United Nations Association of Australia

MANAGING CLIMATE CHANGE IN AUSTRALIA

A GLOBAL, LONG-TERM VIEW

—

POSITION PAPER

13 CLIMATE ACTION

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THE WORLD IS AT A CRITICAL TIME IN THE GLOBAL RESPONSE TO HUMAN-INDUCED CLIMATE CHANGE.

Much now depends on the successful implementation of the UN Paris Climate Change Agreement. To achieve the necessary reduction in the emissions of greenhouse gases all countries are to raise their ambition and engage all sectors of the community to achieve their targets. This is to be led by the developed countries, including Australia.

AN APPROPRIATE RESPONSE BY AUSTRALIA WOULD NOW INCLUDE:

- Supporting the UN Paris Climate Change Agreement by locking in 2050 as the target date to achieve net zero emissions of greenhouse gases
- Developing a thirty-year plan for all Australia to achieve this across public and private sectors and by industry sectors
- Establishing inclusive, nation-wide action programs focusing on the main emission reduction steps – conserve energy, supply low-emission electricity, switch to low-emission energy, minimize emissions from other processes and manage carbon sinks
- Enhancing the network of climate adaptation plans and programs
- Assessing progress and recognizing achievements at all levels, local to national
- Providing additional support for Australia's neighbouring countries, particularly small-island states
- Taking a leadership role in supporting the worldwide actions required for the success of the Paris Agreement
- Establishing a Climate Response Commission to provide independent advice on progress and to co-ordinate action across the nation.

Within this context successive Australian governments at all levels and key organizations will select policies and programs to drive the necessary changes over the next thirty years.

The United Nations Association of Australia is one of over one hundred similar non-government organisations operating throughout the world to promote and support the work and ideals of the United Nations.

Our National Climate Change Program was launched in 2016 and has included workshops involving climate management practitioners from a wide range of government and private organisations, an awards scheme to celebrate excellence in climate management and forums to report on progress in the international negotiations associated with the 2015 UN Paris Climate Change Agreement.

A discussion paper, ***Managing Climate Change in Australia: A Global, Long-Term View,*** was released in June 2018. The Association has drawn on the outcome of those events and the responses to the discussion paper in preparing this position paper.

The sources of the statistics and other data presented in this paper are referenced in the Discussion Paper. The Discussion Paper is available at https://unaavictoria.org.au/what-we-do/climate-change-program/

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> THE WORLD IS AT A CRITICAL TIME

The recent report of the Intergovernmental Panel on Climate Change (IPCC, 2018) emphasises the need for urgent, accelerated action worldwide.

Australia is one of the developed counties most susceptible to climate change. Its future depends upon the successful collaboration between all nations through the UN Paris Climate Change Agreement. The Agreement also provides a means by which Australia can assist the world's most vulnerable peoples.

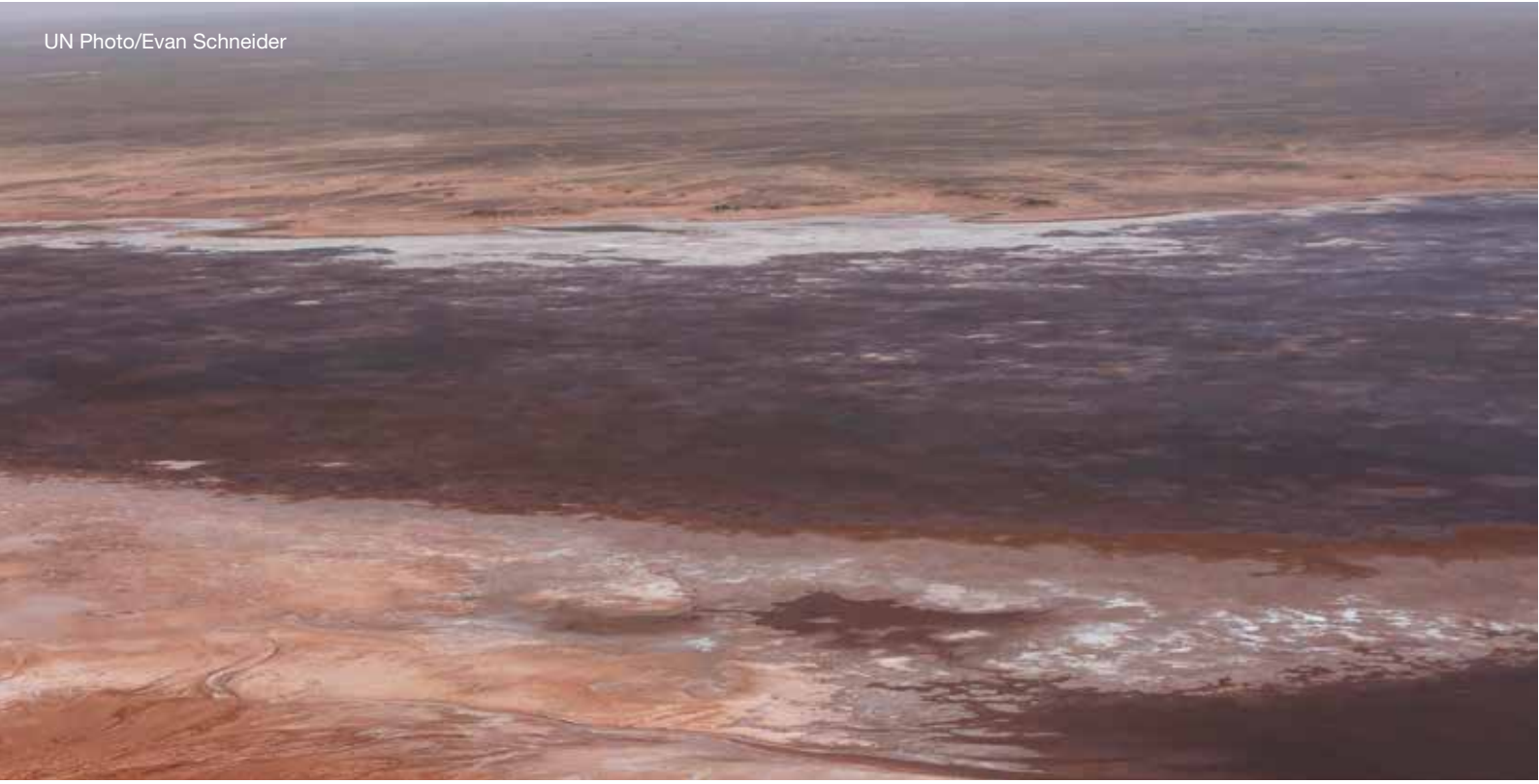
Much can be learnt from the initiatives already underway in many countries. This Position Paper focuses particularly on the long-term measures within which component policies and programs would be developed and implemented by successive governments and others over the next thirty years.

> THE PARIS AGREEMENT PROVIDES A UNIQUE OPPORTUNITY TO ACHIEVE THE GLOBAL ACTION THAT WILL BE NECESSARY TO AVERT CATASTROPHIC CLIMATE CHANGE.

Every one of the 193 member countries of the United Nations, irrespective of their political persuasion, supported the Agreement. (The United States subsequently announced that it intended to withdraw. All other nations have re-affirmed their support.)

In so doing they have all agreed that "climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions" (Paris Agreement, 2015).

Countries have agreed to progressively enhance their targets for reducing emissions of greenhouse gases and to assist poorer, more vulnerable countries to mitigate and adapt to climate change by providing financial support, facilitating technology transfer and building capacity. Progress is to be periodically reviewed and processes put in place to ensure transparency and reliability.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> TOTAL GLOBAL EMISSIONS OF GREENHOUSE GASES HAVE YET TO PEAK BUT ACTION THROUGHOUT THE WORLD IS UNDERWAY.

We are witnessing the early years of a systemic response (Guterres, 2017). Twenty-two developed countries have reduced their emissions while their economies continued to grow (Olivier et al, 2017). There are over 1200 climate-related laws supporting the pledges made under the Paris Agreement (Nuttall, 2017). Many electricity generators and several countries have already committed to discontinuing the use of coal. 80% of countries have clean energy plans (Ross, 2016). In Europe more than 90% of new power generation capacity now comes from renewables. Twelve countries have announced their intention to limit the sale of petrol and diesel vehicles in the future. While the developed countries are expected to lead, major initiatives are underway elsewhere.

> SIMILARLY, IN AUSTRALIA THE EMISSIONS OF GREENHOUSE GASES ARE RISING BUT RESPONSES TO CLIMATE CHANGE ARE WIDESPREAD.

In Australia total emissions of greenhouse gases rose until 2007, then fell back to 1990 levels but have again increased over the last three years. 34% of emissions come from the generation of electricity, 19% from transport, 18% from stationary energy, excluding electricity, 14% from agriculture, 11% from fugitive emissions, 7% from industrial processes and 2% from wastes. Land use, land use change and forestry resulted in the capture of greenhouse gases exceeding their emissions by an amount corresponding to 4% of total emissions. Only the generation of electricity has seen a decrease in emissions (Department of Environment and Energy, September 2018).

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Yet never has climate action in Australia been so widespread. As well as the Australian Government, most state and territory governments, capital cities and many other local governments have policies and programs for reducing emissions of greenhouse gases, introducing renewable energy, improving energy efficiency and adapting to inevitable changes in the climate. In the private sector many organisations are committed to reducing their emissions of greenhouse gases. There is increasing availability of financial support and a growing awareness among company directors of the need to take into account climate related risks. Many research institutions have relevant programs and projects.

Now is the time to build on these initiatives. The Paris Agreement calls for "stronger and more ambitious climate action by all Parties and non-Party stakeholders, including civil society, the private sector, financial institutions, cities and other sub-national authorities, local communities and indigenous peoples". There is a need to enhance Australia's overall ambition and to work collaboratively throughout the nation to achieve the targets

However, we need to know where we are going before working out how to get there!

> AUSTRALIA MUST THEREFORE ESTABLISH A LONG-TERM GOAL FOR THE REDUCTION IN GREENHOUSE GAS EMISSIONS. THIS WILL ASSIST POLICY CERTAINTY AND GUIDE THE SETTING OF INTERMEDIATE TARGETS AND THE ASSOCIATED STRATEGIES, POLICIES AND PROGRAMS TO ACHIEVE THEM

The UN's Sustainable Development Solutions Network stresses the need for short-term measures to be nested in long-term pathways (SDSN, 2015). Deciding on intermediate goals without a long-term target can result in actions that inhibit long-term success. Unlike many countries the Australian Government has not yet set a long-term goal for reducing greenhouse gas emissions by 2050. Its current intermediate goal is to reduce emissions by 26-28% below the 2005 levels by 2030.

> THE LONG-TERM GOAL MUST REFLECT INTERNATIONAL IMPERATIVES AND TAKE INTO ACCOUNT AUSTRALIA'S CIRCUMSTANCES.

Under the Paris Agreement nations have agreed that there is a need to hold "the increase in the global average temperature to well below 2 degrees centigrade above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 degrees centigrade above pre-industrial levels".

To achieve this, global greenhouse gas emissions should peak as soon as possible and there should be a "balance between anthropogenic emissions by sources and removal by sinks of greenhouse gases (i.e. net zero emissions) in the second half of this century" (United Nations, 2015).

The recent findings of the Intergovernmental Panel on Climate Change are that net zero emissions by 2050 will be necessary if the increase in global temperature is to be limited to 1.5 degrees centigrade with a reasonable level of confidence (IPCC, 2018).

The total of the voluntary, national mitigation pledges submitted to the UN is still insufficient to enable these goals to be met. Stronger and more ambitious climate action must to be mobilised by all countries. Developed countries are to take the lead.

"Climate change is undeniable. Climate action is unstoppable. And climate solutions provide opportunities that are unmatchable." Antonio Guterres, May 2017

Many countries already have long-term goals. The European Union, representing 28 countries, has a target of 80% reduction relative to 1990 levels by 2050. Germany and the United Kingdom have targets for 2050 of 95% and 80% reduction relative to 1990 levels respectively.

Some developed countries, such as Norway, Sweden and New Zealand are already planning to achieve net zero by 2050 or earlier. California aims to reach net zero by 2045.

In Australia, the goal of net zero by 2050 has already been adopted by the governments of Queensland, New South Wales, Victoria, South Australia and the Australian Capital Territory and by the cities of Sydney, Melbourne and Adelaide. Their constituencies cover about 85% of Australia's population.

The Climate Change Authority (Climate change Authority, 2014) has proposed the fair share of the remaining global emissions available to Australia. Reducing our emissions at a consistent rate from the level now until reaching zero in 2050 would meet that share.

Benefits resulting from the Australia-wide adoption of a common goal include a greater unity of purpose throughout the nation, greater certainty for investments in climate mitigation projects, greater consistency in the timing of initiatives across all constituencies and an improved sense of participation in the nation-wide effort.

We therefore strongly recommend the adoption of the goal of net zero emissions by 2050 for all Australia and setting the intermediate goals in that context.

The current goal of the Australian Government, which is to reduce the emissions of greenhouse gases by 26-28% of the 2005 levels by 2030, will need to be revised accordingly.

> AUSTRALIA'S MANAGEMENT OF CLIMATE CHANGE SHOULD BE BASED ON ON-GROUND, COLLABORATIVE ACTION THROUGHOUT THE COMMUNITY GUIDED BY LONG-TERM PLANNING AT ALL LEVELS OF GOVERNMENT AND WITHIN THE PRIVATE SECTOR.

The Paris Agreement depends upon collaboration between all countries with their actions clearly visible through systematic reporting and assessment. A similar approach is applicable to individual nations.

Policies and programs of action should be couched in an agreed pathway, strategy or plan by which the net zero target will be achieved over the next thirty years.

Many countries have designed emission reduction pathways. Under the Paris Agreement parties are to submit revised pledges every five years and to explain why they are fair and ambitious in relation to the objectives of the Agreement. Nations are also invited to communicate by 2020 "mid-century, long-term, low greenhouse gas emission development strategies". Last year the Australian Government accepted Recommendation 3.1 of the "Independent Review into the Future Security of the National Energy Market" by Alan Finkel that "by 2020, the Australian Government should develop a whole-of-economy emissions reduction strategy for 2050" (Finkel, 2017).

> WE PROPOSE THAT THE NATIONAL PATHWAY TO NET ZERO EMISSIONS BY 2050 COMPRISE STATE AND TERRITORY PLANS AND AN OVERARCHING NATIONAL COMPONENT. ALL COMPONENTS SHOULD HAVE A COMMON FORMAT THEREBY HELPING TO IDENTIFY OPPORTUNITIES FOR COLLABORATION AND ENSURING COMPATIBILITY.

Some Australian state and city governments are already developing their plans, based on carbon budgets.

All entities that are responsible for significant emissions of greenhouse gases should design the pathway by which they expect to reach net zero emissions.

Many sectors and organisations within the private sector are starting to take a similar, long-term approach. So far in Australia about 16% of the 73 big listed companies most at risk on climate change have released a plan to reduce their emissions of greenhouse gases (Williams, R, 2018). This should be further supported and encouraged.

> ALL EMISSION REDUCTION STEPS SHOULD BE TACKLED TOGETHER WITH PRIORITIES SET FOR THE SEQUENCE OF KEY ACTIONS

Throughout the world the main steps being taken to achieve net zero emissions include:

- minimise the demand for energy,
- convert to an electricity supply system with low and, ultimately, zero emissions of greenhouse gases,
- switch from the direct use of fossil fuels to zero emissions electricity,
- minimise emissions from other processes,
- manage current and potential carbon sinks

In Australia, there has been some progress but much more needs to be done. The emphasis has been on the transition to low emissions electricity. 19% of electricity is now generated from renewables. Progressing this is essential but the achievement of net zero emissions will require urgent and sustained action in all steps. In the case of energy efficiency, we are rated only sixteenth out of the world's 23 largest energy-consuming economies (American Council for an Energy Efficient Economy, 2016). We do not yet have a nation-wide approach to the switch to electric vehicles. Although most states and territories control the removal of native vegetation, rates have increased recently, particularly in Queensland. The Australian economy continues to depend substantially on the export of coal and natural gas.

> THE EMISSION REDUCTION STEPS COULD BE THE BASIS OF NATION-WIDE COLLABORATION.

While there are actions relating to each step in the government and private sectors throughout the nation they are often not recognised as part of the nation-wide effort to reduce the emissions of greenhouse gases.

For each step there could be a national program reflecting the contributions by all sectors of the community to the relevant activities and to associated progress towards net zero emissions.

> FOR EACH STEP THERE SHOULD BE A LONG-TERM ASSESSMENT OF THE CHALLENGES AHEAD AND THE MEANS BY WHICH THEY WILL BE ADDRESSED.

The need for long-term planning has been illustrated by the recent difficulties in integrating the generation of electricity from renewable energy into Australia's supply of electricity. Such planning should also precede decisions on infrastructure, the lifetime of which can be several decades.

> WE MUST ENHANCE OUR CAPACITY TO PREDICT AND RESPOND TO INEVITABLE CHANGES IN THE CLIMATE.

A substantial part of the Paris Agreement focuses on the need for countries to prepare for inevitable changes in the climate (adaptation). It recognises that the poorer nations and people are often the most susceptible. Across Australia there is already a suite of climate adaptation plans at all levels of government and for the natural resource regions.

> THESE PLANS MUST NOW BE DEVELOPED INTO A COMPREHENSIVE NETWORK FOR WHICH FORECAST TRENDS IN THE CLIMATE ARE ROUTINELY UPDATED.

Climate change adaptation plans should be taken into account in all forward planning and pre-emptive action taken. The increasing frequency and severity of higher temperatures, droughts, fires and floods and the ongoing rise in sea levels should be routinely anticipated.

> POLICIES AND PROGRAMS OF SUCCESSIVE GOVERNMENTS AND OTHER ENTITIES SHOULD BE DEVELOPED IN THE CONTEXT OF THESE LONG-TERM GOALS AND PATHWAYS.

This Paper does not address the selection of policies and programs that will drive change in the public and private sectors. Already there has been a wide range of initiatives in Australia and other countries from which to learn. For example, over 65 nations have implemented, or are considering implementing, an emissions trading scheme.

> AUSTRALIA SHOULD TAKE A LEADING ROLE IN SUPPORTING AND FACILITATING THE ACTIONS REQUIRED TO ENSURE THE SUCCESS OF THE PARIS AGREEMENT.

The Australian Government and a wide range of government and private organisations from Australia are active participants in the continuing negotiations to refine the responsibilities and methodologies for the implementation of the Paris Agreement. It comes into force in 2020.

Already, funding is flowing to developing countries through the Green Climate Fund. The transfer of technology and skills is being supported through such agencies as the UN's Climate Technology Centre and Network. Under consideration is the operation of worldwide markets for carbon credits.

The potential security risks from climate change are under consideration within the UN, including the proceedings of the Security Council.

There are many multi-national initiatives. 7,500 cities are part of the Global Covenant of Mayors for Climate and Energy. The "Under2Coalition consists of 205 state and provincial governments committed to reducing their emissions by at least 80% by 2050 (DELWP, 2018; Nuttall, 2017). The "Powering Past Coal" alliance of twenty countries seeks to phase out the generation of electricity from coal by 2030 in developed countries and by 2050 elsewhere. The International Solar Alliance of sixty countries aims to mobilise $US 1 trillion to invest in large-scale solar energy in developing countries.

Free trade agreements between the European Union and other countries are conditional on those countries participating fully in the Paris Agreement.

Private sector organisations are collaborating across the world.

We acknowledge the well-regarded contribution that many individual Australians and Australian organisations have made to the UN negotiations and other international initiatives. However, Australia's level of participation has not yet reflected its capacity as a wealthy, stable country with substantial expertise and its responsibilities as a nation with a long record of high emissions per capita and as one of the world's largest exporters of fossil fuels.

Not having hosted any of the twenty-three annual Conference of Parties Australia could offer to host one soon.

The proposed national emission reduction programs could be the basis for co-ordinating the input of the public and private sectors to international initiatives.

> WE NEED TO CONTINUE TO DEVELOP SUPPORTIVE AND COLLABORATIVE ARRANGEMENTS WITH NEIGHBOURING NATIONS, PARTICULARLY CLIMATE-VULNERABLE SMALL ISLAND STATES.

Within our region of the world Australia has the opportunity to collaborate on climate change, involving both mitigation and adaptation, with neighbouring countries. Of particular concern are the small island states that will suffer from rising sea levels.

> THE PROPOSED COLLABORATIVE ACTION THROUGHOUT THE NATION WILL NEED TO BE SUPPORTED AND PROGRESS AT ALL LEVELS ROUTINELY REPORTED. THESE COULD BE THE RESPONSIBILITIES OF A CLIMATE RESPONSE COMMISSION.

Much of what we propose falls within the responsibilities of existing government and private entities. However, a special body, similar in independence to the Productivity Commission, could be responsible for facilitating the proposed, nation-wide collaboration, supporting the development of the national strategies, and reporting on progress at all levels, from local to national.

UN Photo/Eskinder Debebe

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