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## SUPPLEMENTARY SUBMISSION TO THE INQUIRY INTO RENEWABLE ENERGY INNOVATION IN THE ACT

## **Acknowledgement of Country**

We recognise our Aboriginal and Torres Strait Islander nations were the first sovereigns of our lands and waters. This sovereignty was never ceded and continues to this day, informing our connection to land, waters and community.

Indigenous respect and guardianship over the Australian land is an integral part of environmental justice and must be acknowledged and respected for the realisation of environmental justice in this country. Indigenous leadership, autonomy and justice are also critical to broader climate justice in Australia.

GreenLaw and its members acknowledge we meet on Indigenous land and, in working towards environmental justice, stand beside the traditional guardians of our lands. We recognise that during the writing of this guide we met on Ngunnawal and Ngambri Country, as well as the lands of the Kaurna people. We pay our respects to Elders past and present.

## GreenLaw

The Australian National University Joint GreenLaw – Law Reform and Social Justice Project, **ANU GreenHub** welcomes the opportunity to provide a supplementary submission in response to the Inquiry into Renewable Energy Innovation in the ACT.

The ANU Law Reform and Social Justice (LRSJ) is a program at the ANU College of Law that supports the integration of law reform and principles of social justice into teaching, research and study across the College. LRSJ provides opportunities for students to explore and interrogate the complex role of law in society, and the part that law and lawyers play in promoting change and stability.

GreenLaw is a young person-led law reform and legal research institute empowering the next generation of lawyers to tackle the climate crisis. GreenLaw works in partnership with Universities, NGOs and other industry partners to deliver policy development, legal research and law reform recommendations. GreenLaw aims to create a network of future lawyers and environmental organisations, laying the building blocks of a more sustainable and compassionate future.

This submission was written by the ANU GreenHub, a jointly managed project under GreenLaw and LRSJ program. GreenLaw draws on academic support from the ANU College of Law. We thank them for their suggestions for this submission.

This submission reflects the views of GreenLaw researchers and is not intended to be an institutional submission by The Australian National University or University of Adelaide, nor is it intended to represent the views of our respective employers.

If it would be of assistance, we are happy to be contacted for further comments, please email: green\_law@outlook.com.

# **Supplementary Submission Regarding Gas and Gas Infrastructure**

We welcome the opportunity to make a supplementary submission to the Inquiry into Renewable Energy Innovation in the ACT. Our supplementary submission specifically concerns gas, alongside gas infrastructure. We commend the ACT Government for its leadership in moving from a reliance on gas to **clean** renewable energy sources and strongly encourage the Inquiry to further this important process of reform. Below we provide further analysis of gas and gas infrastructure, outlining, among other considerations, why communityscale batteries are a more optimal form of dispatchable energy for the ACT. This reflects our primary submission on community-scale batteries in the ACT, which can be accessed here:

https://greenlawnetwork.org/wp-content/uploads/2021/05/GreenLaw-Submission-tothe-Inquiry-into-RE-Innovation-14.05.2021.pdf

#### Legal and Regulatory Background

We applaud the ACT Government for its current leadership in reducing the ACT's reliance on gas for electricity, heating and cooking. In particular, we support the ACT's existing commitment to not provide gas connections in new suburbs in the ACT, to stop all newly constructed residencies from joining the gas network, and to remove the mandate for the development of gas infrastructure in new developments in the ACT. These are all positive and significant steps towards delivering on the joint Labor-Greens ACT Government's commitment to 'phase out fossil-fuel-gas in the ACT by 2045 at the latest'.<sup>1</sup> Indeed, last week it was announced that the new Molongo Commercial Centre will be developed to run on 100% renewable electricity with no gas connections.<sup>2</sup> This development is an Australia-first and reinforces the ACT's position as a pioneer in decarbonising urban planning .

We also note, and strongly commend, that the ACT Government on the 2 June 2021 agreed to endorse the Fossil Fuel Non-Proliferation Treaty (**FFNPT**) in a world first.<sup>3</sup> The FFNPT calls for three major actions:

- 1. To prevent the proliferation of coal, oil and gas by ending all new exploration and production;
- 2. Phasing-out existing stockpiles and production of fossil fuels; and
- 3. Fast-tracking real solutions and a just transition for every worker, community, and country.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> ACT Labour and ACT Greens, *Parliamentary and Governing Agreement* (Agreement, 10<sup>th</sup> Legislative Assembly ACT, 2 November 2020) 7.

<sup>&</sup>lt;sup>2</sup> In line with commitments under the ACT Labour and ACT Greens, *Parliamentary and Governing Agreement* (Agreement, 10<sup>th</sup> Legislative Assembly ACT, 2 November 2020) 7.

<sup>&</sup>lt;sup>3</sup> The Honourable Jo Clay MP, 'Fossil Fuel Non-Proliferation Treaty – Proposal' (Motion delivered at the ACT Legislative Assembly, Canberra, 2 June 2021) 184 – 185

<sup>&</sup>lt;a href="https://www.parliament.act.gov.au/\_data/assets/pdf\_file/0006/1769595/MoP016.pdf">https://www.parliament.act.gov.au/\_data/assets/pdf\_file/0006/1769595/MoP016.pdf</a> >.

<sup>&</sup>lt;sup>4</sup> The Fossil Fuel Non-Proliferation Treaty, *Home Page* (Web Page, 2021) <a href="https://fossilfueltreaty.org/home-">https://fossilfueltreaty.org/home-</a>.

Endorsing the FFNPT is a critical step forwards in the phasing-out of fossil fuels and demonstrates the ACT Government's deep commitment to responsible climate action. The ACT Government must now act in accordance with the principles of the FFNPT, to demonstrate its commitment to climate action, and to provide leadership to other governments.

#### Why Gas is Not a Genuine Solution

'Natural' gas, more aptly termed fossil gas, is commonly extracted using hydraulic fracking with severe environmental and social consequences for communities. The extraction of fossil gas releases significant amounts of methane, which is a more potent greenhouse gas than carbon dioxide in the short term.<sup>5</sup> The Climate Council, relying on modelling by the University of Melbourne, also highlights that 'gas powered generation has the highest scope 3 emissions of any form of generation'.<sup>6</sup> Gas is not a transition fuel towards lower emissions. In light of the ACT's global leadership in achieving zero emissions by 2045, it is critical that decreasing gas consumption be a priority. Indeed, gas is currently responsible for approximately 21% of the ACT's annual emissions.

Community-scale batteries and other renewable forms of dispatchable energy are more effective and cheaper than gas powered generation. 'Peaking generation' refers to power sources that can respond in short timeframes to expected and unexpected high electricity demand. For example, cyclical demand peaks are experienced everyday at roughly 6pm; or in severe weather due to increased use of air conditioners.<sup>7</sup> The Clean Energy Council highlights in its recent report that:

# "Large-scale battery storage is now the superior choice for electricity peaking services, based on cost, flexibility, services to the network and emissions. It is the new clean peaker that Australia needs."<sup>8</sup>

We encourage the Inquiry to utilise clean and innovative forms of renewable energy to respond effectively to the electricity needs of Canberrans, without increasing their power bills. This means supporting community-scale batteries and other renewable dispatchable power over gas. Gas powered heating and cooking is more costly to Canberra homes than electrified appliances. Electrified heating and cooling, such as using installing a reverse cycle air-conditioner, saves the average Canberran household in up-front costs and in bills.<sup>9</sup>

Thus, we encourage the Inquiry to reject supports reforms that shorten the life of gas as a cooking or heating source in Canberra. Not only is gas more costly for Canberrans, but gas in the home has significant health impacts on members of our community. Recent research

<sup>&</sup>lt;sup>5</sup> Climate Council, Gas: Dangerous, Expensive and Unnecessary (Web Page, 4 February 2020)

 $<sup>&</sup>lt;\!https://www.climatecouncil.org.au/gas-dangerous-expensive-and-unnecessary/\!>.$ 

<sup>&</sup>lt;sup>6</sup> Climate Council, Submission to the New South Wales Independent Planning Commission Hearing Into the Proposed Santos Narrabri Gas Project (Submission Report, Climate Council, 3 August 2020) 14.

<sup>&</sup>lt;sup>7</sup> *Battery Storage: The New Clean Peaker* (Research Report, Clean Energy Council, April 2021) <a href="https://assets.cleanenergycouncil.org.au/documents/resources/reports/battery-storage-the-new-clean-peaker.pdf">https://assets.cleanenergycouncil.org.au/documents/resources/reports/battery-storage-the-new-clean-peaker.pdf</a>> 3.

<sup>&</sup>lt;sup>8</sup> Ibid 2.

<sup>&</sup>lt;sup>9</sup> See, e,g, Conservation Council ACT Region and ACT Government, *Make the Switch* (Web Page, 2021) <a href="https://maketheswitch.org.au/>">https://maketheswitch.org.au/></a>.

indicates gas cooking contributes up to 12% of the burden of childhood asthma; this is the equivalent of a child being exposed to cigarette smoke daily.<sup>10</sup> Gas cooking and heating also contributes to other respiratory problems, has impacts on the neuropsychological development of children, and increases the risk of carbon monoxide poisoning.<sup>11</sup> We encourage the Inquiry to recommend the electrification of heating and cooking in Canberran homes (including those to be developed and those already built). A major component of renewable energy innovation is well designed urban planning to enable the benefits of renewable energy to flow into everyone's homes. This is especially important considering the differing financial capacities of communities and suburbs in the ACT to electrify without support.<sup>12</sup> Thus we recommend:

#### Reforms to Support Electrification of Canberra's Heating and Cooking Systems

We encourage the Inquiry to build on the existing successes of the ACT Government and propose innovative reforms that enable the ACT to continue its leadership both in the electricity space, and in broader urban planning, to provide economic, environmental, and health benefits to Canberrans.

We first recommend that the ACT Government bring forward the timetable for developing a plan to phase-out all gas and gas infrastructure in the ACT. Currently, the *ACT Climate Change 2019-2025*, anticipates that a formal plan for phasing out gas will not be finalised until 2024 (under Goal 4B).<sup>13</sup> This is a significant delay that risks stranded assets in Canberran homes, such as gas heaters, and wasted investment in utilities-scale infrastructure by the ACT's gas distributor EvoEnergy.<sup>14</sup> It also risks further ACT emissions that could be averted to contribute to the Territory meeting its net zero target by 2045, if not earlier. The timetable for a phaseout should be brought forward as a priority in consultation with stakeholders, including community groups, the ACT Government's Climate Council and industry, notably EvoEnergy. A poorly planned transition off gas benefits no one.

We also recommend that the phaseout timeline be ultimately enshrined in legislation, alongside the ACT's broader goal for net zero emissions by 2045.<sup>15</sup> We recommend the *Climate Change and Greenhouse Gas Reduction Act 2010* is amended to specifically include interim gas phaseout targets, similar to the renewable energy targets outlined at *Section* 9.<sup>16</sup>

Secondly, we recommend the ACT Government seek to phaseout gas by 2030, rather than 2045. This aligns with the lifecycle of most gas infrastructure and reduces the risks of wasted investment by Canberran homeowners, businesses and industry. It also aligns with the science on the ACT's required emission reductions to align with limiting global warming to less than

<sup>&</sup>lt;sup>10</sup> L.D. Knibbs et al., 'Damp housing, gas stoves, and the burden of childhood asthma in Australia' (2018) 208 *Medical Journal of Australia* 299 – 302.

<sup>&</sup>lt;sup>11</sup> Hilary Bambrick et al., *Kicking the Gas Habit: How Gas is Harming Our Health* (Research Report, Climate Council, May 2021) Chapter 3.1.

<sup>&</sup>lt;sup>12</sup> For further discussion of equity considerations please see our primary submission, Peta Bulling et al., *Submission to the Inquiry into Renewable Energy Innovation in the ACT* (Submission, GreenLaw, 2021) 20 – 25.

<sup>&</sup>lt;sup>13</sup> ACT Government, ACT Climate Change Strategy 2019-2025 (Government Strategy, 2019) 10.

<sup>&</sup>lt;sup>14</sup> Conservation Council ACT Region, *Submission: ACT Sustainable Energy Policy 2020-25 Discussion Paper* (Submission, October 2019) 10 – 11.

<sup>&</sup>lt;sup>15</sup>*Climate Change and Greenhouse Gas Reduction Act 2010* (ACT) s 6. <sup>16</sup> Ibid s 9.

2°C.<sup>17</sup> We encourage the Inquiry to explore innovative options to support a transition by 2030 through urban planning and other legislative mechanisms. Whilst ending the mandate to connect new suburbs to the gas market was a positive step forwards, we are concerned it may not be sufficient to prevent all future suburbs being connected. For example, despite the Ginninderry development gaining an exemption from being connected to the gas grid, that infrastructure was still rolled out.<sup>18</sup> We thus recommend the inquiry explore:

- Imbedding the phasing out of gas in future *ACT Planning Strategies*, particularly under Direction 3.1 concerning transitioning to a net zero emissions city 'through the uptake of renewable energy, improved building design and transport initiatives';<sup>19</sup> and/or
- Amending the *Utilities Act 2000* (ACT) to support gas supply and distribution companies to phaseout natural gas. Amendments should be determined in consultation with relevant stakeholders, but could include the use of levies to incentivise switching from gas or amending the conditions under utility licenses to impose obligations to phaseout gas.<sup>20</sup>

Thirdly, we encourage the Inquiry to consider vulnerable Canberrans, particularly renters, when assessing options for the transition from gas to clean renewable energy. As discussed above, there are many social, economic, and environmental benefits to be realised through the clean renewable energy transition. Vulnerable people ought to have the opportunity reap these benefits, regardless of their ability to own property, as outlined in our primary submission.<sup>21</sup> This is especially important, as vulnerable people stand to be disproportionately impacted by the health impacts associated with gas use due to barriers to health care.<sup>22</sup>

We commend the ACT for taking preliminary action via provisions under its *Climate Change Strategy for 2019-25*,<sup>23</sup> and encourage the ACT to increase support for renters to transition of gas. The *Climate Change Strategy* mandates minimum energy requirements for rental properties and mandatory disclosure of energy performance. However, we find that given the specific health issues associated with gas use additional provisions should be designed to disclose gas use on rental properties. Furthermore, we find that as demand for rental properties in Canberra is incredibly high,<sup>24</sup> it is unlikely that risks of increased competition will be an effective incentive for landlords to transition to clean energy and more efficient energy options under mandatory disclosure provisions. For an effective and equitable transition to clean

<sup>&</sup>lt;sup>17</sup> Conservation Council ACT Region (n 14) 10.

<sup>&</sup>lt;sup>18</sup> Ibid 11.

<sup>&</sup>lt;sup>19</sup> ACT Government, ACT Planning Strategy 2018 (Government Strategy, 2018) 67.

<sup>&</sup>lt;sup>20</sup> Utilities Act 2000 (ACT) div 3.2.

 $<sup>^{21}</sup>$  For further discussion of equity considerations please see our primary submission, Peta Bulling et al., Submission to the Inquiry into Renewable Energy Innovation in the ACT (Submission, GreenLaw, 2021) 20 – 25.

<sup>&</sup>lt;sup>22</sup> Institute of Medicine (US) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, ed Brian D Smedley, Adrienne Y Stith and Alan R Nelson (National Academies Press (US), 2003)

<sup>&</sup>lt;a href="http://www.ncbi.nlm.nih.gov/books/NBK220358/">http://www.ncbi.nlm.nih.gov/books/NBK220358/</a> .

<sup>&</sup>lt;sup>23</sup> ACT Government (n 14) 10.

<sup>&</sup>lt;sup>24</sup> Rosie King, 'Canberra's Rental Crisis Is Forcing Many to Spend Weeks Searching for a Home as Prices Go beyond "Affordable", ABC News (online, 16 January 2021) <a href="https://www.abc.net.au/news/2021-01-17/canberras-rental-crisis-driving-up-prices-amid-huge-demand/13060322">https://www.abc.net.au/news/2021-01-17/canberras-rental-crisis-driving-up-prices-amid-huge-demand/13060322</a> .

renewable energy the Territory must go further. Thus, we recommend the creation of a financial incentive scheme to promote the conversion of gas appliances to electric in rental properties.

Whilst gas infrastructure may one day be suited to supporting hydrogen technologies, we encourage the Inquiry to focus on renewable energy innovation that is currently feasible and proven to not only reduce the ACT's emissions but also empower Canberrans homes. Our primary submissions regarding community-scale batteries provide a clear pathway to further reduce electricity emissions and costs, which will support the electrification of ACT heating and cooking. But community-scale batteries also offer a clean renewable solution that empowers our communities to participate in climate action and reap the economic, social and environmental benefits of the ACT Government's climate leadership.

## **Summary of Recommendations**

## Recommendation 1

The ACT Government commit to ensuring neither gas nor gas infrastructure are funded or supported in any outcome from the Inquiry into Renewable Energy Innovation in the ACT.

## Recommendation 2

The ACT Government bring forward the timeline to plan the phaseout of gas.

## Recommendation 3

The ACT Government enshrine in legislation its commitments to phase-out gas to provide greater stability for all stakeholders and signal the Government's strong intention to phase-out fossil fuel gases by 2030 at the latest.

## Recommendation 4

The ACT Government should implement an incentivisation scheme to promote the conversion of gas appliances to electric in rental properties.