



AUTUMN 2016

A FREE PUBLICATION FROM
Healthy futures for and lands and people
ARID LANDS ENVIRONMENT CENTRE
www.alec.org.au



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The Devils Advocate is the quarterly newsletter of the Arid Lands Environment Centre. The deadline for submissions for the Winter edition is Friday 29th July 2016. Articles, pictures, poetry, letters, welcome. Email communications@alec.org.au

All opinions expressed within Devils Advocate are those of the author alone, unless explicitly expressed.

The Devils Advocate is edited and designed by Nicole Pietsch, ALEC's Communications and Campaigns Manager. It is printed on 100% recycled paper.

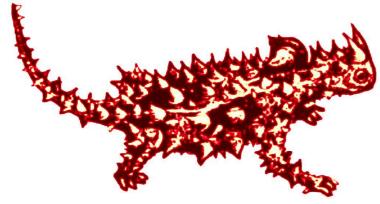
Front and back cover images by Peachy

The Arid Lands Environment Centre acknowledges and pays respect to the traditional owners, both past and

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present, of this region.



Arid Lands **Environment** Centre



ALEC DIRECTORS' WELCOME

G'day folks and welcome to the first edition of the Devil's Advocate for 2016.

It's been an exciting year and busy year at ALEC. While we're celebrating our first year in the Gap, I'm chalking up my eighth at the helm of ALEC. I am also working on the exciting **Ten Deserts** Initiative – connecting land managers across our vast interior. Check out the Ten Deserts website www.tendeserts.org

We have a great team at ALEC. Carmel is cranking out Food for Alice every week and keeping the business of ALEC ticking over, Nicole is driving our community organising and communications, and Alex is driving the growth and impact of **Arid Edge** with a contract to deliver 12 months of food garden and nutrition related activities in Utopia signed; a 6 month Green Army program starting in late April and a number of other projects in the pipeline.

The Arid Lands Environment Centre (ALEC) is firing on all cylinders at the moment. Coming off a summer of supporting the community campaign against the proposed Hale nuclear waste dump 70km south of Alice Springs, ALEC has not stopped.

RePower Alice Springs...

The total electricity blackout that happened in late January 2016 prompted the NT Government to announce a \$75M 'investment' in 10 new gas fired engines for Territory Generation's Owen Springs Power Station. Despite Alice Springs being a 'solar city', there was not a mention of renewables.

In response, ALEC has supported the RePower Alice Springs group to form and meet regularly. A broad cross-section of the community is supporting the group and it is fast making solar

power an NT election issue

Key asks from the Government is for a ten year energy plan to guide the transition to solar energy and for the



government to reconsider its awarding of finance for the tender until such a plan is developed. It's early days but already RePower Alice Springs is emerging as a powerful campaign with the potential to drive government investment towards more solar power.

Climate Change...

The glow of the Paris climate agreement in December is wearing off quickly - we have just experienced our warmest March on record. As a result, more than 90% of the Great Barrier Reef has bleached and reefs from east to west of Australia are reporting large-scale bleaching events.

The world agreed in Paris to the target of limiting warming to 1.5°C, this will require almost all of the world's remaining fossil fuels to stay in the ground.

We are in climate change. It is not tomorrow, it was yesterday and it is today and will be continuing until we find a way to live within our planetary means and reduce our pollution.

Given the powerful influence of the fossil fuel lobby, this is going to be a monumental task. But we must challenge the 'frack it, pump it, sell it, burn it' mentality that is being pushed across the Northern Territory, and do everything that we can locally to reduce emissions. ALEC is working hard on this front.



Upcoming NT Election...

The NT election campaigns are ramping up, and the NT environment is increasingly on the agenda with the issues of fracking, energy policy and regulatory reform.

NT environmental regulatory reform is critical. What is needed is independence in the approval process, thus taking approval of projects that have significant environmental impact away from the Mines and Energy Minister and giving them to the Environment Minister and NT EPA to have more responsibility (see the NT Environment policy article for more detail). This breaks the current conflict of interest in approval processes for projects and is leading to the weakening of the regulatory system to produce regulations, let alone enforce compliance.

The NT Government is pushing hard to develop the shale gas industry with the proposed pipeline to Mt Isa and large advertising campaign; Minister Frydenburg is yet to pick a site for a nuclear waste dump; the Alice Springs Water Allocation Plan was signed off for 10 years without any community consultation; a number of mining projects are submitting draft Environmental Impact Statement's and the NT Government continues to mislead the public in relation to the robustness of the environmental regulatory system in the Territory.

This election year we'll be calling on our political representatives to support and drive investment in renewable energy; protect our groundwater and atmosphere from the pollution risks of shale gas fracking; invest in the protection of nature through supporting indigenous ranger programs; clear and effective environmental regulations; and decisive action to protect vulnerable communities from the impacts of climate change.

Become a Desert Defender...

Two years ago, ALEC was reeling from funding

cuts of more than \$180 000 per year. This saw the end of desertSMART COOLmob after 12 years of delivering home energy and water efficiency audits and sustainable living advice, and a big hit on ALEC's operational budgets.

Thanks to the generosity of some central Australians and a few other lovers of the desert country – ALEC is celebrating its' first year in the Gap and another year of survival. Without this financial support, ALEC would not be here.

This financial year, we're asking you to be a part of our Desert Defender program. Regular giving enables ALEC to maintain its momentum and drive change on numerous fronts. Go to www. alec.org.au to find out how you can get more involved at the Arid Lands Environment Centre.

We're not backing down and we're not going away – climate change adds a level of urgency on all that we do. Be ready to stand with us as we continue to work towards our vision of 'healthy futures for arid lands and people.'

Jimmy Cocking



Jimmy and son Louka at the Ilparpa claypans after the summer rains.





Ten Deserts is a conservation initiative that is raising the profile of Australia's desert country and it's value to global biodiversity.

Ten Deserts is bringing together a diverse range of stakeholders to identify the key threats to biodiversity across the region, and to develop integrated landscape scale strategies to counter the threats.

Ten Deserts is connecting land managers across borders and land tenure through facilitating knowledge sharing, capacity building, and collaborative planning to maximise on-ground outcomes.

The two key collaborative projects for the Ten Deserts in 2016 are:

- Buffel Grass Free Great Victoria Desert
- Organising an on-country Desert Fire Forum and Workshop in early 2017



Desert Fire

For thousands of years the Australian landscape has been shaped by fire and its use by people. Indigenous Australians continue to use fire as part of their cultural practice to hunt for food, and 'clean up country'.

Australia's desert country is rich in biodiversity and highly adapted eco-systems. The highly variable and unpredictable rainfall patterns dictate how much of the landscape is susceptible to burning. Fire patterns have changed as people have moved from nomadic lifestyles, different land uses have emerged and weeds have encroached, leaving large tracts of land vulnerable to wildfire.

Wildfires are one of the largest threats to biodiversity and property. Large wildfires also contribute to the impacts of climate change. Wildfires can be incredibly destructive, but when fire is used as a tool it can benefit biodiversity, people and the climate.

Through restoring mosaic burning practices, and coordinating these on a regional scale, fire is playing an important role in land management. The vast scale of the arid lands requires landholders to work together across borders and land tenure to reduce the threats of wildfire. Improved fire management practices also provide opportunities to address climate change through emerging carbon abatement programs.

Increasing knowledge sharing, collaboration and training on fire management is an aim of the Ten Deserts initiative.

The Desert Fire concept is based on recommendations by Edwards et al (2008-09) – Fire in central Australia and Desert Fire: Fire and regional land management in arid landscapes of Australia.

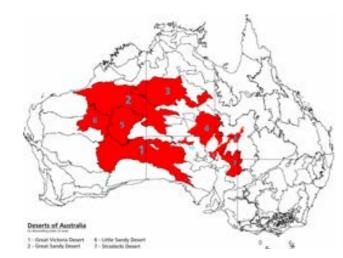


It states:

- 1. Fire is a tool which means we need to use it, not fear and only suppress it.
- 2. Regional fire management strategies need to be developed across the desert country through inclusive stakeholder engagement.
- Better monitoring system including fuel loads, fire histories, seasonal conditions and location of fire sensitive assets (infrastructure, grazing pastures and conservation) is required.
- Coordinated across tenures and across borders – pooling resources, developing regional fire management plans and funding to support the development of a sustainable funding model that is seasonally responsive and overcomes the shortcomings of annual budget cycles.
- 5. Develop best practice through sharing knowledge, creating cross cultural understanding and addressing knowledge gaps through targeted research.

Research areas to better understand:

- a) Fire behaviour,
- b) Fuel accumulation and curing rates,



from Wikipedia: Map of Australia, with internal borders and Interim Biogeographic Regionalisation of Australia (IBRA) regions overlaid; deserts highlighted, w/legend; also see http://www.environment.gov.au/parks/nrs/science/bioregion-framework/ibra/index.html (http://www.environment.gov.au/parks/nrs/science/pubs/regions.pdf; http://www.environment.gov.au/parks/nrs/science/pubs/subregions.pdf)

- c) Traditional uses of fire,
- d) The best way to burn in remote areas,
- e) The impacts of fire on biota and landscape function and;
- f) The opportunities to market carbon sequestration and greenhouse gas abatement outcomes from prescribed fire regimes in desert landscapes.

Ten Deserts will catalyse the implementation of these recommendations by:

Raise the profile:

- Promoting fire as a land management tool across the desert country
- Advocating for a national monitoring system and cross border regional fire planning
- Advocacy for funding to research knowledge gaps and development model to overcome annual budget cycles.

Connect people:

- Organising the Desert Fire Forum to bring diverse stakeholders in fire and land management together to plan, share knowledge, identify opportunities to coordinate actions
- Identifying priorities and research gaps

Connect country:

- Better monitoring
- Best practice across borders and land tenure
- Mosaic fire patterns across the Ten Deserts, less big hot wildfires, greater diversity of vegetation ages.

Reference

Edwards GP, Allan GE, Brock C, Duguid A, Gabrys K, Vaarzon-Morel P (2008) Fire and its management in central Australia. The Rangeland Journal 30, 109–121.

Edwards, GP, Allan, GE. ed. Desert fire: fire and regional land management in the arid landscapes of Australia. Desert Knowledge CRC., 2009. http://www.nintione.com.au/resource/DKCRC-Report-37-Desert-Fire_fire-and-regional-land-management-in-the-arid-landscapes-of-Australia.pdf

Jimmy Cocking



CENTRAL AUSTRALIA'S PREMIER SCIENCE AND SUSTAINABILITY EVENT

Friday 12th August - Sunday 14th August

Eco-Science Schools Day, The Alice Springs Bicycle Film Festival, Green Thumbs with Costa, Science Under the Stars, and the Sunday Eco-markets & Sustainable Living Festival

Organised by the Arid Lands Environment Centre as part of National Science Week





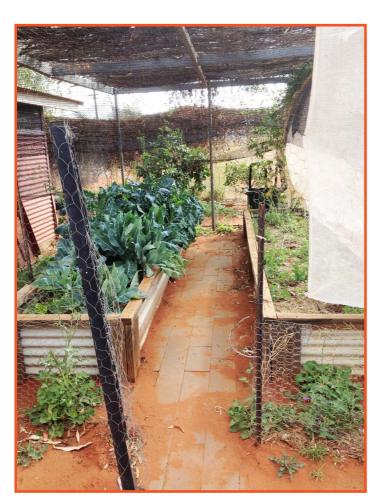
The start of 2016 has been a real cracker for Arid Edge, with heaps of interesting contracts happening and opportunities on the way.

Our Utopia Food Gardens program has gone from strength to strength under Hilton Chilvers' steady hand. Winter vegie crops have been planted across various homelands, fruit trees have gone in at the new garden at Rocket Range, fences going up for a new garden at Boundary Bore and strong community interest for gardens at Mosquito Bore also. The partnership with My Pathway continues to strengthen as well, with another 12 month contract recently confirmed, and the possibility of employing a part time nutritionist in the near future also.

We recently started our first Green Army project with the Alice Springs Town Council in late Arpil, undertaking revegetation works and managing buffel grass around River Red Gums in the Todd River. We welcomed Jake Eden onto the team in early April to supervise, and have recently filled our 9 paid volunteer positions with a great team of local Alice Springs youth who will work with us on this project for the next 6 months. We hope to have updates of results before long, and hopefully news of more projects to come.

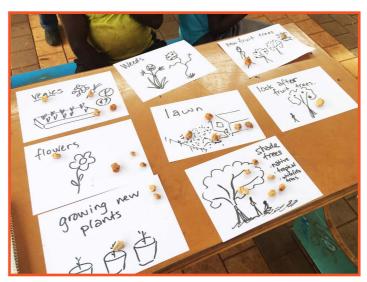
Arid Edge has recently been invited to work with MPH Carpentry and Construction to implement the landscaping works at the new Larapinta Childcare Centre. This is an exciting opportunity and a high profile project to be involved in, with some beautiful designs from LA3 architects, and hopefully the start of a great working relationship with MPH. Sunil Dhanji will bring his years of experience from Alice Water Smart and Arid Edge's landscaping team to lead this project between now and mid year.

The whole of community landscaping project in Willora community (that's Willora not Willowra!) is set to move into stage 1 construction this winter, following on from extensive community consultations and an initial wicking barrel fruit trees activity in late 2015. Facilitated by CLC and with some great landscape designs by Clarsen and Clarsen Landscape Architecture, this project is proving very popular with the community and is attracting interest from other communities and organisations as well – including Aspect Design Studio in Sydney who will send 2 volunteer landscape architects to assist with the project when stage 1 gets under way. Stage 1 of the project will include shade trees on the main street, a park around the existing community meeting area and some plantings for the community hall/church grounds - all focused on addressing environmental heath issues of sun



Utopia Aged Care Arid Edge garden project





Nyrippi garden planning consultation.

and dust.

Our partnership continues with Live and Learn (an international environmental education NGO) through long time ALEC staff member and supporter Robbie Henderson. We are currently jointly developing a toolkit for NAILSMA to assist them in empowering their local Aboriginal partners and communities to assess how well the savannah burning C02 abatement projects they are involved in meet their desired outcomes based on traditional values (as opposed to market values or western values). With a draft toolkit nearly complete, we're looking forward to heading up to Arnhem land soon for field testing.

The work for the dole team at the community garden has just finished it's first 6 months, led by long time ALEC and Arid Edge stalwart Ben Wall. Beautiful new rendered earth bag garden beds, water features, shaded potting sheds and compost areas have been constructed, and colourful artwork and date palm-frond ornaments abound – the gardens are looking great! Ben and the team are taking a short break (for date harvesting season!) and will hopefully be back for another 12 month round starting mid year.

Our Garden Tune Ups and small landscaping projects continue, with numerous Alice Springs

residents calling us for assistance and saving water and money as a result. Don't forget Autumn is a great time to adjust your watering schedule for winter and make sure you're not over watering when your garden doesn't need it.

Call us on 8953-8835 or email on info@ aridedge.com.au if you'd like a to book a \$49 garden tuneup.

The team has grown a lot recently as well. This time last year, Arid Edge was a one man operation – now we have 5 staff on the team, with at least one more due to join us soon. Watch this space for more news from ALEC's dynamic social enterprise arm!

Alex McClean





RePower Alice Springs

The RePower Alice Springs community campaign has been launched as a direct response to the recent NT Government announcement to invest \$75 million into ten new gas-fired turbines at Owen Springs Power Station with no community consultation.

Whilst investment in reliable energy supply is welcomed, investment in fossil fuels is not and as the world starts to rapidly transition to renewable energy, the NT Government is taking a backward step by continuing to invest in fossil fuel infrastructure.

RePower Alice Springs represents a growing number of community members who want a solar future for the town. We are asking the NT Government to:

Immediately modify the contract with Clarke Energy to reduce the number of new gas turbines installed at Owen Springs, and redirect the available funding to up-scaling local solar power generation.

Commit to a ten year plan to transition Alice Springs to renewable energy

Create a Territory-wide Renewable Energy and Climate Change policy informed by climate science and community engagement with a focus on attracting investment for low-carbon energy infrastructure.

"Alice Springs citizens have long shared a vision of Alice as a Solar City," said RePower Alice Springs spokesperson Louise Stanley. "With over 300 sunny days every year, Alice Springs has some of the highest solar potential in the world. We have a great legacy and expertise from the

Alice Solar City project, so lets capitalise on this, not lock ourselves into another 20 years of fossil fuel energy."

"This decision represents a disconnect between the community, our elected representatives and Territory Generation. As the community continues to invest in rooftop solar and demand sustainable solutions, our NT government is fixated on gas, and is wasting public money on large-scale infrastructure that is destined to become a stranded asset in a low-carbon future," said Miss Stanley.

"We've just had the hottest February on record and now we are being told that the Great Barrier Reef is undergoing a mass bleaching event due to climate change. Climate change is real, it's happening right now and we need strong leadership from our government, not a business as usual approach. RePower Alice Springs will be mounting a national campaign to have this decision reversed, and for the NT Government to engage in a plan to transition Alice Springs to solar energy," Miss Stanley said.

Community members are invited to get involved in the campaign by emailing repoweralicesprings@gmail.com and to like the Facebook page https://www.facebook.com/repoweralicesprings/





Dollars and sense - answers needed on solar.

The deputation by Territory Generation to the Alice Springs Town Council and local businesses in April has raised significant questions about the company's decision to invest \$75 million solely in gas-fired energy infrastructure. It was made clear that neither the company, nor the Northern Territory Government, has a vision for expanding solar energy in Alice Springs.

"Whilst they acknowledge the town leads Australia with 40% of our power now coming direct from the sun, they are saying more solar will be detrimental to the grid." said Glenn Marshall, spokesperson for RePower Alice Springs.

"Rather than tackling the opportunity of worldclass solar grid integration and battery storage, they are abandoning solar altogether and going with 100% gas engines. We fear they will ultimately ban new rooftop solar installations, " said Glen Marshall. "They are blinded by gas. They need to explain why expanding solar power is not on their agenda."

"This week, the Institute for Sustainable Futures released modeling showing that a transition to 100% renewable energy across Australia is both technically and economically feasible, including large-scale battery storage," said Lou Stanley. "Alice Springs is leading the way, and our community has made it clear through our previous Alice Solar City program that we want to be at the forefront of developments, not lagging behind".

The deputation raised more questions than it answered regarding the future of Alice Spring's energy supply. RePower Alice Springs is calling on Territory Generation and the NT Government to respond to the following questions:

 Will Territory Generation commit to transparency by releasing the economic and technical modeling that informed their gas-

- only decision?
- Did they compare the whole-of-life economics of gas versus solar energy generation over the 25 year lifespan of the engines?
- Does Territory Generation currently restrict the amount of solar power being imported from the Uterne solar farm?
- What measures are Territory Generation taking to ensure that the grid is increasingly capable of solar integration?
- Given Territory Generation CEO, Tim Duignan has stated that extra solar will be detrimental to the stability of the grid, what is their stance on future installations of household solar systems? Will they ban or limit the size of systems, and what is their proposed buyback rate for solar power in coming years?
- RePower Alice Springs is concerned that this decision was driven by existing gas supply contracts. What are the details of these contracts, including who are they with, how long for, are gas prices locked in or will they escalate if/when the Tennant Creek to Mt Isa gas pipeline comes online? Will this impact the price of household power?
- Territory Generation has stated that the company is developing a renewables roadmap by mid-year. What is their Terms of Reference and who is inputting to it? Will it include key stakeholders and proper public consultation?
- What policy or Energy White Paper has the NT Government used to inform their gas-only decision? What is their policy and future plans for renewable/solar energy across the NT? What are their plans to limit greenhouse gas emissions in line with global climate change targets?
- Does Territory Generation or their fellow power companies have strategies to minimize power use in Alice Springs through demand management, and are they pursuing equitable access to renewable energy for lower income residents?



FRACK FREE COORDINATOR UPDATE

What a year it has already been so far! Things are really gaining momentum in the lead-up to the NT Election in August!

Earlier in the year NT Labor announced they will put in place a moratorium on fracking if they win the election. This will allow for appropriate regulations to be put in place, baseline studies on our underground water systems, fugitive emissions and public health impact, and further research on the impacts of fracking on our communities to emerge.

The announcement has been followed by significant backlash and scare mongering from the NT Government claiming that the potential moratorium is costing jobs and putting the viability of the NEGI pipeline from Tennant Creek to Mt Isa at risk.

Interestingly though, across Australia, oil and gas companies are winding down due to lower global prices, and tens of thousands of jobs are already being slashed from the struggling industry in other states.

In the NT fracking operators have already scaled back operations due to the low oil price, only drilling 6 sites in 2015 instead of their planned 25.

One company which undertook 2 fracking operations in the Daly Waters area last year, Pangaea, has advised it is halting operations, citing the uncertainty caused by the potential moratorium. However it is more likely to be as a result of the downturn in the industry.

We need to keep up community pressure for a moratorium in the face of the Giles Government scare mongering to ensure our communities are not put at risk. Meanwhile the NT Government is doing it's best to convince us that the regulatory framework surrounding the industry is best practice!

The Government recently released draft Petroleum regulations for comment. While we welcome moves to improve the regulatory framework, the regulations fall far short of what is needed to ensure our environment and communities are protected.

Instead of setting minimum standards companies must adhere to, the Regulations put the onus on companies to prove they have taken all steps to mitigate risk to the 'lowest practicable level'. Because of this the Regulations will not be enforceable if companies do not follow what they have laid out in their environmental management plans.

The Regulations also allow companies to get out of paying large fines for non-compliance, by negotiating a lowly infringement notice instead.

The Government's line is that the known risks and pollution impacts of the gas fracking industry can be avoided with strong regulation. But this

MR GUNNER, ARE YOU LISTENING TO THE TERRITORY PEOPLE, OR THE GAS FRACKING LOBBY?





first attempt is just not strong enough to protect water and the broader environment. A review of the Petroleum Act itself is also apparently underway with consultation proposed for later in this year.

We will continue advocating for much stronger regulation to protect our land and water.

Pipeline Under Threat

The viability of the pipeline has come under threat from a number of counts since the company responsible for developing it, Jemena, was announced last November.

Despite the NT Government initially saying that the pipeline would not require fracked gas, Jemena, also responded negatively to the moratorium announcement saying it would cast doubt on it's commercial viability.

More recently Jemena announced it would reduce the size of the pipeline from 14 inches to 12 due to lack of commitment from NT gas producers and there was a call from the NT Chamber of Commerce for the Government to inject 60 million into the project. However the NT Government ruled out additional public spending on the pipeline.

While the NT Government continually claims that no public funds have been used for the pipeline, 9.2 million was committed in the 2015-16 budget to support the industry to put in proposals for the project.



Protest outside of Chief Minister Adam Giles office

The pipeline is partly underwritten by a 10-year gas supply deal between Incitec Pivot and PowerWater Corporation to provide it with the NT's excess gas (starting from 2018), as well as a commitment from Central Petroleum to make up the difference with supplies from it's Mereenie, Plan Valley & Dingo conventional gas fields.

However even with these initial supplies of conventional gas the pipeline will still need fracked unconventional gas for it's long-term viability and if built will drive the development of fracked gasfields in the Territory.

However looking at the global picture it is unlikely there will be a market internationally for NT fracked gas with the global glut of cheaper gas from other countries such as Russia available for the main target market, China.

The pipeline never had a solid economic case and it is simply madness for it to be built on the basis of a non-existent gas market. If built the pipeline will only end up an expensive stranded asset.

Tanya Hall







The year started with a bang for CAFFA with our community surveying kicking off at the end of February.

We also held an action at the start of the Northern Territory Government's Annual 'Geoscience Exploration Seminar' in March. The seminar is attended by mining company representatives from all over the world and includes sessions by the NT Government promoting the potential for shale gas fracking in the NT.

About 50 community members came down to

send strong message to the NT Government & the gas companies that we won't stand for fracking at in Central Australia

'Our Land is Our Life Event in Katherine'

On 15 & 16 April CAFFA members travelled to Katherine for 2 fantastic events – a one day conference and a huge horse and rider march through the streets!

The conference saw about 60 people from across the Territory gather to form a powerful alliance with a strong commitment to fighting fracking across the NT. The conference hosted guest speakers John Fenton from Wyoming and Helen Bender from Queensland who shared their stories about living in the gasfields.

Saturday morning saw us take to the streets to spread a powerful message that we won't stand for fracking in the NT!!

Around 300 people marched through Katherine and it was overwhelmingly hopefully to see Traditional Owners, pastoralists and people from the broad spectrum of the community standing together to oppose unconventional gas exploration in their communities.

And the take home message was that we're winning!

Now we need to keep the momentum going! We will be holding actions on Tuesday May 17 and Saturday 24 June. Stay tuned for more information!

We Need You - Get Involved!!

CAFFA currently has a core of about 10 people who are actively involved in helping coordinate the campaign – that's 10 people standing up for the whole of Central Australia!!

In the lead-up to the election we need EVERYONE to get involved. If you have been



following the campaign and support our cause please get in touch to get involved. We need every bit of help we can get. You don't need to commit lots of time there's small jobs to be done that you can even do at home!

Please get in touch to find out more – email frackfreecoordinator@gmail.com or ph Tanya on 0409 886 129.

CAFFA Community Surveying

I've just come back from Katherine where a big group of people from all over the NT came together to think about fracking, it's impacts on country, people and communities and how we will protect these from the destruction it is known to cause.

Amongst all the brilliant thoughts that were shared over these two days there was one message that continued to be spoken over and over by many different people. That is that to stand strong against the big mining companies and governments who only have profit in the forefront of their minds, WE need to come together. All people need to stand as one against this dangerous and irrational industry.

In the words of Eddie Mason, this is what we are currently doing here in Alice Springs by conducting the community gasfield-free survey – we are gathering people, creating a Tsunami to deliver a message that can not be ignored.

Early this year a group of volunteers from the Central Australia Frack Free Alliance came together to plan for implementnig a democratic grassroots process to survey the whole of Alice Springs, one neighbourhood at a time. This type of community survey was first developed in Northern NSW where many communities were under threat of mining.

Groups of volunteers went door-to-door, road-

by-road throughout their neighbourhoods to talk about unconventional gas extraction and gain an understanding of where their neighbours stood on this issue: http://www.lockthegate.org.au/communities_in_action.

This process has been used in over 140 communities now and thousands of people have been asked a version of the question "Do you want your neighbourhood gasfield-free?" Across Australia community after community have declared themselves gasfield–free by this process and proudly display signs alongside their town's welcome signs that notes the percentage of people in support of this.

In late February we ran a training session for a group of people keen to help with the survey and that very afternoon we started door-knocking!

We will complete our first neighbourhood survey at the end of May and are very excited to hear how many people stand in support of protecting this precious desert from turning into an industrial waste-land of fracking wells. It's too soon to announce the results just yet but standby because soon you will be invited to celebrate with us all as we erect our first sign declaring Old Eastside gasfield-free!



Community surveying volunteers in Old Eastside



So here is your invite to come and get involved. Get a bunch of your friends together, or do it with your family, it's a great excuse to get some exercise and catch up with each other. And, it is really fun walking around your town knocking on doors, getting to meet neighbours and hear their views on something as precious as our water supply.

And as I've heard said before, sometimes we feel so powerless that we don't know what to do... well, here is something practical, fun and active

you can do that will remind you that each and every one of us can make a powerful difference in the world.

If you want to get involved in the next neighbourhood survey send us an email: barbstar.m@gmail.com

Yours.

full of hope and excitement for a healthy future, Barb

Alice Springs Community Garden



Regular working bees are on the 1st and 3rd Sundays of every month.

www.alicecommunitygarden.org.au



COMMUNITY RESILIENCE, LOCAL FOOD PRODUCTION & LOTS OF YUM.



WHAT WE DO:

- We reduce food waste by buying backyard gardeners excess produce
- We reduce food miles by offering people local produce
- We create an alternative to the supermarket duopoly
- We create a culture and a community around local food



- We sell seasonal, local fruit & vegetables
- We also sell local honey, and eggs and can sell jam, pesto, and sauce if made in a registered kitchen.

MARKET STALL EVERY SATURDAY MORNING!

9-11AM @ ALEC



Join the Facebook group to see what produce we have!

Arid Lands Environment Centre, 90 Gap Rd, Alice Springs contact Carmel: 0409 180 614







BRINGING LOCAL FARMS & BACKYARD GROWERS OF ALICE SPRINGS TO THE TABLE.



Food Security in Central Australia

Food security is something that has grown in importance to me due to life experiences. As I was growing up and into my early twenties, my biggest priority as a poor student was having enough money to have food in the fridge. I did not really think about where it came from. Then I went to live in a remote Aboriginal Community and the focused changed to shopping for 8 to 10 weeks at a time between trips into Alice Springs. Living and working in remote areas you start to get an idea of just how long you could live without the convenience of a near-by shop, and without the indigenous knowledge of where to find food and water.

Now, I live in Alice Springs where there are two big supermarkets and a number of smaller independent supermarkets so shopping is relatively easy. However, I am not sure how secure it is, all it takes is the train line being damaged for more than one day for it to effect the stocks on the supermarket shelves. So, if there was a major supply problem, just how long would the stock last to feed 30,000 people?

On a more global scale there are threats that have the potential of effecting our food supplies. Natural environmental disasters from floods, fires, earthquakes, droughts and cyclones as well as unnatural environmental disasters such as soil and water contamination. When there are food shortages, especially for fresh food, it has a long way to go to get to Alice Springs.

How do we combat these threats?

In Alice Springs Food for Alice has been designed to help revitalise farmers markets, and increase the resilience of our food supply. The regular weekly market stall enables back yard gardeners and local farmers the opportunity to sell their produce to the community.

Opening the market every week has seen both the supply and demand for local fresh fruit and vegetable grow. This is not only supporting the growing demand for local, fresh food and reducing the carbon impact of our food miles. It is also allowing people to get their hands on fruit and vegetables that are not usually available in supermarkets. Things like tangelos, and lemonade fruits, ruby red grapefruits and locally grown dates and peanuts. Even fresh broad beans which is something that you can never buy fresh in Alice in any supermarket, and a bean called a drum stick, and a few giant Bok Choy's.

We have a long way to go before we really start to put a dint into a "what if" situation with regard to food security. However we have started, and from here we are only going to grow.

Join the Food for Alice Facebook Group: https://www.facebook.com/groups/108715702520033/

Carmel Vandermolen





NATURE LAWS - PROTECTING THE PLACES WE LOVE

On Tuesday 12th April the Places You Love alliance – a nationwide movement redefining how we protect community livelihoods, nature and wildlife – hosted a Nature Laws Workshop in Alice Springs to discuss the need for a stronger set of national environmental laws.

Co-hosted with the Arid Lands Environment Centre, it was one of many workshops taking place across the country designed to inspire and facilitate a collective conversation about the solutions we need for strong and effective nature protection.

The Places You Love Alliance formed as a response to the 2013 Federal government proposal for a 'one-stop-shop' for environmental approvals – an attempt to gut federal environment laws by handing decisions on matters of national significance to state and territory governments. The Places You Love alliance continues to grow and now represents 43 environmental organisations, including the Arid Lands Environment Centre, and over 1.5 million people.

Successive State of the Environment reports show the fundamental indicators of environmental health in Australia are in decline.



At the same time industry lobby groups have aggressively pushed governments to weaken existing environmental protection.

"The laws that protect nature are the foundations of a thriving Australia, but it's clear they are not strong enough to keep the places we love safe and healthy," said Australian Conservation Foundation CEO Kelly O'Shanassy and member of the Places You Love management committee.

"The current system merely manages the decline of nature, and we can do better than that. When something is broken, we fix it," Places You Love's national director Glen Klatovsky explains. "What could be more important than making sure the nature protection laws that keep us healthy and sustain local and national economies are actually working?"

35 local community members participated in the Nature Laws workshop. It was a great community engagement process, with many people feeling really inspired about working together to improve the environmental laws that protect our environment.

Take part in the nature laws conversation! Go to https://naturelaws.dialogue-app.com





BEYOND NUCLEAR INITIATIVE

Wasting the future: national and international radioactive waste proposals in Australia

For more than two decades, successive federal governments have been searching for a location to build a national radioactive waste facility. Remote communities have fought and stopped proposals in South Australia (1997-2004) and the Northern Territory (2005-2014), with strong alliances formed between Traditional Owners, trade unions, health organisations and environment groups. Plans for an international dump in WA were also shelved in the late 1990s after staunch community opposition.

The current proposal - the National Radioactive Waste Management Project - is assessing six sites nominated by landholders across the country. Three sites are in SA- (two in the Kimba region and one in the Flinders) with one each in the NT (Hale), Queensland (Oman Ama) and New South Wales (Hill End). There was no requirement in nominating for consultation with or consent from affected Traditional Owners, neighbours or the broader local community. A shortlist of two or three sites is likely to be announced in the coming weeks.



Six nominated sites standing together in Canberra

There is strong opposition to the dump proposal from communities at every one of the nominated sites. Delegations from each area recently travelled to Parliament House in Canberra to lobby politicians and speak out in the national media. Strong friendships and support networks have been built from the initiative.

The most dangerous of the materials planned for storage in the national facility is "long-lived, intermediate level" waste from overseas reprocessing of spent nuclear fuel rods. These fuel rods were used in the nuclear research reactors at the Australian Nuclear Science and Technology Organisation (ANSTO) campus at Lucas Heights south of Sydney.

The UK government, in exchange for allowing nuclear bomb tests to be conducted in Australia, provided HIFAR, the first reactor, to ANSTO in the 1950s. Two subsequent reactors have come online- MOATA, now decommissoned, and OPAL.

The reactors at Lucas Heights are used for industrial and medical research, along with the production of medical isotopes. There are plans for a three-fold expansion of radioactive isotope production in OPAL for export to the region, despite there still being no 'solution' for storage of the waste produced by its historical as well as current operations. The Medical Association for the Prevention of War (MAPW) argues for a move away from production of isotopes in a nuclear reactor, towards decentralised production in cyclotrons, which do not require nuclear fuel. This shift is currently being undertaken in Canada, where the research reactors have been shut down. Many resources are available on the MAPW website to further explore this topic.



Ignoring the central question of spent nuclear fuel waste, the federal government often argues in the media that a single national radioactive waste facility is required for storage of waste from the use of nuclear medicines in hospitals – such as gloves and contaminated clothing and equipment. But MAPW also disputes this claim, arguing that many of these less dangerous wastes have short half-lives and thus decay at their point of production, not requiring to be moved to a centralised facility.

The legislation governing the waste facility project, the National Radioactive Waste Management Act 2012, gives the Federal Resources Minister Josh Frydenberg wide reaching powers, including 'absolute discretion' over choosing a site. Land surrounding the nominated site can be compulsorily acquired if deemed necessary, for example, for an all-weather access road. The Commonwealth can also override any state or territory law that would hinder the national facility being constructed. Radioactive waste lasts a lot longer than any politician. It is imperative that management decisions transcend electoral cycles.

Internationally it is recognised that social license is as important as technical considerations when choosing waste facility locations.

The campaign to stop the radioactive waste dump proposed for Muckaty, 120km north of Tennant Creek in the NT, had a presence both on the street in Tennant Creek and outside politicians' offices in the major cities. A broad national alliance supported Traditional Owners to get their story heard through the national media and all the way to the federal court.

To stop the government riding roughshod over the six communities currently in the firing line we need to continue building opposition to this proposal, as well as the broad alliances that will stand up against any sites chosen.

SA Royal Commission into the Nuclear Fuel Cycle

In February 2015 South Australian Premier Jay Weatherill announced a Royal Commission into the Nuclear Fuel Cycle, framed as a "feasibility study" for the potential expansion of the nuclear industry in SA.

State and national environment organisations have expressed deep reservations over the Royal Commission process to date, with particular concern over the Commission's proindustry terms of reference and the unnecessarily complex nature of the Commission process.

The Tentative Findings of the Commission (released in February this year) were sceptical about the feasibility of establishing nuclear power or enrichment, but positive about the proposal to import high-level nuclear waste from nuclear power plants for storage and eventual disposal in South Australia. This finding relied in particular on an economic report that argued an international dump would be a profitable venture for the state.

However the revenue estimates have no basis in reality. There is no comparable overseas model of operating a nuclear waste disposal facility as a commercial venture. We have no idea how many countries might take of the opportunity to send nuclear waste to Australia for disposal, how much they might send, or how much they would be willing to pay. So there's no way of knowing whether revenue would exceed costs.

In the US, the Energy Department's plan aims to safeguard nuclear material for the next 10,000 years. But the SA Royal Commission is silent on the question of how much it would cost to safe guard waste for this unimaginable period of time. Finally it should be noted that there is only one deep underground repository for nuclear waste anywhere in the world – the Waste Isolation Pilot Plant (WIPP) in the U.S. state of New Mexico.



WIPP was closed in 2014 because of a chemical explosion that ruptured a nuclear waste barrel and resulted in 23 workers being exposed to radiation. Before WIPP opened, the government estimated one radiation release accident every 200,000 years. But there has been one radiation release accident in the first 15 years of operation of WIPP.

The final Royal Commission report is due in May 2016. Commissioner Scarce has already flagged that it is likely to be very similar in content to the interim report.

Traditional Owners from across SA, along with state and national environment groups are campaigning together under the banner SA: Too good to waste to maintain state and federal laws that prohibit importation of international radioactive waste.

Updates and detailed critiques of the Royal Commission process and findings can be found at http://beyondnuclearinitiative.com/sa-royal-commission/

To keep in touch with nuclear fee campaigns, join the facebook page 'Beyond Nuclear Initiative', follow on twitter @ BeyondNuclearOz or subscribe for updates to the blog at http://beyondnuclearinitiative.com.



Attendees at the Port Augusta meeting

Desert inspired images needed!

ALEC has a number of different forms of communicating with our members and the general public.

Websites, newsletters, Devil's Advocates and Annual Reports all need stunning photos to showcase this wonderful region that we call home.

- Scenic desert landscapes
- Waterholes, gaps and gorges
- Native animals and plants
- Feral animals, impacts of weeds and over-grazing
- · Mining and petroleum impacts
- Any other aspects of desert living

We're asking for your help. Will you exchange your digital photos for photo credit in ALEC publications? Please email Nicole communications@alec.org.au or call 8952 2497.





2016 ELECTION ISSUES

Arid Lands Environment Centre calls on current and aspiring parliamentarians to support ALEC's vision for 'healthy futures for arid lands and people'. ALEC will be developing a scorecard for the environment in the lead up to the Territory and Federal elections based on the following issues:

Territory

1. Real action on climate change:

- Recognise the need to keep fossil fuels in the ground as per Paris Agreement to limit global warming to 2°C (preferably 1.5°C)
- Develop Regional Climate Adaptation Plans in consultation with Local Governments
- NT Government fleet transition to electric vehicles - investment in solar-powered charging stations in Alice Springs.

2. Investment in renewable energy:

- 100% renewable energy target for Alice Springs by 2030
- 50% renewable energy in remote communities by 2020
- Financial incentives to encourage home and business rooftop solar investments, including enabling Environmental Upgrade Agreements.

3. Action on groundwater

- Substantial investment in mapping the groundwater resources of the region
- Removing exemptions from the petroleum and mining activities from Water Act and Waste Management Pollution Control Act
- Review of all water allocation decisions based on the incorporation of mining and energy projects into the water balance.

4. Strengthen NT environmental laws

· Strengthening environmental assessment,

- approvals and compliance system more powers to the EPA and Environment Minister, less to the Mines and Energy Department
- NT Government to ratify Building Code of Australia to support energy and water efficiency in the NT – both residential and commercial buildings

5. Ban on hydraulic fracturing (fracking)

- No new mine approvals that involve the process of hydraulic fracturing
- No Tennant Creek/Mt Isa gas interconnector pipeline

Plus:

- Support for a national inquiry into nuclear waste.
- Evidence-based policies that limit baiting of dingoes with 1080, investigate reported increase in the illegal use of strychnine
- Resourcing and support for indigenous ranger programs



Federal

1. Real action on climate change

- Increased carbon emission reduction targets to at least 60% by 2030 and 100% before 2050.
- Supportive policies for renewable energy investment.



Support for regional climate adaptation plans across the arid zone of Australia

2. Stronger environmental protection laws

- Strengthen the Environment Protection and Biodiversity Conservation Act to include shale gas under the water trigger legislation (currently limited to coal seam gas)
- Strengthen the Environment Protection and Biodiversity Conservation Act to include a climate trigger for projects with high carbon emissions.
- Establish a national environment protection agency.

3. Inquiry into national radioactive waste management

 Explore all options for permanent storage and management of Australia's existing stockpiles of low and intermediate-level waste, while also exploring options for the future reduction of radioactive waste creation.

4. Increased funding for indigenous ranger programs

 Make a federal commitment to resource Indigenous Protected Areas - most of which are in the arid zone.

5. Sustainable development for Northern Australia

 Ensure that Northern Australian Development policies and tax-payer funded investments incorporate the 17 UN Sustainable Development Goals.





Fossil fuel divestment takes the fossil fuel industry to task for its culpability in the climate crisis. By naming this industry's singularly destructive influence — and by highlighting the moral dimensions of climate change — the fossil fuel divestment movement can help break the hold that the fossil fuel industry has on our economy and our governments.

Almost all of the arguments in favour of fossil fuel divestment fit into two categories: moral and financial.

First, the moral argument, which is rooted in basic maths. Scientific research shows that in order to keep to international targets to limit global warming to a 2C rise and thus prevent catastrophic levels of climate change, between two-thirds and four-fifths of fossil fuels need to remain in the ground.

Second is the financial argument, which rests on the premise that if international agreements on climate change are met, the investments will become worthless. The theory that these "stranded assets" are creating a trillion dollar "carbon bubble" that could plunge the world into another economic crisis is now the subject of an investigation by the Bank of England, after Governor Mark Carney said publicly that "the vast majority of reserves are unburnable."

The divestment movement is having a significant impact on banks and major financial institutions. Take action today. Find out where your superannuation funds and banks stand on fossil fuel investment and divest today! For more information go to http://gofossilfree.org or http://www.marketforces.org.au

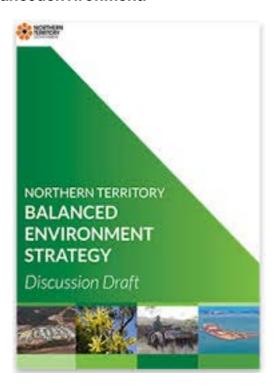


ENVIRONMENTAL POLICY UPDATE

On balance and Hawke 2

In December, the NT Government released the Hawke II Review of the Northern Territory Environmental Assessment and Approval Processes, which had been considered since May 2015. The report outlines 22 areas of reform that that NT Government needs to address and much of it is agreed to. The NT Government's Balanced Environment Strategy provides the essence of the NTG's Environment Policy that includes a long list of actions that include the implementation of some of Hawke's recommendations.

See: http://haveyoursay.nt.gov.au/balancedenvironment.



However, work has only just begun on this undertaking and ALEC has concerns that the NT Government timeline is rushed and election focused rather than outcome-focused as the reform needs to be. ALEC also has concerns that the recommendation reinforces existing conflicts of interest where the Mines and Energy Minister

and Minister for Lands and Planning (currently Dave Tollner) has to balance an industry promoting role while also assessing, approving and regulating compliance for projects. On a positive note, the NT Government has committed to removing the exemptions of mining and petroleum activities from the Water Act (though we're yet to see a Bill in Parliament).

See this link for more details: https://dlpe.

nt.gov.au/environmental-policy-and-reform

Heading into an election

NT Labor released its Water Policy and Environment Policy in early March. The water policy includes an independent review of water licenses and allocations made since 2012 (the term of the CLP Government); a commitment to remove the exemptions for mining and petroleum activities from the Water Act; reinstating strategic indigenous reserves and an increase in research. The Environment Policy included an Environment Protection Act that would supercede the Waste Management and Pollution Control Act; give assessment and approval powers to the Environment Minister and increase the compliance role of the NTEPA. NT Labor also committed to funding a Policy Officer for ALEC, the Environment Defenders Office NT and the Environment Centre NT. This will allow the community to better participate in the policy processes of government and improve environmental outcomes.

It is great to see some distinction between the two major parties heading into an election, the key is the implementation process, which takes time, energy and resources. ALEC will be engaging with candidates and parties in the lead up to the August election and we will publish responses to these questions in the August edition.



Fracking at the forefront

The fracking issue has become an election issue in the NT. The growing movement of people across Australia joining forces to oppose coal seam and shale gas fracking is having political impacts.

NT Labor announced a moratorium on fracking policy should they win government, though light on detail, the intent seems right. In contrast, the Country Liberal Government continues to use taxpayer funds to promote the shale gas industry in all forms of media including paid newspaper and television advertising.

The NT Cattlemen's Association Conference in March demonstrated that a large number of pastoralists are concerned by the risks of the industry on the long-term viability of their industry. The gas lobby continues to peddle out rhetoric that has many believing that the relatively new, horizontal slickwater fracking that is proposed in the NT is safe and 'has been happening for 40 years at Mereenie,' which is untrue.

NT Labor is right to support a moratorium on fracking in the NT. The baseline studies for groundwater supplies and aquifers are required and a legislative framework that gives some semblance of protection is needed. However, they are leaving the door open for the gas companies rather than the One Territory Party and Greens who are calling for an outright ban.

The NT Government has completed a review of the Petroleum (Environment) Regulations and produced a new draft of the document. It was disappointing to see no role for the NT EPA or Environment Minister and an increasing lack of clarity around compliance enforcement with relatively simple Environmental Management Plans being the basis of an approval for a project, with the Mining Minister being able to approve and partially approve projects.

Protecting the Places we Love

On the surface it seems that the Petroleum (Environment) Regulations, the Balanced Environment Strategy and the Hawke 2 review offer a once in a decade opportunity for improving the regulatory framework in the NT, it is in conflict with the CLP approach to fracking. The improvement to the system is only enough to attempt to convince the public that they're doing something about it, providing a veil of safety – the problem is that the current system is at odds with itself. The system is not improved by simply saying it is – as seems to be the current approach. The system is broken and we need an overhaul of our national environment laws.

ALEC recently hosted a workshop in Alice Springs with the Places You Love Coalition on the Next Generation of Nature Laws. http://www.placesyoulove.org/ australiawelove/naturelaws/

More than 30 people attended and were highly engaged on the issues. It is hoped that heading into the election and beyond, more people understand the importance of independent regulation to reduce the influence of polluting dollars on political processes.

Jimmy Cocking





Modelling shows move to 100% renewable energy would save Australia money

http://www.theguardian.com/environment/2016/ apr/19/modelling-shows-move-to-100-renewableenergy-would-save-australia-money

Exclusive: Estimated cost of moving all electricity, industry and transport onto renewables by 2050 would be \$800bn, a saving of \$90bn

Transitioning Australia to 100% renewable energy by 2050 would cost less than continuing on the current path, according to a new report.

Building the infrastructure to supply renewable energy for all electricity, transport and industry would cost about \$800bn between now and 2050, the report from the institute for sustainable futures at the University of Technology Sydney, found.

That's about \$650bn more than continuing with the status quo. But by removing the need for fossil fuels such as coal, gas and oil, it would save the economy up to \$740bn, saving \$90bn over the period to 2050, the report found.

Fuel cost savings would cover 110% of the capital investment needed to transition the economy.

The report is the first comprehensive modelling study to examine a scenario where not just electricity, but also all transport and heat used by industry, is transitioned to 100% renewable energy in Australia. It uses a model developed by the German Aerospace Agency and Greenpeace, which was relied on to help inform how Germany would implement its 80% renewable target for 2050, and by the Intergovernmental Panel on Climate Change (IPCC) for some of its scenario testing.

Commissioned by GetUp and Solar Citizens, it examines three scenarios for Australia's energy system.

The first is based on a continuation of current policies and government forecasts, in which coal, gas and other fossil fuels continue to be used. The second scenario sees electricity generation is almost completely transitioned to renewable energy by 2030, but gas and oil continue to be used for heat and transport.

In the third scenario electricity generation is completely transitioned to renewable energy by 2030, and all transport and heat used in industry are transitioned by 2050. Renewable synthetic fuels replace fossil fuels in some cases where electrification is difficult, such as air travel and long distance freight.

Since many of Australia's coal-fired power stations are ageing, the first scenario requires considerable infrastructure investment, with \$150bn being spent by 2050. Almost half that would be spent on infrastructure for fossil fuel-based electricity generation.

The model suggests that both renewable scenarios become cheaper than the status quo as early as 2020.

In the modest renewable scenario, about \$600bn would need to be spent to source all electricity from renewables. Most of that would need to be spent on wind and solar PV – \$258.1bn and \$167.9bn, respectively.

In that scenario, significant investment in solar thermal and geothermal would also be needed, since they can provide power on demand and fill any gaps when wind and solar are not producing much electricity – \$97.8bn is spent on



a combination of those in the scenario. In the ambitious scenario, most transport is electrified, so that it can run on electricity from renewable sources. That increases the demand for electricity, requiring more investment in electricity generation.

But Australia currently spends more on oil for transport, than it does on all other forms of energy combined. By almost completely eliminating the need for any oil, the ambitious 100% renewable scenario emerges as the cheapest, overtaking the less ambitious renewable scenario by 2035.

By using a mix of different renewable energy sources, the scenarios all maintain an electricity network that is as reliable as the current one.

The authors consulted with the Clean Energy Council to ensure the scenarios grew the renewables industries at rates that would be feasible. It involves increasing wind installations by 2,600MW a year for 15 years, which is in line with what Germany did between 1999 and 2014. And solar PV would need to be installed at a rate of 4,500MW per year to 2030, which is about four times what was installed in Australia in some previous years.

Study author Sven Teske from the University of Technology Sydney, said work that combined energy for transport and electricity was needed, since electrifying cars would have a huge impact on the electricity network.

"This models across all sectors, which gives us a very good overview of different technologies and the interaction of those technologies," Teske said.

The modelling work doesn't examine what policies will be needed to achieve the scenarios, although it does assume in the renewable scenarios that current coal-fired power stations are phased out by 2035.

Miriam Lyons, a senior campaigner at GetUp, said the \$800bn investment needed to transition the economy could be boon for the economy.

"If we decide to go all the way to 100% renewable energy, Australia can get an \$800bn slice of the global renewable investment boom. That's something that Australia is sorely in need of right now," she said. "There is a great big gap that's been left by the end of the mining investment boom."

"It turns out we can get to 100% renewable energy quite fast, and it turns out it saves us money," Lyons said.

Olivia Kember from the Climate Institute told Guardian Australia: "This modelling adds to the growing body of evidence that Australia is completely capable of decarbonising its electricity system. But this won't happen without a comprehensive policy package to replace our high-carbon coal stations with clean energy."

Mark Diesendorf from the University of New South Wales said the report was a valuable study for examining possible renewable energy futures in Australia. But he pointed out it did not model how fast Australia could transition its workforce to cope with the energy transition. "The studies to explore possible timescales of the transition are still to be done," he said.

Michael Slezak and Nick Evershed



Coal Seam Gas: Toxic Emissions Climb As Production Ramps Up

https://newmatilda.com/2016/04/19/coal-seam-gas-toxic-emissions-climb-production-ramps/

New data from the National Pollution Inventory has exposed the increasingly large quantities of toxic compounds the coal seam gas industry is pumping into the atmosphere, as production ramps up around Australia. The latest figures, released Friday, have bolstered concerns about the health impacts of unconventional gas.

"What this data shows is that toxic pollutants that harm health are on the rise from both the coal and gas industries, with huge increases in particulate and chemical pollution," said Fiona Armstrong, Executive Director at the Climate and Health Alliance.

Dr Mariann Lloyd-Smith, a Senior Advisor at the National Toxins Network, said the communities around Chinchilla and Tara, in south-east Queensland, appear to be the worst-affected. She cited Queensland Gas Company's Kenya Processing Plant and Compressor Stations, near Tara, as one example of how pollution is on the rise.

Dr Lloyd-Smith noted a sharp increase in course particulate matter (PM10) at the 'Kenya' facility. In the year to 2012, the facility emitted just 54 tonnes; but by 2014-15, the company posted particulate matter emissions of more than 1,000 tonnes.

The well-respected expert said particulate matter acts as an agent, carrying other toxic compounds and "delivering them deep into the lungs of all that breath them in". Like particulate matter, toxic compounds are rising sharply at the 'Kenya' facility.

Nitrous oxide emissions have risen from 710 tonnes in 2013-14, to 1,300 tonnes in 2014-15; carbon monoxide emissions have more than doubled in the same time period, to 1,000 tonnes; and volatile organic compounds emissions have grown to 180 tonnes, in 2014-15. Emissions at other facilities have been even higher.

Dr Lloyd-Smith said newly developed CSG export facilities near Gladstone are also "a real worry".

"The Curtis LNG plant is an export facility, which claims to give the world 'clean green energy'," she said. "But in just one year, it has released a whopping 4,800 tonnes of deadly carbon monoxide, 4,300 tonnes of nitrous oxides, 620 tonnes of volatile organic compounds and 190 tonnes of carcinogenic formaldehyde."

Air pollution is thought to kill around 3,000 Australians each year, and increases in toxic emissions could be even greater than they appear. Dr James Whelan, a researcher at not-for-profit Environmental Justice Australia, said the national pollution data is "very unlikely to be an over-estimate".

According to Dr Lloyd, "it is important to acknowledge that the pollutants listed on the National Pollution Inventory are the worst of the worst".

"Many are acknowledged as carcinogens, neurotoxins and developmental toxins: Exposure to these can have significant impacts on human health and the scientific literature is full of studies showing the impact of exposure to air pollutants such as these," she said.

Thom Mitchell





Community Information Night 5.30pm Friday 20th May @ ALEC 90 Gap Road

LEARN MORE ABOUT THE CAMPAIGN TO TRANSITION ALICE SPRINGS TO SOLAR

Also Celebrating ALEC's 1st birthday in the Gap!
BBQ, salads and birthday cake available!





The future of the Arid Lands Environment Centre is in your hands.....

ALEC's operational funding has been cut in the Federal and Territory budgets, leaving it up to the community to ensure the work of ALEC continues into the future.

ALEC has worked in Central Australia for 34 years standing up for the protection of the environment and developing programs to live sustainably in the arid lands.

Can you help?

Become an ALEC 100 member:

Donate \$100 a month each year, or contribute a one off \$1000 tax deductible donation. 100 supporters will provide the ongoing essential operating funds of ALEC.

Become a Desert Defender:

Desert Defenders give monthly or one off tax deductible donations that provide critical funds to support ALEC programs and campaigns.

Donate at www.alec.org.au







