



Submission to the  
Northern Territory Government on the development of a  
*Northern Territory Climate Change Strategy*  
13 December 2018

---

**Executive Summary** [see text for details]

**Principles for action**

A. Action to mitigate the effects of climate change, or assist Aboriginal communities to adapt to it, must recognise the rights to self-determination of Aboriginal peoples as established under international agreements to which Australia is a signatory, including the *United Nations Declaration on the Rights of Indigenous Peoples*.

**Climate change in Central Australia**

B. The effects of climate change in Central Australia are likely to include: increased temperatures; more hot days; more variable rainfall; and an increased risk of extreme weather events. Aboriginal community members are already recognising the effects of climate change on local ecosystems.

**Aboriginal communities at risk from climate change**

C. While climate change affects everyone's health in the Northern Territory, Aboriginal communities are disproportionately at risk due to the higher proportions of Aboriginal Territorians living in poverty; having pre-existing low levels of health; living in remote areas; having poor quality drinking water; and living in poor housing often without functional air-conditioning.

**Health effects of climate change**

D. The Aboriginal conception of health includes the social, emotional and cultural well-being of the whole community and the relationships between families, communities, land, sea and spirit. It is a spiritual system in which the physical environment is sacred. The disruption of the living world that climate change creates is therefore in itself a harm to the health of Aboriginal communities.

E. There are a range of other direct effects on population health that climate change is creating. These include increased sickness and mortality due to heat stress; increased food insecurity and malnutrition; increased risk from infectious disease; poorer social and emotional wellbeing / mental health; poorer respiratory health; reduced fresh water supply; and an increased

potential for social conflict.

F. Climate change will reduce the capacity of the health system to respond to the health needs of communities in the Northern Territory because of increased difficulty in recruiting and retaining health staff; increased health facility infrastructure costs ; and reduced productivity of health staff.

#### **Limiting the amount the climate changes (mitigation)**

G. In order to limit the amount or rate of climate change and avoid the most serious effects on the health of Aboriginal and other Territorians, the *Northern Territory Climate Change Strategy* should include **a commitment to a target of net zero emissions in the Northern Territory by 2050**

H. In order for this target to be met, the following actions should be included in the *Northern Territory Climate Change Strategy*:

- reimposing a ban on Hydraulic Fracturing ('fracking')
- investing in sustainable renewable power
- recognising and investing in Aboriginal traditional ecological knowledge
- adopting and advocating for an economic paradigm that is focused on public health and the reduction of inequality.

#### **Reducing the negative effects of climate change (adaptation)**

I. The *Northern Territory Climate Change Strategy* should commit to the following investments to minimise the adverse health effects of climate change:

- addressing the social and economic determinants of health
- increasing the resources for comprehensive primary health care under Aboriginal community control
- increasing investment in health infrastructure
- substantially improving community housing
- advocating for and establishing appropriate regulatory and taxation regimes

## Background

1. Central Australian Aboriginal Congress (Congress) is a large Aboriginal community controlled health service based in Alice Springs. We are one of the most experienced organisations in the country in Aboriginal health, a national leader in primary health care, and a strong advocate for the health of our people. Since the 1970s, we have developed a comprehensive model of primary health care that includes:
  - multidisciplinary clinical care;
  - health promotion and disease prevention programs; and
  - action on the social, cultural, economic and political determinants of health and wellbeing.
2. In making this submission to the Northern Territory Government on the development of a Northern Territory Climate Change Strategy, we speak from the perspective of the Aboriginal communities of Central Australia. However, much of what is included in this submission is applicable across the Northern Territory and beyond.

## Principles for action

3. Through our diverse cultures, Aboriginal peoples have cared for and sustainably regulated the natural ecosystems of this continent for tens of thousands of years. However, the process of colonisation in Australia has profoundly undermined our ability to care for Country.
4. The deregulated non-Aboriginal economic system and its unrestrained pursuit of profit is now causing irreparable damage to the living systems that sustain life in the Northern Territory, across Australia, and around the world.
5. Climate change is a fundamental threat to the planet's living systems and to all human societies. It poses particular threats to the health and wellbeing of vulnerable peoples, including the Aboriginal nations of the Northern Territory.
6. These threats are not in the future – they are happening now. If they are not to become ever more serious, climate change must be tackled immediately. This means all governments – including the Northern Territory Government – taking immediate and effective action to:
  - mitigate the effects of climate change in particular by reducing greenhouse gas emissions, and
  - assist communities, especially vulnerable communities such as Aboriginal nations – to adapt to the effects of climate change.

7. Aboriginal people did not create climate change, but our peoples are amongst those who are most affected by it. Accordingly, action to mitigate the effects of climate change, or assist Aboriginal communities to adapt to it, must recognise the rights to self-determination of Aboriginal peoples as established under international agreements to which Australia is a signatory, including the *United Nations Declaration on the Rights of Indigenous Peoples* [1], which states:

*Article 23: Indigenous peoples ... have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions;*

*Article 29: Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination.*

## Climate change in Central Australia

8. Climate change is an established scientific fact supported by the overwhelming majority of scientists working in the field. However, while the effects are already being felt, its local effects over the coming decades are still uncertain. In Central Australia they are likely to include [2-4]:

- increased temperatures;
- more hot days, with the number of days per year over 35°C estimated to increase from around 90 currently to an estimated 118 by 2030 and 180 by 2070);
- more variable rainfall (for example, more average rainfall but greater variation of wet and dry periods and continuing droughts); and
- more extreme weather events such as storms, bushfires, cold snaps, and heatwaves.

9. While the science to show regional-level changes is still developing, Aboriginal people already recognise climate change and its effects on the ecosystem in Central Australia [2]:

*I think it is changing, sometimes hotter, sometimes colder. Weather more mixed up. Not hot all the time in summer, cold in winter. People talking about this now, now everything's changing, one day hot, one day cold.*  
(Ltyentye Apurte ranger)

*Blossom flowers come on at different times. Atwakeye (Wild Orange) should be flowering at Christmas time, but they are coming early. Other things come late or early, but are all mixed up.* (Longterm resident of Ltyentye Apurte)

*In the old days, the stars and the weather lined up.* (Eastern Arrernte elder)

## Aboriginal communities at risk from climate change

10. Climate change is affecting everyone. However, just as ill-health is not distributed evenly across society, the negative effects of climate change is posing greater risks to some populations than others. Populations at particular health risk include those living in poverty; those with pre-existing poor health; those in remote areas; and those living in poor housing. The following table shows how Aboriginal people in the Northern Territory are particularly vulnerable on these factors.

<b>Vulnerable Population [5-7] Aboriginal population in the Northern Territory</b>	
<b>Living in poverty</b>	<p>Median total personal income for Aboriginal people in the Northern Territory is a quarter of that for non-Aboriginal people (\$281 compared to \$1,072 per week) [8]</p> <p>In very remote areas, Aboriginal incomes are falling, and the income gap to non-Aboriginal people rapidly widening [9]</p>
<b>Pre-existing low levels of health</b> (especially respiratory / cardio-vascular disease, alcohol/drug issues or other mental health issues)	<p>In 2014–15, a fifth (18%) of Aboriginal people in the Northern Territory self-assessed their health as only as fair or poor [10]</p> <p>Aboriginal Territorians die from respiratory disease at 2.7 times the rate for non-Indigenous Australians and at higher rates than Aboriginal people elsewhere in Australia [10]</p> <p>More than one in five (22%) of Aboriginal Territorians report high or very high levels of psychological distress compared with 8% for non-Indigenous Australians [10]</p> <p>The life expectancy gap is still 13.5 years for Aboriginal Territorians compared to non-Indigenous Australians [11]</p>
<b>Living in remote areas</b>	<p>In 2011 in the Northern Territory, almost four out of five Aboriginal people lived in Remote (21%) and Very remote areas (58%) [10]</p> <p>Three quarters (75%) of those living in very remote areas are Aboriginal [10]</p>
<b>Living in poor housing</b>	<p>A third (33%) of Aboriginal Territorians live in houses that need 1 or more extra bedrooms, six times the rate (5%) for non-Aboriginal people [8]</p>

11. Therefore, while climate change affects everyone's health in the Northern Territory, Aboriginal people are disproportionately at risk due to the burden of disadvantage and poor health that they already carry as a result of colonisation.

## Health effects of climate change in Central Australia

12. For Aboriginal people health is *not just the physical well-being of an individual but includes the social, emotional and cultural well-being of the whole community* [12]. This definition:

*... recognises the importance of connection to land, culture, spirituality, ancestry, family and community, how these connections have been shaped across generations, and the processes by which they affect individual wellbeing. It is a whole-of-life view, and it includes the interdependent relationships between families, communities, land, sea and spirit and the cyclical concept of life-death-life.* [13]

13. Accordingly, the disruption and damage to the living world that climate change creates is in itself a harm to the health of Aboriginal people as it undermines the relationships to land and sea that are at the heart of Aboriginal wellbeing. In Aboriginal culture the human spirit is one with the physical environment from which it was formed. An insult to the physical environment creates human illness in and of itself. This relationship and the responsibility for maintaining it has recently been beautifully expressed by Warlpiri leader Ned Hargraves Jampijimpa [14].

14. There are also a range of direct effects on population health that climate change is creating. These include the following [5, 6, 15-18]

- a. *increased sickness and mortality* due to heat stress with Aboriginal people particularly vulnerable due to poorer underlying health in general and higher rates of cardio-respiratory disease in particular.
- b. *Increased food insecurity and malnutrition* with remote Aboriginal communities particularly vulnerable due to pre-existing poverty and poor access to healthy food, and expected increases in prices of food and damage to ecosystems that disrupts access to traditional foods.
- c. *Increased risk from infectious disease* and increased range of some vector-borne diseases. Remote Aboriginal communities are particularly vulnerable to food- and water-borne disease – in Central Australia there is already a high incidence of Aboriginal children being admitted to care with diarrhoea, and nationally such admissions are predicted to rise by up to 18% by 2015.

- d. *Poorer social and emotional wellbeing / mental health*, with increasing temperatures contributing to greater stress and higher rates of suicide. For Aboriginal people, social and emotional wellbeing is also undermined by damage to Country and disruption of cultural practices.
  - e. *Poorer respiratory health* due to increased smoke from bushfires and/or dust.
  - f. *Reduced fresh water supply* (both quantity and quality) due to changed rainfall and increased evaporation rates as well as potential contamination from mining and other extraction industries.
  - g. *Increased potential for social conflict* due to displacement of populations (climate refugees) for example due to changing temperatures or sea level rise elsewhere.
15. In addition, climate change will increasingly reduce the capacity of the health system to respond to the health needs of communities in the Northern Territory because of [5, 6, 15]:
- a. *increased difficulty in recruiting and retaining health staff*, especially to remote areas affected by increased temperatures and more extreme weather events;
  - b. *increased health facility infrastructure costs* to ensure health buildings and staff accommodation are appropriately insulated and cooled;
  - c. *reduced productivity of health staff* due to heat stress and sickness.

## **Limiting the amount the climate changes (mitigation)**

16. Limiting the amount or rate of climate change involves reducing the levels of heat-trapping greenhouse gases in the atmosphere: continuing current emissions rates is likely to lead to a 4°C of warming by 2100 [17]. All governments will need to implement substantial cuts in greenhouse gas emissions if catastrophic effects on human health are to be avoided.
17. The *Northern Territory Climate Change Strategy* should therefore commit the Northern Territory Government to put in place a target of net zero emissions by 2050.
18. In order for this target to be met, the following actions should be included in the Strategy:
- a. *reimposing a ban on Hydraulic Fracturing ('fracking') in the Northern Territory* as it is incompatible with reducing greenhouse gas emissions and poses a range of other environmental threats to the health;

- b. *investing in sustainable renewable power* (e.g. solar) especially in remote communities, including well-resourced systems for maintenance and back up; and
- c. *recognising and investing in Aboriginal traditional ecological knowledge* to manage Country and reduce the release of greenhouse gases for example through Ranger programs to manage fire regimes, feral animals etc.
- d. *adopting and advocating for an economic paradigm that is focused on public health and the reduction of inequality*, rather than the unrestrained pursuit of private profit and the exploitation of the natural world.

## **Reducing the negative effects of climate change (adaptation)**

19. The effects of climate change are unpredictable and may change over time. However, the *Northern Territory Climate Change Strategy* should commit to the following investments which can be expected to help minimise the adverse health effects outlined above:

- a. *addressing the social and economic determinants of health* that increase the vulnerability of Aboriginal communities to the health effects of climate change. This includes action on poverty, lack of appropriate education, employment, and housing (see next point) and action to *reduce inequality*;
- b. *increasing the resources for comprehensive primary health care* under Aboriginal community control, including social and emotional wellbeing services, to respond at the grassroots level to increased health risks posed by climate change and provide a centre for coordinated action and advocacy on health needs;
- c. *increasing investment in health infrastructure* to ensure that all clinics and staff housing are fit for purpose in the context of increasing temperatures and more extreme weather;
- d. *substantially improving community housing*, to ensure that public housing and houses in Aboriginal communities meet the needs of Aboriginal families facing increasing temperatures (improved insulation, air-conditioning, and water) supply; that construction specifications are updated and enforced; and that increased maintenance is provided;
- e. *advocating for and establishing appropriate regulatory and taxation regimes* to ensure that government both address inequality and has the revenue to invest in transitioning to a low carbon economy and which ensure that the effects of climate change are not felt disproportionately by poor and marginalised communities.

## References

1. United Nations. *United Nations Declaration on the Rights of Indigenous Peoples*. 2007; Available from: <http://www.un.org/esa/socdev/unpfii/en/drip.html>.
2. Mooney M, et al., *Climate change: Learning about what is happening with the weather in central Australia*. 2014, CSIRO with Central Land Council: Alice Springs.
3. Addison J, *Impact of climate change on health and wellbeing in remote Australian communities: a review of literature and scoping of adaptation options*, in *CRC-REP Working Paper CW014*. 2013, Ninti One Limited: Alice Springs.
4. Donat M, et al., *More extreme precipitation in the world's dry and wet regions*. *Nature Climate Change*, 2016. **6**: p. 508.
5. Watts N, et al., *Health and climate change: policy responses to protect public health*. *Lancet*, 2015. **386**(10006): p. 1861-914.
6. World Health Organization (WHO), *Protecting health from climate change: connecting science, policy and people*. 2009: Geneva Switzerland.
7. Walter T, et al., *Impacts of climate change on public health in Australia: Recommendations for new policies and practices for adaptation within the public health sector*. 2014, Australian Healthcare and Hospital Association.
8. Australian Bureau of Statistics (ABS). *2016 Census Community Profiles*. 2018 6 December 2018]; Available from: [http://quickstats.censusdata.abs.gov.au/census\\_services/getproduct/census/2016/communityprofile/7?opendocument](http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/7?opendocument).
9. Markham F and Biddle N, *Income, poverty and inequality*. 2018, Centre for Aboriginal Economic Policy Research,: Canberra.
10. Australian Institute of Health and Welfare (AIHW), *Aboriginal and Torres Strait Islander Health Performance Framework 2017 report: Northern Territory*. 2017, AIHW: Canberra.
11. Australian Bureau of Statistics (ABS). *Life Tables for Aboriginal and Torres Strait Islander Australians, 2015-2017* 3302.0.55.003 2018 29 November 2018; Available from: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3302.0.55.0032015-2017?OpenDocument>.
12. National Aboriginal Health Strategy Working Party, *A National Aboriginal Health Strategy*. 1989, Department of Aboriginal Affairs: Canberra.
13. Dudgeon P, et al., *Effective strategies to strengthen the mental health and wellbeing of Aboriginal and Torres Strait Islander people*. 2014, Produced for the Closing the Gap Clearinghouse. Australian Institute of Health and Welfare / Australian Institute of Family Studies: Canberra / Melbourne.
14. Ned Hargraves Jampijimpa. *Evidence to the NT fracking inquiry*. 2018; Available from: <https://www.youtube.com/watch?v=D26yyiiigL8>.
15. Zhang Y, Beggs P J, and Bambrick H, *The MJA Lancet Countdown on health and climate change: Australian policy inaction threatens lives*. *Med J Aust*, 2018. **209**(11).
16. Ford, J.D., *Indigenous health and climate change*. *American journal of public health*, 2012. **102**(7): p. 1260-1266.
17. Hanna E G and McIver L J, *Climate change: a brief overview of the science and health impacts for Australia*. *Med J Aust* 2018. **208** (7): p. 311-315.
18. National Rural Health Alliance, *Rural health impacts of climate change*. 2014, NRHA: Canberra.