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THE MOVEMENTS OF AUSTRALIA'S ENVIRONMENT MOVEMENT



Clean Coal LOL	CSIRO's military funded genetic extinction experiments
War is Peace! Good guys with guns	Brisbane celebrating 50 years of direct action
Uranium industry slumps	The love and loss of Granite Mountain forest
Failure of forestry carbon offsets in Uganda	Retrosurbia: the downshifters guide

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Campaign Against Freeway Extensions

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1

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the Earth**

Friends of the Earth (FoE) Australia is a federation of independent local groups.

You can join FoE by contacting your local group – see the inside back cover of Chain Reaction for contact details or visit foe.org.au/local-groups

There is a monthly FoE Australia email newsletter – subscribe via the website: www.foe.org.au

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Get on board

FoE Melbourne's sustainable cities campaign has launched Get on Board: a collaborative, community-built vision of the sustainable transport infrastructure that Melbourne needs.

Previous governments have failed to plan for Melbourne's growth and create a workable public transport system to relieve traffic congestion. And it's only going to get worse.

Community members across Melbourne are stepping up to address the failure. Bringing together community groups, transport academics, planners, and small businesses to create a plan that works for everyone.

We're calling on everyone to #GetOnBoard with the Community Powered Transport Plan. The core elements of the plan are:

- A better train network with Melbourne Metro 2
- Getting freight off roads
- Active travel with more bikes, walking and green space
- A more connected public transport system through bus, tram and light rail network improvements

Made in Victoria with local jobs

For more information please check the website www.getonboard.org.au

New legislation poses 'existential threat to civil society in Australia'

The federal government has been attacking green groups since 2015 when the Register of Environmental Organisations Inquiry was launched. The attacks aim to break – or at least greatly reduce – the power of green groups. Various attempts to limit our ability to work effectively to protect the environment have failed. So they're giving it one last go before the federal election.

New proposed legislation – the *Electoral Legislation Amendment (Electoral Funding and Disclosure Reform) Bill 2017*, commonly called the 'foreign donations Bill' – is the latest front in this attack on advocacy by civil society groups.

The proposed reform to the Commonwealth Electoral Act has been dressed up as a national security initiative. There are three connected pieces of legislation, all of which will negatively impact on the activity of green groups. The Bill redefines non-partisan, independent, issues-based advocacy as political campaigning and in doing so subjects Australian charities to many

of the restrictions in the Electoral Act designed and intended for political parties. Immediately, many groups will face a prohibition on receiving international philanthropic funding, plus unwieldy and potentially unworkable requirements to prove other donations received are not from international sources.

If successful, this Bill will greatly limit the funds that green groups can access and tie us down in draconian levels of red tape (ironic coming from a government that claims it wants to reduce administrative burdens).

In its current form, the Bill poses an existential threat to advocacy in Australia. A healthy society requires strong independent voices. The Bill would take Australia backwards to a time where only government and big business have a strong voice in forming public policy. It must be resisted. Things are moving quickly and by the time *Chain Reaction* is printed, the legislation will have been re-tabled in parliament. Please check www.foe.org.au for updates and details on how you can help us stop these attacks.

Fighting to protect forests in Western Australia

Richard Wittenoom writes that conflicts over forests in Western Australia have become more intense and complex in recent times. Richard is President of Bridgetown Greenbushes Friends of the Forest (BGFF) and Friends of the Earth WA (FoE WA). BGFF is a member of WA's peak forest conservation body, the WA Forest Alliance (WAFA), and Richard represents BGFF / FoE WA on the WAFA Executive Committee.

WAFA is now fighting on several fronts. It is taking positive action in its 'Forests for Life' campaign, which aims to replace native forest logging with plantation timber and agroforestry, allowing the forests to be preserved for a range of productive and environmentally sound activities.

When the ALP ended the eight-year term of the Barnett government a year ago, WAFA was confident that commitments of support for preservation of old growth and High Conservation Value forests would be implemented. In fact the same people who have been advising Ministers for the past 15 years are still giving the same advice to the present Labor Ministers and this is reflected in replies received to present approaches.

A measure of the level of community support for the forests is shown by the fact that recently a petition of 15,500 signatures calling on the government to keep its election promises was presented on the steps of Parliament House.

On the other hand, WAFA is fighting to overturn the shock certification of the Forest Products Commission's (FPC) karri forest management granted by the leading international forest certification body, the Forest Stewardship Council (FSC).

Since 1995 BGFF/FoE WA has provided an Australian base for Dr Leonie van der Maesen, a Dutch geographer who has been studying the WA forests since the 1980s. Leonie represents FoE WA, and FoE Netherlands, on the International Chapter of the FSC. Leonie, 91 years young, is Patron and an Honorary Life Member of BGFF/FoE WA.

Leonie has been actively supporting the WAFA campaign against the unwarranted certification of the FPC's karri forest management. "There is no way the FSC should have granted this certification," she said. "Now we have to push to have it withdrawn."

Jess Beckerling, Convenor of WAFA, has been fighting doggedly against the certification since it was first proposed.

FoE WA has joined WAFA in objecting to the certification on two main grounds: FPC's logging of old growth karri in contravention of FSC criteria, and the conversion of karri forest into plantations of karri seedlings, again against FSC criteria.

Another battle looks like opening up. The FPC is now evaluating 19 expressions of interest for a major timber processing facility that would buy low-grade logs for uses such as biomass. This would open up possibilities for extensive thinning of the Jarrah forests and would also allow resumption of logging of marri, up to 30,000 tonnes per year.

The objective of the FPC is to increase forest logging to the maximum permitted under the discredited Forest

Management Plan, prepared under the Coalition Government. If established, the timber processing facility would allow the FPC to sell large quantities of low-grade timber products to make up for the fact that sawlogs are getting increasingly difficult to find and tonnages have been dropping for years.

The Jarrah forest in particular has not responded as was expected when intensive logging practices were introduced after 1986. The result has been that there are now enormous areas of intensively logged forest and regrowth that is either stunted coppice or single-size, dense 'locked-up' Jarrah stands.

BGFF has in its area of interest the oldest example of modern intensive logging, carried out in Warrup 05 in 1981-83 for a salinity trial. In this about 68% of trees were logged from the overall area of the trial. Thirty-five years after the event, the area will probably never produce a sawlog.

A solution offered by supporters of the proposed major timber processing facility is that a major program of thinning would remove competition and allow retained trees in existing single-age stands to grow on. There is strong opposition to this from within WAFA, one reason being that the inevitable use of heavy machinery during commercial thinning operations would leave the ground compacted for 50 years or more. Another reason is that logging introduces and spreads Phytophthora dieback. It would also leave the way open for 'open slather' logging.

As if all this is not enough, WAFA is now faced with the mid-term review of the current Forest Management Plan and, shortly after, the expiry of WA's Regional Forest Agreement.

BGFF believes that the planned logging of non-reserved areas of Jarrah on a 100-year cycle is leading to a juvenilised forest unable to support development of nesting hollows in mature trees. This requires a tree aged at least 120 years. There is no question that the days of logging of native forests will soon be gone. However in the remaining years of mining the forest, the preservation of the best of what's left should be a priority. There is so little good forest left it is essential that we preserve all of it.

Forests for Life: www.forestsforlife.org.au

Facebook: www.facebook.com/WAForestAlliance

Warrup Block in the area logged from 1981-83 for a Salinity Trial. This represents the oldest regrowth of near-clearfell.



Kuark forest protected

In a great development, Victoria has seen the first significant forest protection under the current government. In March, the Andrews government announced that some old growth forests in East Gippsland's Kuark forest will be protected. The Kuark has been the focus of a long campaign, driven by FoE affiliate Goongerah Environment Centre (GECO).

GECO spokesperson Ed Hill responded to the announcement by saying: "This is a good step in the right direction and we look forward to working with the government to ensure the Kuark forest is formally incorporated into the Errinundra National Park along with other forest areas of high environmental value, within this term of government."

The state and federal governments have extended the contentious Regional Forest Agreements (RFAs) for another two years today after the East Gippsland and Central Highlands agreements reached their used by date. The RFAs provide the native forest logging industry with an exemption from national environment law and have been heavily criticised by environment groups since they were signed in the late 1990s.

"The two-year extension of the Regional Forest Agreements has extended the logging industry's legal exemption from national environment law, whilst some protection of Kuark forest is welcomed, overall Victoria's forests and wildlife deserve more. Habitat for species like the nationally threatened Greater Glider and Leadbeater's Possum will continue to be logged with legal impunity and the special treatment given to the logging industry will continue," said Ed Hill.

Full response posted at www.geco.org.au

War and the Environment

Friends of the Earth has just launched a national project on War and the Environment. Using a social and environmental justice framework, the project will map, respond to and challenge war and the ongoing militarisation of people and places.

To get involved, contact Robin at robitaubenfeld@hotmail.com or 04 1111 8737. And check out Robin's article on page 22 of this edition of Chain Reaction.

Far North Queensland: protecting the Myola Valley is "vital"

FoE Far North Queensland is involved in a campaign to find a suitable conservation buyer for the controversial 'Barnwell Estate', in the event the Macao-based developer loses interest and wishes to on-sell the rural-zoned land at a fair price.

Several letters of support have been received from relevant stakeholders, backing the principle of acquiring land for conservation in the biodiverse Myola Valley. The support letter from James Cook University's Distinguished Research Professor Bill Laurance is of key interest. Professor Laurance, who works as a conservation biologist in native and damaged forests all over the tropical world, puts the region in global context: "I can say with complete confidence that the Wet Tropics region is among the most ancient, most biologically unique, and most small and imperilled ecosystems on the planet. It literally leaps off the global map as a hotspot of vital conservation importance."

"In this region, most (70%) of the lowland forests have already been destroyed. Much of the upland forests

on the Atherton Tablelands and Windsor Tableland have also been cleared and fragmented. Without doubt, the best possible outcome for this land parcel is to support the Kuranda community's desire to restore the land to its natural state, and for it to be held in trust for nature conservation in perpetuity."

Sarah Isaacs, a campaigner with Far North Queensland, said: "Further fragmentation of this region could easily split the Wet Tropics Bioregion into two distinct regions with no effective wildlife corridor between the two. This would impact negatively and probably disastrously on the wildlife- especially the iconic and endangered Southern Cassowary (*Casuarius casuarius johnsonii*) and the recently discovered and IUCN listed critically endangered Kuranda Tree Frog (*Litoria myola*)."

The full text of Prof. Laurance's letter is posted at <http://kurandaregion.org/content/uploads/2017/11/Rainforest-Trust-Laurance-Kuranda-letter.pdf>

See also www.foefnq.org.au

Climate Frontlines

Wendy Flannery from Friends of the Earth's Climate Frontlines campaign reports:

From 4-8 December 2017, following the UNFCCC COP23 session in Bonn, Germany, CIVICUS, the World Alliance for Citizen Participation held an international conference in Fiji. With all the preparatory work in the Pacific for COP23, it was inevitable that a strong focus of the CIVICUS gathering was vulnerability to climate change, including forced migration.

With the UN scheduled to launch a Global Compact for Migration in September 2018, the CIVICUS assembly issued a strong declaration urging that climate change related displacement and migration be given due recognition in the upcoming Compact. The Declaration on Climate Induced Displacement is posted at www.civicus.org

Climate displacement forum: The Pacific Islands Council of Queensland and Friends of the Earth Brisbane Climate Frontlines are partnering to hold a forum in Brisbane from 25-27 May, focusing on Pacific climate change.

The organisers aim to:

- Raise awareness among Pacific diaspora communities of the impacts of climate change in general and of its impacts on people in the Pacific Islands region
- Highlight the particular concerns of communities in the Torres Strait Islands
- Ensure that the three levels of government and relevant agencies and community organisations are aware of implications for people in the Pacific and for the Pacific diaspora communities in Australia
- Empower representatives of the diaspora communities to respond to the challenges, including advocating with government.

Well-known and highly-regarded presenters both from the Pacific and locally are being invited. Pacific Islander communities in Queensland are being encouraged to gather stories from relatives and friends in Pacific Island countries in advance for online sharing. A representative of one of the most affected communities in the Torres Strait will also be invited.

Wendy Flannery, Climate Frontlines, FoE Brisbane

0439 771 692, wendy.flannery@foe.org.au



TAKE ACTION

Sign the Petition

It's time to #RestoreTheRET

Benefits of new Kiata wind farm shows it's time for Turnbull to #RestoreTheRET

Friends of the Earth (FoE) campaigners were pleased to attend the official opening of the Kiata wind farm, west of Horsham in Victoria, on January 24.

The project is renewable energy success story that highlights the need for the Turnbull government to hit the reset button on energy policy. The completion of the new wind farm comes amid reports the national Renewable Energy Target will be met two years ahead of schedule. This surprising result shows it's time for PM Turnbull to address his government's energy policy failures by restoring the RET.

"The Kiata wind farm was built thanks to Victoria's Renewable Energy Target (VRET) and is the type of policy

the Turnbull government should be emulating," said Pat Simons, Friends of the Earth's renewable energy spokesperson.

"There's a reason five states and territories around the country have adopted renewable energy targets. They work. The Turnbull government can avoid the pitfalls of policy adventurism like the National Energy Guarantee by restoring the Renewable Energy Target."

In 2014 the Abbott government slashed the RET by 20%, a decision that saw 2,500 people lose their jobs and investment to collapse by 90%. Now that investment has finally rebounded it's time to capitalise on the momentum behind wind and solar power.

Windlab's nine-turbine Kiata Wind Farm was built using wind turbines manufactured by Keppel Prince in Portland and will provide enough clean electricity to power 23,000 homes.

FoE's Act on Climate spokesperson Leigh Ewbank said the Kiata wind farm will help the Victoria meet state climate change laws. "The Wimmera community can be proud of its role helping to power Victoria and tackle climate change. The Kiata wind farm will contribute towards Victoria's legislated target of net-zero emissions by 2050."

Please sign and share the Petition to #RestoreTheRET at www.melbournefoe.org.au/restore_the_ret

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A world class reserve system for the people of Melbourne

A cornerstone of FoE's policy work in Victoria is the proposal to 'future proof' Melbourne against continual growth and sprawl. Melbourne keeps growing and is becoming ever more congested and crowded, and will soon pass Sydney as the largest city in Australia. If we want to keep our 'liveable city' tag we need to keep improving public transport and services, especially in fringe areas, while ensuring there is sensible and sensitive infill and increased density along public transport routes and key development nodes.

It is also essential that we protect remaining undeveloped land around the city's fringes and create breathing space for the ever-growing population of Melbourne. Time to do this is running out as the city spreads.

In addition to our sustainable cities #GetOnBoard campaign, we are calling for the creation of new parks from the Western Grasslands reserve in the west to the Great Forest National Park in the east.

Check here for full details: www.melbournefoe.org.au/world_class_parks

State election on the horizon in Victoria

FoE has helped achieve some fantastic outcomes in Victoria over the past half-decade, including the permanent ban on fracking in the state, the moratorium on drilling for conventional gas, and the creation of the Victorian Renewable Energy Target (VRET). With a state election on the horizon, and an Opposition which is saying it will lift the moratorium and gut the VRET, we need to defend these important wins.

FoE is working hard to raise environmental issues in the build-up to the November election, engaging with all political parties, and campaigning on the ground across metro and regional communities to see strong state government action on key issues including climate change and energy policy, transport infrastructure, forests and water.

For full details on our policy agenda, to support our work or get involved, please visit

www.melbournefoe.org.au/victorian_state_election_2018

River Country Campaign

Megan Williams from FoE's River Country Campaign writes:

Last year was a big year for the Murray Darling. The Darling ran dry, ABC's Four Corners exposed upstream water theft thrusting our river into the national spotlight and bickering over the Murray Darling Basin Plan threatened to cut back the amount water that is returned to the environment. With a Victorian State Election and a key decision about the fate of the Murray Darling Basin Plan pending for February, 2018 is shaping up to be even bigger.

That's why I've come on board to help the campaign hit the ground running. I'm an environmental scientist and have been part of FoE for almost four years. As a team member on the Yes 2 Renewables Campaign, I worked with community members across the state to call for Victoria to set its own Renewable Energy Target. I'm pleased to say last year the State legislated a target of 25% by 2020 and 40% by 2025!

Every good campaign has the community's voice at heart. Now I'm asking questions about the environmental watering program in Nyah-Vinifera, to understand how water for the environment is managed in Victoria. At a time when the water allocation for the environment is under threat, we want to tell the good news stories about the benefits of cultural and environmental flows. I want to know that enough water is reaching the forest for it to thrive, and hold the government to account to make sure that happens across the board.

This year we want to send a message that healthy rivers are essential for healthy communities. We are building the community power needed for Lisa Neville, Victorian Minister for Water, to stand up and protect our rivers and secure water to give back to the environment.

Here are three ways you can help our campaign:

- Like our Facebook Page www.facebook.com/rivercountrycampaign
- If you have a tip email me at megan.williams@foe.org.au
- Chip in to help us reach our goals www.melbournefoe.org.au/river_country_donate

www.foe.org.au



Adani still angling for government funding support

They're still at it. Adani is talking to the Australian Government's Export Finance and Insurance Corporation (EFIC), which is already planning to finance companies involved in the Carmichael mega coal mine's supply chain.

When Adani and Aurizon were seeking loans from the Northern Australia Infrastructure Facility last year, EFIC was brought in to help with the projects' assessments. So no doubt EFIC is well aware of how environmentally and socially unacceptable Adani's mega coal mine is.

Thanks to incredible pushback from the community, those NAIF loans

are now off the table. But with Adani increasingly desperate to find funds, EFIC provides another opportunity to channel public money to the Carmichael coal mine indirectly.

Take action! Tell EFIC that the Adani Carmichael coal mine is against the public interest and should not receive a cent of public money! Please visit www.marketforces.org.au/efic

FoE affiliate Market Forces has been tracking which companies are in and out of the Adani Carmichael coal project. See www.marketforces.org.au/info/key-issues/theadaniist

The movements of the Australian environment movement

Cam Walker – campaigns co-ordinator,
Friends of the Earth Melbourne

In the various histories that have been written about the Australian environment movement, most have identified the ‘professionalisation’ phase that happened in the 1980s as a defining feature in the movement’s development.

While many groups started in the 1960s and ‘70s as grassroots orientated, movement-style organisations, the years from 1983 onwards when ‘environment friendly’ federal Labor governments were in power profoundly changed the movement. The ALP’s ‘peak’ approach, whereby key stakeholders are ‘brought into the room’, changed the dynamics of the movement.

The access to government and ministers that this system facilitated, and the assumption that ‘access = outcomes’ gradually brought the gravitational centre of the movement to Canberra. Ever greater staff resources were allocated to federal style campaigning, with more time spent on policy development and lobbying and offices in Canberra. Slowly but surely the local branches waned. Change would come through action in Canberra, backed up by the member and supporter base, who would be mobilised at key moments.

On the back of the federal intervention to protect the Franklin River in Tasmania, this approach made sense. It delivered some important, and lasting, outcomes through the 1980s and ‘90s. Over time, the focus of the movement shifted from ‘nature’ to include ‘climate’. Towards the end of this long process of pressure on federal processes, it seemed that real change might be getting close. Prime Minister Kevin Rudd declared climate change as being the key issue of our time. Peter Garrett, the new environment minister, headed off to climate change negotiations in Bali, declaring that ‘the rich must go first’ when it comes to meeting emission reduction targets. The Rudd government came close to enacting a carbon price. As always, good policy didn’t grow out of thin air. The ALP had been pushed into adopting strong positions because of the new grassroots movement that had formed largely in reaction to the comprehensive failure of the Howard government on climate change. This grassroots movement prodded the federal ALP to go further on climate policy.

The climate movement was more like the ‘second wave’ environmentalism of the 1970s. It was locally controlled, and activist at heart. It started to bring significant power to bear on federal politics because of the connection these groups had in their local communities and the fact that regular ‘summits’ allowed the development

of national strategies. Unlike the top-heavy environmental groups (the ENGOS), these groups were driven from the grassroots up, meaning they had the power that comes with being based in a community. But after this movement helped propel the ALP back into power, that brief moment of hope didn’t last long.

The planned emissions trading scheme was defeated, Peter Garrett subsequently went on to approve a uranium mine, and politics drifted to the Right. Tony Abbott smashed the remaining climate change policies. Many of the local climate change groups lost their energy and focus. With the larger ENGOS now largely irrelevant to the federal debate on environment and climate, there was a huge gap in Australian politics.

The climate movement 2.0

During this time, a reformed umbrella group for the climate movement, called Climate Action Network Australia (CANA) started to strategise about how to build a new movement. A big part of this involved thinking about how to build a grassroots movement that could play a major role in the debate about national energy policy and climate change. The development of this movement has been supported by the rise of GetUp which, in its broad progressive agenda, brings huge political power on environmental and climate issues and helps push them further onto the national political and media agenda.

There is no doubt that CANA is already having impact. A resurgent climate change movement has focused strongly on stopping the Adani coal mine planned for Queensland and is now on the cusp of winning. Many larger ENGOS, working in both the climate and the more traditional natural environmental space, have refocused resources away from Canberra and back into grassroots organising. This process started back in the days when Australian campaigners were influenced by the campaign that helped elect Barack Obama as president of the USA. ‘Directed networking’, a model that encourages local groups to operate on a shared strategy, is all the rage at present.

But in some ways, we are exactly where we started. The movement is still largely dominated by the people who were dominant in the 1980s – well educated urban people of Anglo origin. And policy is still largely driven out of the inner suburbs. In many ways the gravitational centre of power still rests in the headquarters of large ENGOS.

Climate protest camp, 2011.
Photo by Lauren Ausburn.





The world outside Canberra

During these years of inaction - when Tony Abbott was smashing the remaining climate change furniture and Malcolm Turnbull inherited the mess, some of the most solid wins on climate and environment have occurred where groups have decided to allocate their resources to state or regional rather than federal issues. Given the ideological opposition to climate action shown by the Abbott government and state Coalition governments, groups like Friends of the Earth (FoE) decided to focus on the state level.

The five-year campaign in Victoria against onshore gas drilling won the first permanent ban on fracking (hydraulic fracturing) in Australia. A similar campaign by FoE for a state renewables target (the VRET) was equally successful and delivered targets for 2020 and 2025 that have restarted the development of commercial-scale renewable technology in the state.

What is significant about both these was the 'target demographic' and the 'frame' or key messaging in the campaign.

VicGasBan

In 2011, FoE identified the threat posed by the emerging unconventional gas industry. This includes coal seam gas (CSG), tight gas and shale gas. Inspired by the Lock the Gate movement, which FoE had helped establish in Queensland in 2010, the campaign went to regional Victoria to mobilise communities. Using a grassroots organising model - the 'gasfield free' strategy devised by Annie Kia and other activists in northern NSW - FoE worked directly in regional areas that were under threat of gas drilling or new coal mining.

Initially the campaign followed a path of trial and error. At first FoE focused on mobilising communities to oppose exploration licenses for coal or gas. But in each instance, applications were approved as a matter of routine. Communities did not have the power to influence the business as usual approach to fossil fuel development in the state.

Once we started applying the gasfield free model of organising, things started to change as we helped build community power. This organising model, whereby a local group would doorknock their entire community to test support for opposing the gas / coal industry, both built political power and community cohesion. It clearly demonstrated that there was no social license for the industry to be in that community.

It was also 'ideology lite'. As long as you were concerned about some aspect of the industry, there was a place for you in the campaign. This allowed alliances to be built in conservative voting electorates and between a wide range of people within each community. As each community completed its door knocking and then declared itself coal or gasfield free (depending on the local threat) a movement emerged. Apart from The Greens, political parties initially ignored this movement, until one declaration in western Victoria where MPs and candidates were tripping over each other to be in the photos.

This campaign was significant in that while it was helped and supported every step of the way by FoE, it was always driven by the regions. It was light on in terms of organisational 'branding', and strong in terms of supporting local groups to become skilled up. And while it was focused on principles of community organising, the background threat of direct action and the spectre of farmers from Seaspray in Gippsland planning to ride horses up Bourke street to parliament to announce their intention to blockade drilling operations was the tipping point that saw the initial moratorium on drilling enacted.

It was also based on solidarity, the notion of 'looking up' rather than downwards to NIMBY style campaigning. With FoE managing much of the lobbying efforts in Melbourne, the campaign had an unusual dynamic - the 'outsider' movement in regional Victoria was building power at the grassroots, while the 'insider' efforts at parliament house and good communication across the regional groups meant local activity was strategic and meshed into a broad strategic plan.

By the time the state election of 2014 arrived, 75 communities had declared themselves coal or gasfield free, and *The Weekly Times* newspaper declared the issue one of the top two concerns in regional Victoria which was driving debate during the election campaign.



Yes to Renewables campaigners with locals at Hepburn Community Wind Farm, Victoria.

FoE's work in regional Victoria had been influenced by our work with the Plug the Pipe group who had opposed the North South Pipeline that was intended to bring water from the inland rivers to Melbourne. Although we lost that campaign, our experience of working in conservative-voting areas showed that building trust and respect was possible and could lead to effective campaigning.

VRET

When the Coalition came to power in Victoria in 2010, they immediately slammed the door on the environment movement (which in turn, encouraged us to start the successful campaign to win the gas ban). They also 'burnt the furniture' in terms of climate policy. They gutted the Climate Change Act, scrapped the state renewables target and enacted the most regressive anti-wind regulations on the planet. The development of wind energy stopped almost overnight. Jobs were shed, projects stalled, and some renewables companies moved interstate. It was as if Victoria had done a 180 degree turn away from action on climate change and was racing towards an energy policy from the 1950s.

It soon became clear that there was strong alignment between key figures in the Coalition and the anti-wind movement. The Waubra Foundation was at the peak of its influence and anti-wind groups variously blamed wind turbines for ill-health in animals and humans, being fire risks and blights on the landscape, and the slaughter of many native species of birds.

Our Yes to Renewables (Y2R) campaign started to attend the anti-wind forums that were being organised across the state. We started to shift the narrative in regional media away from 'renewables are terrible' to 'renewables bring jobs, investment, income and climate action'. We lobbied the parties to lift the anti-wind laws.

Although we need an urgent shift to renewable energy because of climate change imperatives, the Y2R campaign primarily used other 'frames' in arguing for a restart in renewable energy deployment. We argued that wind farms brought local jobs and manufacturing opportunities (and that contracts should include local procurement clauses). We worked with unions and manufacturers to promote the good news story that wind energy jobs were 'green jobs', part of

the much-needed energy transition. Turbines bring 'drought proof' income to farmers who host them, and rates to cash strapped local government. They bring major investment and downstream business opportunities to the regions and the state.

And as with the gas ban campaign, we found local partners to work with. Local groups have credibility in a way that inner city-based green groups do not. By collaborating with partner groups across the state, we were able to build active support for the development of renewable energy.

With the Abbott government taking a wrecking-ball to the national Renewable Energy Target and other public funds, we knew there was a strong case for Victoria to go its own way by establishing itself as a leader on renewables, and that this would be something people could be proud of.

Over time we helped shift the public narrative from one that was primarily full of negative stories about wind energy to a media environment where most stories spoke about the positive side of wind energy. Our lobbying efforts paid off and the ALP committed to reinstate the VRET should it come to power. The rest is, as they say, history. The VRET has kick-started the development of commercial-scale renewables on a mass scale in the state and placed Victoria back into a leadership position in terms of action on climate change.

What does the future movement look like?

Both the VRET and the #VicGasBan campaigns were significant because they won environmental victories. But they were also important because they helped build a new movement. The 75 groups in the gas ban campaign and the dozens involved in support of the VRET were locally developed and controlled. They were products of their communities. Neither campaign worked on 'cookie cutter' models of change. Each community was different, with a range of skills, challenges and external threats. A big part of our work was simply to help build the latent skills in each of these communities and help steer them towards a strategic outcome.

And of great significance, the core support base of these campaigns came from outside the usual ENGO demographic. They were (and are) being driven by rural and regional communities, often in conservative voting seats.

There are other movements operating on the same basic principles. The Lock the Gate network is doing this work on a continent-wide basis. A growing number of 'site resistance' battles against new coal or gas or other destructive developments are run in the same way - locally controlled but with support from state-wide and national groups. This model, based on deep democratic models and community building, shows that organised concern for the environment does not rest only in urban environments.

In many instances, these new campaigns are linking up with decades-long campaigns by traditional owner groups to protect Country.

And groups like Environmental Justice Australia are active in working-class communities which are affected by coal mining through public health impacts. Long-running campaigns against all aspects of the nuclear cycle on indigenous land continue to build their power, and have achieved a growing list of major victories.

This new movement is the most significant shift in the environment landscape since the ACF and National Farmers Federation (NFF) collaborated to establish the Landcare network in 1989. There is still room to grow and a key dilemma revolves around how to keep these groups active and engaged after they win or lose their primary campaign. But like the Solar Citizens model, which seeks to mobilise 'average' people who also happen to have solar PV systems, these new forms of organising offer a pathway to a more inclusive, more diverse and more democratic environment of the future.

Further information

A longer account of the campaign against coal and gas in Victoria is posted at: www.melbournefoe.org.au/coal_and_gas or www.coalandgasfreevic.org

An account of the campaign to achieve the VRET is posted at www.yes2renewables.org/2016/06/22/the-long-road-to-vret-foes-campaign-for-a-vic-renewable-energy-target

Lock the Gate: www.lockthegate.org.au

Documents reveal FSANZ misled minister regarding the safety and legality of nanoparticles in baby formula

Jeremy Tager

In July 2017, independent testing¹ commissioned by Friends of the Earth found nanoparticles in popular Australian infant formula products that are both illegal in Australia and potentially dangerous.

Now, documents released under Freedom of Information laws show that our food regulator Food Standards Australia New Zealand (FSANZ) unilaterally 'legalised'² the use of nano-hydroxyapatite (n-Ha) in baby formula after previously declaring³ it wasn't permitted. FSANZ also misled its minister - Dr David Gillespie - and the public by stating⁴ that members of its Scientific Nanotechnology Advisory Group (SNAG) supported its claims that the ingredient was safe - when they actually raised safety concerns.⁵

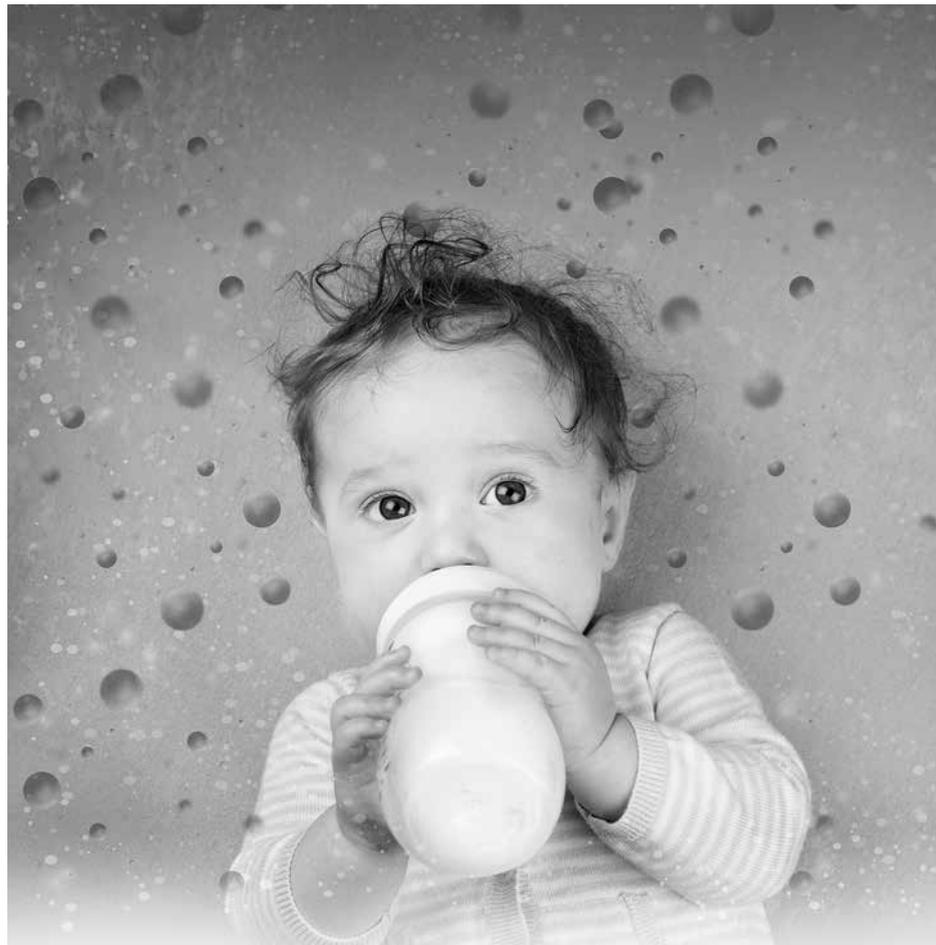
Legalising the presence of nano-hydroxyapatite

The documents reveal that FSANZ back-flipped⁶ on its position that the use of nano-hydroxyapatite in baby formula was illegal and reinterpreted its legislation to serve industry. It did so by accepting without evidence industry claims that the particles weren't intentionally added and then deciding that they therefore weren't subject to the Food Code's prohibition⁷ on the use of nutritive substances in infant formula unless they are expressly permitted.

FSANZ neither sought nor had evidence that the nano-hydroxyapatite wasn't intentionally added but accepted the claim immediately; ignoring the conclusion of Arizona State University scientists that it was both synthetically produced and likely intentionally added. FSANZ also ignored SNAG's conclusion that they didn't know if the nano-hydroxyapatite was intentionally added based on the available information.

FSANZ staffer Trevor Webb asked how do "we intend to manage the change in opinion re approval".⁸ This is a critical admission that FSANZ has completely reversed its position on the legality of n-Ha in baby formula. FSANZ failed to inform its Minister of its new interpretation of the Food Code.

In its *de facto* legalisation of the use of nano-hydroxyapatite in baby formula, FSANZ has failed to adhere to the Food Regulation Ministerial Council's policy for ensuring the safety of baby formula. This states that:



"Pre-market assessment ... should be required for any substance proposed to be used in infant formula and follow-on formula that:

- i) does not have a history of safe use at the proposed level in these products in Australia and New Zealand; or*
- ii) has a history of safe use in these products in Australia and New Zealand, but which, having regard to source, has a different form/structure, or is produced using a substantially different technique or technology."*⁹

Asserting safety

In advice¹⁰ to the Minister and in a public statement¹¹ on its website, FSANZ also claimed its Scientific Nanotechnology Advisory Group (SNAG) supported its conclusion that the nanoparticles of hydroxyapatite found in baby formula were safe. A SNAG member contacted¹² FSANZ unhappy with this misrepresentation - pointing out that at the only meeting SNAG had had to that point, the safety of nano-hydroxyapatite hadn't even been discussed. SNAG met subsequently¹³ and could not reach consensus on the safety of n-Ha, or support FSANZ's claims that n-Ha fully dissolves in infant

stomachs. FSANZ never notified Minister Gillespie of SNAG's actual views.

The documents reveal FSANZ coordinated its response with the baby formula industry. FSANZ goes so far as to write: "Are they engineered? Use industry response they are not adding Ha so irrelevant".¹⁴

When the Chinese Government inquired about the legality of nano-hydroxyapatite in baby formula, because China is a major importer of Australian baby formula, FSANZ misled them as well. The agency ignored the question and provided general declarations of how seriously it took food safety.¹⁵

Extraordinarily, the Minister now responsible for FSANZ – Bridget McKenzie – has refused to investigate the conduct of FSANZ, relying

exclusively on FSANZ positions, most of which are either inaccurate or misleading. For example, in a letter to Friends of the Earth the Minister states that "Further investigation by FSANZ on this matter showed that nano-hydroxyapatite is synonym for a range of calcium phosphate compounds, some of which are permitted forms for infant formula."¹⁶

What FSANZ obviously hasn't told the Minister is that calcium phosphate compounds can only be added to baby formula if the ingredient is expressly permitted in the food code. FSANZ's own staff have admitted that nano-hydroxyapatite is not a permitted form of calcium phosphate.¹⁷

It is inexcusable that FSANZ is prepared to put babies at risk because it doesn't want to force the formula industry to abide by the law. When an agency starts moving the legal and scientific goal posts without evidence and solely for the benefit of industry, the problem is serious.

It is clear that there is a systemic problem with FSANZ. It consistently refuses to regulate, ignores legitimate health concerns and won't act for the public good except in the most extreme cases. The agency needs to be fully investigated and overhauled.

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Why do Chinese workers matter?

Andrew Taylor

We don't have to look far from home to see injustice and environmental destruction on the horizon. From the pledge of the Tasmania's new Liberal government to open up 396,000 hectares of native forests to nuclear waste being dumped at a sacred site for traditional owners. There are plenty of battles to fight at home so why give a thought to Chinese workers?

Much of the narrative pushed by the media is of a China that is seeking to control Australian politicians, and a Chinese state that ignores human rights and crushes decent. There is some reporting and social awareness that sweatshops exist, and that brands like Apple and Nike's

Chinese supply chains rely on low wages, oppressive working conditions and lax environmental standards. However, nothing is heard about the resistance and social movements standing up for the environment, human rights and decent work inside China.

Hope

The growing labour movement in China offers hope for social movements everywhere as an example of organising against incredible odds. Independent labour organising and independent trade unions are banned and workers do not have the legal right to strike in China. But millions of workers have organised autonomously and staged "wildcat", or unofficial, strikes. The *China Labour Bulletin* reports that in the last two years alone, there have been over 2,400 wildcat strikes alongside protests, road blockades and sit-ins.



These actions have led to significant victories from 35% pay increases, overtime payments backdated six years and banning the use of toxic chemicals. China's workers are not passive victims of repression and exploitation. They are creating powerful social movements in the face of state oppression. The impact of the workers' movement will not only be limited to workers' rights. It will also affect the social, economic and political development of China and the rest of the world.

Globalisation

In the 1990s, companies from Australia, the US and the rest of the West moved much of their production overseas. A key factor in this was the opening up of the Chinese labour force to Western companies, leading to cheap labour flooding the global market. The price of consumer goods dropped, poverty wages and oppressive work conditions became the norm, and we effectively exported much of our environmental pollution. Countries were forced to slash any standards they had in the face of companies that could take their business elsewhere in the world, alongside trade deals that forced them to 'open up for business' through deregulation.

The main people to profit from this were Western consumers, and the CEOs and powerful people who made fortunes. While 'ethical consumerism' has grown in the period since, it's impossible to remove ourselves from the horror and injustices associated with the supply chains of many products. While at the same time Australian companies continue to destroy lives and pristine environments across the globe. To challenge this global system of exploitation we need to do more than buy organic, we need to stand shoulder to shoulder with workers across the planet to build a global movement for social and environmental justice.

Supporting international resistance

Companies need to be held to account where ever they go, so that skipping the country when regulation kicks in isn't an option any more. That doesn't just mean boycotting certain brands or blockading flagship stores. Making noise and damaging brands is a great way to hurt their bottom line and to show workers and communities across the globe that we are standing in solidarity with them. But to win big and change the system we need a bigger strategy that uses every tool in the box.

The trade deals our government signs are one part of the puzzle. Shockingly, companies can sue the Australian government if it brings in regulations that hurt their future profits. That makes it much harder for our social movements to ban fracking, build renewables on a mass scale, and cut pesticides out of our food. It's even worse for other people across the globe with companies looking to sue governments for increasing labour and environmental standards to a level we take for granted.

If we want to stop companies riding roughshod over democracy and human rights, we need to stop signing away our ability to make companies act in a socially and environmentally sustainable way. Imagine how much stronger that resistance would be if we take the time to stand in solidarity with social movements across the globe, building trust, relationships and movements that can mobilise against these deals from both ends.

Government institutions spend money every day on behalf of the public – from your local hospital to the Department for Education and Training. In fact, they buy a lot of stuff. When it comes to computers alone, the federal government owns around 350,000 PCs and laptops, spending \$1.5 billion last year. That's big money that could be used to pressure brands to take the demands of workers in their supply chains seriously, and support workers in China and beyond to transform their social and environmental conditions.

If we want more lasting change that holds companies to account, we need new binding legislation to hold our companies responsible for their crimes wherever they may occur. In France, the government has recently introduced legislation that allows people across the globe to sue French companies destroying their environments and communities. If we want to protect people and planet from the sharp end of Australian capitalism in the form of corporations like Rio Tinto and BHP, then our justice system needs to work for people no matter where they live.

The Economic Justice Collective at Friends of the Earth Melbourne is developing a new campaign to challenge corporate power with people power. If you're interested in joining the global movement taking on big business then the collective is open to all. The Collective's contact details are listed on the inside front cover of *Chain Reaction*.

Andrew Taylor is a member of Friends of the Earth Melbourne's Economic Justice Collective, and previously worked for People & Planet in the UK on their Sweatshop Free and fossil fuel divestment campaigns.

Climate Council: Roadmap to Australia's clean energy future

A National Energy Roadmap outlining how Australia can cut its rising greenhouse gas pollution levels, while continuing the transition to clean, affordable and reliable renewable energy and storage technology, was released by the Climate Council on March 6.

The 'Clean & Reliable Energy: Roadmap To A Renewable Future' report features 12 key policy principles for any national energy and climate policy framework, including calls for the rollout of a minimum 50-70% renewable energy target across Australia by 2030.

"Australia needs a fresh approach to cutting greenhouse gas pollution from our electricity," said Climate Councillor and energy expert Greg Bourne.

"The Federal Government's offering of the National Energy Guarantee simply doesn't cut it on improving energy reliability, cutting power prices and tackling climate change. Australia can do better than this."

"Australia's transition to renewables and storage is already underway. The only thing placing this at risk is political will. This roadmap calls for twelve basic, key policy principles that should apply to any credible national climate and energy policy in Australia."

The 'Roadmap To A Renewable Future' framework recommends Australia continues to transition away from its ageing, polluting and inefficient coal and gas fleet and encourage investment in a new clean power supply. The report calls for pollution targets which can be ratcheted up along with transparent tracking and reporting of carbon pollution levels.

"This roadmap shows that it's our electricity sector that has the greatest potential to slash pollution through the transition to a 21st century energy grid, consisting of clean renewables and storage technologies."

"In order to tackle climate change, the electricity sector needs to cut its carbon pollution by more than 60 per cent over the next decade and head towards zero pollution. Renewables plus storage is how we can do it."

Key recommendations include:

- Australian climate and energy policy must accept the need for deep pollution cuts from the electricity sector in order to limit global temperature rise and tackle climate change.
- This means slashing carbon pollution from the electricity sector by 60% by 2030, and ensuring that targets can be ratcheted up over time.
- The Australia's electricity sector needs plans in place to reach net zero emissions well before 2050. This is in line with National Energy Market state and territory commitments.



- To have any effect on carbon pollution (and not just add bureaucratic red tape), any NEM wide emissions target for 2030 and beyond must meet or exceed the total level of state and territory targets.
- Australia must achieve a minimum of 50-70% renewable energy across Australia by 2030.
- A credible reliable climate and energy policy needs to encourage investment in new clean power supply - when and where needed - well in advance of coal closures, and not place reliability in the hands of ageing coal and gas generators.

The report also features key findings highlighting how the Federal Government's proposed National Energy Guarantee risks derailing Australia's booming renewable energy and storage sector and will not provide an integrated solution to improving reliability or tackling climate change.

Climate Councillor and energy sector veteran Professor Andrew Stock said that the Federal Government was missing in action when it comes to credible climate and energy policy.

"The proposed National Energy Guarantee (NEG) falls short across the board when it comes to reliable affordable power and tackling climate change. It simply doesn't deliver on any of these key goals."

Professor Stock said the Federal Government must go beyond the states' leadership and rollout strong and credible climate and energy policy in order to drive the necessary cuts to greenhouse gas pollution in the electricity sector, while also maintaining reliable and affordable power.

"The window of opportunity to tackle climate change is rapidly closing. Australia cannot settle for anything less than strong, credible climate and energy policy. The NEG is anything but that," he said.

The report is posted at www.climatecouncil.org.au/climate-council-roadmap-to-australia-s-clean-energy-future

The failure of a forestry giant's carbon offset project in Uganda

Kristen Lyons

It has been two years since the landmark Paris Climate Accord, committing signatory countries to reduce their carbon emissions in an effort to stabilise the world's climate and ensure a fair and livable future. Marking this anniversary, the One Climate Summit was recently held in Paris, drawing world leaders and celebrities together from around the world to hatch plans to promote climate solutions.¹ Given it is the world's poorest people – who are also the lowest carbon emitters – that are the most vulnerable in a climate changing world², rich industrial polluting nations carry a significant responsibility in reducing global emissions. So what's their plan?

Building upon outcomes from the 2015 Paris Agreement, the One Climate Summit has emphasised the central role of green investments in combatting global climate change. The so-called green economy touts private sector companies and financiers as central actors in driving responses to the climate crisis.

But what if companies, financiers and others invest in climate solutions that do more harm than good? And what do we expect from investors when the failings of the green economy are exposed?

The Oakland Institute's new report, 'Carbon Colonialism: Failure of Green Resources' Carbon Offset Project in Uganda', released in December 2017, lays bare the false solutions to climate change promoted by Western corporations and institutions in Africa.⁴ Drawing from extensive on-the ground research conducted between November 2016 and August 2017, this report reveals how Green Resources, a Norwegian industrial forestry and carbon offset project, undermines food security and livelihoods by excluding people from their own land in Kachung, Uganda.

This project illustrates how climate change is increasingly misused as a pretext to impose new forms of colonialism in Africa.⁵ The significance of these findings is amplified given Green Resources is one of the largest industrial forestry operators on the African continent, with activities that spread across a number of countries.

Green Resources' Kachung project is supported by a number of international financial institutions – including Norfund, the Netherlands Development Finance Company FMO and Finnfund – who are implicated in Green Resources' poor conduct.

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Poor conduct drives divestment

On the basis of an earlier expose⁶ of Green Resources, revealing mistreatment and violence perpetrated by the company in Uganda – through a campaign supported by Friends of the Earth Uganda – Green Resources' only carbon credit buyer, the state-owned Swedish Energy Agency, suspended funding in 2015. It has outlined ten actions for the company to undertake to reinstate payments. The following year, Green Resources' major shareholder, global forestry investment firm Phaunos Timber Fund, also divested from the company.

In the most up-to-date study of Green Resources in Uganda, this latest report shows that the company has failed to respond to the Swedish Energy Agency's requirements for reinstatement of carbon credit payments.⁷

The report finds that Green Resources over-inflates the employment opportunities it provides, as well as sidestepping responsibilities related to the health and safety conditions for its workers. Local villagers also continue to struggle to secure access to firewood and water, challenges Green Resources has done little to address. Most profoundly, villagers continue to struggle to access land to grow food and graze animals, driving food insecurity in the region.

Overall, the industrial monoculture plantation forestry and carbon offset project run by Green Resources at its Kachung site is simply incompatible with the presence and needs of local people who rely upon the same land for their livelihoods. The outcomes of this project directly undermine local livelihoods and threaten local villagers' very survival.

Carbon markets fail people and the planet

The failings of Green Resources' industrial plantation forestry and carbon offset project exposes, more broadly, the limits of carbon markets. While local villagers carry the social, environmental and other costs of this project, Uganda is unable to claim any of these carbon offsets as part of its own emission reduction targets.

This system is carbon colonialism at work, with the natural resources of an African country exploited by foreign interests under the guise of sustainable development, and at a high cost for the people and the environment.⁸

Such circumstances should be a matter of serious concern to Green Resources' shareholders and financiers, who share responsibility with the company in supporting a project that has such a detrimental impact on local populations.

As the Swedish Energy Agency reassesses whether to resume payments to Green Resources in early 2018, Carbon Colonialism is an irrefutable indictment on the failure of Green Resources to address the harmful impacts on local communities that derive from its' project activities.⁴

The disconnection between the aspirations for market-based solutions to the climate crisis, as championed at the One Climate Summit, and the reality on the ground for villagers affected by poor carbon offset projects, is palpable in the case of Green Resources' Kachung project. The social and environmental costs of carbon offset projects must be included in assessing the viability of such market-based solutions. On the basis of the expose of these projects shortcomings, companies and financiers have a responsibility to act. If they fail to do so, they may bare the economic consequences and an eroded social license.

Postcapitalising post carbon for the win

Karun Cowper

For many environmentalists, the “New Economy” is (mis)understood to be simply an economy that has transitioned away from fossil fuels to a renewable energy powered economy. The reality is that there’s not necessarily all that much postcapitalist about a mainstream green post-carbon economic vision.

Indeed postcapitalism, such as it is framed by (for example) Paul Mason in his 2015 book *PostCapitalism: A Guide to our Future* appears to be a framework that many eco-warriors are not even aware of let alone consciously aspiring towards.

So what is the postcapitalism, what is the New Economy? The New Economy Network of Australia defines the New Economy as follows:

“Many different movements have emerged around the world focused on the concept of a ‘New Economy’. Although they use different labels, such as the Social Economy, Solidarity Economy, Sharing Economy, Collaborative Economy, Steady State Economy and Community Economy, they all share two key goals: (i) to challenge the current dominant economic system, with its reliance on fossil fuels, large scale resource extraction and socially unjust structures and wealth distribution, and (ii) to create and strengthen economic systems that serve the needs of people in ways that are ecologically sustainable, socially just and culturally diverse.”

From my point of view, foundational to the emergence of the most interesting aspects of postcapitalist, New Economy developments are the Commons and Peer-to-Peer (P2P) and their interrelation.

P2P theorist Michel Bauwens describes the Commons as “an idea and practice, that has emerged as a new social, political and economic dynamic” and P2P as a “relational dynamic based on the assumed equipotency of its participants, organized through the free cooperation of equals in view of the performance of a common task, for the creation of a common good, with forms of decision-making and autonomy that are widely distributed throughout the network.”

This interrelation of the Commons and P2P has been termed by Yochai Benkler (Harvard University) as “commons-based-peer-production”.

Examples of existing commons-based-peer production are probably most familiar in the digital realm. Think of time banks, peer-to-peer lending, open-source software platforms like Linux, Mozilla Firefox, Wikipedia, Wordpress, Arduino, Raspberry Pi, Wikihouse, and many other digital technologies that are not based on a profit-making motive but rather enable

individuals to do and share things of value socially, outside of the market system.

But it’s not just in the digital space, we have an emergent wave of commons-based-peer-production in the physical world also that Jeremy Rifkin calls the “Internet of Things”. Open design communities are manufacturing in Fab Labs, makerspaces, and community workshops. Futurist Jose Ramos terms this “cosmo-localization” where we have the potential for localising production by drawing on open source global design commons for a wide variety of things including medicines, furniture, assistive devices, farm tools, machinery etc. These are produced locally using technologies such as 3D printers, CNC machines and low-tech crafts tools and appropriate technology.

We have the beginnings of a radically democratised new socioeconomic framework that enables increased capacity for innovation and resilience that prefigures new ecosystems for sustainable communities with solidarity that can be prototyped and defended politically at local and transnational scales. As Bauwens says “the new political agent of change is neither the proletariat nor the precariat, but the commoner, an empowered figure fit for the challenges of our times”.

Sadly it appears that not enough environmentalists are aware of these exciting developments and we have instead a post-carbon economy being sold to us largely within the framework of “sustainable capitalism”. Al Gore for example sells a “vision” that describes a green capitalism with capacity to “maximize long-term economic value by reforming markets to address real needs while integrating environmental, social and governance metrics throughout the decision-making process”. Expressed more simply, his view is that the market has a critical role in saving us from environmental disaster.

Closer to home, Australian Greens leader Richard Di Natale’s message to the “Left Renewal” Greens faction for them to “find a different political home” if they wanted an end to capitalism can only be interpreted as him being an adherent to a similar sustainable capitalist framework.

For Di Natale, Gore and their ilk, who knows whether it is a message aimed at not appearing too radical or whether for them it’s truly easier to imagine the end of the world than the end of capitalism? No doubt this sentiment speaks to the despair in the hearts of many a stalwart environmental (and social justice) campaigner resigned to the ongoing abject failures of the left and not feeling there is anywhere else to turn.

“relational dynamic based on the assumed equipotency of its participants, organized through the free cooperation of equals in view of the performance of a common task, for the creation of a common good, with forms of decision-making and autonomy that are widely distributed throughout the network.”



Photo by Occupy Toronto.
flickr/Eric Parker, CC BY-NC

And sadly, apart from this sustainable capitalist delusion, for many all we have is opposition. Urgent, necessary, critically-needed opposition. But where is our vision for a world beyond this opposition, beyond our current impasse? Where are our practical creative solutions in the here and now that will enable us to transition to a future that is environmentally sustainable, socially just and spiritually fulfilling? Where is the ideological and economic framework that will lift our vision, our hearts and our feet on a trajectory towards meaningful victory beyond a single campaign? What is our narrative?

For me, the most hopeful narrative emerging is that coming together of various threads I have touched on above which we can call postcapitalist. My belief is that authentic green movements have a critically important role to play in this new economic movement. None more so than grassroots groups such as Friends of the Earth with their track record of community organising.

In our campaigning, there are clear echoes in the way that we organise non-hierarchically, in our capacity to bring out the best in each other via Peer-to-Peer (P2P) governance processes and consensus decision-making. In our cooperative use of collaborative technologies and digital media platforms and tools. In our sharing of common resources. In our practice of open sourcing our knowledge through citizen journalism, citizen science, grassroots educational resources and processes. In our values that recognise our precious environment as a commons to be cherished and managed for the welfare of all living beings. In our solidarity with First Nations and oppressed peoples around the world and our capacity to engage with them and invite their leadership in non-tokenistic ways. In our recognition that capitalism isn't working.

All of these above are common skills and practices to grassroots environmental activists and New Economy / postcapitalist movements. Postcapitalism is not about inventing something

new or imposing unrealistic utopias but is about building on existing movements, emerging successes and resilient ecosystems. It's about prefiguring, as much as is conceivable, the lives we want in the here and about maximising progressive utilisation of both ancient and modern, physical and non-physical, human and non-human potentialities.

For more information about the New Economy in Australia check out the New Economy Network Australia at www.neweconomy.org.au

The following is a brief excerpt from their website further explaining some of the fundamentals of New Economy movements:

New economy movements around the world share a similar set of principles that we hope will underpin the emerging 'New Economy Network Australia' (NENA):

Ecological Sustainability: That economic activity not only respects and operates within ecological limits, bioregional health and planetary boundaries, but also supports the regeneration of natural systems and recognises and upholds the inherent rights of nature.

Social Justice: That everyone can participate and benefit from economic activity in inclusive and equitable ways and that this requires working in solidarity to address the historical and ongoing marginalisation of certain groups by racism, imperialism, classism, patriarchy and other systems of oppression.

Democracy: That economic decision-making is participatory, inclusive and transparent and emphasises collective stewardship and management of economic resources, activities and outcomes.

Place-based / Emphasising Locality: Creating greater resilience and strengthening community by rooting wealth and power in place through localised economic activity.

Karun Cowper is a member of Friends of the Earth Perth.

Where is the ideological and economic framework that will lift our vision, our hearts and our feet on a trajectory towards meaningful victory beyond a single campaign? What is our narrative?

CSIRO planning US military funded genetic extinction experiments in Western Australia

Louise Sales

A raft of emails ('The Gene Drive Files') obtained through a Freedom of Information request reveals that CSIRO and Adelaide University scientists are part of a US military funded global network researching a risky new genetic modification (GM) technique referred to as gene drives.¹ The group have already identified six potential islands in Western Australia where they intend to use the technique to drive local mice populations to extinction.²

Defence Advanced Research Projects Agency (DARPA - the US military's research arm) is contributing US\$6.4 million to fund the Genetic Biocontrol of Invasive Rodents Program (GBIRD). This is being spread between the CSIRO, Adelaide University, several US research institutes and the NGO Island Conservation.

The release of gene drives could have potentially catastrophic ecological consequences. Even gene drive proponents have now admitted that the gene drives are too risky to be released into the environment.³ We find it incredible that CSIRO and its GBIRD partners are already considering the environmental release of this technology.

Gene drives are a new and highly controversial technique that can force altered genetic traits through successive generations. The GBIRD scientists intend to use the technique to develop mice that only produce male offspring in order to drive local populations to extinction.

Mice are notorious for stowing away on boats, which is how they have spread globally. One of the proposed release sites for the gene drive mice is Boullanger Island - a popular tourist destination just 1 km from the mainland. There is no way that a release of gene drive mice there could be geographically contained.

Most rodents are considered keystone species in their ecological communities as herbivores, seed eaters and seed dispersers, and prey for many carnivores. Many other species depend on them for survival. The ecological impacts if mice are driven to extinction in their natural habitats in Europe and Asia could be catastrophic.

Gene drives are a classic 'dual use' technology, meaning that gene drives ostensibly developed for one use could also be used as a weapon.

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3. Zimmer, C. 16 Nov 2017, 'Gene Drives' Are Too Risky for Field Trials, Scientists Say', www.nytimes.com/2017/11/16/science/gene-drives-crispr.html
4. Synthetic biology is an extreme form of genetic engineering that involves re-engineering and designing genes to create new synthetic organisms that do not exist in nature.
5. <http://genedrivefiles.synbiowatch.org/attachment-5-keystone-draft-consulting-agreement/>



For example, gene drives could be developed to make insects, parasites or microbes spread disease or toxins. And releasing a gene drive into agricultural fields could attack a country's food production. DARPA has sunk approximately US\$100 million into gene drive research making the agency probably the largest single funder of gene drive research on the planet.

DARPA has no interest in funding public interest research. It is interested in the militarisation of this technology and it is deeply disturbing that CSIRO and Adelaide University are aiding and abetting it in this work.

In the GBIRD coalition, CSIRO has the highly conflicted responsibility of both promoting gene drives and assessing their risks. According to the FOI documents, the CSIRO is planning community engagement "as part of a wider effort to gain social license for environmental applications of synthetic biology⁴ technologies".⁵ CSIRO has allocated A\$3.5 million for community and stakeholder research related to synthetic biology and is attempting to secure more money from DARPA specifically for this work on the GBIRD project.

CSIRO scientists have already decided they want to release gene drive mice into the environment. The community engagement work they are planning is no more than a cynical marketing exercise. They clearly have no interest in a genuine societal debate on the use of this technology.

The federal government is currently reviewing whether new GM techniques such as gene drives and CRISPR should be regulated. CSIRO gene drive developer and GBIRD partner Mark Tizard is currently advising both the Department of Health and Food Standards Australia New Zealand (FSANZ) on the regulation of new GM techniques.

This starkly illustrates the extent of the capture of our regulatory agencies by vested interests. Here we have a gene drive developer who has called for the complete deregulation of new GM techniques such as CRISPR advising the Government on whether these new techniques should be regulated.

The government needs to urgently remove individuals with clear conflicts of interest from its advisory committees and introduce a moratorium on gene drive research.

Louise Sales is the coordinator of Friends of the Earth's Emerging Tech Project. louise.sales@foe.org.au, www.emergingtech.foe.org.au

Australia could become the first country in the world to deregulate genetically modified animals

Louise Sales

Proposed changes its gene technology regulations could make Australia the first country in the world to allow new genetic modification (GM) techniques to be used in animals with no regulation. The new techniques, which include CRISPR (clustered regularly interspaced short palindromic repeats), are collectively referred to as gene editing. Scientists are using these techniques to develop disease-resistant animals that can be housed in intensive conditions without getting sick.

The Australian government claims that when these techniques are used to make small changes to genes they pose the same risk as natural mutations and therefore shouldn't be regulated. Prominent genetic engineers disagree – with over 60 international scientists signing a statement calling for these techniques to be strictly regulated as GMOs.

According to Dr Michael Antoniou, a genetic engineer and Head of the Gene Expression and Therapy group at King's College London: "[T]he science is clear. These new genetic engineering techniques pose very similar risks to older techniques and need to be assessed for safety before being used in our food."

Australia's approach sits in stark contrast with New Zealand's. The New Zealand government has stated it will regulate these techniques as GM – largely because of concerns over exports to sensitive markets such as Europe and China.

The US Food and Drug Administration is also proposing to regulate gene-edited animals.

Take action: Stop the government from shredding the rules on GMOs. Please email the Assistant Minister for Health, Bridget McKenzie, and ask her to urgently intervene to ensure that these new GM techniques are assessed for safety before being used in our food and our environment: <http://gmfree.org.au>

Louise Sales is the coordinator of Friends of the Earth's Emerging Tech Project. louise.sales@foe.org.au, www.emergingtech.foe.org.au



Brisbane celebrating 50 years of direct action for civil liberties

Robin Taubenfeld

When I heard that people who had organised Brisbane's pivotal 1967 Civil Liberties march were getting together to remember, celebrate, and reflect upon the event, I knew I had to go along – to be in the presence of those whose names I had heard, but faces I did not know from that era.

As a (more) recent migrant to the region, I have taken great interest in the anti-uranium campaigns and the peace movement and their histories and have also been heavily involved in helping coordinate community responses to the G20 meetings in Brisbane in 2014. While G20 police liaison took umbrage at my “jokingly” referring to them as the armed face of the state, I have no doubt that their *modus operandi* was to prioritise law and order over civil liberties. Still now, we are constantly needing to reiterate to both activists and the wider community that in Queensland, we have that right to assemble – without seeking the authority of the state: that we do not need a permit, even if our place of assembly is the street and even if we want to march.

The ability to claim this, and its articulation in law under the Peaceful Assembly Act, comes from the efforts of those people who put their bodies on the line in the 1960s and '70s – the organisers of the 1967 march, the ripple effects of their actions and their collective networks.

Fifty years on, it may be hard to imagine that people now in their late 60s and older were being disowned by their families for their “radical” behavior, taking to the streets to protest without permits, exploring their sexuality, looking for ways to better integrate creativity into their political expression, skill-sharing, mentoring and educating each other, learning about land rights and invasion (if they weren't experiencing this first-hand themselves) – all while attempting to dismantle the dominant paradigm of industrial capitalism in all its racist, sexist, ecologically destructive and militaristic glory.

“I'm not a Communist; I'm a radical socialist!” UQ student activist Anne Richards tried to explain to her disapproving father. People like Anne, now a university lecturer, lived on the poverty line, putting their time and energy in to opposing existing power structures and to creating alternatives.

They started Brisbane institutions like the Whole Foods Coop and 4ZZZFM, they published and distributed anti-war and anti-capitalist booklets such as *How Not to Join the Army*, the *Little Red School Book* and the *Guide to Shoplifting*, they held False Registration paper parties, a Marijuana



Women's peace march in Brisbane.

smoke-in on the UQ campus, developed radical theatre and art, explored women's empowerment and women's liberation, set up FOCO (once claimed to be 'Australia's most evil and repugnant nightspot'), formed a National Liberation Front Regiment on the UQ campus, studied or taught, organised for students' rights, rioted on campus, and took to the streets in the highly repressive state of Queensland.

Children of the 1950s, their actions did not suddenly manifest, but evolved out of a need to challenge the stultifying post-war conservatism they had grown up with. Unlike other Australian university campuses at the time, however, “UQ did not have a strong left tradition, and consequently the radical students ... drew their initial inspiration from the US student revolt and from Catholic social activists...” rather than from the Labor Party, wrote Mick Armstrong in his 2001 book *One, Two Three, What are We Fighting For?*

Not dismissing other significant political and social justice campaigns of the era, organisers of the *Fifty Years of Direct Action Queensland* event held on the UQ campus in September 2017 chose to focus on the September 1967 “unpermitted” march of 3,500–5,000 UQ students, staff and their supporters who sat down and occupied Roma Street in central Brisbane. The police response was brutal – over 100 people were arrested, and the moment was pivotal for the campaign for civil liberties.

Despite the repression of the Joh era, or thanks to it, the movement grew into vibrant marches for a moratorium on the war in Vietnam, and for

the right to assemble and march. Ten years on, as the Cold War brewed, anti-uranium marches defied police brutality, Women's House had been set up, 4ZZZ was on air, HECATE was being published, a Queensland community development network had been established and the mostly-white movement had a greater awareness and understanding the need to support struggles for Aboriginal rights.

Aiming to remember the Civil Liberties March, take stock of its impacts, successes and failures, and to explore its relevance to contemporary activism, the day-long *Fifty Years of Direct Action* event brought key thinkers, activists and organisers from the 1960s and '70s: Dan O'Neill, Peter Wertheim, Di Zetlin, Mitch Thompson, Carole Ferrier, Cheryl Buchanan, Uncle Bob Anderson, Brian Laver, to name a few, together with their more contemporary counterparts: Drew Hutton, Ian Lowe, Adrian Burrugabba, Ellen Roberts, Bob Carnegie, plus more.

Widely acknowledged at the event was the predominance of men in leadership and white people at the core of the movement, a general – or at least initial – failure to make the links between Aboriginal rights and the student movement and a belated recognition of the importance of women's liberation, including the significance of Rosalie Bognor and Merle Thornton's chaining themselves to the "Men Only" bar at the Regatta Hotel in 1965.

And for me, the most powerful voices were those of the First Nations and women speakers: Adrian Burrugabba speaking for Wangan and Jagalingou Country and the community's determination to stop the Adani Carmichael mine; Cheryl Buchanan reminding the audience

that Aboriginal people "do not have what we fought for in the 70s" and challenging the audience to take action every day to make a difference in the world; Di Zetlin exploring the "contradictions" that led to and formulated the movement – including the emotional burden borne by women of living when abortion was illegal and contraception was impossible to get while there was a push for "sexual freedom that they were not really in a position to control"; Jennie Harvey explaining the power of story-sharing, consciousness-raising and direct action to set up structures that supported women, such as Women's House; Anne Richards, the radical socialist mentioned above – and more.

In fact, all of the speakers brought something new, special and important in their stories and analysis. And there are too many to mention here. Luckily, in this digital era this event was recorded and videos of speakers are available online.

Fifty years ago, activists may not have used the terms "empowerment", "intersectionality", "structural violence," "privilege" or "colonialism" yet is clear that the understandings behind these words have evolved from the thought, work and action of the people involved in the 1967 march and their contemporaries. And it is clear that the rights to assemble and march – and for broader political expression – are hard won, worth fighting for and critical to maintain.

I encourage you to take the time to visit the *50 Years of Direct Action Queensland* conference facebook page to check out the fascinating archival photos and footage and to watch the short videos of the speakers at this event.

www.facebook.com/Fifty-Years-of-Direct-Action-Conference-Archive-198572730886973/

Fifty years on, it may be hard to imagine that people now in their late 60s and older were being disowned by their families for their "radical" behavior, taking to the streets to protest without permits, exploring their sexuality, looking for ways to better integrate creativity into their political expression, skill-sharing, mentoring and educating each other, learning about land rights and invasion (if they weren't experiencing this first-hand themselves) – all while attempting to dismantle the dominant paradigm of industrial capitalism in all its racist, sexist, ecologically destructive and militaristic glory.

Protest in Brisbane.



Our chance to cut Victoria's emissions

Zianna Fuad

Last year was the world's hottest year on record - even without an El Nino boost. And seven of Australia's ten warmest years have occurred since 2005. We need to act quickly to limit our greenhouse emissions and reduce the disastrous effects of climate change.

This year we have an opportunity to do just that. Victoria will set its first legally-binding Emission Reduction Target (ERT). Victoria will set six interim targets between now and reaching the final target of 0% by 2050, and this is the first legally-binding one.

Ambitious targets are essential in driving the transition away from coal to renewable energy. Thanks to the Climate Change Act 2017, each target has to be more ambitious than the last to ensure a downward trend to the final target of 0% by 2050. This means this first target is really important. The more ambitious it is, the more ambitious each target that follows will have to be.

The Victorian government lucked out - the current target, a reduction of 15-20%, has already been met because of the closure of the Hazelwood coal power station last year. But the government can't continue relying on privately-owned companies closing power stations to cut greenhouse emissions. The government must take bold initiatives to get this state to net

0% emissions to safeguard the future health and prosperity of Victorian communities. Most importantly, the Latrobe Valley community deserves a plan for a transition away from coal that ensures they have long-term job security and a thriving community.

Polling by Friends of the Earth in 2016 showed a large majority, 70% of respondents, want the Victorian government to commit to major reductions in our state's greenhouse pollution.

We acknowledge the Andrews government's actions so far on climate change. They've set the Victorian Renewable Energy Target, strengthened the Climate Change Act and legislated a permanent ban on unconventional gas. But they can't stop now. The lack of federal government leadership means that states must ramp up measures to rapidly reduce greenhouse pollution and transition our economy away from our current reliance on coal.

In the heat of the election year, the state Liberals are talking nothing on climate policy - do they even have one? Meanwhile, they loudly call for new coal power stations and extensions for coal licenses. They are in opposition now, but could be in power within a year. We need both parties if we want to be a leader in climate action.

There's no more time to defer strong climate action. We want the Andrews government to continue to prove its climate credentials and make Victoria's ERT significantly more ambitious than the national targets. We have the technology, we just need to political will, and for that we need you.

The review will be open to public submissions. Once open - we encourage you to send in a submission and use this opportunity to share your vision for Victoria's low-emission, safe-climate future. Keep an eye on the Quit Coal facebook page (www.facebook.com/quitcoalvic) and the Act On Climate page (www.facebook.com/ActOnClimateVic) for more on ERTs and submission alerts.



Victoria's Emissions Reduction Targets: A Primer

Kate Wattchow, Leigh Ewbank and Alex Wylde

The federal Coalition government's failure to act on climate change is well known. Recently released data shows national emissions are increasing and that Australia will fail to meet emissions cuts it pledged under the Paris Agreement.

Regressive political forces at the national level have seen states and territories step up and lead on climate change. But they'll have to make the most of existing initiatives to maintain the momentum.

The Andrews government strengthened the Victorian Climate Change Act in 2017 after winning the support of the Greens and crossbenchers. The Act legislates a target of zero net emissions by 2050 and requires governments to set interim Emissions Reduction Targets every five years.

The Andrews government committed to set the first two Emissions Reduction Targets for 2025 and 2030 this year. An independent panel has been assembled to advise the government on targets to reduce the state's greenhouse gas emissions.

Friends of the Earth's Act on Climate collective understands that policy processes can be complicated. It can be difficult to figure out how we can take part in these processes. Because of this, we have put together this FAQ to explain the process.

What are Victoria's current greenhouse gas emissions?

In 2015, Victoria emitted approximately 120 megatonnes (Mt) CO₂-equivalent, more than Western Australia, South Australia, Tasmania and the ACT combined. Greenhouse gases such as CO₂ and methane are generated from activities such as burning fossil fuels, agricultural practices, and land clearing.

What are Emissions Reduction Targets?

Emissions Reduction Targets, or ERTs, refer to levels of emissions that a government commits to reduce over a certain time period. For example, if a state with annual emissions of 120 Mt CO₂-equivalent each year adopted a target of 50% reductions by 2030, it would be required to cut emissions each year to reach 60 Mt CO₂ per year by 2030.

ERTs provide transparency and accountability. They must be incorporated into government policy making, send a signal to the business sector about where the state is heading, and provide a way for community members to hold the government to account for their decisions.

What are Victoria's Emissions Reduction Targets?

Victoria has a binding target of zero net emissions by the year 2050. As a binding target

the government is legally required to achieve it by or before the set date. In order to reach the 2050 target the government is required to set interim targets every five years.

The Andrews government has set a voluntary target of a 15-20% reduction in emissions below 2005 levels by 2020.

An independent panel is now undertaking research to advise the government on targets for 2025 and 2030. Unlike the 2020 target, these targets will be legally binding.

What is the Independent Panel?

The independent panel on ERTs is comprised of three people with expertise in climate change science, policy, and the electricity sector. The panel will be writing and releasing an issues paper regarding the Emissions Reduction Targets, taking submissions from the public, and holding stakeholder sessions before making final recommendations to the government.

Who is on the Panel?

Victorian Minister for Energy, Environment and Climate Change, Lily D'ambrosio, appointed Greg Combet, Dr Penny Whetton and Dr Lorraine Stephenson to the panel.

Greg Combet is well known as Minister for Climate Change in the Gillard Government. Combet had carriage of the Gillard government's Clean Energy Plan which included a national price on pollution as well as the establishment of the Clean Energy Finance Corporation and Australian Renewable Energy Agency. Prior to public office, Greg Combet was secretary of the Australian Council of Trade Unions.

Dr Penny Whetton is an Honorary Research Fellow at the University of Melbourne's School of Earth Sciences and CSIRO Oceans and Atmosphere team. Dr Whetton is also a lead author of the Intergovernmental Panel on Climate Change's Nobel-prize winning fourth assessment report.

Dr Lorraine Stephenson has a long history in the corporate sector, with a focus on the energy sector. Stephenson's current role includes analysing risk mitigation and creating opportunities in the context of business responses to climate change. Dr Stephenson is a member of the Liberal New South Wales government's Climate Change Council, and previously worked for Origin Energy.

What is the Inquiry timeline?

The independent panel has a lot of work to do in a short time-frame. It is expected to release an issues paper, call for public submissions, and hold stakeholder sessions before giving its final recommendations to the Victorian government in June 2018.

How can you get involved?

The main way for community members who are concerned about climate change to have input into the process will be through the public submissions phase. Community organisations, sustainability groups, businesses, and community members will be able to send a submission to the panel to express support for ambitious and science-based Emissions Reduction Targets.

A high level of engagement from the community will send a signal to the panel and the government that there is strong community support for ambition when it comes to tackling climate change.

Friends of the Earth's Act on Climate collective are keeping a watching brief on the Emissions Reduction Target process and stand ready to respond. To receive action alerts and an invitation to make a submission go to www.actonclimate.org.au/ambitious_targets

Clean Coal LOL ... but carbon capture and storage off Ninety Mile Beach is no laughing matter

Catherine Hearse and the Quit Coal Collective
at Friends of the Earth Melbourne

Golden Beach is an idyllic section of Victoria's Ninety Mile Beach. It boasts a pristine coastline, plentiful fish, multitudes of birds and the skeletal remains of an 1897 shipwreck. But there is a cloud hanging over this lovely place.

A publicly-funded state government project called CarbonNet has earmarked the area for carbon storage. This February, seismic testing for a suitable carbon storage site began in the waters off Golden Beach.

Why are we concerned about carbon capture and storage (CCS)?

CCS is also known as geosequestration or carbon control and sequestration (or as we mostly call it, 'the money pit'). It involves removing CO₂ from power station flue gases by absorbing them into an aqueous solution containing chemicals known as amines. You then extract the CO₂, compress it into a liquid and pump it into a storage facility. In this case, the space left by an old gas reserve off the Gippsland coast.

There are well-founded and grave concerns about CCS. Despite billions of dollars being spent in projects worldwide, the possibility of dangerous leakage remains, rendering the exercise futile. Leakage of any more CO₂ than 1% every 1,000 years would undermine the process entirely.¹

Additionally, the chemicals that they are using to try to trap carbon can degrade into highly toxic compounds that may cause adverse health effects and environmental damage. We don't yet know how the leakage of these compounds into the marine environment will affect marine life and ecosystems. The results could be toxic and devastating. The released amines degrade into highly toxic compounds that may cause adverse health effects and environmental damage and include nitrosamines, one of the most potent carcinogens in tobacco smoke.²

So, CCS makes coal power plants produce greater quantities of toxic chemicals, reduces their efficiency and is exorbitantly expensive. More power is required to run the capture process and further power to capture the carbon emitted for that process, in a continuous feedback loop. The cost of capturing the extra carbon was not considered when CCS was first proposed, resulting in the economic failure of pilot projects so far.³

Victoria's coal policy, *Statement on future uses of brown coal*, relies heavily on the imagined

future success of CCS to continue the use of coal. Alarming, these so-called clean alternatives include converting brown coal to hydrogen to be sold to Japan for motor vehicle fuel. (For a critique of this policy, see Catherine Hearse's article in Chain Reaction #131.)

Until we give up on the fantasy of clean coal through CCS we will not address the real issue: the need for a complete phase out of coal for a safe climate future.

CCS is also a highly ineffective way to reduce carbon output. It would be easily outpaced by simple reductions in energy use. One commentator calculated that, "Simply by not overfilling our kettles, we could remove about the same amount of CO₂ as saved by CCS at a major power station."⁴

State and federal governments and the Global CCS Institute have spent millions in support of CarbonNet. Nationally, Australia has spent \$1.3 billion on CCS technology.⁵ Truckloads of money on an experimental technology that's not yet proven to work anywhere. The Victorian government must stop funding CCS research with public money and re-allocate any remaining funds towards job creation in the LaTrobe Valley.

How does it compare to renewable energy like wind and solar?

Solar and wind energy are both currently cheaper than CCS and continuously decreasing in price. Renewables are already reliable, and unlike CCS, are reducing our carbon output. The funding wasted here would be better spent on improving and rolling out proven renewable technology, but there is a dangerous, misplaced hope keeping old coal alive in a warming climate.

Sarang Supekar and Steve Skerlos, from the engineering school at University of Michigan, write: "Keeping the coal in the ground is not only the most economical way of reducing carbon emissions, it is a sure way to save thousands of lives every day due to cleaner air. It is a classic case of "prevention," through decarbonization of energy systems, being better and cheaper than the "cure" of CO₂ capture."⁶

The seismic testing at Golden Beach shows that the state government and CarbonNet are taking the CCS process seriously despite its unproven and risky reputation. The Gippsland coastal community near Golden Beach has recently been subjected to the exhausting process of fighting onshore gas

Federal Coalition ministers with a lump of coal in federal parliament.



FROM THE FOLKS WHO BROUGHT YOU
CLEAN COAL



exploration, and in nearby Seaspray disused fracking wells sit alongside farmland. Fortunately the locals are well versed in the arts of challenging toxic industries, but they are few in number, and need our support.

Follow the 'No Carbon Storage on the Ninety Mile' facebook page to follow local news at Golden Beach. If you know anyone living or holidaying at Golden Beach, make sure they've heard about this.

Join Friends of the Earth Melbourne's Quit Coal collective in our fight against CCS technologies and new and existing coal:

Meetings: 6pm Wednesdays, upstairs @ Friends of the Earth, 312 Smith St, Collingwood.

Website: www.quitcoal.org.au

Email: info@quitcoal.org.au

More information on CCS:
www.melbournefoe.org.au/carbon_capture_and_storage

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The Federal Coalition's climate failure: An overview

Leigh Ewbank – Act on Climate coordinator, Friends of the Earth Melbourne

The federal Coalition government's poor record on climate change policy isn't from inaction or incompetence. Evidence shows it has actively undermined efforts to address the issue. Since 2013 the Coalition has:

- Defunded the Climate Commission.
- Defunded the CSIRO's climate change research programs.
- Appointed a 'climate sceptic' to review the national Renewable Energy Target.
- Slashed the national Renewable Energy Target by 20 percent.
- Attacked wind farms and backing a hostile senate inquiry into the technology.
- Presided over the loss of 1 in 3 jobs in Australia's renewable energy sector.
- Suggested "coal is good for humanity."
- Brandished a lump of coal in the House of Representatives while Australians on the east coast sweltered through a record-breaking heatwave.
- Attempted to abolish the national Clean Energy Finance Corporation twice despite it delivering a return on investment to taxpayers.
- Suggested that so-called "clean coal" and gas power should receive funding from the Clean Energy Finance Corporation.
- Cut the budget of the Australian Renewable Energy Agency (ARENA) by \$500 million.
- Ruled out an Emissions Intensity Scheme before considering the merits of the policy.
- Repealed the carbon price penalty for corporations that pollute our air and cause climate change.
- Let polluters off the hook and forcing taxpayers to pay for emissions cuts by establishing the flawed Emissions Reduction Fund.
- Supported Adani's Carmichael coal mine and export industry.
- Continued calls to overturn the Victoria's legislated ban on risky unconventional gasfields and moratorium on onshore gas.
- Attacked environment groups and charities in the press, with hostile reviews, and the appointment of a long-standing critic as Charities Commissioner.
- Undertaken a tokenistic climate policy review and buried the findings a few days before Christmas.

Act on Climate will be keeping a watchful eye on the Federal government's climate change policies. We endeavour to hold them to account for any actions that undermine Australia's contribution to global efforts to tackle climate change.

The love and loss of Granite Mountain forest

Darcy M. Hesse

I arrived at the Granite Mountain Blockade in so-called East Gippsland (Bidwell, Monero, and Gunai-Kurnai Country) after logging had already been stopped for several days. A tripod was blocking the access road into the area of forest to be logged (the 'coupe'). During the course of the blockade, which lasted 10 days in total, I was able to experience this magnificent forest in a multitude of ways. This piece is about the love and loss of Granite Mountain forest.

I'm drowning in moss, subsumed in forest sounds, feeling the pull of my soul to dwell in these trees forever. I am human, but an animal human. I look at the forest with human eyes, but with animal human eyes. I cannot separate what I am from this forest around me, from the pulse of life, the beating heart of immeasurable living things that surround me, that are, in this moment, giving me life, sustaining me, enabling me to be a human. I am visitor to this place, and as a visitor I have fallen in love.

We're sitting on the mossy log listening to bird calls, seeing how many different sounds we can pick up on. I lose count. There are 327 bird species within so-called East Gippsland's forest. I can't remember all of their names, but after a while I make friends with one which has a high, trilling call. The bird and I are having a conversation, a musical call and response. About what, I'm not quite sure, but there's something magical in sharing sounds with a being perched high above you.

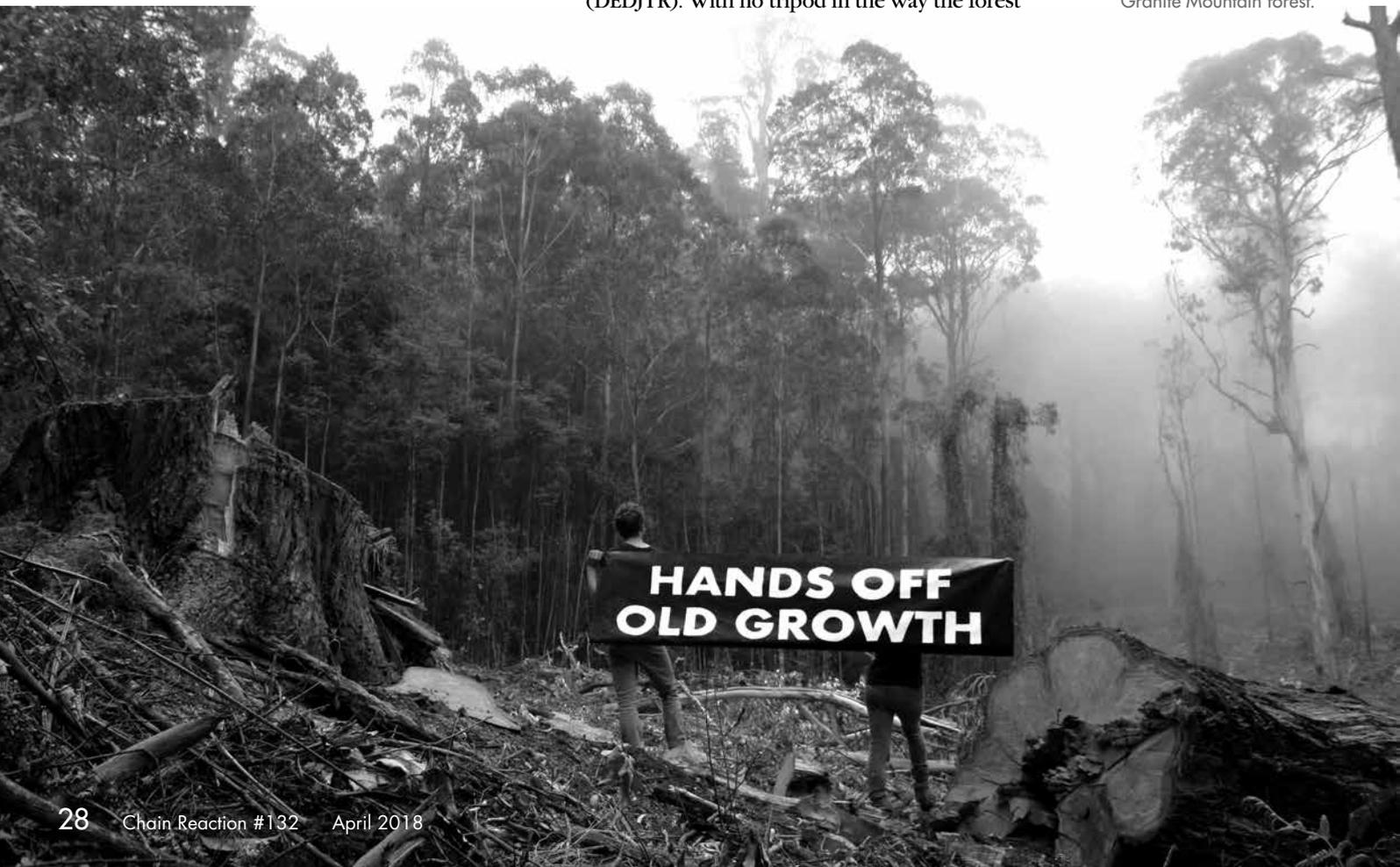
Mists travel through these forests, seeping into tree hollows, hiding the call of the Boobook owl and the path of the Swamp wallaby. Come dawn the first rays of sunlight illuminate my surrounds through the mist with an emanating glow. The leaves are crisp beneath my touch, as I smell the dew drops of the new day. *Thank you forest, I think. This moment I am alive because of you, just as you are alive this moment because of our ten-day blockade.*

This forest no longer exists

Our blockade has been dispersed by the Victorian Labor Government's police force, Search and Rescue (although who are they rescuing?), and "Forest Cops" - government officials from the oddly-named Department of Economic Development, Jobs, Transport and Resources (DEDJTR). With no tripod in the way the forest

I am visitor to this place, and as a visitor I have fallen in love.

Granite Mountain forest.



is murdered, destroyed by alien monsters. Big, clawing bulldozer machines, unforgiving war vehicles. Their destruction is absolute.

As I wander in its aftermath I see a giant old hollowed tree lying on the ground, spray paint marking it as a pulp log. Was this the home of the Boobook owl we heard last night? I know my friend the bird-singer has lost its home. How many others with it? How many others were caught unawares beneath the jaws of the aliens? Perhaps my friend knew that solitary bird which is now flying around distressed on the edges of the war zone. Has this bird lost a family as well as a home? These dozer monsters have gouged out the heart of life in this forest. The land is empty now.

Seeing these bulldozer monsters reminds me of Avatar (the blue alien movie version) and the walking death robots controlled by minute humans inside them. It makes me realise that it's not possible to destroy a forest without becoming something more / other-than-human. When we're fully human, when we surrender to our bodies, our emotions, our mind, we cannot help but realise the destruction of the forest is the destruction of ourselves too, and that "me" is also an ecological community. To murder a forest through clear-fell logging we must forfeit "ourselves" to become "alien": part-human, part-bulldozer, part hyper-rational technological avatars stored in the "cloud". It is this alien which allows us to look at the forest in an abstract sort of way, economically analysing its current value on the global stock exchange. It is this alien which protects a logger from the screams of the dying. (I recognise that loggers are humans too, and they are mostly the foot soldiers in an epic global capitalist marketplace which requires people to sell their labour performing devastating tasks in order to eat and sleep in safety.) It is this alien which murdered the Granite Mountain forest.

The forest is gone. I am back in Naarm (Melbourne), and am overwhelmed by grief. I mourn the stupid, senseless loss of this ancient forest I fell in love with. I cry for the loss of humanity, the loss of humans as intrinsically animal, intrinsically ecological. For a while my grief is all encompassing. I am paralysed by guilt, and every morning I wake up thinking of that beautiful forest that no longer is.

Allowing myself to feel these emotions is hard. I am surrounded by a society which considers despair, sadness, anger, and rage as negative and disproportionate to reality. Apparently, these are emotions to be carefully boxed away with airtight lids. But it is only in creating time and space for these emotions that I was able to look around my community, both human and ecological, and feel hope. I realised that I am *always* surrounded by beings recognising what it means to be ecological. The magpie interrupting the tram noise, the moisture turning the dozer to rust, the human constructing a tree-sit. The relentlessness of nature's forms gives me faith that we are not helpless in the face of the monsters.

Indeed, it helps me recognise the ripples of impact the Granite Mountain blockade has



Granite Mountain forest.

already had. I notice the almost daily media debate on the "forest wars", and there can be no doubt that we have helped to lift the voice of forests within Victoria's consciousness. And I realise that the relentlessness of nature's forms echoes throughout time. As we drove back towards Naarm we followed a flock of parrots through Errinundra National Park, their feathers flashing bright red against the rich greens of the high canopy. These parrots were flying because of 600 people who took direct action in the 1980s, forcing the creation of this Park. I am able to revisit the forests of my childhood in the southern Snowy River because of an intense period of direct action in the lead up to the 2006 election, which caused the Bracks Labor government to link the Errinundra National Park with the Snowy River National Park. And the stunning Goolengook forest still exists because of a five-year continuous blockade. These cyclical threads of history remind me that we have always, and will always, challenge the destruction caused by the bulldozer monsters.

In fact, the number of ways we continue to tie these monsters up is limited only by our imaginations. We can climb trees to save trees, crafting tree-sits and tripods, tying the monsters to ourselves. The Granite Mountain "coup" is not yet completely logged, and so for the remaining forest there is still time. We can tie the formal political system in knots, as the current FoE Forests Collective and GECO's campaign for the Emerald Link are doing, encouraging humans to use their voting power to show there can be no "Government" decision without recognising humans *are* ecological and ecology *is* human. We can create space for the voices of the forest, listening to the bird calls outside our window, projecting videos of the Leadbeater's Possum at busy intersections and onto Parliament House, and conducting the citizen science that GECO does so wonderfully. And in doing all of this, we can allow ourselves and those around us to be ecological beings, transforming our very existence into a blockade for the meaning of humanity.

The relentlessness of nature's forms gives me faith that we are not helpless in the face of the monsters.

VicForests facing charges of illegal rainforest logging

Friends of the Earth Australia affiliate Goongerah Environment Centre (GECO) had a major breakthrough in March. The Victorian the Department of Environment, Land, Water and Planning finally laid charges against VicForests for illegal rainforest logging that GECO reported two years ago. GECO's relentless reporting, monitoring, advocacy and public campaigning for the department to act on a number of cases of illegal logging has finally paid off.

Four serious breaches of rainforest protections in East Gippsland that were reported to the department by GECO were thrust into the spotlight recently by Fairfax media with a February 25 story by Farrah Tomazin in the *Sunday Age*.

For two of the four breaches that the *Sunday Age* story focused on, the two-year statute of limitation period has expired. This means prosecutions can no longer go ahead. But just a couple of weeks before the limitation period expired for one of the four rainforest breaches, the department finally acted after intense pressure and media scrutiny. The department is now prosecuting VicForests for illegally logging the Serpentine Creek Rainforest Site near Cann River in East Gippsland. The fourth breach remains under investigation with pressure mounting for another prosecution.

The Serpentine Creek logging operation caused serious damage to protected warm temperate rainforest. Goongerah Environment Centre and the Fauna and Flora Research Collective first reported the logging operation to the department in April 2016. After a near two-year investigation, the department concluded that protected rainforest buffers were logged in breach of the law.

It is the first time the government's forestry regulator has laid charges against the logging agency since the Andrews government was elected, despite dozens of serious breaches reported by the community where regulatory action is yet to be taken.

A directions hearing will be held in the Orbost Magistrates Court on April 19. If found guilty of breaching the Sustainable Forests Timber Act, VicForests could be fined up to \$38,000.

Goongerah Environment Centre (GECO) spokesperson Ed Hill said: "We're pleased to see the department carry out their role and enforce the laws that protect our precious rainforests.



Serpentine Creek.

we hope this prosecution is the beginning of a new approach by the Andrews government and we expect them to lay charges against VicForests for dozens of other breaches currently under government investigation.

"VicForests has shown systemic failure to adhere to environmental protections. Victorians expect that if a rainforest is illegally logged, the perpetrators will be prosecuted. Under the previous Liberal government VicForests were let off the hook after charges were laid against them for logging rainforest in 2012. We hope this time the Labor government will follow through with the full force of the law, in line with community expectations.

"East Gippsland's rainforests are some of Victoria's most priceless environmental assets. Logging in these sensitive forests is leading to senseless and unlawful destruction. The Andrews government must act to urgently protect East Gippsland's forests within this term of government."

Danya Jacobs, a senior lawyer at Environmental Justice Australia, told the *Sunday Age*: "Time and again we see evidence presented to the Environment Department of serious breaches of rainforest protection laws and nothing is done. Limitation periods to commence prosecutions are allowed to expire with most cases left open, under investigation for years, and no decisions made."

War is Peace! Good guys with guns

Robin Taubenfeld

The Australian government's announcement of its goal to make Australia a top-10 arms exporter came only days after the *Bulletin of the Atomic Scientists* moved the Doomsday Clock to two minutes before midnight – in response to the increasing global threats of nuclear weapons and climate change.

And then the Olympics were on. In South Korea. And in these times of trouble and increased military investment, what do those North Koreans, who are part of the rationale for the moving of the Doomsday Clock, do? Join South Korea as a unified team in a bid to ease tension on the peninsula, and even smile and shake hands with their leader.

And what did US Vice President Pence, who attended the games, do? According to *Time*: “His office said he did not interact with the North Koreans.”

South Korea's President and his wife, North Korea's nominal head of state, Kim Yong Nam, and North Korean leader Kim Jong Un's younger sister Kim Yo Jong, stood as athletes from both Koreas marched together behind a blue-and-white “unification” flag for the first time since 2007.

Pence did not stand for the unified Korean team's entrance. During the parade of nations, he stood only for the U.S. team. And there you have it. The face of the most powerful nuclear-armed nation

in the world and Australia's close friend, which has troops stationed all over Korea, standing up only for itself at the world's most famous sporting event. Houston – we have a problem!

When Trump was inaugurated, the *Bulletin of the Atomic Scientists* set the Doomsday Clock at 2.5 minutes to midnight. Now they have moved it up to 2. What some would see as a sign to take stock, resolve conflicts and do what we can globally to stabilise the climate, others see as a rationale to feed the fear and increase military spending.

That's what Australia is doing. Australian universities are being designated Defence HUBs, states are scrambling to get cashed up to build their “defence” industries and there's talk of increasing US troop numbers in Darwin ... plus more! Last year, Defence Industry Minister Christopher Pyne announced a “bonanza” \$200 billion to upgrade Australia's naval capabilities and Australia is reportedly set to double its annual defence spending over the next 10 years. So it really does look like it's a good time to get your war on.

As a key ally of the US, Australia plays a supporting role in US-led military endeavours. Australia is increasing its military spending, in part to further enable “interoperability” with US forces. The Australian-born International Campaign to Abolish Nuclear Weapons has recently won the Nobel Peace Prize for its work to eliminate nuclear weapons. There is a real possibility that the UN will ratify a treaty to ban nuclear weapons. Who is not joining the party? The US and Australia, of course.

In the wake of another tragic school shooting, American students are calling B.S. on American gun culture. And this can't be done without questioning the role/place/meaning of the military, security and defence in US society. The right to bear arms enshrined in the Second Amendment to the US Constitution reads: “A well regulated militia, being necessary to the security of a free state, the right of the people to keep and bear arms, shall not be infringed.” It's not hard to see how the nation could be sold on the notion that it takes a good guy with a gun to stop a bad guy with a gun. This is an American story: the citizen saviour, the wild, wild west and Mutually Assured Destruction all rolled up in to one ... Weapons keep the peace.

Good guys just don't have guns

But now, while some people are tinkering around the edges of reform and saying good guys can just have this kind of gun, or just this accessory, many people are actually suggesting that good guys just don't have guns. The shifting of this narrative could have huge implications for American kids – and the world. Could #OneLess gun transform to #OneLess conflict “resolved” with violence to #OneLess nuclear weapon?

Despite the Olympic handshake, the Koreans are still at war. Interestingly, the Korean Demilitarised Zone, a no-go zone between the north and the south, virtually untouched in the past 60 years, has become a safe-haven and sanctuary for many animals and plants and is now highly valued for its biodiversity.

The military, some conservationists and some environmental historians like to point out the positive impacts that militaries can have on some landscapes. Snorkeling is reported to be great at Bikini Atoll and Puckapunyal Military Training Area is a biodiversity goldmine! In the 1980s, conservationists were happy to support the military use of the Shoalwater Bay region now part of the Great Barrier Reef Marine Park, in order to stop pastoralism in the region. With the military aiming to increase activity and expand the military zone, some are questioning the military's commitment to preserving the environment,



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invites you to join the

active friends program

but generally they have been thought of as good stewards. None of this changes the fact that war is anathema to the environment.

Chernobyl is also touted as having abundant wildlife – but you wouldn't intentionally plan another meltdown, would you? The resilience of eco-systems aside, the ecological costs of war run deep – they are psychological, social and environmental.

The social justice implications of militarism and war and the environmental impacts of training for war impact on the everyday lives of most Australians in one way or another. Be it the current firefighting foam debacle, military culture and the commodification of nature, the military's carbon boot-print, impacts of nuclear testing and uranium mining, the increasing military-industrial presence in education systems, extractivism which furthers violent colonial agendas, the history of occupation (and resistance to occupation) around Australia, military exercises and other training activity, nuclear ship visits to Australian ports, Australian and US bases, military investment in R&D in dual-use gene and novel technologies, purchasing of US weapons systems, the Joint Striker Force, the links between war, resources, climate and refugees, jet fighters and military equipment, the military presence ... our acceptance of war culture is real.

But we're at a moment where we could be turning ourselves from the brink of disaster. Tragedy is happening all around us, but the Koreans are shaking hands, nuclear weapons abolition is on the agenda, Americans are finally questioning the whole weapons thing, Australians are questioning the increasing cost of supporting the US alliance and an era of endless war.

Australia has the real opportunity to decide how it wants to relate to the US, whether it's going to be a hand-shaker or a sitter-downer in the region, and whether it wants to protect its environment and its people. Australia needs to decide if it's going to be a good guy with a gun (or the wingman when its friend uses guns) – or actually just a good guy.

Friends of the Earth has just launched a national project on War and the Environment. Using a social and environmental justice framework, the project will map, respond to and challenge war and the ongoing militarisation of people and places. To get involved, contact Robin Taubenfeld, robintaubenfeld@hotmail.com, 04 1111 8737

What is the Active Friends Program?

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

- a moratorium on coal and coal seam gas mining through our 'Quit Coal' campaign

- renewable energy through our 'yes2renewables' campaign

- our work to safeguard water for the rivers, wetlands and forests of over 14% of Australia's landscapes through the 'ourdarlingmurray.org' campaign

- FoE's Anti Nuclear & Clean Energy (ACE) campaign, which continues to highlight the dangers of nuclear power and uranium mining and to promote safe alternatives.

Why is the Active Friends Program vital to FoE?

To remain a radical and credible voice for social and environmental justice, we need a stable financial base.

How can you join the Active Friends Program?

To join the Active Friends program, please see the 'Support Friends of the Earth' page in this edition of Chain Reaction, or go to www.foe.org.au and click on the donate button.. All Active Friends donations are fully tax deductible.

Australian nuclear battles, and victories

The fight isn't over to stop the Cameco's Yeelirrie uranium project in WA

Conservation groups and Tjiwarl Traditional Owners in Western Australia have vowed to continue the fight against uranium mining at Yeelirrie in the Northern Goldfields, despite the news on February 8 that their Supreme Court action to halt the mine had been unsuccessful. An appeal against the decision has been lodged.

If and when market conditions improve, Canadian mining company Cameco plans to construct a 9 km open mine pit, requiring clearing of 2,421 hectares of native vegetation and generating 36 million tonnes of mine waste that would remain radioactive for thousands of years. The mine would also threaten the extinction of multiple species of unique underground fauna.

The Conservation Council of WA and members of the Tjiwarl Native Titles group sought judicial review of the WA Government's approval of the project, which went against the advice of the state Environmental Protection Agency to reject the proposal because of unacceptable risks of microfauna species extinction. The Minister for the Environment initially upheld the position of the EPA on appeal, yet turned around and took a position to the contrary in letting the mine proceed. The court case has put a hold on the Commonwealth approval for the project which has not been granted.

Vicky Abdullah, Tjiwarl Native Title holder, said: "This is a very disappointing and sad day for our people, our land, and our future. We have fought long and hard to protect Yeelirrie and stop the uranium project. But the fight is not over - this is only one part of our campaign, and we will not allow this decision to stop us now. It's a bad decision, but it's not the end decision."

Yeelirrie was approved by the former conservative Liberal Party state government. After the March 2017 state election, the incoming Labor Party government said that previously-approved mines, including Yeelirrie, could proceed but no others would be permitted.

Brewarrina targeted for nuclear waste dump

Sites in South Australia - in the Flinders Ranges and farming land near Kimba - are being formally assessed by the federal government to host a national nuclear waste dump. Now, residents of Brewarrina, near Bourke in central-north NSW, are also being targeted for the nuclear dump ... by their own council. The mostly non-Aboriginal council is actively



Brewarrina residents in Sydney to build the campaign to stop their country being targeted for a national nuclear waste dump.

promoting the plan but has made little effort to consult the mostly Aboriginal community.

The Brewarrina Council claims broad community support on the basis of a questionnaire which described the facility as a 'medical and industrial waste facility' and did not mention the words radioactive or nuclear!

Brewarrina residents visited Sydney from March 23-25 for a protest rally and for meetings with trade union representatives, the NSW ALP, the NSW Greens and the Nature Conservation Council. The campaign is being supported by Friends of the Earth, the Australian Students Environment Network, the Australian Conservation Foundation and the Beyond Nuclear Initiative.

Brewarrina is famous for the fish traps, the oldest man-made structures on earth. The traps are elaborate networks of rock weirs and pools built to catch fish swimming upstream.

No *bundabunda* (poison) on Ngemba land!

www.thepetitionsite.com/513/682/502/no-nuclear-bundabunda-at-brewarrina-bad-poison

#keepbrenuclearfree

www.facebook.com/nimmw

www.facebook.com/NO-Nuclear-dump-at-Brewarrina-1561043130631429

Standing Strong I - South Australians defeat dump

Standing Strong is a new book (and e-book) celebrating the victory of South Australians in their 2015-17 campaign to stop an international high-level nuclear waste dump being built in the state. The book is online at www.tinyurl.com/no-sa-dump and www.nodumpalliance.org.au/standing_strong

Published by the No Dump Alliance (NDA), *Standing Strong* covers the key issues championed by Aboriginal and civil society groups opposed to the plan including the lack of Traditional Owner consent, dubious economics, the risks to people and the environment and the impact on future generations.



Respecting the Past  Protecting the Future

“This book documents how our community said no to the threat of radioactive waste,” said Yankunytjatjara woman and NDA spokesperson Karina Lester. “We know nuclear is not the answer for our lands and people, we have always said no. It is important that all politicians get the clear message that nuclear waste and nuclear risk is not wanted in SA.”

South Australians are still battling a plan by the federal government to establish a national nuclear waste dump in the state. www.nuclear.foe.org.au/waste

Standing Strong II – Northern Territorians defeat Jabiluka uranium mine

Mirarr Traditional Owners in the Northern Territory and their many supporters are this year celebrating and commemorating the 20th anniversary of the mass movement that eventually defeated Energy Resources of Australia’s plan to mine the Jabiluka uranium deposit. Hundreds of thousands of Australians took to the streets, thousands made the long trek to the Jabiluka blockade (which lasted for eight months), and hundreds were arrested at the mine-site including Mirarr Senior Traditional Owner Yvonne Margarula.

The first of a number of initiatives to mark the 20th anniversary is a ‘Standing Strong’ calendar featuring powerful and beautiful images to commemorate the historic victory. It includes pictures from Mirarr country as well as from Jabiluka actions and support rallies across Australia and around the world.

The Standing Strong calendar is online at <http://bit.ly/2HcZtpo>

To order hard copies:

<https://marrawuddi-gallery.squarespace.com/shop/2018-calendar-jabiluka-20-years>

Contact: Kirsten@mirarr.net

Australian super funds exclude producers of banned nuclear weapons

A new report was launched by the Nobel Peace Prize-winning International Campaign to Abolish Nuclear Weapons (ICAN) and PAX in March, detailing the financing of the nuclear weapons industry worldwide.

Don’t Bank on the Bomb 2018 profiles the 20 companies that are most heavily involved in the production of nuclear weapons. Since 2014, US\$525 billion has been made available to these companies by more than 300 investors.

At the United Nations last July, 122 countries negotiated and adopted the Treaty on the Prohibition of Nuclear Weapons. This Treaty is

on the path to entry into force, becoming binding international law. The Treaty prohibits the financing of nuclear weapons under the Article 1(e) prohibition on assisting, encouraging or inducing anyone to engage in the development, production or manufacture of nuclear weapons.

Since the Treaty’s adoption, two of the five largest pension funds worldwide are taking action to avoid investing in nuclear weapons; Dutch fund ABP and Norwegian Government Pension Fund. They will ensure their combined assets of US\$1537 billion will not be available to nuclear weapons producers.

Since 2014, Macquarie Group, Westpac, Commonwealth Bank of Australia and ANZ have made US\$5044 million available to nuclear weapons producing companies. ANZ has invested the most, making US\$1902 million available to 13 companies.

Two superannuation funds have made it into the report’s “Hall of Fame” for banning nuclear weapons investments. Future Super and Australian Ethical Superannuation have published policies committing not to invest in companies involved in the production of nuclear arms.

“Nine countries are investing billions in maintaining and upgrading weapons that are now banned by the UN Treaty on the Prohibition of Nuclear Weapons. Financial institutions must now dry up the resources available to producers of these weapons of mass destruction.” said Gem Romuld, Australian Director of ICAN.

“Our government has not yet joined the nuclear ban treaty, signifying its support for these weapons. The public can reject the industry that fuels WMDs by demanding your bank and super fund divest from nuclear weapons producers. If they don’t, then choose a bank that prioritises nuclear disarmament, over nuclear war.”

Don’t Bank on the Bomb 2018 is posted at www.dontbankonthebomb.com/2018-report

Australian Nuclear Free Alliance

Last year, the Aboriginal-led Australian Nuclear Free Alliance (ANFA) celebrated its 20th birthday. ANFA has fought countless nuclear battle over the past two decades, many of them successfully.

Photos of ANFA’s 20th anniversary meeting are online (www.anfa.org.au/anfa-2017-national-meeting/) and a book about ANFA’s history can be ordered from jim.green@foe.org.au

Uranium industry slumps, nuclear power dead in the water

Jim Green

As with other commodity markets, the uranium market is a curious beast at the best of times – keen to spot a bargain, investors get more and more excited the further the uranium price and company stock prices fall. They’ve had plenty to get excited about in recent years.

These days, the market exhibits multiple levels of weirdness, all stemming from the growing acknowledgment that nuclear power and the uranium industry face a bleak future.

The uranium market has a “subdued outlook” and Cameco’s uranium is now “more valuable in the ground” according to Warwick Grigor from Far East Capital, because the cost of production is higher than the prices currently being offered. Cameco CEO Tim Gitzel agrees, saying in January 2018 that at current prices “our supply is better left in the ground.” So uranium industry executives and market analysts are finally coming around to rallying cry of the anti-uranium movement: Leave it in the ground!

We’ve also had the odd situation over the past year of nuclear lobbyists arguing repeatedly that the nuclear power industry is in “crisis” and wondering what if anything can be salvaged from “the ashes of today’s dying industry”. Usually such claims come from the anti-nuclear movement – sometimes more in hope that expectation.

And we’ve had the odd situation of industry bodies (such as the US Nuclear Energy Institute) and supporters (such as former US energy secretary Ernest Moniz) openly acknowledging the connections between nuclear power and weapons – connections they have strenuously denied for decades.

Such arguments are now being used in an effort to secure preferential treatment for uranium mining companies in the US. Ur-Energy and Energy Fuels have lodged a petition with the Department of Commerce seeking a mandated requirement for US power utilities to purchase a minimum 25% of their requirements from US mines. Uranium is “the backbone of the U.S. nuclear deterrent and fuels ships and submarines in the U.S. Navy”, the companies state.

The arguments might appeal to President Trump and they would dovetail neatly with his silly conspiracy theory about Hillary Clinton threatening national security by allowing the sale of a uranium mining company with US interests to Russia’s Rosatom.

But the arguments don’t appear to enjoy any support from the US nuclear weapons complex and they certainly don’t enjoy any support from power utilities. According to market analysts FN Arena, the petition lodged by Ur-Energy and Energy Fuels “brought the uranium market to a screaming halt” and US power utilities warned that a quota would force the early shutdown of some nuclear plants.

Another miserable year for the uranium industry

Nuclear power has been stagnant for the past 20 years. Although power reactors account for an overwhelming majority of uranium demand, uranium production – and prices – have been up and down and all over the place.

Uranium mine production increased by 50% from 2007 to 2016. The increase was driven, initially at least, by expectations of the nuclear renaissance that didn’t eventuate. Mine production plus secondary sources (e.g. stockpiles and ex-military material) have consistently exceeded demand – 2017 was the eleventh consecutive year of surplus according to the CEO of uranium company Bannerman Resources.

Stockpiles (inventories) have grown steadily over the past decade to reach enormous levels – enough to keep the entire global reactor fleet operating for around eight years. Supply from mines and secondary sources in recent years has exceeded demand by about 18%.

Those dynamics have put downward pressure on prices. After six years of steady decline, uranium prices were flat in 2017. The spot price as of 1 December 2017 was less than one-third of the pre-Fukushima price and the long-term contract price less than half the pre-Fukushima price.

Uranium Prices (US\$ / pound uranium oxide)

	1 June 2007	1 Dec. 2008	1 Feb. 2011	1 Dec. 2011	1 Dec. 2014	1 Dec. 2017
Spot price	136	52.50	69.63	51.88	35.50	22.32
Long-term contract price	95	70	71.50	62	49.50	30.67
Notes	Peak bubble	Bubble bursts	Pre-Fukushima	Decline 2011-16		Flat

Countless would-be uranium mining companies have given up, some trying their luck in other areas such as property development or growing dope. Some mines have closed, others have been put into care-and-maintenance, and others have reduced output. But supply has continued to exceed demand – and to exert downward pressure on prices.

Very few mines could operate at a profit at current prices. Some mines are profitable because earlier contracts stipulated higher prices, while many mines are operating at a loss. Many companies have been loathe to close operating mines, or to put them into care-and-maintenance, even if the only other option is operating at a loss. They have been playing chicken, hoping that other companies and mines will fold first and that the resultant loss of production will drive up prices. “We have to recognise that we over-produce, and we are responsible for this fall in the price,” said Areva executive Jacques Peythieu in April 2017.

Current prices would need to more than double to encourage new mines – a long-term contract price of about US\$70–\$80 is typically cited as being required to encourage the development of new mines.

The patterns outlined above were repeated in 2017. It was another miserable year for the uranium industry. A great year for those of us living in uranium producing countries who don't want to see new mines open and who look forward to the closure of existing mines. And a great year for the nuclear power industry – in the narrow sense that the plentiful availability of cheap uranium allows the industry to focus on other problems.

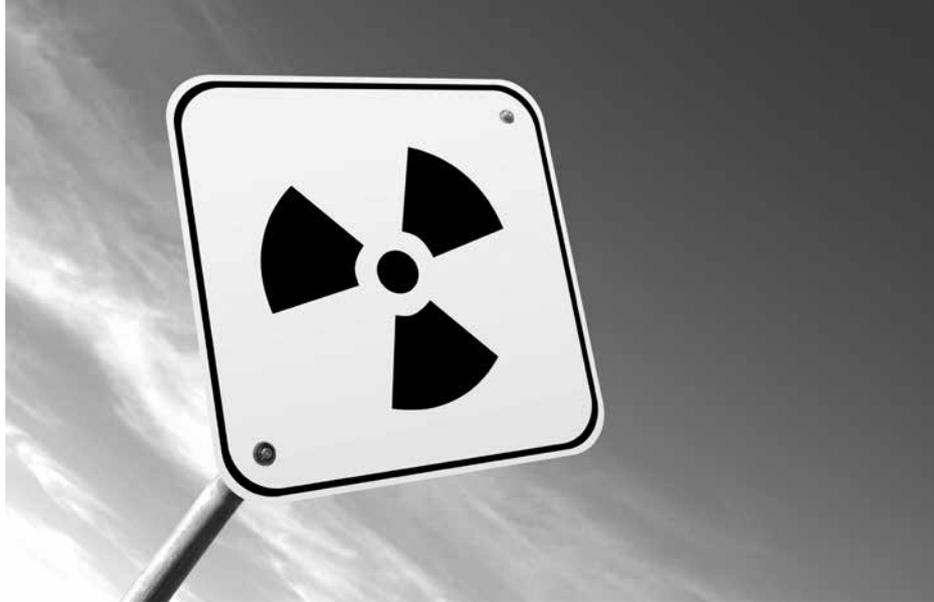
Cut-backs announced

The patterns that have prevailed over the past five years or so might be changed by decisions taken by Cameco and Kazatomprom (Kazakhstan) in late 2017 to significantly reduce production. Canada closed McArthur River in Canada in January and plans to keep it closed for around 10 months – it had been producing more uranium than any other mine in the world. Kazakhstan has been producing almost 40% of world supply in recent years and plans to reduce production by 20% from 2018–2020.

Previous cut-backs in Canada and Kazakhstan have had little or no effect, and so far the late-2017 announcements have had no effect. But the cut-backs are significant and their impact might yet be felt.

A late-2017 report by Cantor Fitzgerald equity research argued that the decisions by Cameco and Kazatomprom could result in a “step change” for uranium prices. But Warwick Grigor from Far East Capital was downbeat about Cameco's announcement. “I don't see this as a turnaround for the uranium price; at best they will stay where they are, but it doesn't signal a boom in price,” he said in November 2017.

BHP marketing vice-president Vicky Binns said in December 2017 that uranium markets would



remain oversupplied for close to a decade, with downward pressure remaining on uranium prices despite Cameco's production cuts. She said that demand for uranium could outstrip supply by the late 2020s but that could change if developed nations close their nuclear reactors earlier than expected, or if renewables take a larger than expected market share.

Equally downbeat comments have been made by other industry insiders and analysts in recent years. Former Paladin Energy chief executive John Borshoff said in 2013 that the uranium industry “is definitely in crisis” and “is showing all the symptoms of a mid-term paralysis”. Former World Nuclear Association executive Steve Kidd in May 2014 predicted “a long period of relatively low prices”. Nick Carter from Ux Consulting said in April 2016 that he did not see a supply deficit in the market until “the late 2020s”.

Perhaps a uranium price increase is on the way but it will do little to salvage Australia's uranium industry. Apart from BHP's Olympic Dam mine in SA, the only other operating uranium mine in Australia is Beverley Four Mile in SA. At Ranger in the NT, mining has ceased, stockpiles of ore are being processed, and ERA is planning a \$500 million project to decommission and rehabilitate the mine site.

And with the cost of a single power reactor climbing to as much as \$20 billion, proposals to introduce nuclear power to Australia seem more and more quixotic and are now largely limited to the far right – in particular, Australians' luminary Senator Cory Bernardi and the Minerals Council of Australia.

Even Dr Ziggy Switkowski – who used to be nuclear power's head cheerleader in Australia and was appointed to lead the Howard government's review of nuclear power – recently said that “the window for gigawatt-scale nuclear has closed”. He said nuclear power is no longer cheaper than renewables and the levelised cost of electricity is rapidly diverging in favour of renewables.

Jim Green is the national nuclear campaigner with Friends of the Earth Australia and editor of the Nuclear Monitor newsletter produced by the World Information Service on Energy and the Nuclear Information & Resource Service.

Perhaps a uranium price increase is on the way but it will do little to salvage Australia's uranium industry.

My story of Students of Sustainability

Cam Villani and Stephan Encisco

In July 2015, I attended a week-long conference called Students of Sustainability (SoS), a five-day conference that brings together people from all over Australia.

Having been new to campaigns and the environmental movement at the time, I was eager to be involved in anything I saw that was related to looking after the planet. So I booked despite having almost no idea of what it was, or what to expect across the five days. I then felt apprehensive about attending, I was in Melbourne and the conference was in Adelaide, and despite the attendance of around 500 people none of my friends were going.

They sent an email out in the days leading up to it explaining what we should know before attending SoS; what to bring (e.g. the usual camping equipment, warm clothes, plate, toothpaste etc.), the general plan of the conference, and a document of several pages. In this document it explained what we needed to be mindful of; how we should respect others' boundaries and make spaces that are free from sexism, racism, transphobia, ageism etc.

The day before it started I made my way there by Vline train and coach. I figured other attendees would also be travelling this way, and at Southern Cross station I looked around and saw a group of people carrying large rucksacks like me, obviously going to camp somewhere. At Ballarat the train connected to a coach, and all of these people got on the coach with me. They all sat facing each other and subtly noticing me, soon after I asked if they were going to a conference in Adelaide, unsurprisingly they said yes and most of them then said hi to me. This crew of 20 or so people suddenly no longer felt like strangers and I slowly got to know them over the next seven hours of the trip.

I arrived at night to a university campus in Adelaide's suburbs, there was an oval where the bulk of us were camping, some marquees set up to cook food and for us to eat and hang out in, the usual bathroom facilities, and the reception in a nearby building.

On the first morning the First Nations people did a welcome ceremony. They then spoke about their struggles with mainstream society, it felt sad and overwhelming but also incredibly important. They said something I continue to remember and think about: "the system isn't working for me, and it's not working for you either, I want to walk not behind you, in front of you, or beside you, but with you."

Each morning started off with a plenary where all of us would gather and listen to a series of speakers. Throughout the day there were many

SoS conference,
Adelaide, 2015.



workshops, filled with topics I eagerly wanted to learn about, so eagerly that I remember spending several minutes deciding which one to go to next. Many of these topics were uncomfortable to discuss but really important. I attended interesting ones on: dealing with calling out racism, how to deal with sexual violence without involving the police, how to build relationships with Aboriginal people for different campaigns, how to develop good facilitation skills, and how to implement principles of decentralisation in organising spaces. These workshops were run by ordinary attendees like myself who had lots of knowledge in particular things. At night we all gathered in the large marquees and had dinner together, followed by some kind of entertainment, usually live music.

It was an amazing week, bringing home something I had only previously understood in an abstract way: politics is very much social. It's easy to become cynical, disillusioned, and depressed, when you aren't surrounded by people who care about the same things you do. The space of SoS fosters a community where everyone is encouraged to contribute to the collective, share knowledge, and participate in meaningful action with the aim to go into depths into the problems that occur in society. At the end of the conference someone said to us "never stop learning", this felt odd at the time because after all that I learned that week I didn't think there would be much more. But I was wrong, and I continue to learn surprising things about society that had been put in a way that I didn't understand before, such as how harmful the status-quo is to people, climate change being an important issue of social justice, the history of violence towards women, and what colonisation really means.

What I like about it is the focus on collective practices in addressing structural problems. We are articulating the challenges posed by the present ecological crisis, not merely to our energy supplies or regulatory regimes, but to the foundations of our economic and social system; to the stories we tell, how we think, what we create and who we are. I used to think that protecting the environment was less important than tackling homelessness, for example. But now I've understood a little more about the intricate links that all campaigns share with each other. When Indigenous peoples around the world are the first and worst impacted by climate change, then it is obvious to me that climate justice and social justice are one and the same.

Individual lifestyle choices, like not eating meat or not buying Nike shoes, are not by themselves going to bring about the structural change that social justice demands. For that, we need people committed to organising collectively and willing to take part in a diversity of tactics. The more I learn about climate change, the more I understand those who want to lock themselves onto a conveyor belt, to protest unsustainable industries that wreck the planet for the sake of profit.

I didn't see myself as an activist, and I didn't think I would enjoy being in the company of self-styled activists. Across the week I met some of these so called "irresponsible, violent troublemakers": lovely, thoughtful people who cared about making the world a better place. I met the people that I'd seen on TV getting arrested, or read about in the newspaper, and I decided that they were some of the most reflective, considerate and intelligent people I had met.

This year in early July, SoS will be in Melbourne. I am looking forward to it already, because I'm convinced that we are in a state of climate crisis and that we need to build capacity to fight what is happening.

The conference is open to anyone with a passion for sustainability and for making a difference to their lives, the lives of those around them, the community and the environment. Just to be clear, students are anyone willing and eager to learn! Everyone from all walks of life and all ages are invited to attend. Don't have any preconceptions, at SoS your world will be opened, you'll meet amazing people, be introduced to great ideas, come up with the ideas yourself, through this constructive discussion.

To find out more: www.studentsofsustainability.org or www.facebook.com/sosconference or email sosmelb2018@gmail.com

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The Gippsland Lakes debacle

Anthony Amis

Ross Scott was the subject of an article that I wrote for *Chain Reaction* in 2010, in which I described his fight to save the Gippsland Lakes and quoted him describing the Lakes system as a “marine morgue”.

Ross has an engineering background and has extensive experience in river management, civil engineering project management in Australia, and aid projects in PNG, Fiji and Cambodia.

This experience combined with visiting, and later living, at the family property on Duck Arm for over 58 years has given him a range of skills and experience that has motivated him to address the current and rapid degradation of the Gippsland Lakes’ ecology.

The Gippsland Lakes are the largest inland network of waterways in Australia. Historically, the Lakes were a barrier estuary system that was closed to the sea on most occasions. They are a complex and unique set of diverse environments driven by river discharges; and its unique geomorphology and wetland system that attracted Ramsar status. (The Ramsar Convention is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.) The Lakes are further protected under Treaties with China, Japan and South Korea.

In theory all should be well, but in 2015 the Victorian Auditor-General delivered a damning report on the mismanagement of Victoria’s 10 Ramsar-listed wetlands. In short, it stated that Parks Victoria and the state Department of Environment, Land, Water and Planning had not been monitoring and testing, yet had been advising the federal government that there had been no change in the Lakes’ ecological character since the 1982 Ramsar listing.

The audit stated: “Overall, the governance, coordination and oversight of the Ramsar sites must improve for Victoria to effectively meet its obligations under the Ramsar Convention.” It further noted that: “Monitoring of the Ramsar sites also requires improvement”.

The Auditor-General’s report now has departments both state and federal in denial and defence mode. They are not prepared to address the reasons for the Lakes’ ecological demise, and state that there is no evidence to suggest that their ecological function has crashed. As there has been inadequate monitoring and testing, they are correct that there is no scientific evidence to support community concerns. But there is substantial credible anecdotal evidence. Hence the request to both state and federal governments for an audit of the ecological function of the Lakes. Both requests have been refused.

The Gippsland Lakes are the largest inland network of waterways in Australia. Historically, the Lakes were a barrier estuary system that was closed to the sea on most occasions.

Erosion on the Banksia Peninsula, demonstrating the impact of salt killing the fringing vegetation.



The last audit of the Lakes was by the CSIRO in 1998. It is argued that without a more recent audit, targeted rehabilitation will not be possible. But the current situation of inadequate information and data on the Lakes' ecology has been the basis on which the following deeply flawed desktop reports have been prepared on the Lakes. These flawed reports have included:

- a 2010 federal report that admitted inadequate data;
- an East Gippsland Catchment Management Authority Ramsar Management Plan;
- a Priority Plan based on the flawed Management Plan; and
- a pending 'report' on the lakes *in lieu* of an audit.

So how did the Lakes become so environmentally degraded? An entrance to the ocean was constructed near Lakes Entrance in 1889, and this allowed salt water to enter the Lakes and impact on the fringing vegetation. Since then, the Thomson and Blue Rock Dams have been constructed, and intense irrigated farming in West Gippsland has further reduced fresh-water flows to the Lakes.

In 2002, the East Gippsland Shire applied to the federal government for funding to investigate deepening the entrance to the Lakes, to cater for deep draft vessels. These vessels service the offshore oil and gas platforms in Bass Strait.

In 2008 a 'trial' dredging of the entrance was undertaken using a hopper dredger from New Zealand that visited annually. The dredging permit was based on dodgy and misleading data and rushed through over the Christmas / New Year period in three months without an Environmental Effects Statement.

The previous side-cast dredger maintained the entrance at 2.5 metres, and the new permit allowed for a total depth of 4.5 metres. Gippsland Ports continued to dredge the entrance for the next two years without a permit, and were reported to the federal government by the Victorian EDO.

A hurried and flawed application resulted in Gippsland Ports then being issued with a 10-year dredging permit to dredge to 3.5 metres, the requested navigable depth required, plus an extra two metres allowance for slump and accretion, making an actual dredging depth of 5.5 metres.

Gippsland Ports have recently taken delivery of a hopper dredger that is stationed at Lakes Entrance. The two-metre allowance for slump has not been removed from their dredging permit, and they continue to maintain the entrance at two metres deeper than that required for navigation.

As a direct result, the entrance cross-sectional area has doubled, and the tidal speed through the entrance has increased from three knots to 7.4 knots. The Tidal Prism, the amount of ocean water entering the Lakes each tide, has massively increased, as has the tidal range of ocean water

entering the Lakes, to the extent that surface water is now classified as 'highly saline' (i.e. it can kill fresh-water plants).

The salt-water wedge has intruded up the lake chain as far as the Port of Sale (a distance of over 100 km), endangering the ecologically significant Heart, Dowd and Clydebank Morass.

The ecological impacts on the Lakes are stark:

- Marine species invasion. Shore Crab; sharks; stingray; squid; starfish; marine oysters etc.
- Loss of shoreline vegetation and subsequent erosion.
- Loss of bird habitat and food chain.
- Loss of black bream recruitment.

Ross has recently written to the Victorian Premier advising that Australia is in breach of the Ramsar Agreement and its Treaties with China, Japan and South Korea to protect the habitat of migratory wading birds. He has requested:

- An immediate audit of the Gippsland Lakes Ecological Function.
- That the entrance to the Lakes be maintained no deeper than that required for navigation, and not the current 5.5 metres.
- Allocate funding to the Gippsland Environment Group to model and design a submerged salinity barrier for McLennan Strait to save Lake Wellington from salt intrusion.
- That a Parliamentary Inquiry into the mismanagement of the Gippsland Lakes be implemented.

There seems no logical reason why the entrance is being maintained so deep, and why the state government will not monitor the adverse impacts of the dredging on the lakes ecology. But slowly, ever so slowly, it has dawned on Ross that the lakes are being managed to a marine condition. He became aware that:

Melbourne is predicted to run short of water by 2030; and has in place plans to dam and divert the Aberfeldy, MacAlister, Mitchell and West Tanjil rivers back to Melbourne.

- Gippsland is now acknowledged as the 'food hub' of Victoria, and the expansion of this industry is requiring more water and a guaranteed supply.
- To address these demands it appears that the state government is managing the lakes into a highly-saline marine condition. To justify Melbourne's increased harvesting of the Lakes' feeder streams, it will be argued that fresh water flowing into saline Gippsland Lakes is going to waste and should be harvested instead.

Ross is now heading for 81 years, and his wife Gayle (of 58 years) reckons that if he wasn't fighting environmental vandals he would be dead by now!

Anthony Amis is a member of Friends of the Earth (FoE) Melbourne and FoE Australia's spokesperson on pesticides & drinking water.

The last audit of the Lakes was by the CSIRO in 1998. It is argued that without a more recent audit, targeted rehabilitation will not be possible.

Cassowaries in the Wet Tropics of Far North Queensland

Ingrid Marker – Cassowary Keystone Conservation Inc.

A keystone species and major tourism icon of Far North Queensland, cassowaries live in the Wet Tropics – a small area compared to their original habitat. This land was set aside to protect species from threats, whilst enabling them to access diverse habitats and forage on variety of seasonal rainforest fruits.

As Australia has no primates to disperse seeds across the landscape, this important role is achieved by cassowaries. This is vital to the diversity and health of the rainforest, creeks and water quality entering the reef catchment and therefore the health of the Great Barrier Reef. A prehistoric apex species, this “Queen of the Jungle” has no natural predators as an adult and can survive cyclones. And yet they are on the brink of extinction.

Key threatening processes include:

- Loss of habitat – significant community goodwill and in-kind philanthropic support has been invested to ensure healthy landscapes with community and NRM groups achieving good outcomes with buybacks and revegetation projects, however stronger land protection laws are needed urgently.
- Car strikes – Many community groups across the Wet Tropics are working to reduce speed limits and other identified hazards in known hot-spots.
- Domestic dog attacks are a persistent and increasing threat, to cassowaries and in particular juveniles no longer in their father’s lengthy parental care. Cassowaries are solitary, long-lived (approx. 50 years), slow-reproducing animals. Studies suggest cassowaries are breeding but that most birds die when leaving father’s care, before recruitment to adult populations.
- A monitoring program in Mission Beach between 1990-92 found sub-adult cassowaries to be the age most vulnerable to dog attack. Of the 24 reported dog attacks on cassowaries recorded in 2003, 82% were fatal.
- My research clearly highlights the laws protecting cassowaries are ineffective. No data is currently being recorded, and as these attacks happen within the rainforest, the birds die out of sight, with the evidence decomposing on the forest floor.

Let me take you down a rabbit-hole of how the laws and policies are failing:

- Local councils are responsible for enforcing the Animal Management Act (AMA), ensuring dogs are kept in a fenced property and under effective control at all times, micro-chipped and registered.



- Many councils say they are under-resourced to do the management, and yet they don’t require rural dog owners to pay registration. Many rural dog owners don’t bother to comply with the AMA. Councils have no data on dog numbers within each Shire; it is estimated that only one-third of dogs are registered, so how can you manage a problem if you don’t know how big the issue is? If a dog attacks, kills or causes an accident and the dog is not registered or micro-chipped, the owner can escape all responsibility and liability for their dog’s actions.
- This highlights the problem that rural dog owners generally live adjoining rainforests and protected areas, own large dogs, frequently own more than one dog and these dogs can often be taught to hunt and kill. When you look at a regional map you can see the Wet Tropics is surrounded by domestic predatory animals (dogs) or roads, so cassowaries are trapped.
- Queensland Parks and Wildlife Service (QPWS) have insufficient resources to adequately enforce the existing laws to keep dogs out of protected areas and the offences generally occur after hours and on weekends.

Regional councils are aware of the issues posed by roaming dogs on cassowary conservation and the biosecurity threats to farmers’ livelihoods from Panama Disease. They are now increasing enforcement of the AMA, working with QPWS and farmers to crack down on irresponsible dog owners and pig hunters who illegally enter protected areas or trespass on farms which by law is considered poaching.

We need to apply the precautionary principle of prevention. Cassowaries that are habituated to humans or pushed into marginal habitats are statistically more vulnerable to dog attack and road mortality as they move through rural and semi-urban landscapes looking for food and territories. I believe the many regional community and conservation groups are vital, undervalued assets in cassowary conservation. If recognised and funded as key stakeholders in research, monitoring and habitat rehabilitation, these groups could be the future of best practice for wildlife conservation.

Cassowary Keystone Conservation has enjoyed working with and being supported by Friends of the Earth Far North Queensland in its campaign.

Retrosuburbia: the downshifter's guide to a resilient future

Retrosuburbia: the downshifter's guide to a resilient future

David Holmgren

Meliiodora Publishing

Available from Permaculture Principles www.permacultureprinciples.com/au/
www.retrosuburbia.com

Review by Kirsten Bradley from Milkwood.net

This book is dangerous. In its essence, *Retrosuburbia* invites and inspires us all to stay right where we are. Turning our suburbs upside down, to make the world we want. No need to be moving to the country, to the coast or to the hills for a happier, greener life. That idyllic community? It's probably where you already are. It's potentially all around you – you just need the tools to make it happen. That resilient future you want for your family? We do this here, in the suburbs. And we do this now.

In his long awaited new book, David Holmgren throws out a challenge to all of us – can we adapt in place, and thrive? Can we imagine a resilient future for our street? How do we make that happen? Is it even possible?

Well, yes, it is. And *Retrosuburbia*, alongside being a handbook, includes many case studies of people already retrofitting their homes and communities to live well with far less, just to prove it is possible. Alongside 592 pages of ideas, methods, designs and patterns for downshifting to a life filled with more community, more food, less carbon, less waste, and more possibilities.

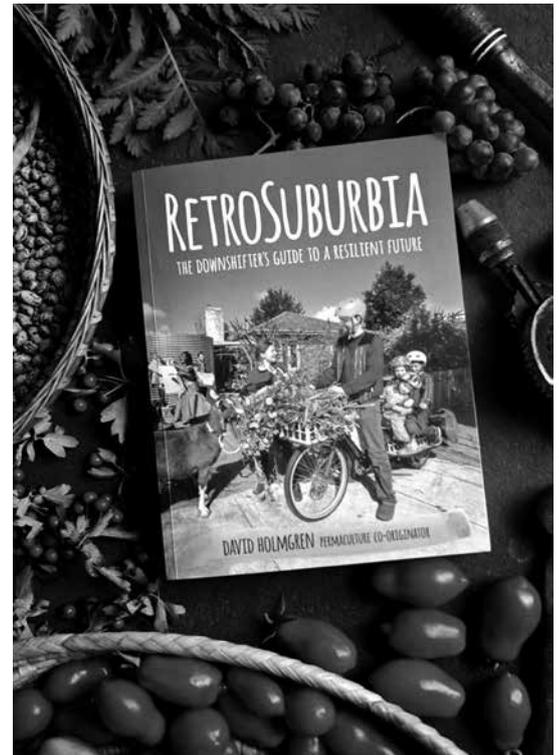
This book is enormously optimistic. As in, you can't help but grin while you read it. The strategies within *Retrosuburbia* are also enormously do-able. For all home owners and renters in south-eastern Australia and beyond, there's many parts of this book that can be used at your place to make things better.

Because alongside a lifetime of permaculture design and systems thinking, David Holmgren is a pragmatic sort. And the fact of the matter is, David recognises that most Australians live in towns or cities. We have the most urbanised population per capita in the world – we live near each other.

And so it follows that this book was bound to happen – an excellent permaculture design handbook for Australians who want to create resilient DIY futures. For both their household and community, wherever they already are.

Retrosuburbia is a large collection of patterns. And it's also a handbook of skills. And it's also a design manual for thinking about and re-jigging our behaviours and needs and wants, just as much as re-designing our roof cladding.

You know what? There's just so much good stuff in *Retrosuburbia* that, rather than try and find more words to explain why we at Milkwood think this book is so wholeheartedly great, let's just go through the contents. You'll see what I mean.



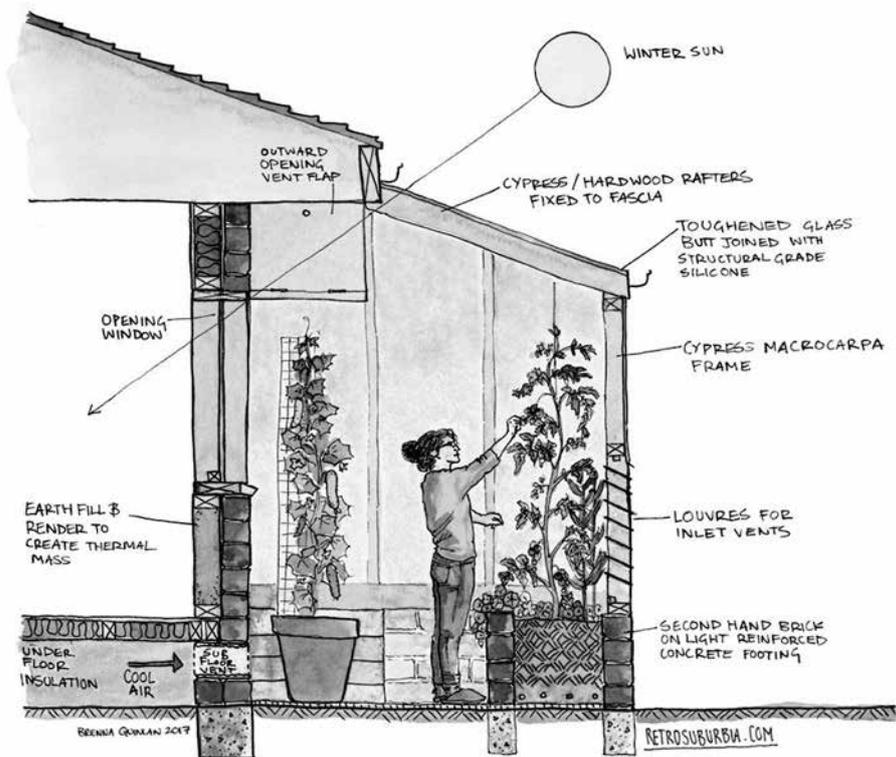
Retrosuburbia as a manual is built around three fields – the built, the biological, and the behavioural. Of course, all three of these are entwined in any resilient system, but pulling them apart is very useful.

The Built Field – Patterns of Human Habitats

How to assess a property – Where is it located / How much sun does it get / How is the street arranged / How vulnerable is it to natural disasters / What services are available / What am I allowed to do there / How much are the rates / Is the building easy to retrofit / What's on the site and how's it arranged / What resilience assets does it have / Introducing the Retrosuburban Real Estate Checklist

Warm in winter, cool in summer – Insulation and draft stripping / Passive solar retrofitting / Attached greenhouse / No air conditioning / East and west facing pergolas / Water tank thermal mass / Shadehouse / Passive solar, active humans / Managing personal comfort

Wood Energy – The other solar energy revolution / Sustainable wood supply / Minimising pollution / Wood burning options / Wood processing and seasoning / Wood ash, charcoal and creosote



Electricity: special energy for specific functions
 - Managing demand / Autonomous or grid interactive / Solar access awareness / Other power options and substitutions / High-tech and low-tech CHP

Water harvesting and storage - Calculating rainfall and runoff / Understanding and modelling water demand / Autonomous or not / Pros and cons of water sources / Rainwater harvesting and storage systems

Greywater and human nutrient recycling
 - Passion for humanure / Regulatory obstacles / Safe humanure and greywater / Reuse and treatment of greywater / Commercial solutions

Facilities for food - Principles of food storage, processing and preservation / Outside food processing areas / Inside kitchen / Food storage infrastructure

Retrofitting for bushfire defence - Suburban bushfire hazard review / Retrofitting buildings for bushfire safety / Retrofitting gardens for fire safety / Managing adjacent public land

Storage of Stuff - Balancing hoarding and decluttering / Renting storage space / Borrowing public space / Borrowing private space / Undercover spaces and eave storage / Mezzanines / Racks, stacks, shelving and crates / Sharing stuff / Reducing stuff

Retrofitting for shared living - Making best use of what we have / Patterns for sharing indoor space / Sharing backyards

Biological Field - Patterns of Life and Growth

How to assess a garden - Balance of sunshine, soil and water / How deep is the soil? / How big is the fertility bank? / Is soil contamination a problem? / How much water can I access? / How sheltered is the garden? / What's already growing?

Garden Farming (Permaculture Zones 1 & 2) - Just do it / Biointensive vs Natural Garden Farming / Permaculture Zoning; a pattern language of land use intensity / Optimising use of available land / obtain a yield / Economics of garden farming

Building and maintaining soil fertility - Balance and abundance / Strategies to improve soil

Managing soil contamination - Understanding problems and options / Preventative strategies / Dealing with lead contamination

What to grow where - Priorities for suburban food sufficiency / Appropriate street trees / Multi-purpose shelter and screening

Food growing systems - Intensive rotational vegetable growing / Aquatics in containers and ponds / Mushrooms: growing food without sunshine / Tree, shrub and vine crops

Seed saving and backyard nursery - Priorities and practicalities / Backyard nursery

Domestic animals in suburbia - Animals as non-negotiable commitments / Just Do It? / Working relationships with chooks / Duck wetlands / Loft pigeons above / Quail on the garden ground floor / Other poultry possibilities / Rabbit lawn mowers / Free range guinea pigs / Backyard goats: bringing the dairy home / Bees: synergistic social productivity / Aquaponic apartments for fish and plants / Carnivores as allies

Wildlife in the Garden; by and beyond design
 - Encouraging beneficial wildlife / Ecological control of smaller pests / Harvesting abundance / Non-lethal deterrents or exclusion / Cats and dogs with jobs

Beyond the boundaries (Permaculture Zones 3 & 4) - Urban agriculture and animal husbandry / Beyond horticulture scale / Agroforestry parklands managed by people and grazing animals / Zone 4: design by nature / Watercourse food and fodder forests

The Behavioural Field - Patterns of Decisions and Actions

Ownership and living arrangements - The household form and location matrix / Extended family household / Hosting volunteers / Household landlord / Neighbourhood landlord; create your own community / Sharing house ownership / Co-ordinated purchase of adjacent houses / Relocating to a country town / Renting in preferred area / Shared rental household / Studio living / Squatting / Co-housing by retrofit / Tiny houses / Network nomads

Changing habits for self-reliance and resilience
 - Hair shirts and frugal hedonism / Home-based work / Daytime lifestyle and seasonal sleeping patterns / Managing habits and addictions / Establishing roles and responsibilities / Multi-tasking / Increasing productivity

Transport and Travel - Working, shopping and socialising at home / Using vehicles and travelling time efficiently / Reducing food

(and everything else) miles / Relocalising daily activities / Internet substitutions and quandaries / Transport options / Traveller lifestyles

Creating your own livelihood – Disintermediation / Reducing costs rather than earning more money / The Great Reskilling / From employed to self-employed / Future livelihoods / Keeping track of exchanges

Financial planning and security – Personal perspective / Getting out of debt / Retiring early / Salvaging savings / Avoiding social (in)security / Paying less tax by earning less

Sustaining and sustainable diet – Local in-season food / Minimally processed whole foods / Modest consumption of concentrates / Naturally fermented and traditionally transformed food / Different diets for different bioregions and people / Bulk purchasing and reusing packaging / Wild foods, gleaned and skipping / Ecological hunting and fishing / The retrosuburban diet and bioregional food system

Rearing self-reliant and resilient children – Babies and early childhood / Children outdoors / Evaluating risk / Home education / Limit media technologies / Dealing with rebellion / Initiations and rites of passage / The demise of extended adolescence

Health, disability and aging – Risk and safety / Retrofitting ourselves / Looking after yourself / Household medical capacity / The medical system / Alternative therapies / Drug dependence / Homebirth / Aging and disability

Security in hard times – Actively enjoy living in a safe, peaceful country / Risk, reason and reaction / Having a sense of humour / Hedging our bets / Locks, alarms and arms / Self defence / Mobile minimalism / Network of households / Secure and networked communities / Communications technology / Relationships with law enforcement / Local government and self-governing communities
Household disaster planning – General principles and strategies / Bushfire planning / Safe houses / Contributing to community capacity

Decision making, interpersonal relations and conflict resolution – Benign dictatorship and natural authority / Household agreements / Decision-making tools

Case studies

At the end of every sub-heading is a small ‘vision’ section – a possible future scenario of how a retrosuburban example of what could be – whether it’s aging and disability, or preventative strategies for soil contamination, or water harvesting. I loved these little sections – they’re part idealism, part very possible reality. Our family loved reading them to each other and imagining how each idea could work.

Also woven throughout the book, in all three fields, are case studies of existing retrosuburban households putting these methods into practice. Some of them call it permaculture and some of them call it something else, but they’re all seriously inspiring. An overview of the case studies is posted at www.retrosurbia.com/case-studies

And then there’s the appendix, which contains

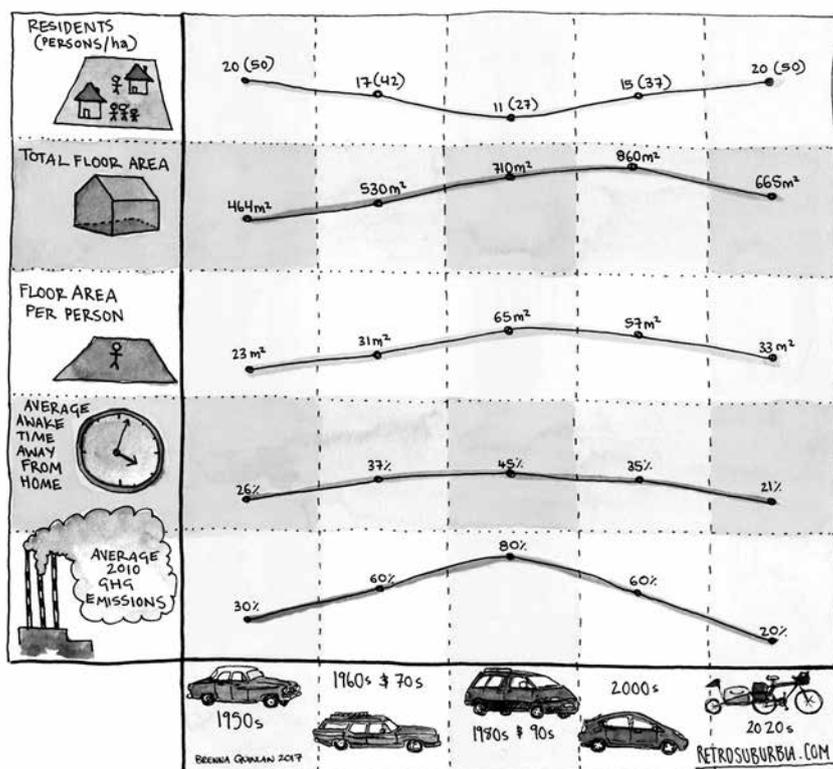
a heap more great resources in the form of expanded plans, layouts, designs and more that expand on sections of the book. And then there’s also the *retrosurbia.com* site which contains digital copies of the case studies as well as extensive resources for ever subheading – it’s a whole world in there!

Living as we do on the property where this book was conceived, written and published, we’re also very aware of what a team effort this book was – with Richard Telford (designer, project manager), Brenna Quinlan (illustrator), Beck Lowe (chief text wrangler, project manager), Oliver Holmgren (photographer, photo editor) and Su Dennett (publisher) as well as David Holmgren (author, publisher) – not to mention the crowd support campaign that helped get the first edition over the line.

Do you know how much cost and effort it takes to get a big book like this printed ethically and locally, without going offshore? It’s a ton of work. But with years of hard work and the help of generous supporters, team Melliodora did it (www.milkwood.net/tag/melliodora).

And so even the act of writing and publishing this book speaks back to the retrosurbia ethic – solar-powered and home-written, fuelled by homegrown food prepared on a woodfired stove powered by a local woodlot, with support and exchanges for work from many people near and far, to help make this collective effort happen. Which is exactly the point. Start where you are, use what you have, do what you can.

Daring to adapt in place, rather than heading for the hills, might just be the most radical, anti-capitalist, dangerous thinking this side of the suburbs. But this is exactly what *Retrosurbia* invites you to do. In its essence, this book is a hefty 2.3kg invitation for you to create the world you want, right where you already are.



Janesville, Wisconsin – rebuilding after the closure of General Motors

Janesville. An American Story

Amy Goldstein

2017

Simon & Schuster

www.simonandschuster.com/

Review by Cam Walker – Friends of the Earth Melbourne.

The world's economy is in a time of rapid transition and transformation. And while the development of new industries brings jobs and opportunities, many people are left behind as traditional economies collapse or move offshore.

In Australia, we are witnessing the end of the mining boom and the loss of local car manufacturing. Coal power is waning, with closures starting in places like the Latrobe Valley, and native forest logging continues its slow decline.

What happens to those who have to survive beyond the loss of the economy they have relied on? While increasingly governments are responding to changes through intervening with buy outs, retraining, alternative development and transition programs like the Latrobe Valley Authority, the fact remains that these changes can have devastating impacts on communities and the individuals who live in them.

Janesville is the story of what happens after the closure. In this case, it is the story of Janesville in Wisconsin in the USA after General Motors closed the huge automobile plant that had been the basis of employment in that town for two generations.

While it is billed as being 'an American story' it has resonance for everyone concerned about the human cost of transition. Journalist Amy Goldstein spent years after the closure visiting Janesville to see how the community would rebuild. The lessons are universal:

Local communities are held hostage to the profit race by corporations and big picture economics, and are often set against each other (different cities had to offer inducements to GM to ensure their factory would be the one to stay open). This bidding war is demoralising and people can feel they have no power.

Once the work is gone, the power of the union wanes, and with it the social benefits that come from having a strong voice for organised labour.

While government support post-closure is essential, it is clear that real outcomes will be generated where the local community control the purse-strings and create the programs, rather than having them airlifted in from a distant government.

A non-partisan response is essential: in this case Democrats and Republicans were able to work together to defend jobs, at least in the first few years after closure. But the 'what comes next' debate – what type of new industry does the community want – is where the ideology kicks in and social cohesion can be lost.

Government programs tend to focus on re training rather than job creation. This sometimes just pushes the problem into the future as re-trained workers then find that there are still no jobs they have qualifications for. In Janesville training needs swamped the ability of education providers, at least in the early days. But over time local providers started to work together to deliver programs, filling the space that might often be filled by government providers.

When local businesses (and importantly, local banks) join together to develop a vision and plan for the city, with strong buy in from service providers and NGOs, great things can happen. Philanthropists joined union officials and local businesses to produce an economic development plan called Rock County 5.0 which had five key aims:

- To persuade local businesses to stay
- To attract new businesses
- To offer help to new small-scale start ups
- To prepare real estate to be ready for new uses (the GM plant was just one part of the infrastructure that formed the basis of the car industry), and
- To develop a workforce that employers would want to hire.

"Moving and magnificently well-researched . . . *Janesville* joins a growing family of books about the evisceration of the working class. . . What sets it apart is the sophistication of its storytelling and analysis." —*The New York Times*



Janesville

AN AMERICAN STORY



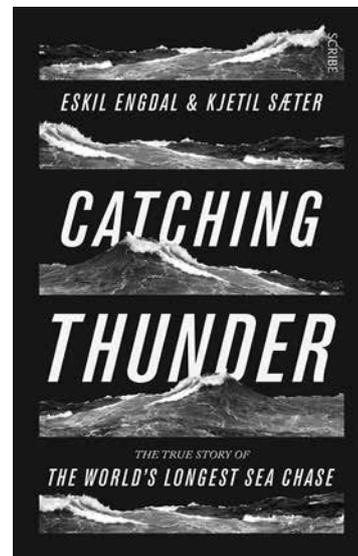
AMY GOLDSTEIN

The financial and personal crisis that happened as a result of closure took several years to peak. This is important in terms of planning for transition. It was several years later that bankruptcies started to grow, property values dropped, homelessness increased, etc. One good initiative involved local banks joining together to develop a way to reduce the number of foreclosures that were happening. For instance, they provided free financial counselling, offered one year's grace on mortgage payments before foreclosure, etc.

Community involvement was essential to see the community through: food drives, support for school kids whose families were struggling, the rise in depression and substance abuse that follows mass job loss, etc. Even celebrations like the annual Labor Day street parade were important to keep a sense of optimism in the future.

The book covers some of the federal government initiatives that were developed by the Obama administration to respond to the massive job losses happening in dozens of cities. This is a useful book for anyone concerned about how to do transition well. This is not a book filled with political theory: it simply tells the story of what happened next for a range of people whose lives were dramatically affected as they lost their job or saw their community transformed and people flooding out of the city in the hope of finding work elsewhere.

It shows that a strong community with high levels of civic engagement and cohesion is more likely to survive the trauma that comes from large scale closure of industry. As noted by one local, Bob Borremans, the "best solutions to local problems come from the creativity and ingenuity of community". The job of government is to support the creation of this vision, not to drop in services that simply may not work or be appropriate to local needs and realities.



Catching Thunder: The Sea Shepherd's hunt for illegal fishers

Catching Thunder: The true story of the world's longest sea chase

Eskil Engdal and Kjetil Sæter

March 2018

Scribe – www.scribepublications.com.au

Catching Thunder chronicles the remarkable true story of the Sea Shepherd's 2014 pursuit of the infamous illegal fishing ship *Thunder*. Wanted by Interpol, the *Thunder* evaded justice for years: accumulating millions in profits hunting endangered species, and ruthlessly destroying ocean habitats.

Catching Thunder brings to life the treacherous voyage led by Captain Peter Hammarstedt of the Sea Shepherd ship *Bob Barker* as he and his crew relentlessly pursue the *Thunder* for what will become the longest chase in maritime history.

Written by two award-winning investigative journalists, the book is the product of over three years of research across 12 countries and five continents and reveals the true criminals behind the illegal fishing of Patagonian Toothfish (known as "white gold") in Antarctic waters.

The authors follow this incredible expedition from its very beginning. Yet even as seasoned journalists, they cannot anticipate what the chase will uncover, as the wake of the *Thunder* leads them to the trail of criminal kingpins, rampant corruption, modern slavery, and an international community content to turn a blind eye. Soon, catching *Thunder* becomes not only a chase but a pursuit of the truth itself and a symbolic race to preserve the well-being of our planet.

The authors view illegal fishing as serious organised criminal activity and a failure of international governments to proportionally punish offenders.

The Interdependent Organization

The Interdependent Organization: The Path to a More Sustainable Enterprise

Rexford H. Draman

2017

Greenleaf Publishing, UK / Routledge

Available from Routledge (inc. e-book): <https://tinyurl.com/Rex-Draman>

Review by Sarah Houseman

From my kitchen table to conference and cafe tables, I hear many caring voices urging for action to mitigate the intensifying challenges of climate disruption, biodiversity depletion, human refugees and environmental destruction. But how will we know change is happening? What are the signs indicating a shift in the mindset of the dominant paradigm?

I believe we will know that a profound transformation is occurring when we are integrally part of it. It won't be something that politicians in Canberra or Spring Street tell us to mindlessly incorporate into our daily practices. A new paradigm is not just about changing law to protect people, animals or planet; it means new ways of thinking, and developing new words and metaphors to describe and explain how we see ourselves, change and human society.

The Interdependent Organization explores how this paradigm shift might emerge in our organisations. It is a useful contribution to the growing resource base of books and papers applying understandings from complex systems thinking in biology, physics and computer science to human organisations.

Starting with where we are – entrenched in a hierarchical, command and control, top-down mindset – Rex Draman provides readers with a thorough background in the history of systems thinking. He also evaluates some of the transformative tools and processes that support the development of engaging with a systems mindset in traditional workplaces.

Draman knows the mindset of large, mainstream organisations. Starting out as a second shift foreman at Mohawk Tire & Rubber and ending up as Director of Advanced Manufacturing Technology for a large defence contractor, he has used this knowledge as the foundation of a 20-year career as an academic exploring systems and sustainability in management. While Draman's focus is US-centric, and corporate in orientation, he makes many useful observations for other organisational entities, such as government, small business and non-government organisations.

For those of you who work in an organisational context where you might be embarking on the journey away from hierarchy, I recommend this

book as a very useful preparation and a comparative study of linear and systems thinking frames.

The expected and dominant way of conducting business in 2018 is still informed by the scientific management exemplified by mechanistic metaphors and the macro-economic viewpoint. The goal of best-practice cost accounting is to control the minutiae, and account for each minute of activity. It assumes that we will achieve effective and efficient operations through better control and costing of each piece of the organisation.

This worldview is linear, based on the assumption that identifying causes (problems) will enable correct solutions, and the elimination of problems (effect). This way of viewing assumes order and predictability as the standard. Therefore, 'failure' is where disorder or unpredictable outcomes occur. These are met with blame and fault-finding because someone let the system fail.

So how are we doing after 150 years of industrial society? Not well on the inside. One indicator of the failure of macro-economics is how we feel about our jobs. Draman quotes a 2014 Gallup poll where over 70% of employees indicated they were either 'not engaged' or 'actively disengaged' at their place of work. This is an outcome of a system where the overarching goal is profit. Why? This is a narrow and short-term goal. It rewards short-term thinking, originating in the 1970's when the US economy was financialised. The focus in business in the US and in Australia has shifted from the product or service generated to the revenues generated from financing.

The global, national and organisational consequences of financialising are explored in detail in the book. Analysing business change management texts, Draman concludes that the bulk are 'more of the same'. New approaches require us to challenge existing practices, system goals and values. Draman does not dismiss the value of the scientific method to humanity, especially in closed systems such as medical or mathematical exploration.

When it comes to complex human systems, linear thinking is not the best framework because thinking as though we have control of the cause and effect of the factors we see as important, does not help us understand and respond effectively

to complex, curly and ‘wicked’ problems of this century. Wicked problems have many variables and interdependencies between parts of the systems. Think of earth’s climate system, endemic poverty, the range of factors that contribute to human health, or the education of a child. These are all areas of our society where, despite long-term financial investment and good intentions, the ‘problems’ never seem to go away.

The book shows how the assumptions of linear thinking create and re-create problems. This is because quick responses and additional control and monitoring are the best ways to fix a machine. We see this clearly in the public discourse around Australian literacy and numeracy standards in school children, where perceived ‘failure’ has led to more and more controls and monitoring. Politicians and bureaucrats seek to avoid blame and ‘find and fix the problem’ by a greater focus on teaching the basics in the classroom. The more we try to change things using this mindset, the more it stays the same.

By contrast, a systems approach looks for patterns when disturbances (problems) emerge. This requires a different way of perceiving. The intention is to see the underlying order that will give us insight into the behaviour of each system. Focusing on one part of a complex system will not help us to understand a whole – focusing on one parent does not reveal the dynamics of the family. Learning to recognise a system’s flow and feedback loops means understanding and valuing processes, networks and relationships.

Draman identifies and explains the enemies of systems thinking in “we have to fix it quickly”, which implies doing it before you understand what ‘it’ is. “We must make the budget last until the end of the financial year” prioritises short-term, budget-driven fixes that most often inhibit long-term sustainability. And, while there is nothing wrong with information, when “we need more information” is invoked to search for the linear cause or answer, it stifles one’s creativity and the ability to see the system. “To hell with the rest of the organisation (or other organisations), we must get our needs met” reflects bunker mentality, a win-lose perspective common from politics to community sectors such as environmental



education, when we don’t recognise that a healthy system is not a monoculture.

To help us re-frame our businesses and communities as living systems rather than as profit machines, the second half of *The Interdependent Organization* is devoted to tools and techniques to assist the transition to this new mental model. The assumption is that we change behaviour by changing our focus to measures of performance, equity and happiness. The first step in the transformation to become a learning organisation: embedding the ‘action-learning’ cycle of plan-act-review and retraining in skills for ‘seeing systems’.

Some of the best things are difficult to measure. This is true of experiencing strong levels of trust within an organisation or taking part in open and honest communications between people working together. Draman identifies these qualitative developments as a few of the valuable outcomes of shifting towards a systems perspective. Observations that my research validates.

Broadening our focus from the individual tree to the entire forest leads us to value a diversity of perspectives. It also awakens our curiosity, because to understand how the myriad of interdependent relationships combine to make our forest healthy is a dynamic, life-long endeavour. This is a collaborative way of working, where we experience that the most satisfying and enlivening way of working occurs when we learn to see the whole together.

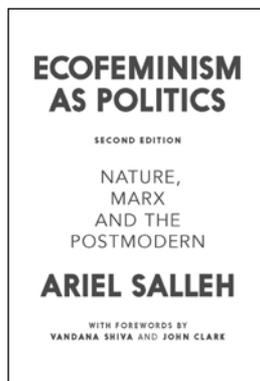
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Sarah Houseman a PhD candidate at La Trobe University, and a member of Friends of the Earth Melbourne’s Act on Climate Collective. Sarah blogs at sarahhousemansite.wordpress.com and you can email her at sarah.houseman@gmail.com. She consults through Glasshouse Creative Media (www.glasshousecreativemedia.com)

Friends of the Earth Australia members exploring the complexity of our interdependent organization. Photo by Sarah Houseman.

Ecofeminism as Politics

*Ecofeminism as Politics:
Nature, Marx and the Postmodern*
Ariel Salleh
August 2017
ISBN: 9781786990402
Also available in e-book
[www.zedbooks.net/shop/book/
ecofeminism-as-politics/](http://www.zedbooks.net/shop/book/ecofeminism-as-politics/)



An updated edition of Ariel Salleh's landmark exploration of the relationship between feminism and ecology, *Ecofeminism as Politics* is now a classic, being the first work to offer a joined-up framework for green, socialist, feminist and postcolonial thinking, showing how these have been held back by conceptual confusions over gender.

Originally published in 1997, it argues that ecofeminism reaches beyond contemporary social movement ideologies and practices, by prefiguring a political synthesis of four-revolutions-in-one: ecology is feminism is socialism is postcolonial struggle.

Ariel Salleh addresses discourses on class, science, the body, culture and nature, and her innovative reading of Marx converges the philosophy of internal relations with the organic materiality of everyday life.

This new edition features forewords by Indian ecofeminist Vandana Shiva and US philosopher John Clark, a new introduction, and a recent conversation between Salleh and younger scholar activists.

"The combination of eco-socialist, feminist and decolonial perspectives is analytically and politically thrilling", writes Ulrich Brand, University of Vienna, co-author of *Theorizing*

the Imperial Mode of Living. Maria Mies, ecofeminist activist and author of *Patriarchy and Accumulation on a World Scale*, writes: "Neoliberalism has not eliminated poverty, nor discrimination of women, nor exploitation of the Earth; neither economists, politicians, nor theoreticians know a way out. Marxists ignore both nature's and women's contribution to the production of wealth, but as ecofeminists show, this is the lost key to building another world."

Ariel Salleh is a founding member of the Global University for Sustainability, Hong Kong; a visiting professor of culture, philosophy and environment at Nelson Mandela University; and a research associate in political economy at the University of Sydney. She also co-founded the Movement Against Uranium Mining in Australia. Her other works include *Eco-Sufficiency & Global Justice: Women Write Political Ecology* (2009).

The body of *Ecofeminism as Politics* covers these topics:

Part I: Women and Ecopolitics

1. Ecology Reframes History. 2. Ecofeminist Actions

Part II: An Embodied Materialism

3. Body Logic: 1/0 Culture. 4. Man/Woman=Nature.
5. For and Against Marx. 6. The Deepest Contradiction

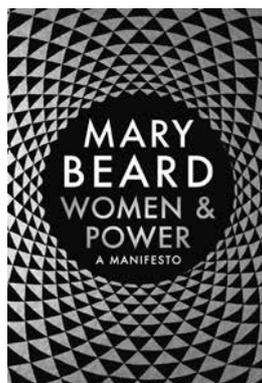
Part III: Making Postcolonial Sense

7. When Feminism Fails. 8. Terra Nullius. 9. A Barefoot Epistemology. 10. As Energy/Labour Flows. 11. Agents of Complexity. 12. Beyond Virtual Movements

Interview: Embodied Materialism in Action

Women and Power: A Manifesto

Women and Power: A Manifesto
Mary Beard
December 2017
Profile Books
www.allenandunwin.com
ISBN:9781788160605



"Why the popular resonance of 'mansplaining' (despite the intense dislike of the term felt by many men)? It hits home for us because it points straight to what it feels like not to be taken seriously: a bit like when I get lectured on Roman history on Twitter." - Mary Beard

British historian Mary Beard is also a committed and vocal feminist. With wry wit she shows how history has treated powerful women. With examples ranging from Medusa and Athena to Theresa May and Elizabeth Warren, Beard

explores the cultural underpinnings of misogyny, considering the public voice of women, how we look at women who exercise power, our cultural assumptions about women's relationship with power, and how powerful women resist being packaged into a male template.

With personal reflections on her own experiences of sexism online and the gendered violence she has endured as a woman in the public eye, Mary asks: if women aren't perceived to be fully within the structures of power, isn't it power that we need to redefine?

Beard is a professor of classics at Newnham College, Cambridge, and the Classics editor of the Times Literary Supplement.



Last July at the United Nations, 122 states voted to adopt the Treaty on the Prohibition of Nuclear Weapons.

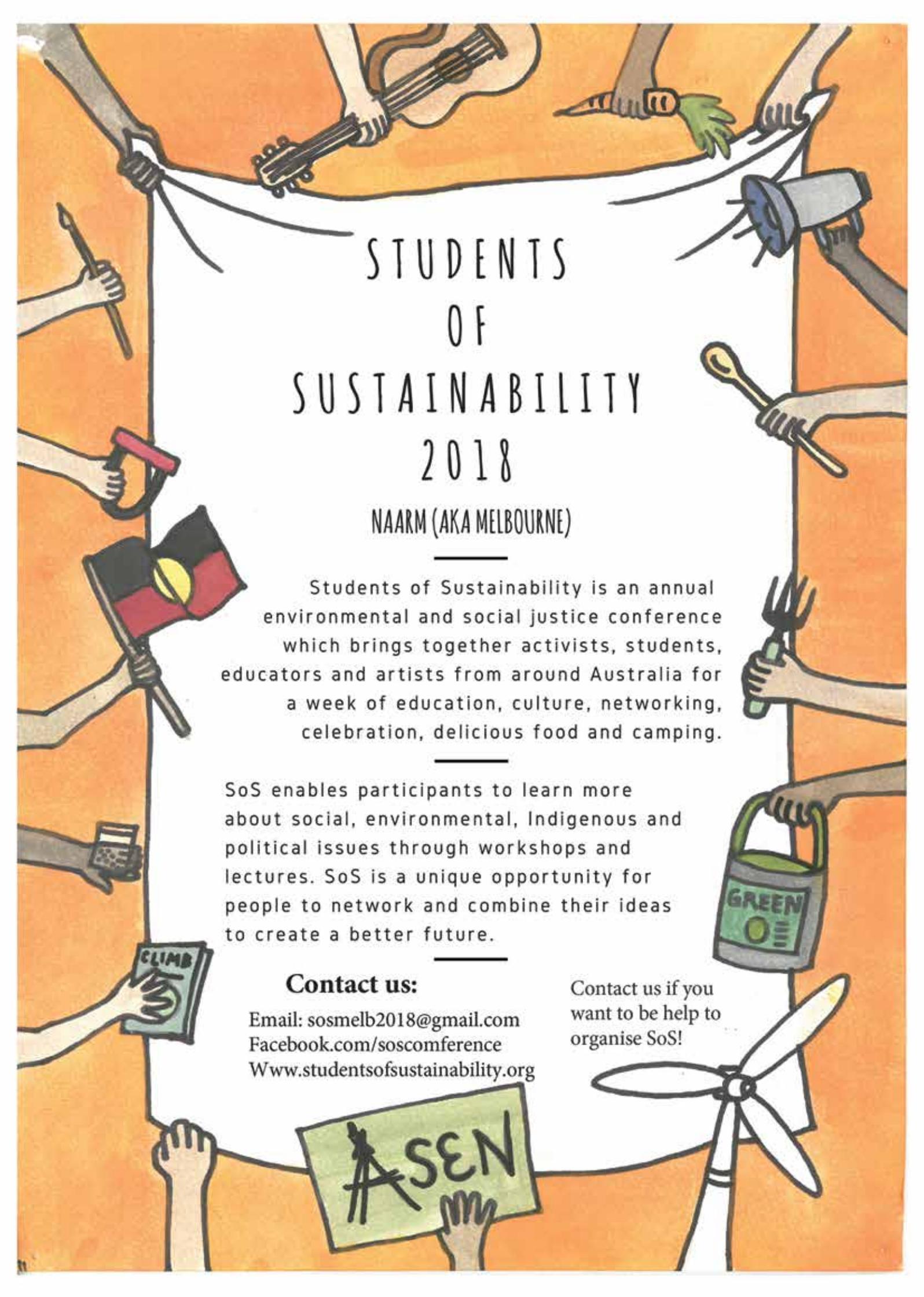
This is the first treaty to ban these weapons of mass destruction, setting out a pathway for their total elimination.

Australia has not yet joined the nuclear ban treaty, but parliamentary support is growing for this goal.

Have your federal parliamentary representatives pledged their support?

www.icanw.org/projects/pledge





STUDENTS OF SUSTAINABILITY 2018

NAARM (AKA MELBOURNE)

Students of Sustainability is an annual environmental and social justice conference which brings together activists, students, educators and artists from around Australia for a week of education, culture, networking, celebration, delicious food and camping.

SoS enables participants to learn more about social, environmental, Indigenous and political issues through workshops and lectures. SoS is a unique opportunity for people to network and combine their ideas to create a better future.

Contact us:

Email: sosmelb2018@gmail.com
Facebook.com/sosconference
Www.studentsofsustainability.org

Contact us if you
want to be help to
organise SoS!