

Northern Territory Climate Change Brief

A comprehensive climate policy is urgently needed to outline how the Northern Territory will reduce emissions, provide certainty for business and 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 (over 35 degrees Celsius), 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.

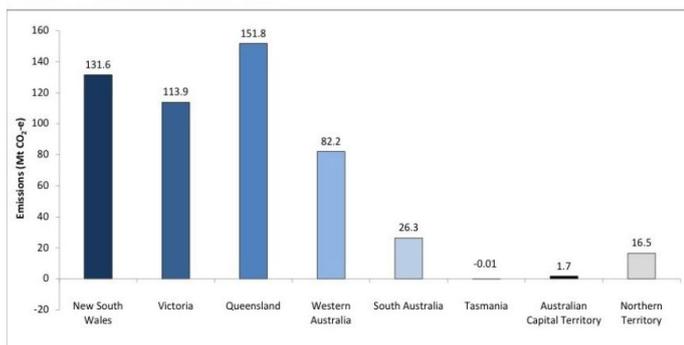
The Northern Territory is already being impacted with increased temperatures, the loss of large swathes of mangroves across the Top End, coral reef bleaching, increased weed spread and changing seasons.

Unfortunately Northern Territory emissions are continuing to rise.

Northern Territory Government – Choosing to Increase Emissions

- The Northern Territory Government Does not have a current climate policy
- The Northern Territory Government is currently formulating a climate ‘strategy’ which 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

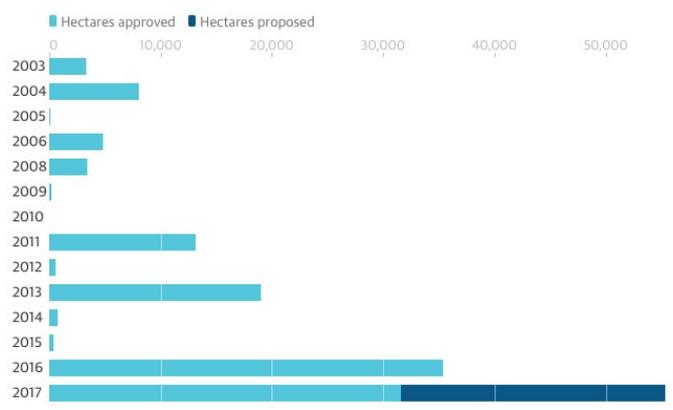
Figure 1: State and Territory total emissions (including those from Land Use, Land Use Change and Forestry), Financial Year 2016, (Mt CO₂-e)



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

- 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 comes online in 2018, 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
- The number of days over 35C in Darwin has increased from 5.6 per year to 22.2 per year. CSIRO modeling estimates that without climate action this could rise to 132 days per year in 2030 and 275 days per year in 2070.

NT pastoral station clearing permits 2003 - 17

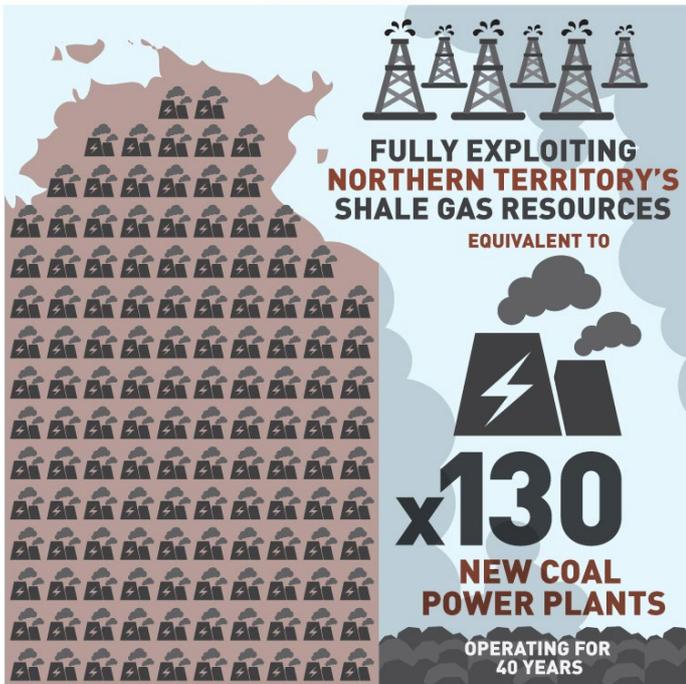


Guardian graphic | Source: nt.gov.au

Applications and approvals for clearing in the Northern Territory

Fracking the NT and WA Will Release a Climate Carbon Bomb

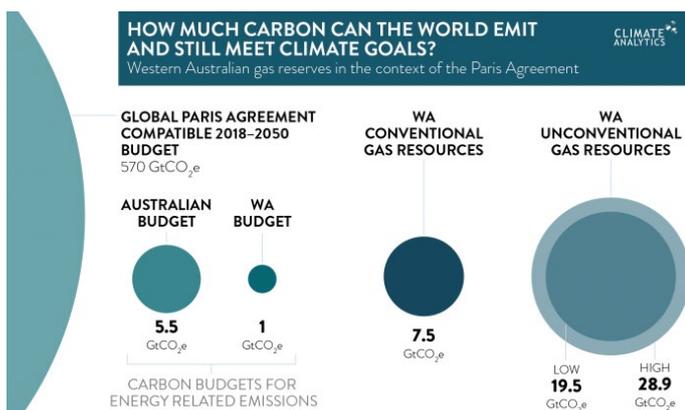
Opening up new unconventional gas reserves in the



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 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
- Predicted increased pressure on air-conditioned community buildings in remote communities as people seek to alleviate heat stress

Resources:

- <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>
- <https://www.watoday.com.au/national/western-australia/report-says-wa-fracking-would-blow-australia-s-whole-carbon-budget-20180319-p4z54p.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-livi>