



Climate Change Discussion Paper

Submission to the Northern Territory Government

November 2018



**Jesuit
Social Services**
Building a Just Society

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Jesuit Social Services

Who we are and what we do

Jesuit Social Services is a social change organisation working to build a just society where all people can live to their full potential.

For over 40 years we have been working at the hard end of social justice with some of the most disadvantaged and marginalised members of our community, who are often experiencing multiple and complex challenges. Jesuit Social Services works where the need is greatest and where we have the capacity, experience and skills to make the most difference.

We have a presence in Victoria, New South Wales, the Northern Territory and internationally, through our leadership of the Justice in Mining Network and involvement in the Jesuit Prison Network.

Our practical support and advocacy covers five main areas:

- **Justice and crime prevention** for people involved with the criminal justice system.
- **Mental health and wellbeing for people with multiple and complex needs** and those affected by trauma, suicide, and complex bereavement.
- **Settlement and community building** for disadvantaged communities, and recently arrived migrants and refugees.
- **Education, training and employment** for people with barriers to sustainable employment.
- **Gender and culture** providing leadership on the reduction of violence and other harmful behaviours prevalent among boys and men, and building new approaches to improve their wellbeing and keep families and communities safe.

The promotion of education, lifelong learning and capacity building is fundamental to all our activity. We believe this is the most effective means of helping people to reach their potential and exercise their full citizenship. This, in turn, strengthens the broader community.

Research, advocacy and policy are coordinated across all program and major interest areas of Jesuit Social Services. Our advocacy is grounded in the knowledge, expertise and experiences of program staff and participants, as well as academic research and evidence. We seek to influence policies, practices, legislation and budget investment to positively influence participants' lives and improve approaches to address long term social challenges. We do this by working collaboratively with the community sector to build coalitions and alliances around key issues, and building strong relationships with key decision-makers and the community.

Our Learning and Practice Development Unit builds the capacity of our services through staff development, training and evaluation, as well as articulating and disseminating information on best practice approaches to working with participants and communities across our programs.

Our work in the Northern Territory

Jesuit Social Services' work in the Northern Territory commenced in 2008 with an invitation to work collaboratively with the Central and Eastern Arrernte people in Santa Teresa and Alice Springs.

Since then, at the invitation of a number of other communities and Aboriginal Community Controlled Organisations, our work has grown to include the communities of Atitjere and Engawala on the Plenty Highway and Tennant Creek. Our work in Central Australia has focused on building the governance and service delivery capacity of the communities and organisations we work with.

To enable a more strategic response to the structural issues we see playing out in the lives of people on the ground, in 2015 we established an advocacy presence in Darwin. Over the last three years, we have developed a strong network of relationships within government and community leaders and have been strong advocates on youth justice issues.

Responding to a need identified by Aboriginal legal services in the Northern Territory, in early 2017 we received funding from the Department of Territory Families to pilot the Northern Territory's first Youth Justice Group Conferencing program in the Darwin, Palmerston and Katherine regions. With the success of this pilot, we are working with other organisations and government to promote restorative practices in the Top End and Central Australia.

We acknowledge the Traditional Custodians of all the lands on which Jesuit Social Services operates and pay respect to their Elders past and present. We express our gratitude for their love and care of the land and all life.

Recommendations

1. Recognising the serious and imminent risk posed by climate change to the planet and people, Jesuit Social Services calls on the Northern Territory Government to act swiftly to legislate an emissions reduction target of net zero by 2050 and set a clear path to transition to a low-carbon future.
2. In developing its response, Jesuit Social Services calls on the Northern Territory Government to adopt an ecological lens. This means:
 - Developing explicit strategies to protect the determinants of health and wellbeing for our community, across the social, cultural, economic and environmental domains.
 - Prioritising resources to mitigate the risk to and building resilience in communities most vulnerable to climate impacts.
3. We ask the Government to continue in dialogue with the community to develop a way forward to protect people and the planet, delivering ecological justice for all.

Specific responses to the discussion paper questions are provided at **Appendix A**.

Introduction

Jesuit Social Services welcomes the opportunity to contribute to the Northern Territory Climate Change Response Discussion paper. As an organisation, we recognise the significant and imminent risks that climate change poses to our communities and the natural world. We acknowledge the imperative to take immediate action – to mitigate these risks, but also harness the opportunities for a more sustainable and equitable future.

The primary purpose of our submission is to ensure the voices of the most disadvantaged and marginalised are considered and present the concept of ecological justice as a framework for understanding and responding to the climate challenges we face.

In an increasingly complex era of climate crisis, environmental degradation and rising social inequity, new challenges to building a just society are appearing. Jesuit Social Services has always worked with people on the margins of society. While often the least responsible for ecological risks and threat, these populations are the most affected by their emergence.

Recognising that environmental challenges pose particular risks to people with whom we work, for several years our organisation has sought to bring an ecological perspective to all our operations. The interconnection between environmental and social issues has influenced our practice, policy, and organisational identity. It has shaped our strategy to ensure we are equipped to address social justice issues of the future, and to lead peer organisations around issues of ecological justice.

We present this submission recognising that there is no time to wait to address the risks of climate change and because we acknowledge that we cannot disentangle questions of environmental and social justice. This submission makes an urgent call to the Northern Territory Government to take action on climate change and offers the lens of ecological justice as a means to expand the discussion and chart a way forward.

This submission:

- Explains the concept of ecological justice and its relevance to the Northern Territory Government's climate change response.
- Presents opportunities for the Northern Territory Government to address the impact of climate change through an ecological lens.

Jesuit Social Services' responses to the specific questions asked by the NTG on the Have Your Say website are included at **Attachment A**.

Ecological Justice

For Jesuit Social Services, justice rests on the principle that ‘everything is interrelated’. Ecological justice is a holistic paradigm that includes both social and environmental justice. Ethical action in the environmental sphere is therefore central to achieving overall ecological justice. For the last eight years, Jesuit Social Services has integrated ecological justice into our way of working, program delivery, organisational culture, advocacy and policy.

An essential element of a just society is the health and wellbeing of people, families and communities experiencing disadvantage. The rapid climate change already being experienced in many parts of the world has direct and significant implications for environmental and social justice. Climate change affects health in multiple ways, including through exposure to extreme heat, poorer air quality, extreme weather events, water borne diseases, and reduced food security. Both physical and mental health are at risk.

Importantly, the adverse impacts of climate change are not spread equally. It is becoming increasingly clear that people already disadvantaged – because of their income, where they live, or their ethnic, educational or social backgrounds – are often the most exposed to the adverse effects of climate change.¹

Jesuit Social Services’ understanding of justice is influenced by its respect for Aboriginal and Torres Strait Islander peoples, whose law and culture are the oldest in the world. Their culture rests on an understanding of the relationships between land, ecosystems and human communities and has informed their care of the land over thousands of years. Justice for Aboriginal and Torres Strait Islander peoples must be the foundation of any commitment to ecological justice in Australia.

The role of the community and public sectors

While Australia has a long and internationally-recognised history of environmentalism and green movements, links between community sector organisations, environmental movements and the pursuit of ecological justice are limited.

The community sector in Australia has started to address the need for climate resilience strategies and preparedness for environmental threats, risks and degradation, recognising its unique position working with those who are most vulnerable to these threats.² There is also rising public and community sector awareness of the impacts of ecological injustice in areas such as energy equity, where the impact of increasing energy poverty on vulnerable populations is becoming evident.

Jesuit Social Services has consistently argued that public policy must pay greater attention to the role of structural factors and social inequality as key determinants of health and wellbeing, and therefore as drivers of demand for community services.

¹ Intergovernmental Panel on Climate Change (IPCC), *IPCC Special Report on Global Warming of 1.5°C*.

² Mallon, K., Hamilton, E., Black, M., Beem, B. and Abs, J. (2013) *Adapting the community sector for climate extremes: Extreme weather, climate change & the community sector – Risks and adaptations*, NCCARF: Gold Coast ([online](#))

Building on this awareness, Jesuit Social Services is seeking to encourage within the community and public sectors the incorporation of ecological justice as a central consideration for public policy and social service delivery. For further discussion, see our position paper, *Ecological Justice: Expanding the Conversation* (2018).³

The impact of climate change in the Northern Territory

The Northern Territory faces a range of environmental, social and economic challenges from climate change. The specific impacts will be influenced by the different climatic conditions within the Territory. The Top End is a humid tropical zone with distinct wet and dry seasons. Because the coast of the NT is relatively close to the equator, the top end is exposed to tropical cyclones. In contrast, Central Australia is largely semi-arid.

The CSIRO, Bureau of Meteorology and the National Climate Change Research Facility (NCCARF) have highlighted some of the main changes that will be expected in northern Australia, including:

- **Rising temperatures.** It is predicted with very high confidence that average temperatures will continue to increase in all seasons, and that there will be more hot days and warm spells. Depending on the extent of emissions increases over coming decades, Darwin could experience between 89 and 227 days a year above 35°C by 2070 – compared to an average of 11 days per year between 1971 and 2000.
- **Increase in severity of extreme weather events.** While the number of cyclones may fall, the number of more powerful tropical cyclones is likely to increase.
- **Rising sea levels.** Over the past 20 years, sea levels have risen between 7mm and 11mm a year in northern Australia, with the effects already being felt – for example, salt-water inflows have reduced melaleuca forest in the NT by two thirds. Continued rises in average sea levels are predicted with very high confidence.
- **Fire.** Up to one third of northern Australia is burnt, making fire the largest source of greenhouse gas emissions in northern Australia. Large late season wild fires are major contributors of greenhouse gas.
- **Rainfall.** Changes to rainfall are possible but unclear, but increased intensity of extreme rainfall events is projected, with high confidence.^{4,5,6}

In the Northern Territory, we can expect that – without mitigating actions by Government – the impacts will be felt first and worst by people on low incomes and those experiencing social exclusion (having the least resources or capacity to adapt), Aboriginal and Torres Strait Islander people whose wellbeing is intrinsically tied to the health of land and waters, people working outdoors, children and the elderly, and people with agricultural or coastal-dependent livelihoods.

³ See [here](#).

⁴ CSIRO (2015) Climate Change in Australia's Top End (online)

⁵ CSIRO and Bureau of Meteorology (2016-17) Climate Change in Australia website: Projections for Australia's Natural Resource Management (NRM) Regions ([online](#))

⁶ NCCARF (2013) Supporting evidence-based adaptation decision-making in the Northern Territory: A synthesis of climate change adaptation research ([online](#))

Despite these risks, current policy settings have the Northern Territory on a trajectory to *increase* rather than decrease emissions: greenhouse gas emissions have risen 28 per cent over the last 10 years and will continue to rise due to with the INPEX Ichthys project, the opening up of the Territory to gas fracking, new land clearing permits, and increased offshore gas processing.

Yet the time to act is narrowing: the most recent report of the Intergovernmental Panel on Climate Change (IPCC) has made it clear that, globally, we have just 12 years to make the changes that will limit global warming to moderate levels, in order to avoid the frequency and severity of impacts associated with warming beyond the 1.5°C ‘tipping point.’⁷

Threats to the environment and society are serious and imminent unless governments – including the Northern Territory Government – take swift action to reduce emissions.

Ecological justice in the Northern Territory

Ecological justice in the Northern Territory requires recognition of the violence and dispossession inflicted upon a people whose system of law and life was inherently ecological: where social and environmental relationships were balanced.

The dispossession of ancestral lands and cultural genocide has had devastating intergenerational social consequences for First Nations people in Australia. Viewing the circumstances of Aboriginal and Torres Strait Islander people through a lens of ecological justice highlights how social disadvantage and economic marginalisation are caused by the loss of relationships with country.

The forced severing of healthy familial relationships with land has had a clearly negative impact on the wellbeing of Indigenous peoples, resulting in disadvantage and trauma that is in turn reflected in high incarceration rates, deaths in custody, low health indicators, low education rates, poverty and intergenerational trauma. It is the responsibility of all governments and communities to heal the ecological injustices of the past, that impact upon the present so we can care for our common home together.

The reality of climate changes is that it is the people least responsible for its emergence who will be most affected. The frame of ecological justice allows us to see the compounding disadvantage that result from social and economic marginalisation and exposure to environmental risks.

Understanding the impacts through an ecological lens

An effective response by the Northern Territory Government requires explicit engagement with the risks posed by climate change to the most marginalised in our community. Without action by Government, the impacts of climate change are likely to exacerbate disadvantage that people experience on a range of social and economic indicators, including health, housing, food security, and employment.

⁷ McKenzie, K. and Jackson, E. (2018) FAQ: The IPCC report on limiting global warming to 1.5°C ([online](#))

Recognising the connection between country and people, and the extent of disadvantage already experienced by Aboriginal and Torres Strait Islander people, it is important to underscore that these communities will uniquely and disproportionately bear the brunt of climate change, unless the Government takes action to specifically address these risks. This includes the expected impact on:

- **Health** – including increased risk of heat stress and dehydration, respiratory illness, increased transferability of viral and other diseases.⁸ Up to an additional 346 temperature related deaths per year have been predicted for the Northern Territory by 2100.
- **Service access** – in the Top End, the increased severity of tropical storms is likely to disrupt access to health, education and other essential services, and increase the cost of food and transportation as roads, railways, airstrips and communications are damaged or cut off for longer periods by big storms and flooding.⁹
- **Food security** – in addition to potential disruption to food supply noted above, rising temperature will affect the seasonal availability of bush tucker, as plant flowering and fruiting times change. Rising sea levels and more big storms will cause many coastal freshwater places to become saltier, again, affecting the availability of traditional food sources.¹⁰
- **Housing and potential displacement** – people living in already overcrowded and poor quality housing will face further strain due to rising temperatures and adverse weather events. In the extreme, sea-level rises, coastal flooding and water shortages may force communities' displacement.¹¹
- **Social, cultural and spiritual wellbeing** – recognising the connection between health of country and health for Indigenous people, the 'sickness' of country caused by climate impacts and environmental degradation pose a particular threat to Aboriginal and Torres Strait Islander peoples' sense of wellbeing.¹² Social and cultural life will be affected through reduced availability of traditional food sources, loss of livelihood, loss of access to sacred site and hunting grounds, and potential physical displacement.¹³

A 2009 report to the Commonwealth, Northern Territory and Western Australian Government provides a more fulsome discussion of the risks of climate change for Indigenous communities in northern Australia – across the domains of health, infrastructure, education and livelihood – including case studies that highlight the context-specific natures of climate change impact in specific communities.¹⁴ Further case studies have been presented by the CSIRO.¹⁵

⁸ CSIRO (2014)

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

¹² Green, D. and Minchin, L. (2014) Living on Climate-Changed Country: Indigenous Health, Well-Being and Climate Change in Remote Australian Communities, *EcoHealth* ([online](#))

¹³ CSIRO (2014)

¹⁴ Green D., Jackson, S. and Morrison, J. (2009) *Risks from Climate Change to Indigenous Communities in the Tropical North of Australia* Department of Climate Change and Energy Efficiency: Canberra ([online](#))

¹⁵ CSIRO (2014)

While Jesuit Social Services welcomes the inclusion in the Discussion Paper of the impacts of climate change on human health and wellbeing, we suggest that this discussion needs to be broadened to a more fulsome exploration of the impacts on the social, economic and environmental *determinants* of health and wellbeing, in particular, for Aboriginal and Torres Strait Islander people and other people in our community experiencing disadvantage.

Ecological approaches to climate resilience

Adopting an ecological framework allows us to consider a multifaceted (and likely more sustainable) response to climate change. It requires us to develop a holistic strategy that sets out a path to mitigate the risks to and maximise shared benefits across the social, cultural, economic and environmental domains.

From an ecological perspective, it is clear that part of this response must include looking to the knowledge and practices of Aboriginal and Torres Strait Islander people; a people whose system of law and life was inherently ecological – where social and environmental relationships were balanced.

Across Australia, we are recognising that the inheritance of land and water management practices not suited to the particularity of this continent has contributed to the environmental degradation and climate change we are now experiencing. There is growing acknowledgement that practices of caring for country that have been maintained by Aboriginal and Torres Strait Islander people for generations show the way forward. Recognising the exploitation and dispossession experienced by Indigenous peoples, Indigenous control over and benefits from the use of this knowledge and experience must be safeguarded.

Across the Territory, there are already a range of examples of Aboriginal communities developing locally relevant responses to climate adaption – one of the most well-known being the West Arnhem Fire Abatement project, as well as other smaller examples such as the erosion control by the Ltyentye Apurte Rangers in Santa Teresa in Central Australia (overleaf).

An effective climate changes strategy would promote programs like these that protect the environment, strengthen culture, and provide economic opportunities on-country.

Erosion Control in Santa Teresa

In the last few years, the Ltyentye Apurte Rangers have been doing a lot of erosion control work, as a result of Ecosystem Management Understanding planning with Traditional Owners of the Santa Teresa Aboriginal Land Trust.

The rangers have built 20 kilometres of new fences and repaired another 20 kilometres of fences. They made a large paddock, next to important springs, to keep out feral horses, cattle and camels. They also made a large paddock for local people to keep their horses in. The rangers have also constructed whoa boys to slow the flow of water and channel it across roads and slopes around Santa Teresa. This work to repair the country will help prepare it for climate change.¹⁶

In Victoria, Jesuit Social Services' focus on ecological justice has brought into view the importance of ensuring the opportunities we create for economic and social inclusion are ecologically sound. For this reason, we have recently established an Eco Skills Centre in Melbourne's north.

Brunswick Ecological Skills and Learning Centre

The establishment of the **Brunswick Ecological Skills and Learning Centre** (or simply the Eco-Skills Centre) is a demonstration of our commitment to create a larger focus on Ecological Justice in the work we do in communities. The Eco-Skills Centre will promote ecological justice, ensuring that justice and equity are central to ecological sustainability. It will help build knowledge and skills, including through practical 'hands on' projects, to strengthen understanding about ecological justice and what it means in practice in our homes and in communities.

Strategies for achieving the goals of the Eco-Skills Centre are the development of the Centre as:

- A **Skills Centre** for engaging people in pre-accredited and accredited training, who have previously experienced barriers to participation in training and employment, to develop their skills in areas where there are employment opportunities related to more environmentally sustainable sectors of the economy (e.g. energy, waste management and recycling, building and construction, and local food production).
- A **Community Ecological Demonstration Hub** showcasing practical projects for members of local and surrounding communities (e.g. permaculture, food production, energy production and storage, and home and community based waste management, and recycling and re-use). These projects will provide small scale demonstrations of how people can apply these innovations in their own home and community, to provide economic benefits and to reduce environmental impacts.

¹⁶ Mooney, M., Walsh, F., Hill, R., Davies, J., Sparrow, A. and Central Land Council Ltyentye Apurte Rangers (2014) Climate change: Learning about what is happening with the weather in central Australia, report by CSIRO with Central Land Council, Alice Springs, Australia ([online](#))

- A **Community Learning and Information Exchange centre** – for people wishing to:
 - become more aware of what they can do to reduce their environmental impact
 - reduce their household costs through more environmentally sustainable activities
 - access information about who can support them be more environmentally aware and practical
 - gain advice about training and employment in the area of environmentally sustainable skills
 - participate in community workshops and seminars, promoting the creation of a more ecologically just society.

In the Territory, transition to a low-carbon future provides a major opportunity to unlock jobs in the green economy – for example, including activities that contribute to carbon sequestration (such as native plant food and medicinal industries, reforestation, hemp industries, sustainable agricultural and carbon neutral hydrogen production), renewable energy (especially solar), and a host of other green jobs that can be identified in partnership with communities and business. Consideration should be given to the range of jobs that are created, from low-skill, entry-level positions to high-skill, higher-paid jobs, and opportunities for advancement in both skill and wages.¹⁷

Already there are innovative examples in the territory delivering environmental, social and economic benefits – including internationally recognised programs such as Bushlight, Alice Solar City and the Desert Knowledge Australian Solar Centre.¹⁸ Opportunities like these should continue to grow.

An ecological response must also explicitly address the fact that the burdens of climate change will not be felt equally. A fair and effective climate change strategy must seek to mitigate the risk to and build resilience in communities already experiencing the greatest disadvantage and with the least capacity to adapt.

This means ensuring people ‘living on the margins’ become part of the solution and stand to benefit from the new opportunities that are created. It also means explicit strategies to support adaptation and resilience, for example, support for low-income households to improve the energy efficiency of their homes and appliances, and measures to assist renters improve the efficiency of their homes.¹⁹

An ecological approach to systems transformation

The discussion paper acknowledges that “we all have a role to play” in responding to climate change. At the same time, the Northern Territory Government must take the lead: setting clear targets to reduce emissions and supporting transition by business and within the community to a low-carbon future.

¹⁷ ACOSS Climate Change ([online](#))

¹⁸ Northern Territory Roadmap to Renewables (2017) ([online](#))

¹⁹ See for example reports by the Brotherhood of St Laurence exploring the distribution of benefits of energy savings measures among high and low income households, including *Johnson, V., Sullivan, D. and Totty, J. (2013) Improving the energy efficiency of homes in Moreland Warm Home Cool Home and Concession Assist social research final report* ([online](#)) and *Sullivan, D. and Johnson, V. (2012): The power to save* ([online](#))

Jesuit Social Services suggests that deep and sustainable change by government and organisations will require an interrogation of our relationship with the natural world. This process of reflection and transformation has been one that Jesuit Social Services has been undergoing since 2008 (see overleaf).

Organisational change and leadership in ecological justice

Jesuit Social Services used its original *Way of Proceeding* as a basis to develop its ecological approach. This Way of Proceeding recognizes three interconnected domains that must be considered in all aspects of the organisation's operations.

1. **Human Spirit** - Focusing upon essential anthropological and spiritual questions around what it means to be human and enquiries into the conditions within which humans thrive and have healthy relationships. This involves an informed and discerning process of understanding ourselves, our fellow humans and our relational context.
2. **Practice Framework** – Developing a relational way of being and acting that reflects and lives ecological justice. This promotes environmental awareness and ecological justice across our practice areas and our advocacy including justice and crime prevention, settlement and community building, mental health support and wellbeing, and education, training, and employment.
3. **Business Processes** – Adopting environmentally sustainable business practices and processes. Discernment in relation to our financial and other resources so they respect and contribute to, rather than harm, efforts to build a just society.

Conclusion

This paper has presented ecological justice as a framework for understanding and addressing both the risks and opportunities presented by climate change. An ecological approach considers the interrelated natures of the environmental, social and economic spheres, and provides a framework for action that will support and equitable and holistic response to what is the most pressing challenge facing our country and our planet.

Appendix A. Responses to Climate Change Discussion Paper

1. What (if any) GHG emissions target should the Northern Territory adopt?

Legislate a science-based emissions reduction target of net zero by 2050. It should include interim targets to ensure the overarching target is achieved and integrate sector-specific targets (with the recognition that some sectors are more difficult to decarbonise than others).

The legislated targets must be supported by an enforceable whole-of-Government framework with strong regulatory controls. This should include an overarching climate change strategy, supported by specific, targeted action plans that provide a clear pathway to transition.

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

Deep and rapid emissions reductions targets are required across all sectors and at all levels.²⁰ In short, business and government need to be doing everything they can to decarbonise and transition to a low-carbon economy.

The Government has an instrumental role to play in setting the framework for change. This requires action on three fronts to help reduce emissions:

- i. At the level of **government policy** – implementing a zero-emissions target
- ii. At the level of **government operations** – leading by example to reduce emissions
- iii. Through **government advocacy** – advocating for Commonwealth, COAG and international action consistent with the Paris Agreement.

Similar action is required by government to strengthen our climate resilience and support adaption, namely:

- i. At the level of **government policy** – setting a clear path for transition to a low-carbon future and providing targeted support to households, communities and businesses to support that transition.
- ii. At the level of **government operations** – take action to mitigate the climate risk to government and assets and services (and associated flow-on effect to communities)
- iii. Through **government advocacy** – advocating for Commonwealth, COAG and international action to support effective adaption.

A clear framework set by government will assist business to initiate change, through investor certainty, clear regulatory parameters in which to operate and targeted support where appropriate.²¹

²⁰ Intergovernmental Panel on Climate Change (IPCC), *IPCC Special Report on Global Warming of 1.5°C*.

²¹ The Prince of Wales' Corporate Leaders Group, "Global Climate Action Summit: Governments Must Aim for Net Zero Carbon Emissions Before 2050, Say Business Leaders."

Jesuit Social Services joins the call by the Arid Lands Environment Centre to halt harmful activities and seize the opportunities to develop the green economy. This means reinstating the moratorium on fracking and slow land clearing. Instead, the Northern Territory Government should continue to invest in activities that sequester carbon (such as native plant food and medicinal industries, reforestation, hemp industries, sustainable agricultural and carbon neutral hydrogen production), renewable energy (especially solar), and supporting green jobs for communities.

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

There is widespread recognition that Indigenous knowledge and land and water management practices hold a key to our response to climate change and our ecological future.

Aboriginal knowledge and practices must be recognised, respected and paid for. However the question of how we can better apply Aboriginal knowledge and practices is most appropriately answered by Aboriginal people, communities and organisations.

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

There are many opportunities to be harnessed from transition to a low-carbon economy, including but not limited to:

- Protecting and improving the health of Territorians²²
- Protecting the ecosystems we rely on. For example, the Northern Territory's marine and coastal ecosystem contribute \$1 billion per year to the economy²³ - these ecosystems are at high risk with rising temperatures.²⁴
- Significant cost savings to government, households and business through energy efficiency and savings realised by maximising renewable energy generation.^{25, 26}
- Technological innovation and the growth of investment in low-carbon sectors.²⁷ The NT has the potential to be established as a leading international solar/renewable energy research hub.²⁸
- Increase in energy and water security^{29,30}
- Creation of new jobs and industries – the NT could be a net renewable energy exporter³¹
- Establishment of safer and climate smart infrastructure³²

²² Hanna and Ogge, *Cooked with Gas: Extreme Heat in Darwin*.

²³ Crossman et al., *Economic Values of the Northern Territory Marine and Coastal Environments*.

²⁴ Intergovernmental Panel on Climate Change (IPCC), *IPCC Special Report on Global Warming of 1.5°C*.

²⁵ Ibid.; The Global Commission on the Economy and Climate, *Unlocking the Inclusive Growth Story of the 21st Century*.

²⁶ CSIRO and Energy Networks Australia, *Electricity Network Transformation Roadmap: Final Report*.

²⁷ CSIRO, *National Hydrogen Roadmap: Pathways to an Economically Sustainable Hydrogen Industry in Australia*; Valladares, "Global Trends and Outlook for Hydrogen."

²⁸ Langworthy et al., *Roadmap to Renewables: Fifty per Cent by 2030*.

²⁹ CSIRO and Energy Networks Australia, *Electricity Network Transformation Roadmap: Final Report*.

³⁰ Intergovernmental Panel on Climate Change (IPCC), *IPCC Special Report on Global Warming of 1.5°C*.

³¹ IRENA, *Hydrogen from Renewable Power: Technology Outlook for the Energy Transition*; Valladares, "Global Trends and Outlook for Hydrogen."

³² The Global Commission on the Economy and Climate, *Unlocking the Inclusive Growth Story of the 21st Century*.

- Making communities more sustainable³³
- The simultaneous achievement of the United Nations' Sustainable Development Goals, if carefully integrated into climate action planning and implementation.³⁴

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

New extraction of fossil fuels (including natural gas) is incompatible with reducing climate risk and limiting warming to within the 1.5 °C 'tipping point' identified by the IPCC.³⁵ In line with the Paris Agreement, fossil fuels must be phased out by 2050.³⁶

To achieve this target, there can be no new fossil fuel extraction and any existing fossil fuel operations will need to adhere to strict mandated targets to ensure the necessary reductions are achieved.

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

There are clear calls from business for action by Government to respond to the threat of climate change. At the global level, the Corporate Leaders Group has brought together business leaders to accelerate progress on addressing climate change; members include Unilever, Coca Cola, GSK and Lloyds Banking Group. The Group has called for governments to adopt a net zero emissions target by 2050.³⁷ They argue this target will send a strong signal and galvanise business action, unlocking the innovation and creativity required to transition to a low-carbon economy.

In Australia, the Business Council of Australia has called on government to implement a clear and comprehensive energy and climate policy at the national level to meet current and future absolute emission reduction targets, and deliver secure and reliable energy supply, affordable energy supply, and a strong, internationally competitive economy.³⁸

As noted in response to question 2, an effective response by the Northern Territory Government would combine a clearly legislated zero-emissions target, a comprehensive roadmap for government and industry to achieve that target (with sector-specific plans), and ongoing advocacy to the Commonwealth and COAG for action at the national level.

³³ Intergovernmental Panel on Climate Change (IPCC), *IPCC Special Report on Global Warming of 1.5°C*.

³⁴ Intergovernmental Panel on Climate Change (IPCC), *IPCC Special Report on Global Warming of 1.5°C*.

³⁵ Tyndall Centre for Climate Change Research Manchester et al., *Natural Gas and Climate Change*.

³⁶ Ibid.

³⁷ The Prince of Wales' Corporate Leaders Group, "Global Climate Action Summit: Governments Must Aim for Net Zero Carbon Emissions Before 2050, Say Business Leaders."

³⁸ Business Council of Australia, Energy and Climate Change ([online](#))

7. Are you prepared to pay higher prices for goods and services as businesses pass on the cost of mitigation?

As articulated in our submission, climate change will disproportionately impact low income households and disadvantaged communities.

Low income earners tend to live in areas more likely to be adversely affected by climate change, and have far less ability to move or make other necessary adjustments to their living circumstances. On average, low income earners spend a greater proportion of their total weekly household budget on energy and water than wealthier households. Few households with low incomes are able to afford significant energy efficiency measures such as insulation, new hot water systems or rainwater tanks. Given that energy and water are essential services, when the prices of these services increase, householders are left with little option but to pay the extra.³⁹

We encourage the Northern Territory Government to work community sector organisations like Jesuit Social Services for fair and equitable responses to climate change and shield low-income households are shielded from price hikes for essential goods and services, and provide financial and technical assistance to support adaption and resilience, for example, support for low-income households to improve the energy efficiency of their homes and appliances, and measures to assist renters improve the efficiency of their homes.⁴⁰

The Northern Territory Government has an important role to play ensuring people and communities already experiencing the greatest disadvantage, who are often the least responsible for climate change, do not unfairly bear the brunt of mitigation and adaption.

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

First, it is crucial that people understand the risks posed by climate change. Without this knowledge, it is not possible to address climate risk.

Jesuit Social Services encourages the Northern Territory Government to continue a dialogue with Territorians, working together to develop tailored strategies to reduce the risks and maximise the shared benefits from the opportunities. Strategies must be evidence based, people centred and informed by best-practice in other regions in Australia and internationally.

Territorians will require ongoing information and support to mitigate and adapt to climate change. This includes providing households, communities and businesses to access the resources and develop the skills to implement change that supports an ecologically sustainable future.

³⁹ ACOSS Climate Change ([online](#))

⁴⁰ See for example reports by the Brotherhood of St Laurence exploring the distribution of benefits of energy savings measures among high and low income households, including *Johnson, V., Sullivan, D. and Totty, J. (2013) Improving the energy efficiency of homes in Moreland Warm Home Cool Home and Concession Assist social research final report* ([online](#)) and *Sullivan, D. and Johnson, V. (2012): The power to save* ([online](#))