

No green recovery? A Public Affairs Commission discussion paper on Climate Change 2021.

Discussion paper offered to the PAC by the Rev'd Dr Evan Pederick

Introduction

Ever since the outbreak of COVID economists have speculated that the way out of the economic morass associated with massive injections of government assistance to businesses and individuals and the initial screeching halt in economic activity would depend on a major new focus of government, business, capital and academia around a Big Idea. 'Building Back Better' – a phrase that captured public imagination after the 2004 Indian Ocean tsunami – was adopted by then Democrat presidential hopeful Joe Biden in September 2020 to describe his plan for a massive stimulus package that would focus on global environmental threats like climate change and biodiversity loss. Biden's plan recognised that social well-being and inclusion were not separate from environmental issues of water and land use, species extinction, global warming, rising ocean acidity, wildfires and other catastrophes related to rising levels of atmospheric greenhouse gases. The plan called on government to align economic goals with science-based emissions reduction targets, improvements to circular supply chains, and investment in decentralised, renewable transport and electricity systems.

Not so in Australia. Originally formed in March 2020, the National COVID-19 Commission Advisory Board (NCC) was tasked with advising the Government on public-private partnerships and coordination to mitigate the social and economic impacts of the pandemic in Australia. The roles and membership were changed in July 2020 to reflect an emphasis on industry and resources, and its report to Parliament in August 2020 dismissed calls from many business leaders to use the pandemic as an opportunity to lock in development of low-emissions technology. Instead, the Commission chair Nev Power confirmed the commission had asked the government to underwrite new investment in gas pipelines as part of recommendations from a manufacturing taskforce. In relation to renewables, Power commented that renewable projects needed 'substantial government support' and that the Commission did not have a role in recommending specific projects.¹ Prime Minister Scott Morrison warned in September that taxpayers would step in if the private sector did not commit to building at least 1,000MW to replace the Liddell coal-fired generator in 2023, and in May 2021 announced the Federal Government would spend up to \$600m to build a new gas-fired power plant in New South Wales' Hunter Valley despite experts warning the fossil fuel investment makes little commercial sense. The 2021 Budget was light on measures to address climate change, and in June the Prime Minister's guest appearance at the G7 meeting in London did not come with any new commitments.

¹ Katherine Murphy, "Australia's Covid commission downplays 'green recovery' and confirms gas push", *The Guardian*, 11/8/2020.

In this paper, the Public Affairs Commission (PAC) has attempted to bring together a range of developments from the previous 12 months in relation to climate change and environmental matters. It has been a year in which public awareness of the shortening time remaining to address climate change has heightened significantly. With the November 2020 Presidential election bringing the United States back into the 2015 Paris Accord circle and committing itself to strong climate action, we believe the moral and economic case for Australia to accelerate its commitments is imperative. With the rest of the world including most of Australia's major trading partners rapidly moving away from fossil fuels, we cannot continue to subsidise and build fossil-fuel powered infrastructure or continue to rely on exports of fossil fuels without attracting trade sanctions or simply falling behind economically.

The PAC hopes that this paper may serve as a focus for discussion within the Australian Church. We hope to provide updates in this very complex area from time to time, and support the development of an environmentally-informed Australian theology.

Theological principles

As Christians we believe that we are to be good stewards of creation. We note the Anglican Communion's fifth mark of mission: 'to safeguard the integrity of creation and sustain and renew the life of the earth'

We are concerned about climate change which is already affecting the lives of our nearest neighbours across the Pacific and increasing risks in our own country from drought and extended bushfire seasons. Already, the effects of global warming fall most heavily on the poorest of the world's poor. We believe we have a moral obligation to future generations to do all we can to mitigate the risk of runaway global warming which will lead not only to rising sea levels but threats to fishing and agriculture, increased susceptibility to disease and unprecedented global migration of affected populations.

We also believe that the natural creation is loved by God for its own sake apart from its utility to human life and industry. We believe that we must love all that God loves, and that every creature is a unique and unrepeatable word of God. When species suffer extinction and ecosystems die all creation suffers through its loss and God's word spoken through the created order is diminished.

General Synod position

Noting the global groundswell of community and industry support for effective and rapid action to reduce greenhouse gas emissions in line with the very challenging goal expressed in the 2015 Paris Climate Accord, General Synod in 2017 passed a motion committing the Church to encourage Federal and State governments in Australia:

to act quickly to resolve perceived conflicts of interest between the wider community and commercial beneficiaries of fossil fuels and show leadership in reducing greenhouse gas emissions through effective market mechanisms based on consistent expert recommendations.

Principles supported by PAC

Principles previously endorsed by PAC include:

1. the implementation of policies that will reduce greenhouse emissions rapidly to meet the 1.5 C target set by the Paris Climate Agreement. According to the Climate Central group of concerned scientists this will require a reduction of 45% in carbon emissions on 2010 levels by 2030, and nett zero emissions by 2050.
2. a ban on all new coal mines and coal-powered electricity generation, and the orderly phase-out of existing plant combined with proper support for affected communities to create the low-carbon industries of the future.
3. policies that reverse the alarming loss of unique Australian species and for the preservation of vulnerable ecosystems, as well as national water-use policies that can protect rural communities facing continuing drought.
4. We endorse the Government's recent move to ban the export of recyclable waste, and support measures to create a viable Australian recycling industry. We also call for measures to reduce the use of unnecessary plastic packaging in food and other industries.

This paper reviews a number of recent developments and publications relating to environmental policy that suggest not only the need for urgency in developing an adequate climate policy, but the need for better directed policy in certain areas, for example in agriculture and transport emissions, environmental approvals, land use and biodiversity. There may be potential for PAC to update its own previously published positions to reflect both positive trends and areas of urgent concern.

Unpacking the 2020 reports

A number of significant reports landed in the second half of 2020, of which the most significant for the Australian context was the *Royal Commission into National Natural Disasters* which the PAC had specifically decided to examine for its input into the climate change policy debate. Other significant climate-related reports during this period include the joint Bureau of Meteorology (BOM) and CSIRO *State of the Climate 2020*, as well as a report published in *Science* in November on the need to address emissions from food production. Salient points from these are noted below:

Royal Commission and Australian Climate Prediction

This report tabled 28 October found that Australia's naturally variable climate susceptible to flooding, bushfires and heatwaves linked to drought and flood cycles is experiencing a significant warming trend 'beyond the noise' of natural variability with average warming of 1.4 degrees since 1910.² This has been accompanied by a drying trend across the southern half of the continent which has received below average rainfall over the last 20 years leading to increased frequency of heatwaves and record high temperatures, longer fire seasons with more extreme fire danger days. Other clear climate-change related trends include an increase in heavy rainfall events and increased frequency of coastal inundation.³

Evidence presented at the Royal Commission was that Australia's climate was 'virtually certain' to continue warming and drying, as well as events associated with sea-level rise (2.25, p. 59). Significantly data taken from the 2018 CSIRO/BOM *State of the Climate Report* found that a similar increase in average temperatures was predicted under all

² 'Report of the Royal Commission into National Natural Disaster Arrangements', Royal Commission (Commonwealth of Australia, October 2020), sec. 2.19.

³ Ibid., sec. 2.20-22.

plausible global emissions pathways over the next 20 years (2.29, p. 60). Beyond the next 20-30 years however under high-emissions scenarios average temperatures of about 6C above pre-industrial levels were expected, compared with 2C under low-emissions scenarios.

Once warming has occurred, according to CSIRO, it is more a question of adapting rather than returning to a lower-temperature climate.⁴ Heatwave events have already increased in frequency and intensity, and by 2050 extremely hot days that now occur every 20 years are expected every two to five years.⁵ The fire weather season which already commences more than three months earlier in some parts of Australia than in the 1950s will continue to lengthen, reducing the ability to undertake prescribed burning, and more dangerous weather conditions for bushfire will be more frequently experienced.⁶

The Royal Commission also cited evidence that tropical cyclones are expected to reduce in frequency but increase in intensity with overall worsening coastal impacts experienced further south than is presently the case.⁷ Sea levels are expected to rise between 26 and 82 cm by 2090 depending on the level of emissions, and this will mean an increased frequency of coastal and tidal flooding with an associated loss of infrastructure.⁸

In relation to wildlife, The Royal Commission noted that an estimated 3 billion wild animals were killed, injured or displaced in the 2019-20 bushfire season. This is in addition to the tens of thousands of farm animals who also perished. The Royal Commission recommended improved wildlife rescue arrangements and proactive strategies to reduce the exposure of wild populations to bushfire events. A more significant shortcoming noted by the Royal Commission was that Australia does not have a comprehensive central source of information about native species or a standardised model across jurisdiction of determining which species are at risk. The Royal Commission also noted that the protection and restoration of habitat was crucial for the protection of vulnerable species and recommended indigenous land and fire management practices informed by deep knowledge of plants, animals and landscapes should be integrated into government policies and practices.⁹

While the Royal Commission report relied on the 2018 BOM/CSIRO data, this was further confirmed in the BOM/CSIRO State of the Climate 2020 report published in November, which noted ongoing long-term climate change effects interacting in Australia with underlying natural variability.¹⁰ This report confirmed that significant effects of climate change are already being experienced in Australia. Key points were an increase in average current temperatures of 1.44 degrees since records began in 1910, a decline of April to

⁴ Ibid., sec. 2.34.

⁵ Ibid., sec. 2.49.

⁶ Ibid., sec. 2.52-57.

⁷ Ibid., sec. 2.39.

⁸ Ibid., sec. 2.43-44.

⁹ Ashleigh Best, Christine Parker, and Lee Godden, '3 Billion Animals Were In The Bushfires' Path. Here's What The Royal Commission Said About Them', *The Conversation*, 11 November 2020, <https://www.msn.com/en-au/news/techandscience/3-billion-animals-were-in-the-bushfires-path-heres-what-the-royal-commission-said-about-them/ar-BB1aOZ9i>.

¹⁰ 'State of the Climate 2020' (Bureau of Meteorology/CSIRO, November 2020), <http://www.bom.gov.au/state-of-the-climate/>.

October rainfall in the south-west of the continent by around 16%, and in the south-east by around 12% since the late 1990s, and a significant increase in extreme fire weather across large parts of the country since the 1950s. The BOM/CSIRO report noted that scientific predictions over the last several decades have been both broadly consistent and have accurately predicted current conditions. Coming decades will see continued increases in air temperatures with more heat extremes, longer and more enduring drought conditions and increasingly dangerous and longer fire seasons. The BOM/CSIRO report also noted increased and longer lasting marine heatwaves which will affect marine environments such as kelp forests and cause further extreme bleaching events in coral reefs including the Great Barrier and Ningaloo reefs.

Land use and biodiversity

In relation to land use, another first for Australian research published this month found that between 1995 and 2017 the population sizes of Australian plants under risk of extinction fell by an average of 72%, with species in managed conservation areas declining on average 60% while those in non-managed areas declined by 80%.¹¹ These are greater reductions than for mammals (about a third) and birds (about a half). The most common drivers of threatened plant species reductions are land clearing, changed fire regimes, grazing by livestock and feral animals, plant diseases, weeds and climate change. As well as the importance of lost plant biodiversity in its own right, the findings are cause for alarm because of the secondary loss of habitat for animal and bird species as well as preservation of soil and water systems. These results emphasise the importance of addressing agricultural priorities both because of their emissions contribution and to preserve natural biodiversity. These biodiversity finds are also of importance given the finding that over three billion wild animals in Australia perished in the 2019/20 bushfires. The Samuel Report on environmental approvals (considered below) also makes specific findings on environmental approvals in relation to species biodiversity and extinctions.

The Samuel Report

The Final Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) by Professor Graeme Samuel finalised in October 2020 but not released by the Federal Government until 28 January 2021 makes 38 recommendations including the immediate introduction of legally-binding national environmental standards to boost protection, and longer-term changes needed to address the “trajectory of environmental decline”.¹² The full report can be accessed online.¹³ Oddly, the Federal government chose to proceed last year with plans to give the States greater autonomy in environmental safeguards before the Samuel review had been completed, and its release exposes the dangers in the legislation currently blocked by the Senate.

¹¹ Hugh Possingham and Ayesha Tulloch, ‘Australia-First Research Reveals Staggering Loss of Threatened Plants over 20 Years’, *The Conversation*, 16 December 2020, <https://theconversation.com/australia-first-research-reveals-staggering-loss-of-threatened-plants-over-20-years-151408>.

¹² The Guardian 28 Jan 2021, *Australia urged to overhaul environment laws and reverse 'decline of our iconic places'*

¹³ <https://epbcactreview.environment.gov.au/>

Samuel finds the environment is suffering from two decades of failure by governments to improve protection systems meant to ensure the survival of the country's unique wildlife. The report finds that Australia's animals, plants and habitats are in unsustainable decline, and concludes the EPBC Act is failing both the environment and developers. He finds the Act unclear about what it is trying to achieve for the environment, which is now so under pressure it could not withstand current, emerging or future threats, including climate change. Samuel said successive governments had taken a "piecemeal" approach to the recovery and management of threatened species, and highlighted the failure to adopt and implement recovery plans or properly address major threats.

Amongst his 38 recommendations, Samuel calls for the establishment of a new independent Office of Compliance and Enforcement with "regulatory powers and tools" that would sit within the Department of Agriculture, Water and the Environment and administer a new set of national environmental standards. He also recommends the introduction of regional recovery plans to address threats and secure the survival of species and habitats. Two new officeholders are required: an environment assurance commissioner responsible for overseeing and auditing government decision-making, and a "custodian" responsible for managing and coordinating a national supply of information about the environment.

The report makes detailed recommendations for standards covering threatened species, engagement with Indigenous Australians, legal compliance and enforcement, and environmental data and information, with further standards to be developed over time. In particular, Samuel noted that governments had failed to support the rights of Indigenous Australians in environmental decision-making and were not harnessing the "extraordinary value" of traditional knowledge in managing the environment.

Environment Minister Sussan Ley has called the report 'far reaching' and says the government is "committed to working through the full detail of the recommendations with stakeholders". However at the same time Ley said the government would still pursue its plan to try to pass legislation that would clear the way for the handover of federal environmental approval powers to state and territory governments. While the Samuel report insists this should only occur under a framework of legally-binding standards the Morrison government remains committed to the bill drafted last year prior to receipt of the interim Samuel Report which was blocked in the Senate in part because it contained no mention of legislated national environmental standards.

Agriculture and Food

Despite lack of interest in reducing agricultural emissions at a governmental level, many Australian farmers have recognised the importance to their own business model of adopting ambitious climate targets particularly when exposed to increasingly climate-aware international markets. For example in Western Australia a group of farmers have formed AgZero30 with a commitment to make their farms emissions-neutral within the current decade. On a national level they are affiliated with a group of over 5,000 farmers through Farmers for Climate Action.¹⁴ These farmers recognise both the environmental importance of

¹⁴ Robert Baird, "Living climate change now': how WA farmers are trying to turn the tide", *The Guardian*, 25/5/2021.

reducing agricultural emissions and the fact that in a global market rapidly becoming more climate-sensitive it is simply a better business model.

The problem may be deeper than just *how* our food is raised, however. Increasingly it is being recognised that it also concerns what we choose to eat. A study published in the *Science* journal in 2020 sounded the warning that neither the Paris Climate Summit ‘high ambition’ target of 1.5C or the less ambitious 2C global warming target can be met without addressing food systems emissions which collectively contribute around 30% of total emissions.¹⁵ The authors warned that under a business as usual scenario expected emissions from food production would by themselves be sufficient to cause the world to cross the 1.5C threshold by mid century and would consume almost the entire ‘carbon budget’ required to stay below 2C by the end of the century. Significantly, the paper found that the 1.5C target is no longer achievable without rapid and ambitious changes to food production and consumption as well as all non-food sectors. Emissions in the agricultural sector are produced at every level of the food-production system, from deforestation for the growing of crops or grazing livestock (releasing carbon dioxide and nitrous oxide), to rice fields and cattle burps (both of which emit methane). Interestingly, Australian research supported by AgZero30 indicates the potential for developing feed supplements derived from seaweed which potentially may reduce methane emissions from cattle by up to 90%. Apart from greenhouse gas emissions, however, agricultural activities also threaten other environmental systems including water systems, and lead to biodiversity reduction through habitat loss.

The authors of the *Science* article showed the effect of a range of emissions reduction strategies in the food system, the most effective of which was widespread adoption of plant-rich diets (either entirely plant-based or incorporating reduced levels of animal products). On the production side, improved crop yields and more efficient agricultural methods were effective and on both the consumption and production sides waste reduction made an important difference. Crucially, the required contribution to emissions reduction from the sector could only be accomplished by adoption of all of these strategies together.

With global per capita meat consumption still increasing in emerging economies, the authors found a conspicuous and concerning absence of government-driven policies targeting reduced use of animal products or a shift to plant-based diets and argued this is a necessary component of a comprehensive emissions policy. Policies to reduce waste in the food production system are also largely absent and need to be significantly expanded.

In relation to the Australian market, a recent report published by *Statistica.com* reveals a completely different picture with per capita red meat consumption continuing a years-long downward trend and plant-based ‘meats’ increasing their market share

¹⁵ Lili Pike, ‘How Shifting from Meat-Heavy to Plant-Based Diets Can Help Reverse the Climate Crisis’, *Vox*, 18 November 2020, <https://www.msn.com/en-au/news/world/how-shifting-from-meat-heavy-to-plant-based-diets-can-help-reverse-the-climate-crisis/ar-BB1b6gLQ>; citing Michael Clark et al., ‘Global Food System Emissions Could Preclude Achieving the 1.5° and 2°C Climate Change Targets’, *Science* 370, no. 6517 (6 November 2020): 705–8. Pike’s estimate that global food systems contribute 30% of total emissions would include food manufacturing and transport and marketing. Globally, the IPCC estimates agriculture is responsible for 24% of global emissions, considerably exceeding the 15% contribution of the agriculture sector in Australian emissions data.

accordingly.¹⁶ Australians are also opting for plant-based milk alternatives, with soy and almond being the most popular. With more Australians identifying as vegan, vegetarian or flexitarian, plant-based foods are making their way into the mainstream including in popular fast-food chains. Statistica author Thomas Hinton suggests plant-based foods in Australia have the potential to be market disruptors although at this time they are still hampered by an approximately 50% price premium over animal-based counterparts. This would suggest government policy support for an already evident trend would be highly effective, and could provide support for emerging Australian agricultural and food processing initiatives.

Animal agriculture is also a major cause of biodiversity loss and species extinction. For 86% of the 28,000 species in danger of extinction, agriculture is the main threat; 80% of global farmland is used to raise animals, yet these animals' flesh provides just 18% of all calories consumed; and if we could restore farmland to its natural state it could store a full seven years' worth of greenhouse gas emissions from fossil fuels.¹⁷ This suggests Australian government support for development of agriculture based on indigenous plant and animal resources could assist the 'rewilding' of currently marginal pastoral and cropping lands while supporting the nascent native food or 'bush tucker' industry: an economic and environmental 'win-win'. For example, work currently being done by the University of Queensland and the Australia Research Council's Training Centre for Uniquely Australian Foods indicates scope for domestic as well as international demand for branded Australian native foods such as Illawarra plums, pindan walnuts and wattleseed.¹⁸ In addition, research by the Rural Industries Research and Development Corporation indicates the potential for commercial exploitation of indigenous Australian fauna including kangaroo, emu and crocodile, as well as feral but superbly well adapted camel and buffalo populations.¹⁹

Some way off from commercial sustainability are initiatives to create insect-based foods including from crickets and mealworms. Insect-based foods are quite common in traditional societies in most parts of the world, including Central and South America, Africa, Asia, Australia, and New Zealand, are high in protein and calorific value and can be farmed cheaply and sustainably. Importantly, these initiatives also allow for food production to be largely disconnected from land use. Acceptance of insect-based foods by Australian consumers may take some time, however. Other food technologies beginning to reach commercial sustainability include the manufacture of fungi-based proteins, and the long-anticipated journey towards laboratory-grown meats also shows potential to assist in food production that avoids the environmental impacts of animal agriculture. The PAC and other bodies advocating in the environmental space should encourage government support for each of these initiatives.

¹⁶ 'Plant-based food in Australia - statistics and facts', Thomas Hinton, <https://www.statista.com/topics/8030/plant-based-food-in-australia/> accessed 30/9/2021

¹⁷ Damian Carrington, "Plant-based diets crucial to saving global wildlife, says report", *The Guardian*, 4/2/2021, citing a report published by Chatham House.

¹⁸ 'Australian Native Superfoods', Rachel Riga, 17 Nov 2019, on <https://www.abc.net.au/news/2019-11-17/native-bush-foods-australian-bush-tucker-going-global/11658008> accessed 30 September 2021.

¹⁹ 'Buffalo, Camel, Crocodile, Emu, Ostrich, and Rabbit Meat: new value-added products', by Joanne Bobbitt, accessed at <https://www.agrifutures.com.au/wp-content/uploads/publications/03-036.pdf> on 30 September 2021.

Transport Policy

On 5 February the Government released its long-awaited plan to reduce greenhouse gas emissions from Australia's transport sector. A leaked copy of the paper, entitled Future Fuels Strategy, was released by The Guardian in December 2020.²⁰ The paper does not propose any direct financial help for buyers of electric vehicles, or introduction of a phase-out date for the sale of new fossil fuel powered vehicles. Instead, the paper summarises the government's intention to 'create an environment that allows consumer choice' while stimulating industry development. In addition the paper claims that hybrid vehicles are cleaner than electric vehicles using the false assumptions that all EV owners will charge their vehicles from the grid and that the proportion of renewable energy delivered by the grid will remain constant.

At the moment electric vehicles make up only 0.75% of all new car sales in Australia. In Europe EVs currently make up 10.2% of new vehicle sales and most European countries actively encourage EV adoption. Globally, EV's are projected to make up 26% of all new vehicle sales by 2030. Other large right-hand-drive markets, including Japan and Britain, have announced the banning of new fossil fuel vehicles from 2035 and 2030 respectively, and according to the Electric Vehicle Council with only five EV models under \$60,000 available in Australia compared with 26 in Britain the government's ambition to provide consumer choice is not backed by the market reality.

In December last year Energy Minister Angus Taylor also announced a \$2.5bn package to ensure the future of oil refineries supplying high-sulphur dirty fuels to an Australian car fleet with no emissions nor fuel-efficiency standards for light duty vehicles.²¹ The transport sector currently accounts for around 20% of Australian emissions, of which road transport contributes around 85%. Although Australia is one of the few countries in the world without emissions standards the government has given no indication after five years of deliberation that it intends to rectify this. Without significant change, The Guardian warns Australia is likely to become a dumping ground both for high emissions vehicles that cannot be sold in other markets past 2030, and for the dirty fuels that the government's \$2.5bn subsidy is designed to protect.

Challenges and opportunities for COVID-recovery

Action on bushfire royal commission

Following the Royal Commission which made over 80 recommendations in a range of areas, from the coordination of all levels of government during emergencies, warning systems for the public, climate data, the role of the Australian Defence Force and the role of charities and other groups. The Federal Government has indicated its support (or in-principle

²⁰ Simon Holmes a Court, Australia's electric vehicle policy steers us to a future based on fossil fuels. It needs to be dumped, *The Guardian* 8/2/2021, Adam Morton, 'Coalition Accused of Wasting 18 Months on "nothing" Electric Vehicle Strategy', *The Guardian*, 16 December 2020, <https://www.theguardian.com/environment/2020/dec/16/coalition-accused-of-wasting-18-months-on-nothing-electric-vehicle-strategy>.

²¹ Bill Hare, 'The Morrison Government Subsidising Dirty Fuel amid the Climate Crisis Beggars Belief', *The Guardian*, 16 December 2020.

support) for most of these. In November 2020 the Government announced it would legislate the power to declare a national state of emergency. The Government has rejected the royal commission's call for a national aerial firefighting capability. In relation to climate threats the Prime Minister remarked that the commission found the elevated risk over the next 20 years comes from impacts of climate change that are already locked in "regardless of what might happen in terms of emissions reduction ... (so) ... a key part of dealing with climate change in this country is dealing with the resilience to what is already there" (ABC 13 Nov 2020). Remarkably, the inference appeared to be that as climate change is locked in due to previous inaction, no additional policy response to this specific threat is therefore necessary or possible. Despite indicating its support in broad terms, then, the government appears content to ignore the elephant clearly identified by the Royal Commission as being in the room.

Some more specific recommendations were made by the royal commission in relation to the estimate 3 billion wild animals and tens of thousands of farm animals that perished in the 2019-20 bushfires, recommending governments improve wildlife rescue arrangements, develop better systems for understanding biodiversity and clarify evacuation options for domestic animals.²² Better of course would be action to minimise such catastrophic impacts in the first place, and in this regard urgent consideration must be given to the 38 recommendations in the Samuel Report (see below).

A positive contribution to wildlife recovery following the bushfires has been made by the World Wildlife Fund, which following the 2019-20 bushfires received over \$40 million in donations which allowed them to establish over 40 separate recovery and restoration missions for the animal victims of the fires estimated by the Royal Commission to number up to 3 billion dead. WWF in Australia has also started a Two Billion Tree program aimed at replanting as much forest as was lost in the fire including the regeneration of habitats for native animals such as koalas.²³ Support for such initiatives by other environmentally-active agencies is critical, as the government has not indicated any policy response in this area.

Renewable power: the emerging picture in Australia

Since the filling of the mandated 23% national renewable energy target last year there is no longer any national mechanism for ramping up investment in renewable energy, and with the continuing Australian climate policy gridlock despite the ever-reducing cost of renewable electricity the pace of investment is seen to have slowed.

State governments continue to implement ambitious targets however, for example with the NSW Government announcing plans in 2020 to underwrite 12GW of renewable electricity and 2GW of storage. Victoria announced in November 2020 plans to install Australia's largest (300 MW) battery to modernise the state's electricity grid, support new renewable energy capacity and improve the reliability of power supply and a renewable

²² <https://www.msn.com/en-au/news/techandscience/3-billion-animals-were-in-the-bushfires-path-heres-what-the-royal-commission-said-about-them/ar-BB1aOZ9j>, republished from *The Conversation* under a Creative Commons licence and accessed 9 Jan 2021.

²³ 'Australian Renewable Export COVID-19 Recovery Package' (World Wildlife Fund, 2020), <https://www.wwf.org.au/what-we-do/climate/renewables/renewable-export-covid-19-recovery-package#gs.ns5co7>.

energy target of 50% by 2030. South Australia is targeting 50% renewable energy by 2025 and net 100% renewable by 2030. Queensland has committed to 50% renewables by 2030. Tasmania, already at net 100% renewables, has announced plans to become a net exporter of renewable electricity. Western Australia lags behind as the only state without a renewable energy target or zero emissions target, insisting on national leadership before committing to targets, although according to the Government's own modelling expects at least 70% of installed capacity and 60% of generation by 2040.

Industry is also moving aggressively into renewable energy, for example with Australian Super the latest large investor to dump its shares in Whitehaven Coal. Woolworths has announced it plans to run its supermarkets and operations on 100% renewables within five years. The Fortescue Metals Group's Andrew Forrest has recently announced a major foray into renewable energy with the goal of building 235CW of renewable power across the globe.

Most exciting is the massive 26GW Asian Renewable Energy Hub backed by a consortium of Australian and overseas interests and recently awarded major project status by the Australian Government. When built in the Pilbara in northern WA this will include 1,600 giant wind turbines and a 78 sq km solar array in an area half the size of greater Sydney.²⁴ Most of the energy generated will be used to convert seawater into 'green hydrogen'. This project is expected to come online by 2027.

Other major renewables projects already in development include the 10GW plus storage Sun Cable project 750km south of Darwin and the 2.2GW Star of the South offshore wind project planned for Bass Strait. Rooftop solar remains the biggest existing power plant in the country with 29% of Australian homes producing about 12GW of power.

The 'gas-led recovery'

The Federal Government's hand-picked "COVID Commission" led by former Fortescue executive Nev Power recommended in August 2020 a massive new investment in gas pipelines and infrastructure to kickstart new investment coming out of the COVID recession.²⁵ The Government's subsequent commitment to the 'gas-led recovery' so far does not seem to have been quashed by criticism that what is needed is rather a green-led recovery – although as noted below since the US election there is a discernible shift in the rhetoric.

Major reports from the Grattan Institute and the Australia Institute in November both questioned the economic foundations of the 'gas-led recovery' suggestion. Grattan found that Australia has already recovered most of its easily accessible gas reserves meaning that government subsidies will be required to extract increasingly expensive sources. The Grattan Institute found that the government's promotion of gas as a 'feedstock' for manufacturing enterprises was wildly overstated with only 1% of Australian gas currently used as a feedstock in manufacturing. This would mean higher energy bills for consumers and massive subsidies to companies employing relatively few workers.

²⁴ "Green Giants", *The Guardian* 14 Nov 2020

²⁵ *The Guardian*, 11 August 2020, "Australia's Covid commission downplays 'green recovery' and confirms gas push".

In terms of environmental impacts, as a stabilising fuel to support a renewables electricity grid the Australian Energy Market Operator (AEMO) found that today gas could perform this role at a lower price than battery technology “it would struggle to do so when the grid actually requires it to carry out this function in 10 years’ time”. In addition, taking into account fugitive emissions in the extraction process and leakage in the distribution network gas is at least as environmentally damaging from an emissions perspective as coal.

A post US-Election pivot?

The ‘climate wars’ between Coalition moderate and conservative factions (in particular the Nationals) are well known, as are the apparently irreconcilable priorities between city and country voters which bedevil both the major parties. Until recently the Prime Minister’s apparent strategy has been to give verbal support to the government’s weak Paris commitments while doing nothing in the policy field to support actually achieving them – and to continue with policies that give effective subsidies to fossil fuel interests.

With the election of US President Biden on an explicitly pro-climate action platform, all of Australia’s major trading partners are committed to effective action to reduce emissions. With strong Paris commitments to 2030 and net-zero commitments to 2050/60 from the US, China, the EU, UK, Japan, India and South Korea, Australia can now expect no support for its continued intransigence on setting ambitious targets and implementing policies to achieve them. There is the distinct likelihood, hinted at by then Presidential-hopeful Joe Biden, that tariffs could even be erected against trading partners without sufficiently strong climate commitments. This will nudge the Australian government in the direction of climate action, however it is clear they will need to be held to account on action to achieve their commitments.

Australia continues to resist calls to increase its ambition to 2030, however the language appears to have softened since the US election and on 1 February 2021 Morrison commented in an address to the National Press Club: “Our goal is to reach net zero emissions as soon as possible, and preferably by 2050” (The Conversation, 1 Feb 2021, *View from The Hill: Now Scott Morrison’s ‘preference’ is for net zero emissions by 2050*). Given the advantages for Australian companies in a newly climate-ambitious trading environment this may well translate to formal commitments, say in time for the Glasgow conference in September.

The Government can hardly have failed to notice that renewable energy has won the climate wars by default at least in the electricity sector given that renewables are now hands-down cheaper than the alternative. With the States and private enterprise driving the large-scale renewable energy initiatives described above it is virtually certain that as existing coal stations retire they will be replaced by renewable generation. A possible game-plan for a Coalition government wanting to avoid both international censure and backlash from its own more conservative elements would be to allow States and industry to do the heavy lifting in relation to renewable electricity and achieve modest reductions by 2030 while continuing to do nothing in the areas of agriculture and transport emissions. As noted above, however, in order to meet the Paris goals of 1.5/2 degrees C action in every sector is necessary, so the lack of policies in relation to agriculture and transport emissions needs to be called out.

Predictably, PM Morrison's belated conversion to net zero has caused consternation within Coalition ranks leading Deputy PM Michael McCormack late last year to openly speculate that a net zero commitment could exclude agricultural emissions. Net zero not counting the 13% of current emissions contributed by agriculture is not net zero at all. Nevertheless in seeking to win over the Nationals' constituency it is likely increased focus will fall on land use opportunities such as carbon sequestration as well as measures to protect biodiversity. The 21 June 2021 Nationals party-room coup leading to the replacement of Michael McCormack by Barnaby Joyce as Nationals leader and Deputy Prime Minister may signal an era of more overt climate intransigence from the junior Coalition party. A proper accounting for all agricultural emissions is of major importance, and as noted above this must include government policy to encourage the production and consumption of plant-based foods if the Paris 1.5/2 degree goals are to be met.

Another major area in which the government's newly-minted but questionable climate ambition needs holding to account is the Prime Minister's own 2019 special project of recycling and waste management. Despite the National Waste Policy Action Plan's laudable commitment to new recycling infrastructure there is no sign yet of any waste avoidance initiatives.²⁶ The vexed area of environmental approvals and a proper response to the Samuel report is an area in which the government needs to be held to account, and in relation to the bushfire enquiries an area in which the government has not responded satisfactorily is that of land use, loss of biodiversity and wildlife protection especially of endangered species. The protection of marine environments, especially the Great Barrier Reef, has not received sufficient attention over the last year, and the government's inaction in this area also needs to be highlighted.

Conclusion

The situation at the moment seems to be a mix of continuing inaction at some levels and hopeful movement at others. In the area of renewable electricity generation it appears likely that even without coherent policy at the Federal level massive cuts in emissions will be realised over coming years accompanied by significant reduction in Australian coal exports. Signs of a gradual Australian return to the climate action table in the aftermath of the US election remain hopeful, however the Coalition track record of giving lip service while refusing to implement policy to achieve environmental outcomes is likely to continue and so community organisations will need to hold the government to account.

In relation to greenhouse gas emissions the areas in which least action has been taken in Australia are those of agriculture (30% of total) and transport (20% of total) – and perhaps these areas in particular should be the focus of renewed action by PAC and other community organisations and churches. In many other uniquely Australian areas of concern including waste management, biodiversity, water and land use (all with complex interrelationships with the bushfire landscape) where inaction is continuing and the cost to

²⁶ The Conversation, 6 July 2020, *Waste not, want not: Morrison government's \$1b recycling plan must include avoiding waste in the first place*, See also: [placehttps://www.environment.gov.au/protection/waste/publications/national-waste-policy-action-plan#:~:text=About%20the%20Action%20Plan&text=ban%20the%20export%20of%20waste,recycled%20cont%20by%20governments%20and](https://www.environment.gov.au/protection/waste/publications/national-waste-policy-action-plan#:~:text=About%20the%20Action%20Plan&text=ban%20the%20export%20of%20waste,recycled%20cont%20by%20governments%20and)

future generations of a degraded environment is mounting, efforts should focus on the twin goals of calling governments to account while encouraging an increasingly environmentally aware electorate to demand positive outcomes.