: Will Mooney

since January 2005. The original Camp Weld Blockade was established to prevent roading into the edge of 2,000 hectares of pristine wilderness and rainforest bordering the WHA. After initial success in gaining a six month moratorium, Camp Weld was re-established on the 24th September 2005. Over the course of the summer, activists created the Weld Ark, a full-sized, road-blocking pirate ship, attracting thousands to the forest. After enduring a long Tasmanian winter, camp was raided at dawn on the 15th November by 52 police, complemented with Forestry and SES. Ten days of committed efforts ensued to prevent the construction of the road. This resulted in a large mobilisation of the local conservation community and 25 arrests. Camp Weld was re-established, but busted again several days before Christmas.

Forest Defenders are expecting an onslaught by Forestry Tasmania any day now, with the simultaneous construction of three roads into old growth and wilderness areas, and logging of three magic forests planned in the Lower Weld. Initial construction of one of these roads, only metres from the Lower Weld's only reserve, was halted temporarily on the 29th January when activists captured roading machines, while campaigners in the Florentine simultaneously stopped a logging operation. These actions brought the number of forest actions in the Southern Forests since the re-establishment of Camp Weld in September 2005 to 28, with 45 arrests encompassing the Picton, Warra, Huon, Weld, Denison, Arve, Upper Florentine, and Styx forests, as well as a number of city actions.

These events demonstrate a re-vitalised resistance to the violation of the Southern Forests by the woodchipping industry. The spirit of resistance activated at Farmhouse Creek in the summer of 85/86 has been carried on to this all important stage in the history of the Tasmanian forest conflict. The end may be a way off, but hope continues as local communities fight for this small corner of the Earth's unique ecological heritage.

How you can help:

- visit the forests
- join the struggle, it's now or never
- get educated. Find out more at:
www.huon.org
www.derwentforests.org
www.forestdefenceunit.org
www.wilderness.org.au
- write to John Howard, Malcolm Turnbull, Kevin Rudd and Peter Garrett calling for protection of Tasmania's remaining old-growth and high-conservation value forest.
- host a film night or info session
- donate skills, energy, ideas or money

BEYOND COAL

*Towards a Just Transition
to sustainability in the
Hunter Valley coalfields*

GEOFF EVANS

Mining is, by its very nature, an industry with a big environmental impact and a limited lifetime in any locality as it relies on the extraction of a finite, non-renewable resource. The need for transition from mining to other economic activities is an issue that needs to be planned for from the earliest stages that mining becomes a development option, and is a vital element for the sustainability of a mining region or locality.

Transition needs to be based on justice principles, but justice to who or what? Ecological justice protects the health and integrity of ecosystems for their intrinsic value, and also because healthy ecosystems are the foundation for life. A just transition must also be grounded in social justice principles that protect the rights of less well-off and vulnerable people, and future generations. A just transition perspective considers the well-being of people in a region whose livelihoods and health are threatened by expansion of hazardous economic activities, as well as those people whose livelihoods might be threatened by a shift from unsustainable economic activities to alternatives. Social and economic sustainability of any region ultimately depends on sustaining ecological values and a precautionary approach to development.

The Hunter Valley of New South Wales is perhaps Australia's most distinctive region, an economic powerhouse from which 40% of Australia's electricity is generated, and from which almost 100 million tonnes of coal is exported annually, worth around \$6 billion. There are 30 coal mines in the Region and another dozen proposed. The proposed new open cut mines are vast, and will add further to the impacts of over 500 square kilometres of coal mine-affected land in the Hunter on the region's rivers, groundwater, biodiversity, air quality and human health. The future of the Hunter's coal mining industry has become a conflict about regional sustainability and global climate change.

Regional sustainability overwhelmed by global markets

Large areas of the Upper Hunter are now vast open-cut pits, enormous mounds of rubble and bland-looking paddocks 'rehabilitated' with scrappy, weed-infested revegetation. A landscape that was prime agricultural land and forest is now a moonscape, sacrificed to provide coal to global energy markets.

Clear links between ecological distress to the Hunter environment and human health distress among local residents, including high incidence of asthma, depression, and grief at the destruction of previously rural landscapes and lifestyles have been identified by a transdisciplinary team of researchers at the University of Newcastle, Linda Connor, Nick Higginbotham and Glenn Albrecht.

Rural land-users, including winegrowers, dairy farmers, thoroughbred horse breeders, olive growers and tourism operators, many of which have thrived in the region for generations and (like the mines) employ thousands of people have declared their viability jeopardised by the current scale, and threatened expansion, of mining in the Valley.

In its submission to the NSW Department of Planning regarding the Anvil Hill mine proposal, the Hunter Valley Thoroughbred Horsebreeders Association said: "The expansion of coal mines ... threatens the viability of [our] businesses and the families that they support to remain in the area."

In its submission, the Upper Hunter Winemakers Association stated: "As much as the mining industry would like to believe that mining and wine tourism can co-exist, that is certainly not the view of the wine tourism industry. Many longstanding, sustainable agricultural enterprises will be displaced by the Anvil Hill mine, impacting the existing communities and families that have, in some cases have been in operation for generations".

The Upper Hunter Tourism Inc submission stated: "Our Board is in no doubt the establishment of the Anvil Hill coal mine will result in a severe negative impact on the area's Tourism Industry and will serve to destroy the hard work and resources invested in the industry to date".

Farmers, local business people, environmentalists and even some mine workers in the Hunter have united to call for a moratorium on new mines, and an independent inquiry into the impacts of coal mining on local ecological and human health, and on climate change. Their calls have been supported by some local governments, including Singleton and Newcastle Councils. The Newcastle City Council passed a resolution calling for a cap on coal exports at existing levels and a levy on coal exports from Newcastle (the world's largest coal exporting port) to fund a transition to a clean energy economy, including funding for renewable energy projects.

Local and global

There are local and global justice issues associated with the burning and export of Hunter coal. Coal is Australia's major contribution to global climate change, directly and indirectly. The Hunter's coal exports, almost totally controlled by four global mining corporations – BHP Billiton, Rio Tinto, Xstrata and AngloCoal – contribute three times more carbon dioxide to the atmosphere than the CO₂ emitted from six local power stations. Seventy per cent of coal mined is exported. A quarter of locally generated power is used by two locally-based aluminium smelters, also controlled by foreign corporations, Alcan and HydroNorsk.

Hunter coal plays a big part in the Australia's economy, contributing to cheap electricity and coal is the country's largest export commodity. Billions of dollars of infrastructure have been invested in the coal industry locally, and global markets have grown significantly over the last 20 years, and expected to grow further. These are boom times for coal corporations with production and prices doubling over recent decades, while employment in the coalfields has halved.

Concerns about the local impacts of coal mining in the Hunter have been ineffective in convincing governments, industry or mining unions to consider limits to industry growth, and proposals to almost double mine volumes and infrastructure for coal exports are likely to be given the green light. Advocates for industry expansion argue it is economically irresponsible to put a moratorium on new mines, claiming it threatens prosperity and energy security, and that business should continue as usual because technologies can be developed to make coal-burning carbon dioxide-free.

The Mining and Energy Division of the Construction Forestry Mining and Energy Union (CFMEU) is a key player in the coal industry, with strong influence on the Labour Party, and is strongly opposed to a moratorium on coal mines or coal-fired power stations. The Union's members are primarily in the coal mining industry so any winding back of the industry would threaten the Union's membership base. Mineworkers earn on average \$100,000 per year, so any loss of a job would be stressful for the individual worker, their family and their community. Yet many miners also talk of being locked in 'golden handcuffs' where high wages bond them to stressful lifestyles where fatigue, unhealthy work practices and long shifts cause stress and make participation in community activities almost impossible.

An economy dependent on coal is jeopardising ecological, social and economic sustainability locally in the Hunter, and globally as burning coal is the world's biggest single source of climate change-causing carbon dioxide emissions.

The World Coal Institute predicts global coal demand to grow by 30% by 2030 in a 'business-as-usual' scenario, but a recent Greenpeace report, *Energy (R)evolution: A*




Image: Over 800 people gathered on Newcastle's Nobby's Beach on Saturday the 4th November 2006 to spell out the words "Beyond Coal" with their bodies. The mass public action occurred at the mouth of the world's biggest coal port, to protest the role of Newcastle coal exports in fuelling global climate change.

The action was organised by Climate Action Newcastle
<http://www.climateaction.org.au/>

Sustainable World Energy Outlook, demonstrates that a shift of investment towards energy efficiency and renewables would see coal demand decline from current levels, with half of world energy supplied by renewables by 2050.

The coal industry is not a passive player meekly meeting growing global demand. It is actively creating the demand, using its enormous influence on political parties and governments to stall strong action on climate change and a rapid shift to clean energy alternatives. The industry argues against targets for greenhouse gas emission cuts and high mandatory renewable energy targets, while gaining hundreds of millions of dollars of public funds for research and development of high risk technological fixes, such as so-called 'clean coal' and carbon capture and storage (CCS).

While technological fixes, like CCS may have some role to play to curb CO₂ emissions in some places where refits and appropriate geology might exist (which does not include the Hunter), there is a growing body of research that indicates the technology is likely to be too little and too late to make a significant impact on the climate change threat, and burying vast quantities of CO₂ underground (geo-sequestration) and hoping it stays there forever poses a huge act of faith and enormous potential risk to the environment and human health from possible leakage back into the atmosphere.

As in Australia, many communities targeted for coal-fired power in the Asian countries, where the majority of Hunter coal is exported, are saying they do not want coal, preferring clean energy alternatives. Filipino and Thai farmers have campaigned against coal-fired power

stations in their localities, and have visited the Hunter to support communities opposing mines. In 2006, the industrial giant Toshiba abandoned a A\$1.6 billion project to build two new coal-fired power plants in Ube, Japan, an industrial city of 175,000 people which happens to be the Sister City of Newcastle, citing concern about climate change impacts.

A moratorium on coal mine expansion in the Hunter would limit damage to the local environment and minimise further lock-in to climate change-contributing technologies.

Partners for a Just Transition

There would be significant costs at local, State and national scales in a moratorium on expansion of coal-fired electricity and coal exports in the Hunter, at least in the short term. Some stakeholders, particularly governments, mining corporations, mineworkers and their families, and contractors to the mines would suffer economic impacts as the industry contracted, but there would be significant benefits - to the environment, the renewable energy industry and other land users and residents. The costs and benefits of transition need to be shared equitably.

The concept of 'Just Transition' emerged from efforts to reconcile the differences between organised labour, environmentalists and communities affected by unsustainable industries ('fence line communities') in the US and Canada over the last few decades.

Just Transition strategies specifically address concerns that change towards sustainability can have an adverse impact,

at least in the short-term, on vulnerable communities and workers currently engaged in unsustainable practices, such as logging, fishing, toxic chemical production, farming and mining. A Just Transition framework looks at all stakeholders in a region, and aims for: "A viable strategy for people and businesses involved in unsustainable practices to bring their skills and assets to new uses....and that people and businesses invested in unsustainable practices have a viable exit strategy that allows them to bring their skills and assets to new uses" (Ecotrust, April 2003).

Tony Mazzocchi, a visionary leader of the US Oil, Chemical, and Atomic Workers Union in the 1960s and 1970s, was a pioneer of campaigns for Just Transitions. Among the many legendary struggles he was involved in were a successful strike over health and safety issues at Shell refineries, exposing the cover-up of the health hazards of asbestos, catalysing the anti-nuclear movement by raising awareness of Karen Silkwood's epic battle against the Kerr-McGee nuclear plant, and campaigning for 'right to know' legislation giving workers and citizens the right to information about toxics on the job and in the community.

According to reports in from the US Sierra Club, Mazzocchi recognised that workers who lost their jobs for environmental reasons could be assisted to move from toxic industries into new secure, environmentally-friendly jobs in a redesigned economy, if they receive government support and resources. The Servicemen's Readjustment Act of 1944, also known as the GI Bill, was held up as a precedent and model. The GI Bill covered 15.4 million American war veterans returning home, and provided them with a living wage and tuition for up to four years to enable them to adjust to civilian life and new jobs. The program is hailed as one of the best human-resources investment ever made, with a 1998 Congressional study finding that for every dollar invested in the GI Bill the government and economy reaped at least \$6.90 in economic growth and taxes.

Another of Mazzocchi's inspirations for a Just Transition program was the European Coal and Steel Community of the 1950s that provided economic relief and retraining for hundreds of thousands of displaced steelworkers and coal miners during periods of overproduction, helped develop new industries, and was funded by levies on coal and steel production and loans. Mazzocchi believed that a similar application of government commitment and resources could facilitate transitions for workers.

Just Transition has gone from being an idea promoted by small coalitions of labour and environmental activists to a solid policy idea embraced by wider audiences. In the USA, the Sierra Club and the Union of Concerned Scientists worked with the United Steelworkers of America, the Service Employees International Union, and the Union of Needletrades, Industrial, and Textile Employees (UNITE!) to establish a Blue/Green alliance in 2000, that developed shared campaigns for Just Transition in the chemical

manufacturing sector. In 2002, Canada's largest union of energy workers and the Canadian Labour Congress backed their government signing the Kyoto Protocol and commitment for the nation to targeted reductions in CO2 on condition that there be a Just Transition for displaced workers.

Unions must be key partners in a just transition process to ensure that workers' knowledge informs the transition process and to ensure that displaced workers continue to work in a union environment, with all the benefits and protections that unions offer.

Newcastle people are familiar with many elements of a Just Transition program from when the BHP steelworks closed in 1999. At its peak in 1980 the BHP steelworks employed 12,000 workers. When the closure was announced in 1997, the labour force had fallen to less than 3,000. In September 1999, the final 1,452 employees finished.

Active government, industry, union and community partnerships were critical in assisting the Newcastle community and steelworkers deal with closure. Workers had years of prior notice of the proposed changes, and packages were put in place to ensure that workers received benefits during the transition from steel making. A BHP work force transition committee was set up by workers and management to ensure that the two groups worked towards the same objectives. Generous compensation was awarded by the Federal and State governments through the Steel Industries Assistance program.

A NSW Government task force worked with BHP, local government agencies and unions to support the BHP workforce over two years, with training, counselling, job placement and relocation initiatives that were developed early enough to be of real assistance to workers. A key element of this transition was the establishment of a Hunter Advantage Fund, bringing in funds from the Federal and State governments and from BHP that provided assistance in the form of labour market, business and marketing programs for the Hunter region, emphasising the strengths of its work force.

The Steel River project, a collaboration between the NSW Government, local government, business, unions and residents, attracted new business to Newcastle including the CSIRO Sustainable Energy Centre, which has brought cutting-edge renewable energy research to the Region.

The need for Just Transition programs in mining communities is necessary because mining is an industry with a finite life. In mining communities where there have been mass lay-offs, mineworkers have experienced extreme income losses, long spells of unemployment and high rates of inter-industry mobility. Canadian research of displaced mineworkers conducted in remote, single-industry communities where the closure of the industry was sudden, showed that average income losses were around 20 to 30 per cent, with loss of



employment persisting for as long as five years (though the average duration of unemployment was between 25 and 30 weeks). One third of displaced workers were re-employed in mining, while a third withdrew from the labour force.

In the Hunter, former coal mining communities around Cessnock and Kurri Kurri have experienced major social and economic disadvantage since local coal mines closed in the 1960s. The community suffered high levels of unemployment and poverty. Many Cessnock residents have had difficulty securing jobs in the post-mining era. Lack of prior planning, and inadequate investment in new industries and in education and training have been identified as problems. Luckily, new local opportunities have emerged as a result of more recent government intervention and the growth of the local wine industry, and related tourism industry, but social disadvantage is still high.

The mining around Cessnock was mostly underground, and had relatively little impact on the local environment, while the mines around the Upper Hunter are massive open cuts with much greater impacts on the environment and potential future land use options. The local impacts of the coal industry, and global climate change, threaten the local wine, horse breeding, tourism and other industries that might be the foundations for post-mining employment.

Mineworkers are key participants in any Just Transition process in the Hunter coalfields that might result from a moratorium on new mines and coal-fired power stations. The Mining and Energy Division of the Construction, Forestry and Energy Union acknowledges the need for action on coal and climate change, though its policy of November 2006, noted: "There is no doubt that climate change, brought on by the effects of humanity's historical and ongoing disregard for the planet's well being, is a real and pressing issue to be addressed. As a union with nearly all of our membership in the coal and power generation industries, we have

an obligation, both to our members and to the broader community, to be actively involved in the debate surrounding this important issue".

The CFMEU Mining and Energy Division policy supports new coal-fired power stations using the latest technology such as Combined Cycle Gasification technologies, and calls for a massive investment in carbon capture and storage. It refers to the NSW Greens and Greenpeace, who oppose new coal mines and new coal-fired power stations and are sceptical of clean coal technologies as pushing 'extreme' policies that the Union will campaign against.

No serious environmentalist is suggesting the Hunter coal industry be closed down immediately, and any phase out of coal mining in the Hunter would most likely take decades as existing coal-fired power stations and most mines have many years of operations remaining.

Mineworkers have more to fear from unilateral employer labour cuts than a moratorium on new mines, as former CFMEU leader John Maitland noted to an industry conference in 2003, when he said: "As far as jobs and climate change go, the reality is that industry restructuring will probably destroy more coal jobs than climate change politics ever will. You can't ward off the greenhouse challenge by saying you are defending jobs – because there are precious few jobs anyway."

The Union and environmentalists share many policies, including supporting ratification of the Kyoto Protocol, an increase in the mandatory renewable energy target, introduction of carbon emissions trading scheme and subsidisation of renewable energy development. There is surely plenty of common ground that could provide healthy dialogue and partnerships with environmentalists and others, while the sustainability impacts of expanding local coal mining, and the climate impacts of burning Hunter coal are debated.

Foresight and planning

The threat to the Hunter environment and the global climate from coal is serious. The local and global impacts of coal dependency suggest there is an urgent need for a moratorium, and dialogue about the potential of a Just Transition program to shift the Hunter to a clean energy economy. A Just Transition process requires foresight and planning at the level of community, industry, workplace, union and local organisations. It requires dialogue and partnerships of affected communities, and needs public and private investment in environmental protection, economic diversification, new employment opportunities, education and training, renewable energy research and corporate responsibility.

The knowledge in energy generation, engineering and manufacturing suggests the Hunter has potential to be a

global leader in clean energy, and many new jobs could be created in renewable energy and energy efficiency refits of household, factories, offices, schools and other building and industrial processes.

Australia can meet its energy needs without reliance on coal, with appropriate incentives for energy efficiency, and use of renewable energy and gas-fired base load power. The nation's economy has the resilience to survive without depending on coal, especially as there is plenty of time to adjust.

Supporters of Just Transition strategies have noted the great disparities of funds for industry compared with workers in transition processes, as the Canadian Labour Congress stated in 2000: "Considering the huge amount of financial assistance given to corporations, Just Transition is not an exorbitant demand; it merely redresses the balance in the form of fair treatment rather than welfare subsidies to corporations."

A moratorium on coal mines and coal-fired power stations in the Hunter, and a shift to a clean energy economy promises thousands of potential jobs for workers. Some industries, such as coal-fired power generation that contributes to climate change and aluminium smelting that relies on coal-fired power, have no future in any serious attempt to cut greenhouse gases. There may be trauma in the short-term, but the experience of BHP's closure in Newcastle has shown that adequate notice of the need for change, and appropriate support from government, industry and communities, that builds an alternative economy from a region's strengths can attract new industries. Since BHP's steelworks closure

Newcastle has attracted ship and luxury yacht building, railway carriage manufacture, health and medical research and renewable energy technology development.

There is potential for a really fruitful dialogue and partnership between the environment organisations and other stakeholders, particularly labour unions, rural land-users, government, research institutions and industry about equitable and realistic pathways to a Sustainable Hunter, a pathway where society as a whole can share the costs and benefits of change.

Geoff Evans is an environmental scientist, social ecologist, unionist and PhD candidate currently researching transitions to sustainability in mining effected regions. He is a director of the Mineral Policy Institute and co-convenor of Climate Action Newcastle.

Further resources:

CFMEU - http://www.cfmeu.com.au/storage/documents/CFMEU_climate_141106.pdf
 Mineral Policy Institute - www.mpi.org.au
 Anvil Hill Alliance - <http://anvilhill.org.au/>
 Sierra Club - <http://www.sierraclub.org/planet/200605/justtransition.asp>
 Canadian Labour Congress - http://canadianlabour.ca/index.php/Just_Transition
 Economic Policy Institute - <http://www.epi.org/>

For a fully referenced version of this article please see the Chain Reaction section on the FoEA website.

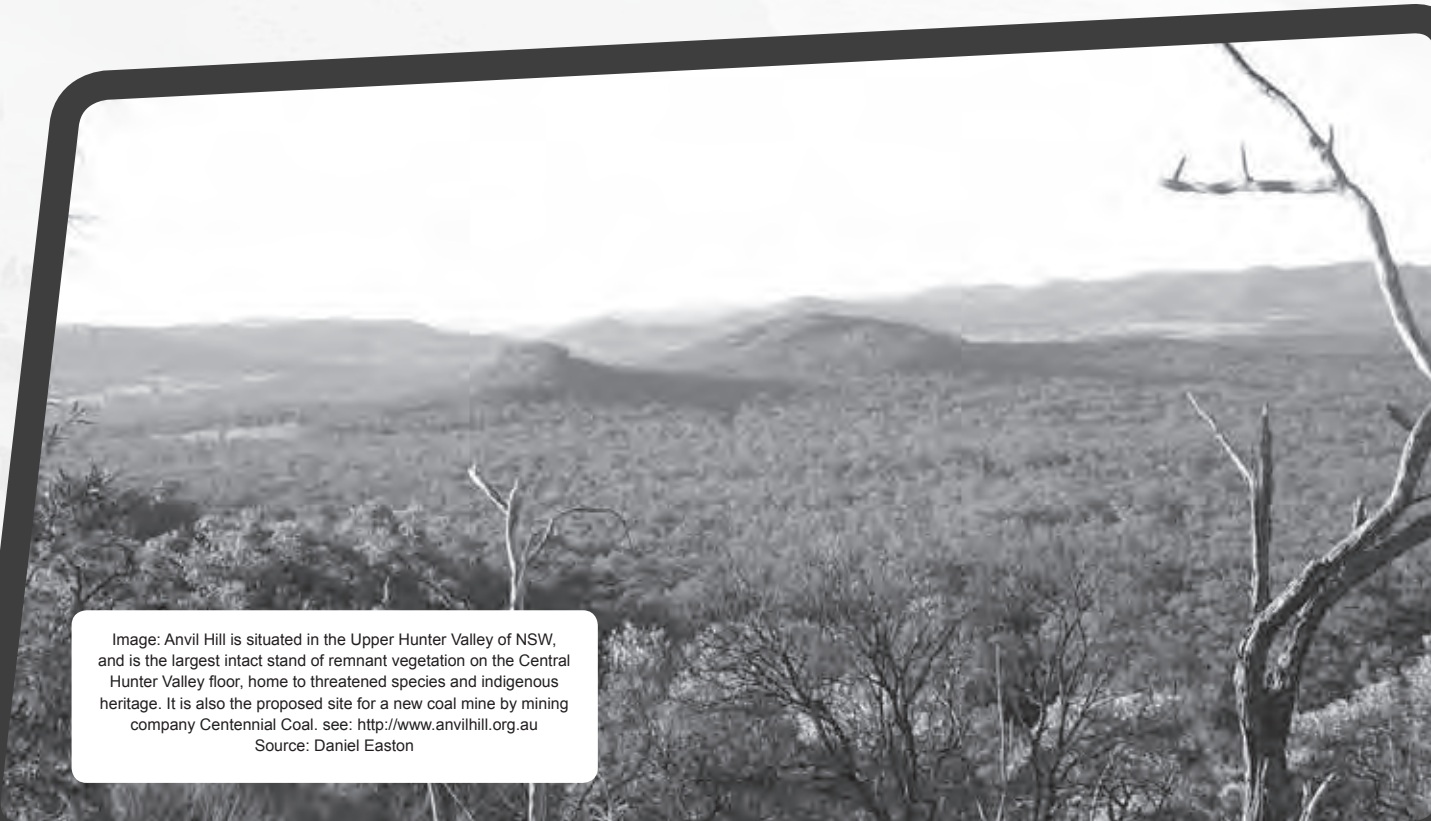


Image: Anvil Hill is situated in the Upper Hunter Valley of NSW, and is the largest intact stand of remnant vegetation on the Central Hunter Valley floor, home to threatened species and indigenous heritage. It is also the proposed site for a new coal mine by mining company Centennial Coal. see: <http://www.anvilhill.org.au>
 Source: Daniel Easton



Victoria's Native Forests *Cheap as Chips*

Review by Anthony Amis

Review of Dr Rod Anderson's 'Cheap as Chips - A History of Campaigns to Save Victoria's Native Forests'

Published by Dr. R.W. Anderson, 2006

This attempt to tie together the history of Victorian forest campaigning is fundamentally a flawed undertaking as the bias of the editor weakens the overall package.

As a historical document, the book fails the test because of the selective nature of the contributors. Two of the contributors use the book to attack other forest campaigners they (and the editor?) disagree with.

The book totals 337 pages and up until page 167, the book is excellent and provides a wealth of information regarding forest campaign history in the 1970s and 1980s. I found the campaign development in East Gippsland through the late 1970s to the late 1980s to be fascinating as it was an era I knew little about.

After page 167, the book's credibility is weakened as it provides uncontested interviews with 'key people', selected of course by the author and selected no doubt because of their political position of no native forest logging. Most of these interviews are reasonable but two interviews in particular annoyed me.

The first person featured in 'Cheap as Chips' is Linda Parlane, who was Environment Victoria's director from 1990-97. Linda had been active on forest issues since 1975 which is quite an amazing effort against overwhelming odds. What is fascinating about Linda's spiel is that she gives a detailed explanation of why the national environmental movement got totally sold on plantations in the early 1990s. Linda was the driving force of this change in direction for the movement, which effectively was a top down approach not endorsed by all groups and certainly not by communities impacted by plantations.

For example, in 1993-94, Friends of the Earth groups in Tasmania were already up in arms about atrazine in their drinking water at Lorinna and Derby. How could FoE endorse a 100% plantation position when our members were being poisoned by plantation chemicals?

Linda claims that "... the issue of pesticides in plantations will be dealt with at the right time". She gives no explanation as to when the right time is. Plantations by their very nature are reliant on pesticide props for their survival. Without the props the plantations in many instances will fail. There never will be a right time, so what Linda is actually endorsing is an unsustainable industry based on non-ecological criteria.

The politically-ambitious Greens forest spokesperson and failed upper house candidate, Marcus Ward, provides a 15-page rant on the plight of the Wombat Forest, including an uncontested hatchet job on the Wombat Forest Society (WFS).

There is no recognition in Ward's contribution – or elsewhere in the book – of the WFS's success in getting logging reduced by over 40% throughout Victoria in 2002, thanks largely to the work of WFS members Tim Anderson and Loris Duclos. Loris was the instigator of determining that logging was occurring way above sustainable yield throughout Victoria and after crunching the figures for a year, managed to convince the Bracks government that logging had to be reduced significantly across the state. No easy task against an industry well known for its belligerence!

This successful campaign strategy not only shut down logging in key forest areas throughout Victoria, it also led to the shutdown of numerous sawmills, as the mills could not be guaranteed a supply of timber into the future. A massive campaign win, yet Ward and Anderson refuse to acknowledge any positive contribution from the WFS at all. Why?

It should also be noted that the Greens forest campaign in Victoria was initially set up to support a no native forest logging agenda. Anyone not agreeing with this was effectively not invited into the party, leaving people like Marcus to 'rule the roost' and leaving others – like WFS, FoE and many others – as perpetual outsiders.

The book finishes with a 44-page rant by Gavan McFadzean from the Wilderness Society (TWS). Gavan uses the book for all its worth pushing the historical importance of TWS in saving the world. He saves his worst thought to discredit and undermine the work of the WFS and the Otway Ranges Environment Network. The WFS is attacked because of its support for limited native forest logging and their influence with the Labor Party. Similarly, OREN's influence with Labor is also criticised. In 2005, the State government announced a new 150,000 hectare National Park in the Otways, a coupe largely created by OREN. A massive forest win yet McFadzean still sticks the boots in.

McFadzean for years has endorsed the TWS position of no native forest logging, which in 2006 was overturned when TWS decided to back certification of native forest logging via the Forest Stewardship Council. This means that TWS are now working from a model that the WFS has always supported, a position that McFadzean attacks in 'Cheap as Chips'. McFadzean along with the Australian Conservation Foundation in 2003 was also supportive of corporatisation of VicForests, the entity in charge of managing native forests in Victoria – a position far more extreme than that of the WFS. These double standards and contradictions are not unusual in Victorian forest campaigns but to publicly attack a group over policy differences, when they are the same policies now endorsed by TWS, is a disgrace.

What value did Rod Anderson see in publishing contributions critical of groups that have successfully campaigned in their regions? Ward, McFadzean and Anderson have done the movement a disservice by using the book as a means of promoting their blinkered view of history.

Maybe in time someone will write a definitive history of the Victorian forest movement. 'Cheap as Chips' definitely is not it.

Anthony Amis is a forest campaigner with Friends of the Earth. A longer version of this review is posted at <www.foe.org.au>.

Movement News, Resources & Updates

Environment Tasmania launched

Environment Tasmania is the new conservation council for Tasmania, made up of more than 20 environment groups from across the state, with a collective representation of more than 5,000 Tasmanians. It was launched in Launceston in early December.

Environment Tasmania will broaden the existing work of green groups in Tasmania as well as providing strong links between groups in all parts of the state. It welcomes new members.

The Understorey Turns 10

The Understorey newsletter covers conservation news in the Dandenong Ranges and Yarra Valley to the east of Melbourne. Covering urban fringe and rural areas as well as containing much of Melbourne's water catchments, the issues are varied but often come back to the steady encroachment of urban sprawl.

The Understorey has just clocked up its 100th issue, marking 10 years of consistent reporting. This issue includes the 'interview of the decade' with Bob Brown, reports on a range of local enviro issues, as well as weaving in big picture issues such as climate change.

To subscribe (just \$15/ \$12 conc), contact ro.martin@bigpond.com.au or send a cheque to the Understorey, PO Box 24, Seville, 3139.

New Reports From EcoEquity

US based EcoEquity has released two new reports on climate politics:

- High stakes: designing emissions pathways to reduce the risk of dangerous climate change suggests safe emissions reductions trajectories (and which models are not safe in terms of avoiding dangerous climate change.
- Greenhouse Development Rights looks at how we might be able to approach global climate negotiation frameworks (such as the Kyoto Protocol) in such a way that will allow us to meet the necessary greenhouse gas emission targets while also preserving the right to human development by all people on the planet.

These reports are available from the EcoEquity website: <http://www.ecoequity.org>

Getting Over Oil – We Can Survive The Transition To The Post-oil Economy.

"As we move into an era of oil depletion and energy constraint, everything from transportation to medicine to food to climate change response strategies will be affected. Almost everything we do is dependent on oil.

The transition to a future of reduced oil supply will require the development of clean, reliable, and renewable energy sources and reduced oil production and consumption. The Oil Depletion Protocol will allow us to accomplish both - simply, conservatively, and cooperatively. It is a plan for a sensible energy future."

Details on the protocol can be found at: <http://www.oildepletionprotocol.org/>

letters and feedback



Air Travel and Climate Change

I have been deeply impressed to see the work carried out by Friends of the Earth England on air travel. As George Monbiot has pointed out, air travel is one of the fastest growing sectors in terms of the creation of greenhouse gases and one that will need to be substantially curtailed in coming years (he talks about the need to reduce 'love miles' - the distance we travel to visit friends, families, and partners). I saw that over Christmas 2006, FoE Australia encouraged people to holiday near home to reduce their emissions. This is a good start. FoE in England has called for taxes on aviation, to create a fund that can then be used to offset the environmental costs of all this air travel.

Caitlin Webb, Newcastle

[eds note: details on FoE-UKs work can be found at: <http://www.foe.co.uk>]

CR #98

– strong community, sane world

Thanks for the latest chain reaction. Its concentration on sustainability is a matter dear to my heart. I have to say, however, that none of the articles deals with the really vital problem - how to reduce the general addiction to consumption, the mainstay of our economic system.

The general drift of the articles is that the capitalist system is evil, exploiting both the environment and all workers. Nowhere is there recognition that capitalism is the driver of production, including the ever-increasing flow of consumer goods which people everywhere want, or that capitalism is the basis of our material prosperity. The prosperity that people want. The basic problem is that while there's increasing uneasiness about the environment, including the problem of climate change, most people want the material prosperity that capitalism brings. Largely, they do not recognise that capitalism is self-destructing through its exploitation of the environment and that eventually we will have to curb our materialism. The future's beginning to look increasingly cloudy but the general view remains 'we can do little as individuals'.

I recognise and applaud the active minority who are prepared to accept the lower living standards that accompany the significant switch from capitalism that we require. But they will remain just that - a small minority - unless and until an attitude spreads that sees that lasting happiness comes from 'doing' and not from 'having', from personal development, and not from material possessions.

Wanting material things and the stature they can bring, in addition to security, is an age old part of our psyche. FoE and other bodies interested in constructive social change should be putting some energy into finding ways to get people to regard success as success in developing potential and in personal and community relations. If we ignore the need for this basic change, we'll be facing an enormously destructive social upheaval when capitalism collapses and, as we know, the poor will suffer the most.

Regards, Stan Jackson, Sydney
abcjackson@bigpond.com

Letters to Chain Reaction are welcomed. Please email to chainreaction@foe.org.au
(marked as being for Chain Reaction). Brief is good!

Patriots: Defending Australia's Natural Heritage

William. J. Lines. UQ Press, 2006.



From the development of the Great Barrier Marine Park, through to Lake Pedder, the Daintree, Franklin River, Kakadu, Jabiluka, Ningaloo, Tassie forests, Bob Brown, Tasmanian Wilderness Society, The Greens, FoE and ACF; all the icons of Australia's environmental movement get a run in William J. Lines' **Patriots: Defending Australia's Natural Heritage**. Upon reading that introduction, one might be tempted to describe the book as a collage of Australian bumper stickers, but it is much more than that. It is in part an extensive chronicle of many of the great, and also lesser known, environmental campaigns of the past 50 years. It is also a dedication to the many people who have fought and strived for so long to preserve our natural systems.

Foremost amongst these are the 'Patriots', Lines true heroes of Australian conservation: Milo Dunphy, Judith Wright, Len Webb and many others "...united by a common patriotic goal – saving Australia's natural heritage..."

Politics, language and philosophical asides are interwoven throughout, and Lines includes in this historical critique not only an analysis of the current state of the conservation movement(s), but also its many facets: Bob Brown, Green politics, the ACF, the concept of the "Ecological Aborigine", land-rights, humanism, leftism and the politicisation of the conservation movement. FoE is described curtly as "inaccurately-named". Whilst the detailing of the various conservation campaigns provides some useful and interesting insights, particularly in highlighting just how close many regions were (are) being lost to development, it is in these digressions that **Patriots** fully engages the reader, though not always comfortably, according to one's perspective.

The use of the title **Patriots** is interesting, and Lines returns often to the idea that conservation is, or should be, a patriotic act. Strictly speaking he is right, but the term is nebulous, and amongst the cultural left so pejorative that it in fact provides an insight, perhaps, to the book's real intent. **Patriots** is largely a diatribe against humanism and abstractionism and the convergence of these patterns of thought with environmentalism within Australia. Lines finds that the great increase in universities in the 60's and 70's produced an elite, adept at developing ideas and using language to debase nature, and using abstraction to overcome reality. He laments the transformation of the 'conservation' movement into the 'environmental' movement, which views saving nature becoming secondary to saving humans from each other. This is an obvious reference to the human justice/rights movement and its conflation, politically and ideologically, with nature conservation. Lines believes conservation should be about the natural world, and sees no room for the humanistic approach of environmentalism (energy, transport, roads, land rights, economic models) and other means

by which we debase nature and wilderness. There is a failure to fully explain to the reader what he would have us do otherwise, and this appears at times to be just another anti-intellectual, anti-leftist attack, styled in the manner of tabloid media. The ism's all get lined up against the wall here: Marxism, socialism, multiculturalism, feminism and Bob Brownism. Brown is an "incorrigible humanist", dedicated to being a martyr to the world's problems, and even championing bike lanes in Launceston.

According to Lines, this conjunction between leftist ideologies and conservation was consecrated by the Franklin river campaign, which consisted of almost "...40%...students and teachers: people schooled in abstraction and hence susceptible to the lure of abstraction". Lines dislikes abstraction, believing that conservation should be grounded in reality, and "guided by loyalty to Australia". An abstract and gormless sentiment itself.

Lines believes that the contemporary environmental movement fails to see that the inherent reality of the battle for nature is the human desire to exercise its power over nature, to transform nature for its own ends. The identity-challenged elephant in the corner of the room, which of late is alternately climate change, peak oil, nuclear power or materialism, is in Lines argument, population pressures. He touches briefly, but regularly, on the failure of environmental groups to confront this issue. He himself offers no solution or program to confront population expansion. Rather than admit that humans are

the cause of ecological destruction, 'progressives' blame "...social structures, systems and technology". Humanism and leftist ideologies provide little in the way of understanding conservation, according to Lines, who finds that this human-centric abstraction leads to superstitions such as the "Ecological Aborigine". The lauding of the Aborigine, says Lines, "at one with the land", whilst the rest of us remain "strangers", never to be able to connect to this landscape, is an enormous lie and a failing of Australian conservationists. This fits with Lines proposition that "...only people motivated by patriotism..." could meet the challenge of preventing ecological destruction. He quotes the well known conservationist Bob Carr (former NSW Premier, now of Macquarie Bank) in supporting his assertion of the nexus between saving nature and patriotism. But it appears to be a feral dog in a merino suit; an anti-leftist, anti-academic, anti-humanist, anti-elite attack that could align itself neatly with the nationalism of the tabloid world. It is vacuous and in many cases meaningless.

He finds the new green politics intellectually vapid. Arguments couched in abstraction. Conservationists should appeal to "...patriotism that arises from a loyalty to the living land". Simple. Easy. But in no way deals with the 'reality' of the world we live in. Political, economic, and cultural forces all competing, and all able to claim to be patriotic in one sense or another, so inane is the term.

Lines finds displeasure with the language of environmentalists, and their engagement with the civic constructs which he believes are at the heart of the problem. Lying in front of bulldozers, confronting the reality of destruction and sitting atop tripods however, will not win the battle for nature. There is indeed the need to fight on all fronts: direct action, advocacy, abseiling, passion, science, intellectually, PR, spiritually, through thoughts and ideas and language; succinct and complex, practical and abstract. Isn't direct, pure, simple action not requiring of a vigorous set of ideals, forcefully and regularly expounded, through engagement within and through business, government, academia, and in as many areas of civic society as possible? Are not words and action more powerful than action alone?

Lines offers the concept of economically sustainable development as an example of the modern conservationists' folly. By engaging with industry and government on this issue, nature is sidelined in the pursuit of growth. This is a valid point and the only time that the idea of consumption and lifestyle are in any way co-opted into his argument. It is a pity he doesn't develop this stream more, but perhaps it is the very humanness of human activity that prevents this.

Clearly the cause of environmental destruction is a combination of too many people, together with greed, materialism, stupidity and the growth ethic. The real question is what to do. It is here that Lines vapidly is laid bare. No solutions, no alternatives, no

answer to the question What next?, apart from a call for all patriots to act. A small section deals with the incompatibility of having both conservation and social justice/human rights sensitivities. It is a laboured argument, full of the "gobbledegook" he accuses others of wallowing in.

Yes the true heroes are those out there saving nature. Not necessarily in the forest, or the desert, or on the reef, physically stopping the attackers in their tracks, but also talking about it, writing letters, educating, cajoling and developing policy. Patriotism though, is no panacea. It is an abstraction, unabashedly political and cultural. The alignment of the political and social left with the 'conservation' movement in general, clearly raises the ire of Lines. The political and cultural right, with whom Lines might feel more comfortable, will not adopt his conservation cause, irrespective of their 'patriotic' tendencies.

This is an interesting book in ways that I suspect the author did not intend. **Patriots** will challenge the reader to confront the issues of how to advance the cause of nature conservation. Lines concludes that: "Without concerned citizens there would be no laws to protect wildlife, no mechanisms to preserve and enlarge wild country and no institutions to look after national parks."

These mechanisms, human political constructs, are the results of the intellectual efforts, thoughts and ideas he spends much of the book bemoaning.

Reviewed by Pat O'Neill

Recovering the Sacred

Winona La Duke, *Recovering the Sacred*, the power of naming and claiming. South End Press, 2005. www.southendpress.org

Anyone who has an interest in the interface between Indigenous concerns and environmental protection should know about Winona La Duke, the remarkable Anishinaabeg (Ojibwe) woman from the White Earth reservation in Minnesota. Depending on your interests or era you may know her as a member of Women of All Red Nations (WARN), the Indigenous Environment Network, or more recently because she ran for vice president of the USA for the Greens party.

Her most recent book is titled *Recovering the Sacred*, which is a collection of stories of both historical and contemporary struggles in North America and, perhaps more significantly, a series of essays on ecological and cultural restoration across that continent.

While the key stories are not new – the long struggle of the Lakota, Navajo and other nations against colonisation, dispossession and encroachment and ecological devastation, she also chronicles more

recent campaigns such as at Mount Graham in Arizona, a sacred mountain for the Apache and site of a major telescope project (backed by the Vatican, amongst others). Many of the books that are now classics of First Nation resistance such as *Bury My Heart at Wounded Knee* by Dee Brown, *Blood of the Land* (Rex Tyler), *Indian Country* (Peter Matthiessen) or Ward Churchill's books are well over a decade and a half old. Sadly it is not as if the depredations against Indigenous peoples have eased in this time. So to get updates on the resistance against coal mining at Big Mountain, the recovery of stolen bodies and cultural items from museums and other institutions, and problems associated with the Human Genome Diversity Project, which is 'mapping' the genetic differences between peoples around the world makes for useful and timely reading. There are connections for our work here in Australia as well, not only the example of incredible strength in the face of relentless dispossession but more direct campaign links - for instance the Homestake mine in Lakota country in the Dakotas (owned by Barrick, who are also creating an enormous open cut goldmine at Lake Cowal in Central Western NSW in the heart of Wiradjuri country).

With a title like 'recovering the sacred', you could be forgiven for assuming this was a book focussed on spirituality. But what we get is another take on the fact that for most if not all indigenous peoples, there is a strong and profound link between the people and their lands and that dispossession has a triple impact; cultural, economic and religious. What is heartening about this book is the second half, which profiles a series of attempts to reclaim community, sovereignty and land. The return of the Sturgeon to the Great Lakes and horses to the Nez Perce peoples of eastern Oregon and creation of food gardens based on traditional foods highlights that culture, land, dignity and a hopeful future are all inter connected. In a world where community continues to fray, globalisation brings more problems and dispossession, the re-weaving of a rich cultural life based in real ecosystems acts as a counterweight of hope to the atomisation of society towards self interest and rootlessness we see all around us. These stories are heartening reminders that there is still hope and that, in many quiet corners of the globe there are good people doing good things.

Reviewed by Cam Walker

A Gippsland Union: the Victorian Coal Miners Association 1893 – 1915

This book is not a recent publication, it was released in 2003, on the anniversary of the 'great strike' by the Victorian Coal Miners Association. Still, it seems worth noting because it deserves wide reading. It is an in-depth chronicle of the struggles between workers and capital in the coal mines of southern Gippsland. With renewed interest by many younger activists in the story of their movements, this is a significant addition to the story of working class struggle in

Australia. While lots of us are well versed in the MUA dispute and other recent struggles, many people would struggle to give any sense of the depth of the union movement over the past century and many of us with a sense of movement history are more familiar with the IWW in the USA than our own home grown workers campaigns.

East Gippsland historian Peter Gardner has produced a worth while and very readable story in this history. It is produced by Ngarak Press and available directly from the author <ngarak@bigpond.com> or the FoE bookshop in Melbourne.

Reviewed by Cam Walker

Climate Change Litigation:

Analysing the law, scientific evidence and impacts on the environment, health and property. Dr. Joseph Smith & Prof. David Shearman. 2006. Presidian Legal Publications. Adelaide.

Australia's public and private institutions, as significant greenhouse gas emitters, and as Kyoto recalcitrant's, are at the forefront of a new era in climate change activism. *Climate Change Litigation* shows just how reasonable (jurisprudentially and philosophically) it is to expect that contributors to global warming be held accountable for the harmful effects of their activities. Smith and Shearman have produced a very readable and important book outlining the emergence of a new weapon to tackle the crisis of global warming, detailing the various legal realms through which governments and corporations could be held accountable for the harm they inflict. The book explores the various legal processes available to litigants, the impediments to these actions and the numerous issues that arise when considering these processes. Whilst *Climate Change Litigation* can sometimes overwhelm the reader with detailed legal analysis, the chapter on Scientific Evidence (Consensus and Scepticism) is a very forthright dissection on the voluminous evidence for global warming thus far accumulated, and a clear appraisal of the position of the climate change sceptics.

The writers include a very interesting discussion on the environment as a global public "common", and the various ethical considerations surrounding this notion.

Much of the discussion surrounding climate change litigation is hypothetical as this area is only in its nascence. The authors believe that climate change litigation provides "...fertile..." ground for pursuing agents of global warming, and "At its most fundamental level...is largely about protecting human rights...". This book, together with the extensive footnotes should keep any reader interested in how climate change can be tackled, busy for some time.

Reviewed by Pat O'Neill

Inspiration



Susie Zent

by Anthony Amis

In the mid-1990s I found myself for the first time venturing into the daunting Strzelecki Ranges, two hours drive south-east of Melbourne. I was there at the invitation of members of the newly-formed Friends of Gippsland Bush who were attempting to stop Amcor clearing 2,000 hectares of bushland. Amcor and their predecessor APM had a long history in the region dating back to the 1930's when the Maryvale pulp mill (still Australia's largest paper mill) was first established.

My main memories of this first visit included witnessing pine logging on Jeeralang Creek and meeting local campaigners Susie Zent and Theo Morsink. Little did we know that 10 years later Susie and I would still be meeting up, working out ways to move forward with one of Australia's most challenging forest campaigns.

Susie lives near Yinnar in the northern Strzeleckis with her partner Peter in the heart of the plantation nightmare. She is not your average 'greenie'. She is middle-aged, swears like a trooper, is half incapacitated due to many illnesses but is a brilliant strategist and a tireless campaigner. Susie had been employed as a teacher in Collingwood and Morwell. That was until she suffered a mystery illness in 1982.

Susie first became aware of a medical practitioner who would eventually diagnose her disease by reading a copy of Chain Reaction in 1982. Her disease was caused by viral meningitis and diagnosed as chronic fatigue with multiple chemical sensitivities – a debilitating disease of the central nervous system which impacts on the whole body.

Friends of Gippsland Bush (FoGB) acted as the vanguard of resistance to Amcor's plans to wipe out 2,000 hectares of bush in 1996. Amcor totally underestimated the resolve and tenacity of the local campaign, which eventually stopped logging in 1,700 hectares. FoGB not only had to face a hostile company but they also had to endure personal attacks from other conservationists (see <www.hancock.forests.org.au/docs/06oct.htm>.)

During this time Susie embarked on what was probably one of her most ambitious ideas, to map the unknown rainforests of the Strzeleckis. Elaina Fraser (a local mother of three and school teacher), had since the mid-1990s been working relentlessly on weekends and school holidays mapping the Cool Temperate Rainforests of the Strzeleckis. Susie insisted on participating in a very difficult and time-consuming journey which formed the basis of the areas identified as the Cores and Links in the 'Strzelecki Ranges Biodiversity Study' (Biosis Research 2001).

Despite the leaches, painful joints, obvious health problems, and a host of other issues, these women achieved amazing results, managing to catalogue and map at least 80% of what rainforest was out there.

From late 1997, Susie was also involved in monitoring logging operations in her region (often with myself), a task which often involves a lot of walking including negotiating fallen trees and thick bush.

In October 1998, the Kennett Victorian government sold the logging rights to the Strzeleckis for 99 years. The buyer was Hancock Victorian Plantations, a subsidiary of the giant US insurance company John Hancock Financial Services. These logging rights included possible access to all the native vegetation and rainforest within the Strzeleckis, which technically the company could log due to the lax wording of the Victorian Plantations Corporation Act and licences. Only by walking the country could anyone really know what was out there. Lucky for us, Elaina and Susie were already doing this.

The Cores and Links Reserve was officially launched by the Victorian government in October 2006 after difficult negotiations with Hancock Victorian Plantations and Victorian government departments. Without the tireless work of Elaina and Susie, this reserve would never have been made a reality.

For more information see: <www.hancock.forests.org.au> and <www.australianpaper.forests.org.au>

For information and to support Friends of Gippsland Bush, contact: Susie Zent, c/- Churchill Post Office, Churchill, Victoria, 3842.

ANNOUNCEMENTS

Sacred Lifewalk Mother Earth Is Crying Walking from Adelaide to Uluru

From Susan Charles Rankin:

Mother earth is screaming out in such horrific pain at the moment as she can no longer feed nurture and sustain her children by what has happened to her through the logging and the mining and the sacred waters of life drying up we are in a time of great urgency.

Mother earth is trying to send us her children her distress signals through nature by the climatic shifts and changes that are taking place but we are too blind and too deaf to see or hear even when the scientific evidence is right there in front of us.

This walk will leave Adelaide on the anniversary of the Wave Hill walk off - freedom day 23rd of August - as this is representative of the old people from Wave Hill walking off and setting down on the lands together and it also represents freedom day - its like turning our backs upon this system and its laws and formulating our own declaration of independence based upon our law system signed off on by the whole 500/600 nations of our people.

But the most important thing of all is the passing down of the ancient knowledge for the first time in the whole of history from our great grannies.

MATERIALS AND RESOURCES NEEDED TO DO THE WALK

- (1) sponsorship and donations to aid the walk
- (2) support crew to drive van and trailer with food water and materials and to do work shops
- (3) film crew to document each stage of the walk
- (4) people with skills and vision to offer to the walk like creative expression through music, art, drama, kids activities, etc
- (5) generators to run on the side of the road for music and video projections
- (6) Bring your own swags and camping gear and musical instruments and your selves as this journey is about all of the human race as nature affects all of us

For more information, contact Susan Charles Rankin
<malgoonanga@riseup.net>, phone 0400 653 166.

Carbon Neutral Across Greenland

Roger Chao, Rob Rigato, and Linda Beilharz will be crossing Greenland unsupported from sea to sea, each hauling 100kg sleds some 550km. They will begin the initial climb from sea level up to around 2700m and then back down, facing winds of up to 200km/ph and temperatures down to -30c.

They aim to make this a totally carbon neutral expedition by calculating their total emissions and offsetting this by tree planting, showing that people can live a carbon neutral lifestyle.

They will be interviewing the indigenous Inuit who live on the icecap on both the east and west coasts, documenting on camera how global warming has and will impact on their lifestyles and culture. They will be using this documentary to do a series of talk to primary schools, sustainability festivals, public lectures, and numerous other groups as part of an awareness campaign of global warming and its impacts on indigenous cultures around the world.

Most impact studies have been done on low elevation coastal areas where water will rise, but not so much has been done on communities living and depending on icecaps. Thus this is a great chance to interview people living in very remote and inaccessible areas, first hand on camera about the impacts of global warming on them.

For full details, please see: <http://www.icecapjourneys.com.au/>

Friends of the Earth invites you to join the ACTIVE FRIENDS PROGRAM

What is the Active Friends Program?

The Active Friends Program is one of the best means to support the current and future work of Friends of the Earth. It involves a regular monthly donation a self-nominated amount.

Where will Active Friends donations go?

Friends of the Earth is renowned for making a little money go a long way. Because our administration costs are always kept to a bare minimum, practically all Active Friends contributions directly support campaign work, publications and community engagement. Active Friends donations will help maintain projects such as the Nuclear Freeways Project, protecting Red Gum forests and ensuring climate refugees are recognised and given aid to, to name just a few.

Why is the Active Friends Program vital to FoE?

Friends of the Earth never endorses people, parties or products and does not receive government or corporate sponsorship. To remain a radical and credible voice for social and environmental justice, we need a stable financial base. The Active Friends Program means that Friends of the Earth can engage in long-term campaign planing, and quickly and effectively respond to local issues.

How can you join the Active Friends Program?

To join the Active Friends Program, please fill in the 'Active Friends' section on the reverse side of this page and post to: Friends of the Earth, PO Box 222, Fitzroy, 3065. You can cancel this pledge at any time by contacting the FoE office. All Active Friends donations are fully tax deductible.

www.foe.org.au



**Friends of
the Earth
Australia**

AS A MEMBER OF FRIENDS OF THE EARTH YOU ARE NEVER ALONE

We are part of the Australian voice of the largest grassroots environment network in the world, with groups in 68 countries. Whether you decide to get a campaign up and running, volunteer at the fabulous food coop or bookshop, or provide crucial dollars as a monthly Active Friends supporter, it is people like you who keep Friends of the Earth strong.

If you are short on time but big on commitment, take a few minutes to fill in the form below.

You make the difference

community ecology solidarity justice

Join Friends of the Earth



Help ensure FoE remains a vibrant and independent voice for social and environmental justice. You can give your support by:

- ☐ Becoming an **Active Friend** by giving monthly tax deductible donations
- ☐ Becoming a **Member**
- ☐ Giving a one-off **donation**

Please return to
Friends of the Earth
PO Box 222 Fitzroy 3065

Cheques payable to 'Friends of the Earth'

Name _____
Address _____

Phone h) _____
mobile _____
email _____

PostCode: _____

Active Friends

Yes, I would like to make a monthly donation of:

- ☐ \$20 per month ☐ \$30 per month ☐ \$50 per month ☐ other \$_____ (\$10 min) per month

The donation will be:

- ☐ By direct debit from my bank account (this has the least admin fees!) - please fill in 'Direct Debit Details' below
- ☐ By going to www.egive.org.au - please return this form as well
- ☐ By credit card - please fill in the 'Credit Card Details' at the bottom of this form

If you would also like to become a member, tick here: ☐ \$20 per financial year of your active friends contribution will go towards membership, this is not tax deductible.

Individuals join FoE by joining a local group.
Please fill out this form and post with your payment to FoE national liaison, Box 222, Fitzroy, 3065 and it will be sent on to your local active group.

Direct Debit Details

I/We _____
(Given name) (Family name)

Request you, until further notice in writing, to debit my/our account described in the schedule below, any amounts which Friends of the Earth Inc may debit or charge me/us through our direct debit system. I/We understand and acknowledge that:

1. The bank/financial institution may in its absolute discretion determine the order priority of payment by it of any moneys pursuant to this Request or any authority or mandate.
2. The bank/financial institution may in its discretion at any time by notice in writing to me/us terminate this Request as to future debits.

The schedule (Please print clearly)

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Branch Address _____

Account Number _____

Name on Account _____

Your Signature _____

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OR become a FoE member with a yearly membership payment:

- ☐ **New Member** ☐ **Renewal**
- ☐ **\$120 Supporting Member (\$60 tax deductible)**
- ☐ **\$50 Waged Person** ☐ **\$60 Household**
- ☐ **\$90 Organisation** ☐ **\$30 Low Income**
- ☐ **One year** ☐ **__ years** ☐ **Ongoing (credit card only)**

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OR make a one-off donation

Donation \$_____ (thank you)
Donations over \$2.00 are tax deductible

- ☐ **Please send me information on FoE's bequest program**

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☐ **Visa** ☐ **Mastercard** ☐ **Bankcard**

Card Number: _____

Card Expiry Date: ____ / ____

Card Name: _____

Cardholders Signature: _____

ABN 689 18945 471

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Transnational Corporations

– Cam Walker
0419 338 047
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Wild Spaces environmental film festival

<http://www.wildspaces.foe.org.au>
wildspaces.regionals@foe.org.au

Local Groups:

FoE ADELAIDE

Postal address:
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FoE BLUE MOUNTAINS

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STOP THE NUCLEAR FOOL CYCLE!

National Day of Action



Palm Sunday: April Fool's Day, April 1, 2007

Stop nuclear power in Australia: Renewables not reactors!

Stop uranium mining: Leave it in the ground!

Stop nuclear weapons: Put down the US nuclear umbrella!

Stop nuclear waste: No waste dump in Australia!

WWW.NUCLEARFOOLSDAY.ORG