

DEVIL'S ADVOCATE



SUMMER READING

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



CONTENTS

The Arid Lands Environment Centre
90 Gap Road, Alice Springs
PO Box 2796 Alice Springs NT 0871
Ph: (08) 89522497 Fax: (08) 89532988
www.alec.org.au info@alec.org.au

The Devils Advocate is the quarterly newsletter of the Arid Lands Environment Centre.

The deadline for submissions for the next Autumn edition is 16th February 2019

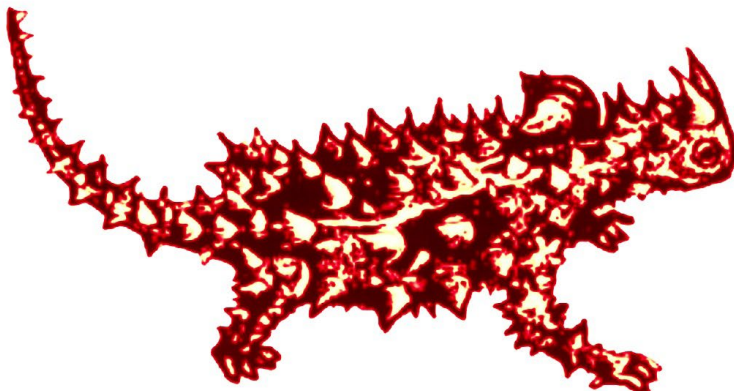
Articles, pictures, poetry, letters, welcome.
Email communications@alec.org.au

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 Strategy and Communications Manager. It is printed on 100% recycled paper.

Thoughts Of Hot Summers
NT Climate Statement
ALEC Media
NT Beetaloo Frack Free Roadshow
NT Protect Country Alliance
COOLmob Free Energy Audits
ALEC Policy Update
Next Generation
Central Australian Frack Free Alliance
Alice Springs Community Garden
RePower Alice Springs
Food For Alice XMAS Hours
Land Clearing Court Challenge
New Wind and Solar Now as Cheap As
Existing Coal
Thoughtful Giving
NT Climate Change Brief
Summer Garden Tune Ups
Donate to ALEC

The Arid Lands Environment Centre acknowledges and pays respect to the traditional owners, past, present and future of this region.



**Arid
Lands
Environment
Centre**





THOUGHTS OF HOT SUMMERS

Summer time in Central Australia is a unique experience, not for the faint hearted. Months of temperatures above 35 degrees, weeks at a time above 40 degrees. Sometimes dry, sometimes more tropical with storms, rains and humidity.

Communities of people who exist must have strategies to cope with the heat. For many, pools and airconditioners are essential. But a good question is what do you do if you don't have access to those resources?

As climate change impacts increase, we all must consider how our future might look in central Australia.

This year an article, *"Under IPCC forecasts babies born today will be 22 when warming hits 1.5C. What will life be like?"* explored this topic.

It reads: "Meet Casey X. She was born in Alice Springs Hospital on October 13, 2018..... Today — October 13, 2040 — she's 22.... Extreme hot days in Alice Springs hit 48 degrees Celsius — nearly 3C hotter than on her first birthday. And heatwaves last much longer....In the year she was born, the Intergovernmental Panel on Climate Change (IPCC) predicted that by today, the world would be 1.5C* warmer than it was before the industrial revolution.... Alice Springs is in the middle of a heatwave.....Keeping things alive in the garden at these temperatures is next to impossible. Plants are pushed beyond their thresholds and die from heat shock.... Casey loves the NT, but it's getting harder to live here..."

Whilst a hypothetical article, it explores some key questions about a future that is more than possible - probable even, unless we can take significant global action in the next decade.

How will life be like in arid Australia if climate change impacts continue to worsen? What

planning do we have to put into place to ensure that our communities not only survive, but thrive?

These important questions are at the heart of much of the Arid Lands Environment Centre's work. Protecting our environment, driving action on climate change, growing strong sustainable communities.

Australian emissions are continuing to rise, largely due to the growth in the Australian export gas industry. Here in the Territory emissions will rise exponentially if gas fracking is allowed to go ahead. At this moment we are on that path...and it's a challenging scenario to face.

The Northern Territory Government is choosing the path to climate disaster by positioning the NT as a gas hub. We are one of the sunniest places on the planet, yet unfortunately because the resource exists underground, there is that colonialist extractive attitude that it must be dug up. No point it sitting in the ground doing nothing!

Therein lies the problem. It MUST stay in the ground if we have a hope of mitigating climate change, and even the IPCC is now saying that there can be no new fossil fuel developments.

Climate change is regarded as an existential threat to life on planet earth. It is going to require a never before witnessed coordinated effort on a global scale to prevent catastrophic warming.

The IPCC forecasts that warming is likely to reach 1.5C above pre-industrial levels between 2030 and 2052 if it continues at the current trajectory. For many of us this is within our lifetime, and for our children the changing climate will be all that they know.

The urgency of our global situation could not be any clearer, and despite how challenging this is



for so many of us we urge you to keep up hope and continue to take meaningful action.

Rebecca Solnit has written a great article "Don't Despair: The Climate Fight Is Only Over If You Think It Is" and states:

"I don't know exactly if or how we'll get to where we need to go, but I know that we must set out better options with all the passion, power and intelligence we have. A revolution is what we need, and we can begin by imagining and demanding it and doing what we can to try to realize it. Rather than waiting to see what happens, we can be what happens."

What gives me hope is the millions of people working across the globe on protecting our environment and climate. Despite facing the billions of dollars of climate denying propaganda from the fossil fuel industry, collectively we are making an impact. The tide is turning.

Renewable energy is now the cheapest form of new energy and battery technologies are vastly improving to soon be able to support 100% renewable integration into electricity grids.

Despite the complete lack of leadership on climate by the Federal Government, States, Territories and communities are taking action. Tasmania and SA are leading the way on renewable energy and the ACT has a net zero by 2045 emissions target. Queensland has more renewable energy projects under construction than any other state. Almost 10,000 jobs are being created in the renewable energy industry across Australia with 69 wind and solar plants under construction.

There's much to be excited about in the renewable energy sector - we already have the technologies, we just need the political will. Even in the fossil fuel sector, mining giant BHP is calling for a carbon price and is pulling out of the



Chipping buffel grass is a similar process to acting on climate change. Here I am after spending one hour on clearing around the base of one coolibah tree. With buffel grass out of control in central Australia most people would say - what's the point? You will never get rid of buffel grass. But recently a fire came through the Ankerre Ankerre swamp and the tree was saved. The point is - every action can make a difference.

World Coal Association because of inaction on accepting climate science.

Will the tide turn quick enough on climate? I don't know, but I am going to keep on believing in our collective capacity and do my bit anyway.

If you can't do your bit, or your bit is trying to make the world a better place in other ways, then make sure you donate to the organisations who are on the frontline of driving climate change action. We have to crowdfund for our future!

Nicole Pietsch
Strategy & Communications Manager

https://www.abc.net.au/news/science/2018-10-13/climate-change-ipcc-life-in-2040/10359104?fbclid=IwAR01qU8sf1cUNjXVZEIxyvfyCT6elGE3H1Yo8tf7geEC0UJ_QsSfbxt-8c

Response to Climate Impacts in the Northern Territory

Dear Chief Minister and Members of the Northern Territory Parliament,

We are calling on you to develop a comprehensive climate policy to:

- 1. Achieve net zero emissions by 2050 (mitigation)**
- 2. Develop climate resilient communities (adaptation)**

Anthropogenic climate change – climate change directly attributable to human activity – poses a severe risk to the Northern Territory.

Impacts. The impacts of climate change on the NT include: increase in extreme heat days (over 35 degrees Celsius)¹; increase in severity of extreme weather events; changes to water availability; and an increase in sea-level rise and extreme sea-level events.^{2, 3}

Climate change threatens Territorians: it will impact our food and water security; our health; and the ecosystems we depend on.^{2, 3} This will have adverse long-term economic consequences. We note that the most marginalised and vulnerable members of our community, including Aboriginal and Torres Strait Islander people, are often the least responsible for ecological risks and threats but are the most affected by their emergence.

Net zero emissions. Consistent with our ratification of the Paris Climate Agreement, we *must* reduce our GHG emissions to net zero. All other Australian States and Territories (except for Western Australia), have committed to reduce emissions to net zero by 2050.

The Northern Territory Government has already shown a commitment to reducing our emissions (*Northern Territory Roadmap to Renewables*). There is substantial potential to further reduce emissions and reduce climate change-related risks posed to Territorians.

Opportunity. We need to manage future risk, make robust decisions, and take advantage of opportunities including: stimulating long-term investment and economic growth; ensuring healthier communities; and protecting our environment and existing infrastructure.

An enforceable whole of government approach needs to be implemented that protects people and country and ensures the ongoing liveability of NT communities.

We urge the Northern Territory Government to develop a comprehensive climate policy that has emission reduction targets and a plan for a just transition to a low carbon economy.

¹ Hanna, E., & Ogge, M. (2018). *Cooked with gas: Extreme heat in Darwin*. The Australia Institute. Retrieved from <http://www.tai.org.au/content/cooked-gas-extreme-heat-darwin>

² Earth Systems and Climate Change Hub. (2017). *Climate Change Science for Northern Australia*. Aspendale. Retrieved from [www.http://nspclimate.com.au/climate-change-science-for-northern-australia/](http://nspclimate.com.au/climate-change-science-for-northern-australia/)

³ Hennessy, K., Page, C., McInnes, K., Walsh, K., Pittock, B., Bathols, J., ... Suppiah, R. (2004). *Climate Change in the Northern Territory*. CSIRO. Retrieved from http://www.cmar.csiro.au/e-print/open/hennessy_2004a.pdf

Signatories:

Wendy Morton	Executive Director, Northern Territory Council of Social Service
Dave Pugh	CEO, Anglicare NT
Julie Edwards	CEO, Jesuit Social Services
Rosalie Schultz	Public Health Association NT Branch
Michael Fonda	Doctors For Environment NT
Stephen Schwer	CEO, Tourism Central Australia
Donna Ah Chee	CEO, Central Australian Aboriginal Congress
Walter Shaw	CEO, Tangentyere Council
Joel Bowden	General Secretary, The Unions NT Executive
Sue Mckinnon	Chair, Landcare NT Inc.
Tony Burns	CEO, Helping People Achieve
John Patterson	CEO, Aboriginal Medical Services Alliance NT
Shar Molloy	Director, Environment Centre NT
Jimmy Cocking	CEO, Arid Lands Environment Centre
Kelly OShanassy	CEO, Australian Conservation Foundation
Nicola Beynon	Head of Campaigns, Humane Society International
Martin Rice	Acting CEO, The Climate Council
Dominique Rowe	Program Director, Greenpeace Australia Pacific
Lyndon Schneider	National Campaigns Director, The Wilderness Society
Kelly Albion	Campaigns and Communications Director, Australian Youth Climate Coalition
Amelia Telford	National Director SEED
Cam Walker	Campaigns co-ordinator, Friends of the Earth Australia
Joseph Scales	National Director, Solar Citizens
Ben Oquist	Executive Director, The Australia Institute
Blair Palese	CEO, 350.org Australia
Vanessa Petrie	CEO, Beyond Zero Emissions
Donna Luckman	CEO, Alternative Technology Association
Kate Smolski	CEO, Nature Conservation Council of NSW
Mark Wakeham	CEO, Environment Victoria
Craig Wilkins	CEO, Conservation Council SA
David Barnden	Principal, Environmental Justice Australia
Dr Nicole Sleeman	General Practitioner, Wuchopperen Health Service, Cairns.
Associate Professor Tim Cohen	ARC Centre of Excellence for Australian Biodiversity and Heritage, GeoQuest Research Centre - Co-Director, School of Earth and Environmental Sciences/SMAH, University of Wollongong
Professor John Church	Climate Change Research Centre, University of New South Wales
Professor Mark L Wahlqvist AO	Monash University
Professor John Quiggin	VC Senior Research Fellow School of Economics, University of Queensland



ALEC MEDIA:

FRACKING THE WEST WILL BE A CLIMATE DISASTER 28.11.18

The Arid Lands Environment Centre is deeply disappointed by the Western Australian Government decision to open up the Canning Basin to fracking, which could blow Australia's carbon budget twice over on its own.

Like in the Northern Territory, the McGowan Government came to power promising to ban fracking in the Southern regions and to put a moratorium on fracking across the Kimberley, Pilbara and Mid West. Both the NT and WA have undergone scientific inquiries into the process of hydraulic fracturing and both have seen unprecedented public support for bans on the controversial process.

Now Western Australia joins the Northern Territory in allowing fracking to go ahead, despite the huge climate risks.

"With the latest IPCC Report providing the starkest call to action on climate change yet, our elected leaders are continuing to ignore the warnings," said Nicole Pietsch, Acting CEO Arid Lands Environment Centre.

"Opening up new gas reserves in WA and the NT is going to be a climate disaster, jeopardising any meaningful action elsewhere in Australia, and significantly increasing overall Australian emissions."

"Fracking the Beetaloo Basin in the NT could increase Australian overall emissions by 5%, and the full exploitation of all of WA's gas resources would be 4.4 times higher than what Australia's entire energy system can emit to comply with the Paris Agreement."

"Fracking the NT and WA is an issue of national importance and Australians need to get behind

the remote communities on the frontline of fracking and stop these developments going ahead."

"One of the best ways Australia can meet its' Paris climate commitments is to not open up new unconventional gas reserves and ban fracking in NT and WA."

"The future is in renewable energy, and we need courageous leadership to bring about the urgent transition to a low carbon economy," said Nicole Pietsch.

NT GOVERNMENT CAVES TO INDUSTRY PRESSURE ON REGULATORY REFORM 30.11.18

The Arid Lands Environment Centre (ALEC) has serious concerns the Northern Territory Government is being unduly influenced by industry in the current regulatory reform process, by today announcing changes to how environmental decisions are to be reviewed.

After public pressure from industry in recent days, the NT Government has indicated they will remove open standing for judicial review and remove merits review from the recently released Draft Environment Protection Bill.

This is despite a previous commitment to introduce open standing and judicial review as recommended in the final report from the Scientific Inquiry Into Hydraulic Fracturing. Open standing is considered best practice environmental law, and helps provide a more transparent, accountable government and a stronger democratic process.

"Whilst ALEC is supportive of the NT Government's environmental regulatory reform process, and believe the Draft Environment Protection Bill is otherwise a strong piece of legislation, we are seriously concerned by today's announcement. The NT Government



is buckling under pressure from industry to remove the rights of people to challenge illegal and inappropriate decisions that could have significant environmental impacts' said Jimmy Cocking CEO of the Arid Lands Environment Centre.

"Over the weekend we have seen an opinion piece in the Northern Territory News quoting gas lobbyist and ex-Chief Minister Paul Henderson calling for the weakening of the proposed environmental laws in regards to standing and review of decisions."

"This was followed by an interview with the Chamber of Commerce CEO on commercial television calling for the government to limit the rights of people and organisations to comment on projects."

"This morning, acting Minister for the Environment, Lauren Moss released a media statement stating that they had listened to industry (and the community) and were removing merits review for environmental assessments."

"This is an example of the disproportionate influence special interest lobbyists have over the political process in the Northern Territory. They are holding the environment and public health to ransom in order to further their own economic agenda."

"The public consultation period is not even finished. The NT Government needs to stand strong and deliver a set of environmental laws that does not place the interests of industry over that of our environment and climate."

"The Arid Lands Environment Centre is working directly on the environmental regulatory reform process and we are making submissions and comments on many local, Territory and national issues. We urge Territorians to get involved in the NT regulatory reform process, otherwise it will be industry lobbyists who are dictating our future,"

The Draft Environment protection Bill can be found at <https://denr.nt.gov.au/environment-information/environmental-regulatory-reform/consultation-on-new-environment-protection-legislation>

NT GOVERNMENT MUST LEAD ON CLIMATE 5.10.18

The Arid Lands Environment Centre welcomes the release of the Northern Territory Government's Climate Change Discussion paper, but has serious concerns that the paper downplays the urgency of the situation and the role of government in leading climate action.

The Northern Territory is especially vulnerable to the impacts of climate change with a predicted increase in extreme heat days, an increase in severity of extreme weather events, and an increase in sea-level rise and extreme sea-level events. CSIRO modelling estimates that without climate action the number of days above 35 degrees in Darwin could increase from 22.2 days to 275 days per year in 2070.

"The Northern Territory is already being impacted with increased temperatures, the loss of large swathes of mangroves across the Top End, coral reef bleaching, increased weed spread and changing seasons. Unfortunately Northern Territory emissions have risen 28% over the last ten years and will exponentially rise if the Territory is opened up to gas fracking," said Jimmy Cocking, CEO ALEC

"Whilst there are good opportunities for action identified in the discussion paper, ultimately the pursuit of a gas economy will undermine all other action. Gas is not a transition fuel. The world is moving to renewable energy, which is now the fastest growing new source of energy on the planet. A lot of developing economies are leap-frogging fossil fuels and moving straight to renewables. The Territory needs to get on board, not be left behind."

Support the NT Beetaloo Frack Free Roadshow



Shale gas fracking is on the horizon for the Northern Territory in 2019.

The Arid Lands Environment Centre (ALEC) is organising a Roadshow that will support Traditional Owners and film makers to travel to the remote regions on the frontline of fracking.

The Roadshow will support sharing information and knowledge in culturally appropriate forms and be part of a broad community organising approach to building power and capacity in these remote NT communities.

People in remote communities are under significant pressure from resource and mining companies to accept projects on their land, and often information is provided without all the facts and without interpreters.

Representatives from remote Aboriginal communities have identified that it is critical for people in the Beetaloo and other affected regions to have a full understanding of the impacts of fracking.

The Roadshow will be a critical ingredient in sharing knowledge, invigorating remote communities and helping strengthen their voices.



Donate now at:
<https://chuffed.org/project/nt-frackfreeroadshow>

NT PROTECT COUNTRY ALLIANCE

The NT Protect Country Alliance is a coalition of landholders, communities and civil society groups. We are concerned about oil and gas fracking proposals or projects in the Northern Territory.

In July 2018, community representatives from across the Beetaloo sub-Basin and beyond supported the initiative for a formalised alliance. The Alliance includes delegates from gasfield targeted regions of the NT. It aims to unite and amplify the voices of impacted regions in the battle to protect land, water and communities from fracking gasfields.

The Alliance provides the opportunity for knowledge and resource sharing. It supports landholders, businesses and communities working to protect their regions. A coalition of independent scientific, legal and health experts provide help to increase scrutiny of government and company fracking plans.

The development of the Alliance follows a 5-year campaign to protect the NT from fracking gasfields. Concerned community members successfully campaigned for a moratorium on the process of hydraulic fracturing. This was implemented by the Gunner Government whilst a Scientific Inquiry into Hydraulic Fracturing was undertaken.

The Inquiry found, "For a significant majority of the people participating in the Inquiry, the overwhelming consensus was that hydraulic fracturing for onshore shale gas in the NT is not safe, is not trusted and is not wanted."

The report also states, "Aboriginal people from regional communities who made submissions to the Panel almost universally expressed deep concern about, and strong opposition to, the development of any onshore shale gas industry



Our Indigenous cultures tell us how to care for the land, the water, the plants, animals and each-other. Through the Alliance we will share this knowledge and offer support to any community at risk of fracking." Miliwanga Wurrben, Roper Region delegate for the Alliance

on their country".

Despite the concerns, the Northern Territory Government lifted the moratorium on fracking in April 2018.

The Final Inquiry Report contains 135 recommendations that must take place. 31 recommendations must be completed before any further exploration fracking activities take place in the NT.

Gas companies are saying they plan to start fracking for shale oil and gas in the Territory again in early 2019.

The work of the Alliance is in response to ongoing community concerns about the



risks from fracking to water, health, climate, communities and culture.

The Alliance will meet regularly by phone, in regional meetings and as community-based actions groups.

The NT Protect Country Alliance invites landholders, communities and civil society groups to join. You can help protect the Territory from invasive fracking and industrial gas fields.

How can I get involved?

1. Join the NT Protect Country Alliance
<http://dontfracktheterritory.org/alliance/>

2. Call your local member of NT Parliament and let them know that you have joined the NT Frack Free Alliance because you believe fracking is risky, polluting, invasive, unnecessary and should not go ahead in the NT.

3. Like the “Don’t Frack the Territory” facebook page. <https://www.facebook.com/DontFrackTheTerritory/>





FREE Home Energy Audits

If you're living on a low income, you might be eligible for a FREE home energy audit. Home audits can help you to save energy, lower your power bills, and make your home more comfortable . Contact the COOLmob team to find out more.

**Register for an audit online at www.coolmob.org
Or contact Rachel O'Leary on 8952 2497
Email rachel.oleary@alec.org.au**



Environment Centre NT
protecting nature | living sustainably | creating a climate for change





CONSULTATION OVER SUMMER

In continuing with the governments environmental reform agenda, they have begun the process of reviewing the entire water planning framework and the Water Act.

A Water Directions Paper has been released for public comment, with submissions being received until the end of March 2019. The directions paper outlines a process for reviewing the entire water planning framework to modernise water planning in the NT.

This is the most comprehensive review of water policy that will consolidate policy proposals and other amendments made throughout 2018. Water continues to be a key reform priority to improve accountability across extraction licences in order ensure the ongoing sustainability of groundwater resources.

The Alice Springs Water Advisory Committee has determined that demand management is a top priority which hopefully means 2019 will see the reinvigoration of water efficiency and sustainability programs.

You can access the Directions Paper online at: <https://haveyoursay.nt.gov.au/waterreform>

A key recommendation from the Fracking

Inquiry was to reform the Petroleum Act and Petroleum (Environment) Regulations. A Petroleum Legislation Amendment Bill 2018 has been released for public comment through the economic policy scrutiny committee. This is the same committee that has recently reviewed amendments to the Water Act.

Submissions are being received until 30th of January 2019.

The amendments can be found here: <https://parliament.nt.gov.au/committees/EPSC/76-2018>

2018 was a big year for policy and legal reform; 2019 is going to continue with that momentum with more developments expected on mining reform and waste management.

OUTSOURCING ENVIRONMENTAL REFORM TO PRIVATE CONSULTANCIES

The NT Government is pushing full steam ahead with an ambitious agenda of environmental reform. In the last couple of months of 2018 we have seen the release of a Climate Change Discussion Paper, Water Reform Directions Paper, Draft Environmental Protection Act and Regulations and other subordinate environmental guidelines.



While it is heartening to see action on the NT Government commitment to substantive environmental reform, consultation on these reforms is both challenging and complicated. Analysing thousands of pages of environmental law and regulations is also often beyond the scope of general community members.

The efforts from the NT Government to go through community consultation processes is positive a thing, but it is vulnerable to co-opted by more powerful interests to support changes that are not in the public interest or improve environmental outcomes.

Private consultants contracted by governments hold a lot of informal power as they interpret the perspectives of the community and repackage these concerns to government.

With many of these regulations and draft guidelines, private third-party consultancies have been contracted to undertake 'targeted stakeholder consultation'. These companies, on instruction from the Government, contact certain identified organisations, business and individuals under the ambit of scoping key concerns and ideas for the reform in question.

While on face value this seems reasonable, there is a very real political problem here that sees the

shift of influence and power from civil and public institutions to the private realm. There is a lot of power in listening to stakeholders, interpreting their position and compiling these positions into a summary document.

Through refining, condensing and summarising, the message is tailored in a specific way that may not represent the full scope of community concerns.

The following illustrate examples of how the integrity of public consultation could be diluted through the work of private consultants, especially where there are potential conflicts of interest.

Elton Consulting have been contracted to compile stakeholder feedback on the planning system to the NT Government. As well as consulting, they also offer planning advice for developers. It is important to be mindful of the risk that the company may, through their interpretation, recommend against changes that could have financial implications for their other clients.

The reform has recommended against changes to exceptional development permits; Elton is also involved in the preparation of these permits as part of their professional services.





A Brisbane based consultancy, Arcadis has been tasked with scoping ideas for improved regulation of the mining industry in the NT. There are members of the NT government who had previously been employed by that company. A previous director of Arcadis now works within the NT Government in the onshore gas implementation taskforce.

An engineering firm, Jacobs is heading up consultation on contaminated land remediation guidelines. Jacobs is an international firm that provides technical expertise to the petroleum and chemical manufacturing industries, the same industries that are largely responsible for contaminating land in the first place.

JTA Australia have been tasked with undertaking 'targeted stakeholder engagement' on the recently released Environment Protection Bill and complementary regulations. This large consulting group has a history of providing engagement and communications advice to coal and gas industries in Queensland.

Their past projects include the Gladstone LNG Plant, producing fuels from low quality coal and gas fired power plants. Past clients include Shell, SANTOS and other multinational oil, gas and mining companies.

Can the expertise of a company that has been heavily involved in industrial fossil fuel projects be fully trusted to be impartial when it comes to vital environmental protection laws?

Ultimately, we are witnessing a situation where private consultancies, often with potential conflicts of interest, are advising government how to design vital reforms. It is important that the general public is aware of this, and that potential conflicts of interests are acknowledged.

The NT Government has provided funding for ALEC and ECNT to engage in government policy processes. This important work needs to be guaranteed into the future to ensure that at the very least community interests and environmental concerns have the opportunity to be heard.



**Alex Read
Policy Officer**



**Become a Desert Defender
and help protect nature
with your donation today!**

<https://aridlands.nationbuilder.com/donate>



NEXT GENERATION

“We shouldn’t ask why the students are marching. We should ask why everyone else isn’t.”

The School Strike For Climate Action on November 30th saw thousands of students rallying across the globe for greater action on climate by our elected leaders.

Here in Alice Springs 100 young people gathered on short notice to make their voices heard. It was inspiring gathering of young people who were passionate about caring for our planet and a healthy, sustainable future.

“We may be small but we shouldn’t be ignored because we’re part of the community as much as anyone. We have the right to stand up and politicians need to listen to us because that’s their job.” Eleanor Twine

“Alice Springs has sooooo much sun with so much free energy to give!” Jesse Hitmann



The AYCC Alice Springs is a group of young people working locally towards solving the climate crisis through educating and empowering young people to take action.

The AYCC have recently reformed and organised the Student Strike for Climate Action Rally in Alice Springs.

Want to get involved?

***Find out more on the Facebook Page:
<https://www.facebook.com/ayccalicesprings/>***





All We Want For XMAS Is A Fracking Ban!

On Saturday 17th November CAFFA and ALEC hosted a gathering to come together as a community to plan for how we might work together to protect the NT from fracking. An overwhelming sense of solidarity and energy to continue fighting was encouraging and sends a strong signal to the NT government that we will not stop until fracking is banned.

Importantly this meeting realised that we each have something to contribute to this campaign. Several working groups were established that focus on specific areas.

- Political Lobbying
- Regulatory Reform
- Creative Activism
- Corporate Campaigning - How do we stop Origin Energy?
- Community Engagement

If you would like to be involved in any of these working groups please contact Jesse Hancock at [**frackfreecoordinator@gmail.com**](mailto:frackfreecoordinator@gmail.com)

CAFFA will start meetings again early next year.





For me summer days are tied to hot white sands and welcoming cool blue seas, yummy cherries and the delicious taste and aromas of summer fruits and veggies. Here in Alice there's a strong desire to hide inside from the mid-day sun but much to enjoy outside in the cool of the mornings and the early evenings in shaded garden areas.

Unfortunately our plants can't retreat inside but shade cloth is their next best thing. Fortunately our Garden watering system provides our soils with life preserving moisture for those tough times and mulch and plenty of organic humus help too! We can't have it all in Alice but our Community Garden can continue to be a refreshing haven for many, not only us humans.

On behalf of our committee I'd like to thank and congratulate all our plot holders and Garden Friends for a great combined effort and result again this year. We've shared so very many wonderfully diverse, colourful and productive gardens, which taken all together have been 'amazing'!

Our working bees have provided a great opportunity for many new members, to learn, to 'own' and to contribute to the growth and productivity of the Garden. It's so rewarding and sustaining to spread the joy and skills of successful community gardening. They will resume early Sunday mornings in early 2019.

The Garden Committee is always on the lookout for new members and contributors to any of our PODS (action groups):
INFRASTRUCTURE & MAINTENANCE
FUNDRAISING & EVENTS
MEDIA & COMMUNICATIONS
HEALTHY GARDENS
GOVERNANCE PLOT HOLDERS

Please email info@alicecommunitygarden.org.au

Bruce Simmons
Garden Convenor



ALEC 40TH BIRTHDAY CELEBRATION ORGANISING COMMITTEE CALL-OUT

ALEC turns 40 in July 2020 and we want to make sure we honour and pay respects to the journey that has been! We're looking for old and new ALEC members who are keen to organise a day, a week, a month, a year of celebration to highlight this milestone. We're also chasing footage, photos, flyers, posters, booklets, reports and any other ALEC collateral generated over the years to put together as part of an exhibition.

If interested please email director@alec.org.au Subject ALEC Turns 40. Let's make it a great party!



Submission to the Northern Territory Government Climate Change Discussion Paper

RePower Alice Springs is an independent volunteer-run community group, working on behalf of the people of Alice Springs. Our central aim is to achieve 100 per cent renewable energy for the Alice Springs electricity network by 2030 through advocacy, community engagement and development of community solar projects.

RePower sees community solar as making a major important contribution to the 100 per cent renewable energy target for Alice Springs.

The following is our response to the questions in the discussion paper:

1. What (if any) greenhouse gas emissions target should the NT adopt?

Net zero emissions by 2025, and a carbon sink thereafter, aiming for negative emissions equivalent to our current emissions of 16MtCO_{2e} by 2050. This is consistent with RePower's mission of 100% solar power for Alice Springs by 2030 and the urgency of strong action demanded by the latest IPCC report of 8 October 2018. Target must be in legislation, and include interim and sector-specific targets to track and enforce progress.

2. What should businesses and governments be doing to reduce emissions?

Recommendation 1 of last year's Roadmap to Renewables report to the NT Government said: "To ensure long-term benefits for all Territorians, the NT Government should include renewable energy as a central pillar of economic policy, maximising benefits of forthcoming disruptive change in the electricity sector caused by the global transition to competitively priced renewable energy." The Northern Territory Government's response was to support this. This support must now be translated into action and investment.

The NT Government should invest in and actively encourage solar energy through direct investment, subsidies and other mechanisms., Electric vehicles can contribute to reduced greenhouse gas emissions if their energy source is not fossil fuel dependent; and act as batteries in storing solar energy for late use. However the impacts of private vehicles in traffic congestion, particulate pollution and sedentary lifestyles are not overcome through a simple change to electric vehicles for private use.

NT Government investment in solar energy can be complemented by strategies that increase the cost of emissions; and exerting influence on the Commonwealth government taxation system.

Major companies, including Woodside, BHP and Rio Tinto are all calling for a carbon price. Much of the community wants it, industry now wants it, the environment must have it and governments are lagging behind. The NT Government should lead, and not limit this lead to research. Operating examples of big solar are now in abundance interstate and internationally, with big economic development and job opportunities. The NT government should adapt these opportunities for the local situation. The town of Port Augusta is a suitable model for Alice Springs, with similar climate although half



the population and is now an energy exporter. Increasing investment in solar power and batteries in Government buildings, with high energy efficiency requirements will lead in the medium term to government savings.

The NT Government should actively support NT Airports proposal to increase its investment in solar in Alice Springs (and Darwin). It has the money, is developing the plans and wants more government engagement and support.

The NT Government should implement the 'Community Renewable Energy Participation Program' flagged in the NT Electricity Market Reform and Renewable Energy Implementation Plan 2018-19.

3. How else can we apply Aboriginal knowledge and practices to help us to mitigate and adapt to climate change?

NT Government should identify and help develop recognised methodologies for strategic savannah burning by Aboriginal people for carbon credits in Central Australia, which will provide significant social and environmental benefits beyond carbon storage. There are big opportunities here for Central Australian Aboriginal people, their land and our environment.

4. What potential opportunities can you see emerging from climate change in the Territory?

A renewables economy with many future-oriented jobs plus innovations to export. There is an urgent need to move away from the current energy and gas extraction industries which are environmentally damaging, potentially stranded assets with boom and bust, ultimately redundant jobs.

While there is evidence of people leaving NT because of increasing heat, there are opportunities for research in heat mitigation.

NT has no large cities which are particularly vulnerable to heat island effect. Water supplies are relatively secure, so there are opportunities for research and development in heat mitigation, air-conditioner efficiency, and agriculture and food production in changing climate conditions. Darwin has led the way in cyclone standards for buildings, so there is experience in developing building codes that can tolerate extreme weather events.

5. How can the fossil fuel industry further reduce emissions from energy production?

The NT government must assist fossil fuel industries modernise, and use their expertise in renewable energy. This can be done through a permanent ban on fracking, in line with the science-based Paris Agreement target, fossil fuels must be phased out by 2050. Any new extraction of fossil fuels – including natural gas – is incompatible with reducing climate risk and limiting warming to the 1.5 degrees now required. For the NT Government to now support this extraction, including fracking, is environmentally and ultimately economically irresponsible.

6. What type of regulations do you think would assist industry in being accountable for their impact on climate change?

A carbon tax or price would assist industry accountability for impacts on climate change. This could achieve widespread community support through appropriate messaging and community activism. Major resource industry players, including Australia's biggest oil and gas producer Woodside, are now calling for a carbon price for investment certainty, as they recognised the importance of carbon pricing for environmental protection. To fail to introduce a tax/price quickly is to not only let the environment and community down but also industry and the market. Ultimately, circumstances will demand a price on carbon, so delaying this investment has high costs and risks.



To emphasise this, the Corporate Leaders Group, including Unilever, Coca Cola and the Lloyds Banking Group has called for governments to adopt a net zero emissions target by 2050. The NT Government must heed this call.

All forms of fossil fuel subsidies should be identified and eliminated immediately.

7. What actions are you willing to take to mitigate or reduce the impact of climate change?

RePower already works tirelessly and voluntarily in many ways consistent with its mission to achieve 100% solar power for Alice Springs by 2030 by:

- Building community capacity
- Advocacy
- Community power projects and partnerships with considerable impact and traction considering its meagre resources.

Three-quarters of the respondents in RePower's 2017 survey wanted 70-100 per cent solar power for Alice Springs by 2030. Over 80 per cent of the 542 respondents in RePower's 2018 survey said they are willing to invest in an Alice Springs solar farm. A number of respondents would be willing to invest over \$100000; while the most common range was \$1000 to \$5000.

Personally, members of Repower Alice Springs are highly committed to reducing their own carbon emissions through choices in transport, entertainment, consumption, recreation and family size.

8. What support do you need to help you to mitigate or adapt to climate change?

NT Government buy-in, literally and otherwise, is needed to transition the NT faster, to fully renewable power and a renewables economy. While the Alice Springs community is willing to

put its money where its concerns are, it expects governments to take leadership in demonstrating the possibilities of renewable energy, and mitigating and adapting to climate change.

In summary, RePower Alice Springs, formed in response to catastrophic government failure to respond to the urgent need to invest in renewable energy, urges NT government to recognise that climate change is a global emergency, requiring leadership and action.

We advocate:

- Ambitious emissions reductions
- Consideration of climate change mitigation and adaptation in development of every policy
- Collaboration with industry and the community particularly in developing renewable energy,
- Recognition of the opportunities for Aboriginal leadership,
- Support for individual action.



COMMUNITY RESILIENCE, LOCAL FOOD PRODUCTION & LOTS OF YUM.

<https://www.facebook.com/groups/108715702520033/>

XMAS Season Timetable

Date	Day	Open/closed
15/12/2018	Saturday	Open
22/12/2018	Saturday	Open
29/12/2018	Saturday	Closed
5/1/2019	Saturday	Open
12/1/2019	Saturday	Closed
19/1/2019	Saturday	Open
26/1/2019	Saturday	Closed
2/2/2019	Saturday	Open

From February FFA is back to normal, open every Saturday 9 to 11am, 90 Gap rd. Bringing you locally grown fruit and vegetables.



LAND CLEARING COURT CHALLENGE

The Northern Territory Supreme Court will hear arguments from lawyers acting on behalf of the Environment Centre NT (ECNT) in ground-breaking litigation. ECNT, represented by the Environmental Defenders Office NT (EDONT), questions the legal validity of the decision making processes which saw the NT's largest ever land clearing proposal approved without an environmental impact assessment.

The litigation raises legal issues with the processes followed by both the NT Environment Protection Authority (EPA) and the NT Pastoral Land Board (PLB). The challenges relate primarily to the way in which the EPA failed to properly consider climate change and the principles of ecologically sustainable.

"Our message to the Government is quite simple – it needs to take its responsibility to protect our environment seriously across all land tenures," said ECNT Director Shar Molloy.

"The Northern Territory's environment is one of the things that makes where we live so special, that's why there is deep community concern when they hear about deforestation at such a large scale. It's especially concerning when we note the lack of effective safeguards and processes within the very agencies tasked with assessing the environmental impact of these decisions."

"The NT Government has failed to put in place either an emissions or climate change policy – which is alarming in and of itself. However, the absence of this framework should not be used as an excuse for a regulator to do its job of protecting the environment. It is the responsibility of the EPA to make its decisions according to the legislation that does exist, notwithstanding the absence of a climate change policy. It's very



clear that this hasn't occurred in this instance."

"Based on recent scientific studies we estimate the greenhouse gas emissions from this single deforestation permit to be about 2-3 million tonnes. That's the equivalent of about 15-20% of the NT's entire annual emissions. The scale and impact of this destructive proposal is vast."

"Territorians want their government to protect the environment for the future. It's imperative that we have laws that strengthen deforestation rules alongside more open process in making environmental assessments. What we need is a real vision for the Territory environment that starts with enhancing the things that make the NT great, not more bulldozing," said Ms Molloy.

"Our client will argue that when it comes to a proposal to clear tens of thousands of hectares of native vegetation, the NTEPA is required by law to properly consider climate change and the principles of ecologically sustainable development – but in this instance, they failed to do so," says EDONT Principal Lawyer Gillian Duggin.

"While it has many flaws, the Environmental Assessment Act does impose a serious task on



the NTEPA. The NTEPA must decide whether or not a project is capable of having a significant effect on the environment and if so, require an environmental impact assessment. In relation to Maryfield Station, our client argues that the NTEPA did not properly discharge its decision-making role in accordance with the law.”

“The NTEPA and PLB have important responsibilities under environmental law here in the Northern Territory. Both statutory authorities must ensure they fulfil these responsibilities, and act in accordance with their own laws and procedures. This case will be an important test case about their legal obligations”, Ms Duggin said.

Background:

- This is the largest single land-clearing permit ever issued in the Northern Territory, and also the first time the decision-making processes of the EPA and the PLB under this legislation have been challenged in the NT Supreme Court.

- It is believed to be the first in the Northern Territory which is based on grounds relating to climate change and ecologically sustainable development.

- In June 2016, the PLB received an application from Maryfield Station, a pastoral station approximately 550km south east of Darwin, to clear over 20,000 hectares of native vegetation. This is an area the equivalent to 200 times the size of the Darwin CBD.

- In June 2017, a full year after receiving the application, the PLB referred the matter to the EPA to assess whether an environmental impact assessment (EIS) or public environmental report (PER) was required under the Environmental Assessment Act, given the size and scale of the proposal.

- In late October 2017, the EPA Chairperson

issued reasons 1 indicating it considered that the Maryfield application did not require assessment under the Environmental Assessment Act.

- In November 2017, the PLB determined to grant a permit for the clearing.

- In early 2018, the Environment Centre Northern Territory (ECNT), represented by the Environmental Defenders Office (NT)(EDONT), commenced proceedings challenging decisions of the NT Environment Protection Authority (EPA) and the Pastoral Land Board (PLB).

1 https://ntepa.nt.gov.au/__data/assets/pdf_file/0011/459335/statement_reasons_maryfield_station_land_clearing.PD



For perspective, this map shows what 20,000 hectares looks like in the Darwin region. The Northern Territory’s environment is one of the things that makes where we live so special, that’s why there is deep community concern about deforestation at such a large scale.

NEW WIND AND SOLAR NOW AS CHEAP AS EXISTING COAL

Early December, energy analysis firm Bloomberg New Energy Finance (BNEF) produced new research that comes to a stunning conclusion: new renewable energy is now the same cost or cheaper than existing coal power stations in New South Wales and Queensland.

This is a critical inflection point. Due to the continued fall in the cost of wind and solar, as well as the higher international price for black coal, it is now the same cost or cheaper to build a new wind or solar plant in Australia than to continue operating old coal power stations in New South Wales and Queensland.

Or in the words of BNEF's analyst Ali Ashgar, "This means that it is already cheaper to build a new solar or wind plant than burn export-linked coal in an existing, fully depreciated, coal plant."

For a number of years, renewable energy like wind and solar have been the cheapest forms

of new generation. That is, it is cheaper to build a wind or solar farm than to build a coal or gas power station. Wind and solar costs have been falling dramatically over the past decade, with lower capital costs than coal and gas power stations and far lower running costs.

This is why private companies are overwhelmingly choosing to invest in new renewable energy generation. A new coal power station is so expensive that the only way one could get built is with a significant government subsidy. Table 1 shows that it is now almost three times more expensive to build a coal power station than it is to build a wind or solar farm:

However, existing coal power stations have continued to produce a cheap supply of electricity. Most of Australia's ageing coal powers stations, like the decrepit Liddell power station in New South Wales, were built decades ago and were funded entirely by the taxpayer. With all the

COST OF POWER

Power technology

Levelised cost of energy (USD/MWh)

Utility-scale solar

\$37-66

Wind

\$40-74

Coal

\$112-147

Source: BNEF (2018)



capital costs already paid by government, these power stations could supply electricity relatively cheaply, at least until they eventually break down from old age.

But not anymore. Figure 2 shows how the cost of generating electricity over the lifetime of solar and wind farms, including capital, construction and running costs (described as the levelised cost of energy, or LCOE), has fallen dramatically over the past two years. Meanwhile, the cost of generating electricity from coal power stations, including just the running costs (described as the short run cost), has risen over the past two years.

With the costs of wind and solar expected to fall even further in the years to come, it is probable that private companies will increasingly close their ageing coal power stations early, replacing them with cheaper renewable energy. This will accelerate Australia’s transition away from polluting coal power stations and towards clean renewable energy.

Renewable energy is a win-win, reducing both prices and greenhouse gas pollution. For further reading, check out Renew Economy’s article on BNEF’s analysis: ‘Why coal – and not

renewables – is root cause of surging Australia power prices’

By Louis Brailsford / 06 December 2018
<https://www.climatecouncil.org.au/new-wind-and-solar-now-as-cheap-as-existing-coal/>

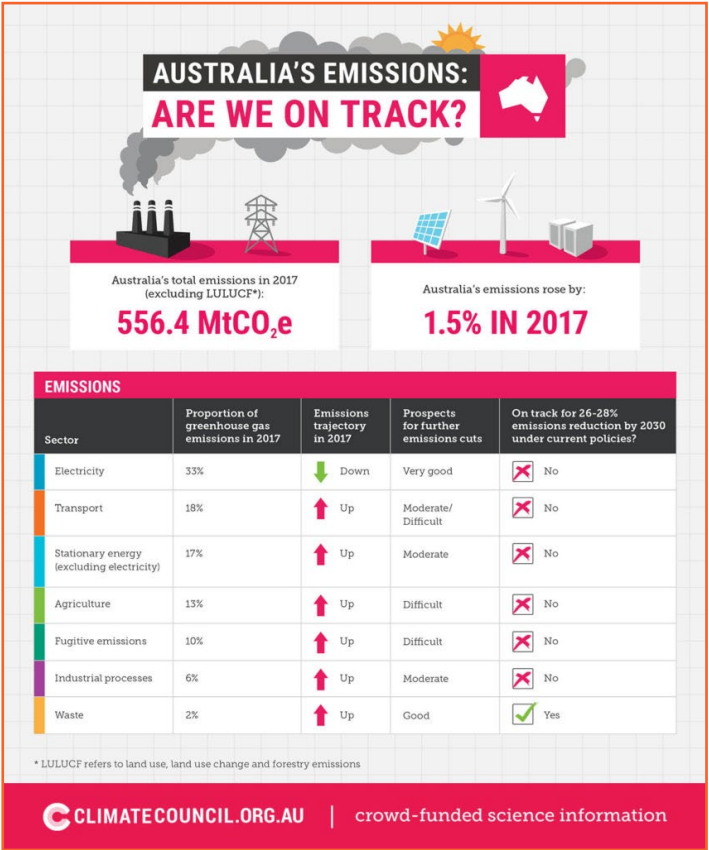


Figure 2: Short-run cost of coal versus levelized cost of electricity of wind and solar





Thoughtful Giving

A big part of the festive season is sharing gifts with our loved ones, friends and work colleagues.

Australians can spend a whopping \$11 billion on gifts at Christmas time, with the average person spending about \$593 last festive season according to a Commonwealth Bank's Consumer Spending Survey.

Research indicates that a lot of consumers have regret about getting caught up in the moment and overspending, that Christmas gift giving causes many financial stress, and that often many gifts are not wanted or appreciated.

We also need to consider the impact on the planet from all of this overconsumption.

Consider the fashion industry, one of the key industries that benefits from Christmas spending.

By 2030, the climate impact of the apparel industry alone is forecast to nearly match today's total annual US greenhouse gas emissions, emitting 4.9 gigatonnes of carbon dioxide equivalent. The rise of fast fashion in Australia means 6000 kg of clothing is dumped in landfill every 10 minutes.

Thoughtful giving is about being mindful of the impact that your purchasing has on the planet, and also encourages people to give gifts that are going to be appreciated.

With some creative thinking, we can still celebrate the festive season but in a more meaningful way, and with less impact to the planet. This also applies to gift giving throughout the year.

Think of the person you are buying for and what would be meaningful for them. Do they already



have a lot of personal items? Perhaps it's not a physical gift, but could be an experience they would enjoy or you could donate to their favourite charity on their behalf.

Here's some suggestions for thoughtful gift giving:

Buy second hand

Search for treasure in your local opportunity shops, antique stores or online at ebay.

Give to charity

Ask your family or friends to nominate a charity that they are concerned about and donate to them in lieu of buying a Christmas gift. Many charities have special gifts where you sponsor animals, or certain activities.

Make a present

Handmade gifts are often the most appreciated. They are often one of a kind, and people appreciate the time taken in this busy world.

Share an experience rather than a gift

Take your family or workmates on an adventure,



to the movies, theatre, bowling, or even a home foot massage voucher. Buy them a lesson in something they are keen to learn about.

Purchase from Ethical Stores

Support your local community craft stores or social enterprises or buy online from Fairtrade or earth friendly stores that stock organic, sustainable or items made from recycled materials

Support your local environment organisation

Like ALEC - see the gift certificate below. Support the organisations on the frontline of taking action on climate change and leading community sustainability initiatives.

Here are a few ideas from the Arid Lands Environment Centre to also further reduce waste

this festive season:

Reduce the people you are buying for

Do a Kris Kringle within families or offices and just choose one person to buy a gift for. Consider setting a limit on this - either a dollar value, or a home made present.

Reduce packaging

Avoid buying presents with lots of packaging. If you buy presents online, you can ask the sender to wrap your gift in brown paper rather than packaging it in plastic. Make your own cards or wrap with recycled paper. Send E-cards.

Avoid Buying Too Much Food

Christmas can mean that most often we buy way too much food, meaning lots of food waste. Consider making one less dish!



**THE GIFT OF A DONATION
TO THE ARID LANDS ENVIRONMENT CENTRE**

TO:

FROM:

PROTECTING COUNTRY, GROWING SUSTAINABLE COMMUNITIES



Northern Territory Climate Change Brief

A comprehensive climate policy is urgently needed to outline how the Northern Territory will reduce emissions, provide certainty for the economy, and to provide planning for how urban and remote NT communities will adjust to a warming world.

The Northern Territory is especially vulnerable to the impacts of climate change with a predicted increase in extreme heat days, an increase in the severity of extreme weather events, changes to water availability, and an increase in sea-level rise and extreme sea-level events. CSIRO modelling estimates that without climate action the number of days above 35 degrees in Darwin could increase from 22.2 days to 275 days per year in 2070.

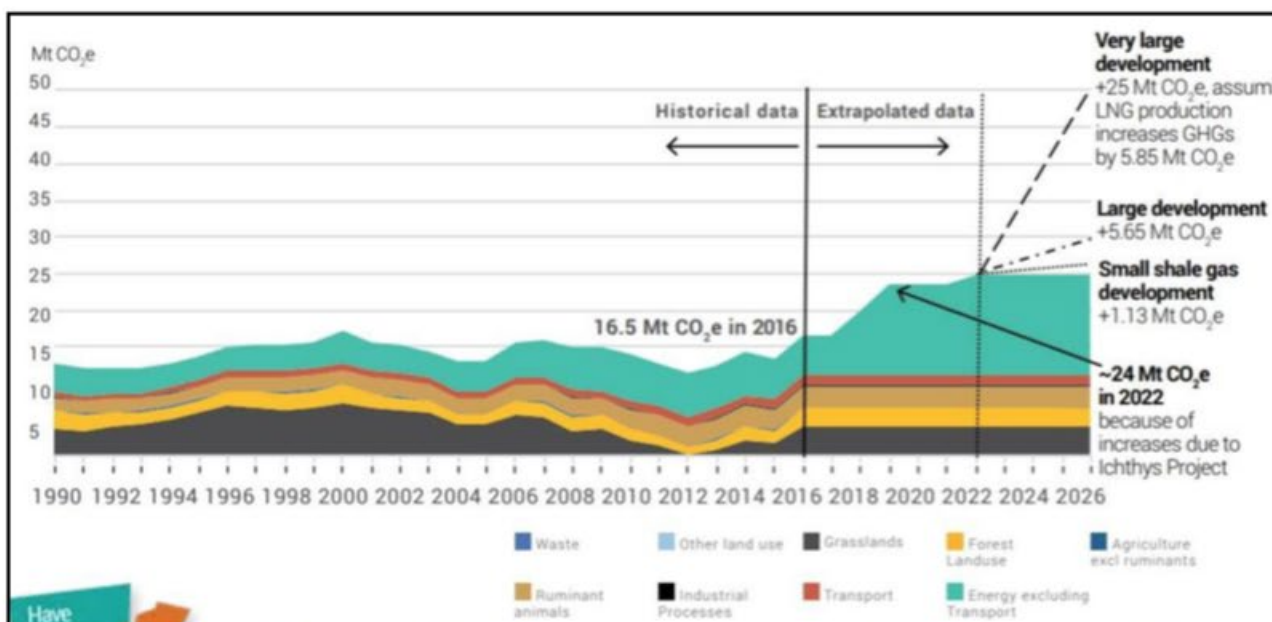
The Northern Territory is already being impacted with increased temperatures, the loss of large swathes of mangroves across the Top End, coral reef bleaching, increased weed spread and changing seasons. The number of days over 35C in Darwin has increased from 5.6 per year to 22.2 per year. Unfortunately Northern Territory emissions are continuing to rise.

Northern Territory Government – Choosing to Increase Emissions

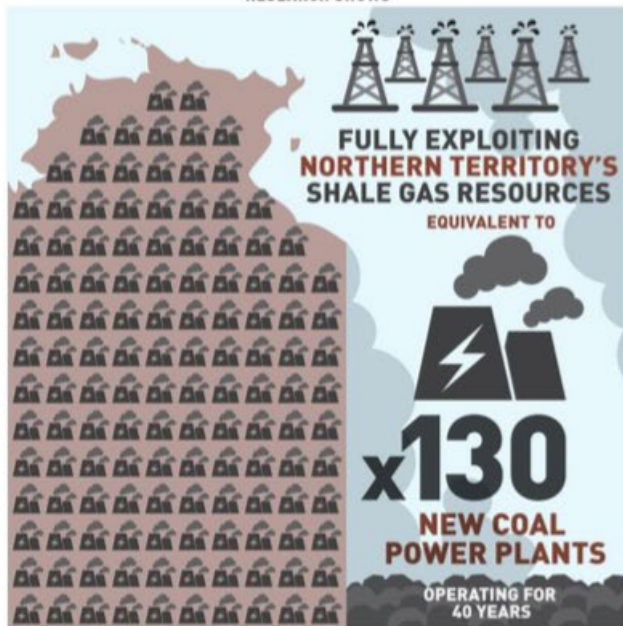
- The Northern Territory Government recently released a Discussion Paper for public comment. A draft climate strategy will be released early 2019. There are concerns the strategy may not contain emission reduction targets.
- The NT currently produces 3% of Australian

emissions, with only 1% of the population. Australians are one of the highest polluting people per capita on the planet, and Territorians are the highest per capita polluters in Australia.

- NT emissions have risen 28% over the last 10 years
- NT emissions will continue to rise with the INPEX Ichthys project, the proposed opening up of the Territory to fracked gas production, new land clearing permits, and increased offshore gas processing.
- When the INPEX Ichthys project is operational, the project is expected to emit an average of 7 million tonnes of greenhouse gases per year.
- Once the Ichthys Project is fully operational, onshore and offshore emissions are expected to account for approximately 1.2% of Australia's total CO₂
- Exploiting the Territory's unconventional gas reserves could increase Australia's total greenhouse gas emissions by over 5%.
- If the Beetaloo Basin in the NT is fracked it is estimated that the carbon emissions will be 4-5 times that of the proposed Adani Carmichael coal mine in Queensland.
- The NT Government has put 15,000 km² into special reserved land for coal development in the Perdirka Basin
- Land targeted for clearing in the Northern Territory has increased nearly tenfold in the past two years.
- In 2016 and 2017, the NT government approved about 45,500ha of land for clearing through the Pastoral Lands Board. That was an almost tenfold jump over the average of the previous 12 years of about 4,600ha



Graph from the NT Climate Discussion Paper demonstrating that fracking could increase emissions by 200%



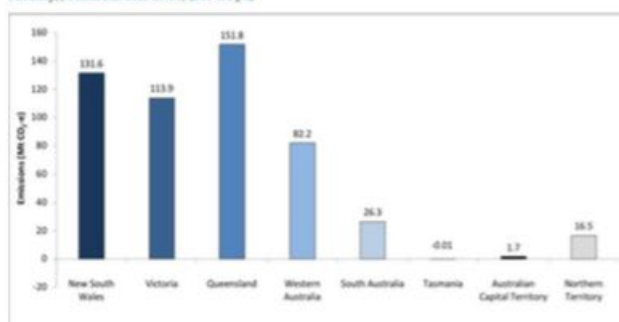
Fracking the NT and WA Will Release a Climate Carbon Bomb

Opening up new unconventional gas reserves in the Northern Territory and Western Australia will blow Australia's carbon budget multiple times over.

A moratorium on the process of hydraulic fracturing in the Northern Territory was lifted in April, with exploratory fracking expected to start in early 2019. Western Australia is currently undertaking its own Scientific Inquiry into Hydraulic Fracturing but it is anticipated that new unconventional gas reserves will also be opened up in WA.

- Emissions from exploiting NT unconventional gas reserves will increase Australia's total greenhouse gas emissions by over 5%
- Emissions identified by the NT fracking Inquiry would be equivalent to 100 times more than the emissions savings under the Northern Territory Government's Roadmap to Renewables: 50% by 2030 policy.
- Emissions from opening up the NT to fracking will be equivalent to six times the Northern

Figure 1: State and Territory total emissions (including those from Land Use, Land Use Change and Forestry), Financial Year 2016, (Mt CO₂e)



Note: The NSW inventory includes ACT emissions from the stationary energy sector.

Territory's total 2016 emissions.

- The full exploitation of all of Western Australia's gas resources would be 4.4 times higher than what Australia's entire energy system can emit to comply with the Paris Agreement.
- If the largest of these WA reserves, the shale gas in the Kimberley's Canning Basin, were exploited it would blow Australia's carbon budget twice over on its own.
- One of the best ways Australia can meet its Paris climate commitments and reduce emissions is to not open up new unconventional gas reserves and frack the NT and WA

Threats to the Territory's Most Vulnerable Communities

The most marginalised and vulnerable members of our community, including Aboriginal and Torres Strait Islander people, are often the least responsible for ecological risks and threats but are the most likely affected by their emergence.

- Overcrowding, poor housing conditions, run down infrastructure, lack of access to resources, and existing health issues are already having significant impacts on people's lives in remote Australia.
- Climate change favours the spread of weeds like buffel grass, which is a prolific coloniser. With high rainfall events increasing, weeds spread further along watercourses, taking over landscapes. Changing conditions can lead to mega bushfires, habitat and species loss.
- Anecdotal evidence of changing bush tucker seasons

Resources:

- <https://haveyoursay.nt.gov.au/climatechange>
- <http://www.abc.net.au/news/2018-03-22/green-groups-call-for-nt-climate-policy-as-emissions-rise/9573404>
- <http://www.tai.org.au/content/nt-fracking-emissions-would-dwarf-renewables-target>
- <https://www.theguardian.com/australia-news/2017/dec/11/northern-territory-land-clearing-approvals-increase-nearly-tenfold>
- <http://www.tai.org.au/content/cooked-gas-extreme-heat-darwin>
- <https://www.theguardian.com/australia-news/2016/aug/23/timing-of-nt-governments-secret-deal-with-tri-star-coal-company-queried>
- <https://www.theguardian.com/environment/2017/aug/02/emissions-from-nts-mcarthur-basin-would-dwarf-those-from-adani-coalmine>
- <http://climateanalytics.org/publications/2018/western-australias-gas-gamble.html>
- <http://ieefa.org/ieefa-op-ed-gas-oligopoly-is-gouging-australia/>
- <https://researchers.cdu.edu.au/en/publications/understanding-climate-adaptation-investments-for-communities-liv>



Will your summer garden be WaterWise?



**Is
your
leaky
irrigation
costing you
money
?**

**Get ready for the hot summer months.
Book a **Garden Tune Up** now!**

Only \$49.00

30 minute consult includes:

- * On the spot irrigation repairs + maintenance**
- * Water saving advice**
- * Quotes for further work needed**

Call: 8953 8835

Email: info@aridedge.com.au


environmental services



Support the work of the Arid Lands Environment Centre

For more than 36 years ALEC has been standing up for the outback and catalysing change in the arid lands. With unprecedented threats facing the NT environment we need your support.

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.
https://aridlands.nationbuilder.com/desert_defenders

Become a Desert Defender:

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

https://aridlands.nationbuilder.com/desert_defenders

Make an Electronic Transfer

Account Name: ALEC Inc - Gift Fund

Bank: Alice Springs - Bendigo Bank

BSB: 633 000 Account #: 1343 58688

Join or renew your ALEC membership

http://www.alec.org.au/become_a_member



Donate at www.alec.org.au



Healthy futures for arid lands and people
ARID LANDS ENVIRONMENT CENTRE
www.alec.org.au

**IF YOU'RE NOT
SAVING THE PLANET,
WHAT ARE
YOU DOING?**



WWW.ALEC.ORG.AU

Healthy futures for arid lands and people
ARID LANDS ENVIRONMENT CENTRE
www.alec.org.au