



Veterinarians for
Climate Action
A Voice for all Animals

vfca.org.au
info@vfca.org.au
ABN: 636 944 191

Contact:
Ben Cox, CEO

7 July 2021

Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Chair and committee members

Oil and gas exploration and production in the Beetaloo Basin

Veterinarians for Climate Action strongly protests against the Industry Research and Development (Beetaloo Cooperative Drilling Program) Instrument 2021 and the public funding that it will grant for gas companies to frack the Northern Territory.

Our reasons are as follows:

1. There is a global climate crisis.

Climate scientists are increasingly concerned that global heating will trigger tipping points in Earth's natural systems, which will lead to widespread and possibly irrevocable disaster unless action is taken urgently [1].

The CSIRO State of the Climate 2020 report [2] states that Australia's climate has warmed on average by 1.44°C since national records began in 1910. The Paris Agreement [3] is attempting to limit the world temperature increase to 1.5°C above pre-industrial levels. Australia is already about there! And is already experiencing the severe weather events associated with climate change.

2. Natural gas is a fossil fuel

Scientists agree that global warming is caused mainly by human activity and that emissions from fossil fuels, including natural gas, are the dominant cause of global warming [4].

Natural gas as a fuel is mostly made up of methane. Methane is the second-most important greenhouse gas after carbon-dioxide and a key driver of climate change. Greenhouse gases are released into the atmosphere at all stages of the natural gas industry, during the

production of gas, as fugitive emissions and during the energy intensive process of liquefying gas for export [5].

When the world is attempting to reach zero net gas emissions as fast as possible, Australia must not invest millions of public monies in further natural gas development that will have the effect of increasing greenhouse gas emissions and will inevitably become obsolete as the country moves to renewable energy.

3. The world is committing to net zero emissions

World leaders have committed to reduce gas emissions.

Earlier this year, the United Nations Secretary-General, António Guterres, urged all countries, companies and financial institutions to commit to net zero or carbon neutrality, with ‘clear and credible’ plans to achieve the target, starting immediately [6].

Fatih Birol, executive director of the International Energy Association and one of the world’s foremost energy economists, has said: “If governments are serious about the climate crisis, there can be no new investments in oil, gas and coal, from now – from this year” [7].

The British High Commissioner in Canberra confirmed last month that the UK is encouraging Australia to increase its emission reduction target for the 2030s, indicating it is not enough for nations to commit to net zero by 2050 [8].

And last week, Mike Goldman, the top US diplomat in Australia said that the US and Australia had a shared obligation to protect the planet and that both countries needed to set more ambitious climate targets [9].

4. Courts are ruling against fossil fuel production

In the last few months, courts have made landmark decisions that could equally apply to the Government’s proposal to fund new gas exploration and development in the Northern Territory.

The Federal Court in Australia has ruled that carbon emissions released from mining and burning fossil fuels will contribute to wide-ranging harms to young Australians [10], setting an important legal precedent.

A Dutch court has ruled that global oil and gas giant Shell must reduce both its own direct greenhouse gas emissions, as well as those caused by the products that it sells. Significantly it rejected the company’s arguments that the responsibility lies with consumers rather than fossil fuel companies [11].

Legal experts from across the globe have drawn up a “historic” definition of ecocide, intended to be adopted by the international criminal court to prosecute the most egregious offences against the environment [12].

5. Australia has an abundance of renewable energy

State and Territory governments are leading the transition to renewable energy. Tasmania has become one hundred per cent self-sufficient in electricity generated from renewable sources, largely wind and hydro. South Australia and the ACT are close behind that achievement [13].

The Australian continent has the highest solar radiation per square metre of any continent and consequently some of the best solar energy resource in the world [14]. Householders and business owners have been investing in solar energy for decades, fixing solar panels to their roofs to contribute renewable energy to the grid. In the last couple of years there has been a surge in roof and ground mounted photo voltaics and Australia now leads the world in solar per capita, at 600W/person with Germany a close second at 580W/person [15].

Wind power is currently the cheapest form of large-scale renewable energy. For the first time, wind overtook hydro as Australia's leading source of clean energy in 2019 supplying 35.4 per cent of the country's clean energy and 9.5 per cent of Australia's overall electricity [16].

There are over 100 operating hydroelectric power stations in Australia [17]. And now the power of the sea is being explored as an energy source with CSIRO reporting that wave energy could contribute up to 11 per cent of Australia's energy (enough to power a city the size of Melbourne) by 2050, making it a strong contender in Australia's renewable energy mix [18]. Wave power doesn't require the sun to shine or the wind to blow.

One of the biggest criticisms of renewable energy has been that the output of wind and solar farms is variable depending on the weather and time of day. Energy storage technology and digital intelligence to improve grid stability is rapidly evolving. The Hornsdale Power Reserve in South Australia is the largest lithium-ion battery in the world, and is providing essential grid-support services [19]. Pumped hydro energy storage can utilise surplus energy to pump water from a lower dam to a higher one, essentially converting the upper reservoir into a giant battery.

Another argument raised against renewable energy has been that it is more expensive. However, a report last year from the International Energy Agency stated that renewable energy costs have dropped and are increasingly below the costs of conventional fossil fuel generation [20].

There is genuine concern that, in moving from traditional fossil fuels to renewable energy, people employed in the coal and gas industries will lose their jobs. That will happen and will require planning and support for those people concerned. However, the International Energy Agency has declared that 'government actions to rapidly boost clean energy and reduce fossil fuel use can create millions of jobs, lift economic growth and keep net zero in reach' [21]. In Australia new jobs will result from the green economy in all areas of employment, from building and maintaining wind or solar farms to sustainable construction designers, energy efficiency consultants and other specialised professionals [22].

There are significant rewards for Australia in transitioning to renewable energy. Once the Federal Government matches the leadership shown by State and Territory governments, climate technology and industry will really take off. Innovative technology will be exportable to other countries, increasing the gross domestic profit. Carbon taxes currently threatened by

other greener countries to which Australia sends exports, will no longer be a threat. And Australia will become an acknowledged leader in climate action.

6. Conclusion

For the sake of our grandchildren, all future generations and the animals we love, we urge the committee to recommend that the Industry Research and Development (Beetaloo Cooperative Drilling Program) Instrument 2021 be repealed.

Public funding must be directed to fund research, technological innovation and development that will give Australia a safe and dependable power supply generated from renewable energy.

About Veterinarians for Climate Action

Veterinarians for Climate Action is a national, not-for-profit, registered charity that aims to advocate for and achieve climate action within and beyond our profession.

Our members include veterinarians, vet nurses and animal carers who campaign for climate action out of concern for all the animals that are being hurt or killed by climate change. Our patron is Professor Peter Doherty, veterinary surgeon, Nobel Laureate and Australian of the Year in 1997. Twenty-eight former Chief Veterinary Officers also publicly work alongside us.

We mobilise the veterinary profession, the animal care community and animal lovers to advocate for and take climate action. We deliver non-partisan pressure on governments to implement climate action.

We are evidence-based and informed by published scientific findings. Limiting the global temperature increase to 1.5C will reduce the challenging impacts of climate change on ecosystems, human (and animal) health and welfare, and all aspects of society. For that reason, Veterinarians for Climate Action support a target of reducing emissions by 75% below 2005 levels by 2030 and reaching net zero emissions by 2035.

References

1. IPCC <https://www.ipcc.ch/>
2. Commonwealth Scientific and Industrial Research Organisation, *State of the Climate* <https://www.csiro.au/en/research/environmental-impacts/climate-change/state-of-the-climate>
3. United Nations Framework Convention on Climate Change, *The Paris Agreement* <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
4. Client Earth, *Fossil fuels and climate change: the facts* <https://www.clientearth.org/latest/latest-updates/stories/fossil-fuels-and-climate-change-the-facts/>

5. Climate Council, *Why is gas bad for climate change and energy prices?*
<https://www.climatecouncil.org.au/resources/why-is-gas-bad-for-climate-change-and-energy-prices/>
6. UN News, *UN chief urges 'clear and credible' plans to achieve net zero*
<https://news.un.org/en/story/2021/03/1088142>
7. The Guardian, *No new oil, gas or coal development if world is to reach net zero by 2050, says world energy body*
<https://www.theguardian.com/environment/2021/may/18/no-new-investment-in-fossil-fuels-demands-top-energy-economist>
8. The Guardian, *UK urges Australia to scale up climate ambition before G7 summit*
<https://www.theguardian.com/environment/2021/jun/03/uk-urges-australia-to-scale-up-climate-ambitions-before-g7-summit>
9. The Guardian, *US urges Australia to adopt 'more ambitious climate goals' as pressure mounts on Morrison to act*
https://www.theguardian.com/environment/2021/jul/05/us-urges-australia-to-adopt-more-ambitious-climate-goals-as-pressure-mounts-on-morrison-to-act?fbclid=IwAR3ywQgACRdCLcT3qKN_CrXSI3OOyFjOnmi74bw8X6wmiDc8BozB7PNKk3Y
10. ABC News, *Australian teenagers' climate change class action case opens 'big crack in the wall', expert says* <https://www.abc.net.au/news/2021-05-27/climate-class-action-teenagers-vickery-coal-mine-legal-precedent/100169398>
11. RenewEconomy, *Shell, Exxon and Chevron stunned by courts and shareholders in climate blitz* <https://reneweconomy.com.au/shell-exxon-and-chevron-stunned-by-courts-and-shareholders-in-climate-blitz/>
12. The Guardian, *Legal experts worldwide draw up 'historic' definition of ecocide*
https://www.theguardian.com/environment/2021/jun/22/legal-experts-worldwide-draw-up-historic-definition-of-ecocide?fbclid=IwAR3pS2FjrPpGn2bZz1DLQ_5dPu17FWeWQA3b3CvUN1rUWhJXIV1fu24Q0Uc
13. Climate Council, *States and Territories to thank for emissions drop*
<https://www.climatecouncil.org.au/resources/states-territories-thank-for-emissions-drop/>
14. Australian Government – Geoscience Australia, *Solar energy*
<https://www.ga.gov.au/scientific-topics/energy/resources/other-renewable-energy-resources/solar-energy#heading-2>
15. Australian Energy Market Operator, *Standards evolve to support a secure and reliable electricity grid as solar PV continues to grow*
<https://aemo.com.au/newsroom/news-updates/aemo-welcomes-revised-inverter-standard>
16. Clean Energy Council, *Wind*
<https://www.cleanenergycouncil.org.au/resources/technologies/wind>
17. Australian Government – Geoscience Australia, *Hydro energy*
<https://www.ga.gov.au/scientific-topics/energy/resources/other-renewable-energy-resources/hydro-energy>
18. Commonwealth Scientific and Industrial Research Organisation, *Wave Power in Australia* <https://www.csiro.au/en/research/natural-environment/oceans/Wave-energy>
19. Hornsdale Power Reserve, <https://hornsdalepowerreserve.com.au/>
20. International Energy Agency, *Projected Costs of Generating Electricity 2020*
<https://www.iea.org/reports/projected-costs-of-generating-electricity-2020>

21. International Energy Agency, *Pathway to critical and formidable goal of net-zero emissions by 2050 is narrow but brings huge benefits*
<https://www.iea.org/news/pathway-to-critical-and-formidable-goal-of-net-zero-emissions-by-2050-is-narrow-but-brings-huge-benefits-according-to-iea-special-report>
22. Climate Council, *Renewable jobs: Future growth in Australia*
<https://www.climatecouncil.org.au/uploads/7b40d7bbefbdd94979ce4de2fad52414.pdf>