

Updating the Climate
Change Authority's advice
on meeting Australia's Paris
Agreement Commitment
Submission

Contact:

Laura Simes

Environment Policy Advisor

WALGA

ONE70, LV 1, 170 Railway Parade West Leederville

Phone: [REDACTED]

Email: [REDACTED]

Website: www.walga.asn.au

Contents

2.0	About WALGA	5
3.0	WALGA's comments	5
4.0	Climate change and Local Government.....	5
5.0	The need for effective climate action by the Commonwealth Government.....	6
6.0	Comments in response to key areas of investigation	11
6.1	Previous recommendations.....	11
6.2	Achieving a net zero emissions economy	12
6.3	Sectoral and economy-wide policies	12
6.4	Supporting innovation, finance and new industries	13
6.5	International context.....	13
7.0	Concluding comments	13

Attachment: WALGA Climate Change Policy Statement (2018)

1.0 About WALGA

The WA Local Government Association (WALGA) is working for Local Government in Western Australia. As the peak industry body, WALGA advocates on behalf of 138 Western Australian Local Governments. As the united voice of Local Government in Western Australia, WALGA is an independent, membership-based organisation representing and supporting the work and interests of Local Governments in Western Australia. WALGA provides an essential voice for 1,222 Elected Members, approximately 22,000 Local Government employees (16,500 Full Time Equivalents) as well as over 2.5 million constituents of Local Governments in Western Australia.

2.0 WALGA's comments

WALGA thanks the Climate Change Authority for the opportunity to comment on its consultation paper *Updating the Authority's advice on meeting Australia's Paris Agreement* (the **Consultation Paper**). This submission is made in accordance with the [WALGA Climate Change Policy Statement](#).

3.0 Climate change and Local Government

Climate change is a key issue for Local Governments that cuts across almost all aspects of operations and responsibilities. Western Australian Local Governments are proactively pursuing a range of emissions reduction and adaptation actions to address climate change. This includes, but is in no way limited to, ambitious corporate and community-wide energy efficiency, renewable energy and emissions reductions strategies, programs and policies to encourage residents to reduce their carbon footprint and adaptation planning. Local Governments are active on climate change, but all levels of Government must act.

The WALGA Climate Change Statement, endorsed by WALGA State Council in July 2018, represents the consolidated view of Western Australian Local Governments:

Local Government acknowledges:

- I. The science is clear: climate change is occurring and greenhouse gas emissions from human activities are the dominant cause.
- II. Climate change threatens human societies and the Earth's ecosystems.
- III. Urgent action is required to reduce emissions, and to adapt to the impacts from climate change that are now unavoidable.
- IV. A failure to adequately address this climate change emergency places an unacceptable burden on future generations.

Local Government is committed to addressing climate change.

Local Government is calling for:

- I. Strong climate change action, leadership and coordination at all levels of government.
- II. Effective and adequately funded Commonwealth and State Government climate change policies and programs.

WALGA Climate Change Policy Statement (2018), p3.

Along with above headline statement, the WALGA Climate Change Statement outlines priorities for mitigation, adaptation, emergency management and resilience.

4.0 The need for effective climate action by the Commonwealth Government

The WALGA Climate Change Statement outlines a range of key priorities for action, with a number relating directly to the Commonwealth Government. The relevant parts of the Statement are set out below, and the complete Statement is also provided as an attachment to this submission.

Priority	Context
<p>A more ambitious Paris commitment</p> <p>(noting that this is not directly in scope for this consultation)</p>	<p>Local Government is committed to contributing to national and international emissions reduction targets to achieve the Paris Agreement goal of limiting global temperature rise to well below 2° Celsius and to pursue efforts to limit the temperature increase even further to 1.5° Celsius.</p> <p>Local Government acknowledges that current worldwide commitments under the Paris Agreement are insufficient to achieve even the 2° Celsius goal¹. Australia is a developed country with among the highest per capita greenhouse gas (GHG) emissions in the world². Recognising this, Local Government calls on the Commonwealth Government show international leadership, by committing to a more ambitious Paris target.</p>
<p>The need for an equitable transition</p>	<p>Local Government supports an equitable transition to a carbon constrained world:</p> <ul style="list-style-type: none"> ➤ globally, the right of developing countries to increase their share of global wealth in ways that remain within the ecological capacities of the planet; ➤ domestically, the need to equitably share the cost of climate change adaptation and mitigation and ensure disadvantaged and marginalised groups receive adequate support. This includes provision of support and incentives for communities impacted by the transition (eg, by fostering innovation, and supporting workforce adjustment packages and new employment opportunities). <p>Local Government supports the United Nations Sustainable Development Goals, and supports climate change action as part of a broader sustainable development agenda.</p>
<p>Cooperation and coordination between all levels of government</p>	<p>For Australia to meet its international obligations, all levels of government must act.</p> <p>Local Government asserts that it is the responsibility of all spheres of Australian Government to ensure that their decisions, policies and programs take into consideration the likely impact of climate change on current and future human settlements, natural resources and ecosystems and facilitate adaptation to these. These include but are not limited to disaster relief, national security, environment, energy, infrastructure and land use planning, water, housing, health and transport.</p>

	<p>The State and Commonwealth Governments have an obligation to address climate change in partnership with Local Government, and in consultation with the community.</p> <p>Local Government calls on the Commonwealth Government to develop a formalised coordinated approach, such as in the form of a Commonwealth/State/Local Government partnership agreement or Intergovernmental Agreement, establishing consistent and coordinated principles, objectives and actions across Australia that provides for long-term planning to address climate change.</p>
<p>A range of domestic policy measures are required:</p> <ul style="list-style-type: none"> • A national plan • A cross sectoral response 	<p>Local Government calls on the Commonwealth Government to develop and implement a national plan for action to:</p> <ul style="list-style-type: none"> • meet Australia’s international obligations; • ensure Australia is prepared to adapt to the impacts of climate change; and • navigate the pathway to a low carbon economy, fostering innovation, new employment opportunities and economic growth. <p>Local Government acknowledges a successful response to the challenge of climate change requires cross-sectoral action by government, business and the community.</p> <p>However, there are insufficient long-term Commonwealth Government plans or resources directed to climate change action. Australia and the world is seeing a shift away from fossil fuels towards energy efficient and renewable technologies that includes widespread uptake of rooftop solar³, battery storage⁴, energy trading⁵, virtual power plants⁶,electric vehicles⁷, energy efficiency and energy productivity⁸. The market, business, insurers, many Local Governments, communities and (other) State Governments are moving in this direction. Local Governments are calling on the Commonwealth Government to accelerate action and remove barriers to transition to a low carbon, energy efficient economy.</p>

<ul style="list-style-type: none"> • Efficient, effective and equitable • A range of policy measures • Strategic, long term planning 	<p>As part of the required national plan for action, Local Government calls on the Commonwealth Government to put in place efficient, effective and equitable measures to drive national emissions reductions.</p> <p>Local Government considers a wide range of policy measures - from regulatory intervention and market-based mechanisms (such as an emissions trading scheme) through to voluntary schemes, education and behaviour change programs - are required to successfully achieve emissions reduction targets.</p> <p>The strategic, long-term planning that Local Government seeks from the Commonwealth Government includes:</p> <ul style="list-style-type: none"> ➤ adequate ongoing funding for essential research, science and innovation to underpin climate change policy initiatives and program design⁹ ➤ taking direct responsibility for the delivery of mitigation actions, adaptation and resilience planning in areas that lend themselves to centralised coordination at Commonwealth Government level; ➤ embedding climate change mitigation and adaptation considerations in Government projects and policies (government procurement, land management, development, investment strategies that move away from fossil fuels etc.); ➤ partnering with and resourcing Local Government to deliver community emissions reduction programs that are most effectively implemented at the Local Government level; ➤ removing existing barriers to climate mitigation and adaptation actions by Local Government; and ➤ ensuring all decisions are guided by the precautionary principle.
<p>Leveraging off Local Governments' connection with community</p>	<p>Local Government is in a unique position to drive and implement mitigation programs, foster innovation and support sustainability at the community level, and has had successful collaborations and partnerships to implement such programs in the past¹⁰.</p>

	<p>Local Government calls on the Commonwealth Government to partner with Local Government in its efforts to further reduce GHG emissions, including through:</p> <ul style="list-style-type: none"> ➤ renewable energy projects (small scale and large scale); ➤ energy efficiency projects (eg, mass LED public lighting retrofits); ➤ waste management; ➤ enabling take-up of new renewable and sustainable technologies; and ➤ accelerating the take up of low or zero emissions vehicles (eg, Local Government electric vehicle fleets, installation of electric vehicle charging stations).
<p>Mitigation policy needs to occur in concert with effective adaptation and resilience building</p> <p>(noting that this is not directly in scope for this consultation)</p>	<p>Effective adaptation and resilience planning by the Commonwealth Government includes:</p> <ul style="list-style-type: none"> ➤ a strategic approach to progressing and funding action for climate change adaptation and building resilience; ➤ adequate assistance, including funding, for Local Governments and Commonwealth and State agencies engaged in adaptation action; ➤ recognising and planning for the impacts of climate change on biodiversity and agricultural productivity, particularly in relation to biosecurity; ➤ sustainable management of water resources; <p>Local Government is calling for national and state emergency management and disaster relief policies that adequately incorporate climate change in their planning and implementation. Western Australia Natural Disaster Relief and Recovery Arrangements (WANDRRA) financial measures need to provide funding to reinstate a damaged or destroyed asset to a more disaster resilient standard, where this is an appropriate and cost effective response based on likely recurrence of the disaster event.</p>

5.0 Comments in response to key areas of investigation

The Climate Change Authority's consultation paper includes some specific areas for which input is sought. WALGA's specific comments on those areas are set out below.

5.1 Previous recommendations

The Authority's principles for assessing the merits of emissions reductions policies are broadly consistent with the principles outlined in the Climate Change Statement. The final principle that the Authority has regard to, that climate change policies are to "be consistent with Australia's foreign policy and trade objectives" is not a policy priority outlined in the WALGA Climate Change Statement, and WALGA makes no comment on this.

The Authority's recommendation that climate policy take a sectoral and diverse approach, building on existing approaches (including strengthening the Emissions Reduction Fund and the Safeguard Mechanism) appears to be a sensible one, and is also consistent with the position in the WALGA Climate Change Statement that a broad range of policy tools are necessary to achieve the necessary emissions reductions.

Since the Authority's previous recommendations the case for urgent climate action has grown stronger. There have been numerous reports and studies that demonstrate the need for urgent action, and that show Australia is not on track to achieve its Paris Commitment, for example:

- IPCC's [Global Warming of 1.5°C \(2018\)](#) and [Climate Change and Land \(2019\)](#) outlined the scope of the task and the urgent and comprehensive action required.
- The Australian Government's own [Emissions Projections 2018](#) show that Australia is not on track to meet the Paris Commitment.
- UN Environment [Emissions Gap Report 2018](#) notes that Australia's emissions trajectory falls short of achieving the Paris commitment.
- [Climate Action Tracker – Australia](#) which includes analysis of current Australian policies as being insufficient to meet the Paris commitment.
- In Western Australia, the EPA's [Background paper on greenhouse gas assessment guidance](#) noted "the national framework for emissions reductions no longer imposes effective limitations on emissions".

WALGA considers that the Authority should, as a minimum, undertake an analysis to determine if the Authority's proposed policy changes would be sufficient to enable Australia to meet its Paris target without the 'Kyoto carryover'. Given the increasingly urgent need to action, it may be necessary to put in place additional or stronger policies than have been previously recommended by the Authority.

In assessing the 'environmental effectiveness' of the policies, it is recommended that the Authority incorporate the latest climate science (for example the reports noted above), establish an 'ideal' emissions budget that is consistent with this and ensure that recommended policy measures are consistent with this.

5.2 Achieving a net zero emissions economy

As outlined in the WALGA Climate Change Statement, the Commonwealth Government is best placed to develop and implement a national plan of action to:

- meet Australia's international obligations;
- ensure Australia is prepared to adapt to the impacts of climate change; and
- navigate the pathway to a low carbon economy, fostering innovation, new employment opportunities and economic growth.

It is acknowledged that a transition to a zero carbon economy will disproportionately impact some communities and regions. WA Local Governments support an equitable transition to a carbon constrained world, and acknowledge the need to equitably share the cost of climate change adaptation and mitigation and ensure disadvantaged and marginalised groups receive adequate support. This includes provision of support and incentives for communities impacted by the transition (eg, by supporting workforce adjustment packages and fostering new industries and employment opportunities).

To provide a local example, the Western Australian Government has established the Collie Futures Fund¹¹, which seeks to drive economic diversity in a region that is currently heavily dependent on coal for jobs. WALGA's *Economic Development Framework Project* (2019) made a number of recommendations for policy priorities and reform to encourage economic development, including providing support and encouragement for new and emerging industries.¹²

The Commonwealth Government can play a valuable role in fostering new and emerging low carbon industries that offer a wide range of employment opportunities. For example, mining commodities needed for the growing battery industry, large and small scale renewable energy projects and green hydrogen. As outlined in our Climate Change Statement, the Government could foster these industries via a wide range of policy measures - from regulatory intervention and market-based mechanisms (such as an emissions trading scheme) through to voluntary schemes, education and behaviour change programs.

The potential for a carbon offsets market has not been well realised under the current Emissions Reduction fund, but a well-designed policy (including a transition to private sector purchase of offsets, as the Authority previously recommended) could be well utilised particularly in regional areas (eg, carbon farming, crop and livestock efficiencies and vegetation management).

5.3 Sectoral and economy-wide policies

Local Government is in a unique position to reduce emissions resulting from their own operations and drive and implement mitigation programs, foster innovation and support sustainability at the community level. Successful collaborations and partnerships to implement such programs in the past have included as delivery agents of the Commonwealth

Government's Community Energy Efficiency Program (CEEP), the Local Government Energy Efficiency Program (LGEEP) and Cities for Climate Protection.

5.4 Supporting innovation, finance and new industries

As noted above at 5.2, WALGA's Climate Change Statement recognises the wide ranging opportunities offered by the shift to zero carbon economy, and supports Commonwealth policy that fosters these new industries, particularly in areas transitioning out of fossil fuel dependant employment

5.5 International context

The Consultation paper asks what role carryover from earlier commitments should play.

The WALGA Climate Change Statement acknowledges that current worldwide commitments under the Paris Commitment are insufficient to achieve even the 2°C goal, and calls on the Commonwealth Government to commit to a more ambitious Paris target. The practical effect of applying the 'Kyoto carryover' would be to dramatically decrease Australia's emission reduction commitment. Given that it WA Local Governments' position that Australia needs a stronger rather than a weaker emissions target, the use of the 'Kyoto carryover' is not supported.

6.0 Concluding comments

As key contributors to climate change mitigation, and as the level of government that is already proactively managing and planning for a range of impacts of climate change, WALGA's members have a keen interest in seeing efficient, effective and equitable climate change policy at all levels of government. There is a current lack of strong and effective climate policy at the Commonwealth level, and since the time of the Authority's previous recommendations, the case for urgent action has only grown stronger.

An effective national plan for action is required from the Commonwealth, with comprehensive, effective frameworks and mechanisms to reduce Australia's rising greenhouse gas emissions, if Australia is to achieve its international commitments and play its part in addressing climate change.

¹ The Climate Action Tracker (Climate Analytics, Ecofys & NewClimate Institute) calculates the gap in current policies, Paris Commitments and the emissions reductions required to keep the world at a 1.5°C and a 2.0 °C increase. Available here: <https://climateactiontracker.org/global/cat-emissions-gaps/>.

² Australia has the highest per capita emissions of the OECD countries, and the seventh highest per capita in the world after Kuwait, Brunei, Qatar, Belize, Oman and Bahrain: CAIT Climate Data Explorer (World Resources Institute) (2018). *GHG Emissions Totals Excluding Land Use Change and Forestry Per Capita 2014*. Available at: <http://cait.wri.org/historical>.

³ See for example: A Bruce & I MacGill. "FactCheck Q&A: is Australia the world leader in household solar power?" *The Conversation*. 28 March 2016. Available at: <https://theconversation.com/factcheck-ganda-is-australia-the-world-leader-in-household-solar-power-56670>.

⁴ See for example: N Harmsen. "Elon Musk's giant lithium ion battery completed by Tesla in SA's Mid North". *ABC News*. 24 November 2017. Available at: <http://www.abc.net.au/news/2017-11-23/worlds-most-powerful-lithium-ion-battery-finished-in-sa/9183868>; Climate Council. *Fully Charged: Renewables and Storage Powering Australia*. 2018. Available at: <https://www.climatecouncil.org.au/resources/battery-storage-2018/>.

⁵ See for example: K Diss, "Blockchain technology fuels peer-to-peer solar energy trading in Perth start-up". *ABC News*. 11 October 2017. Available at: <http://www.abc.net.au/news/2017-10-11/blockchain-technology-fuels-peer-to-peer-energy-trading-start-up/9035616>.

⁶ See for example: C Chang. "South Australian government strikes deal with Tesla to install free batteries to 50,000 homes". *News.com.au*. 5 February 2018. Available at: <http://www.news.com.au/technology/innovation/south-australian-government-strikes-deal-with-tesla-to-install-free-batteries-to-50000-homes/news-story/fd04731350da176c374383f3fb25e947/>.

⁷ A Gray. "Countries are announcing plans to phase out petrol and diesel cars. Is yours on the list?" *World Economic Forum*. 26 September 2017. Available at: <https://www.weforum.org/agenda/2017/09/countries-are-announcing-plans-to-phase-out-petrol-and-diesel-cars-is-yours-on-the-list/>.

⁸ Energy productivity is an indicator of the amount of economic output that is derived from each unit of energy consumed. See, for example, the Australian Alliance for Energy Productivity project to double productivity by 2030: <https://www.2xep.org.au/>.

⁹ For example, BOM and CSIRO's Climate Change in Australia: <https://www.climatechangeinaustralia.gov.au/>, Western Australian Marine Science Institution: <https://www.wamsi.org.au/>, National Climate Change Adaptation Research Facility: <https://www.nccarf.edu.au/> and CoastAdapt: <https://coastadapt.com.au/>.

¹⁰ For example as delivery agents of the Commonwealth Government's Community Energy Efficiency Program (CEEP) and Local Government Energy Efficiency Program (LGEEP) and the Cities for Climate Protection.

¹¹ Western Australian Government, Colle Futures Fund: <https://www.jtsi.wa.gov.au/economic-development/economy/collie-futures-fund>.

¹² WALGA, *Local Economic Development* (May 2019). Available here: <https://walga.asn.au/getattachment/Policy-Advice-and-Advocacy/Economic-Development/Economic-Development-Framework/Research-Findings-and-Future-Directions.pdf?lang=en-AU>.



Climate Change Policy Statement

July 2018

Version tracking

Version number	Date	Author	Comments / Modifications
1	February 2018	Laura Simes	Major revision of 2009 Climate Change Policy Statement, taking into account sector responses to the <i>WALGA Climate Change Position Statement Review Discussion Paper (November 2017)</i> .
2	May 2018	Laura Simes	Revisions taking into account sector comments on the <i>Draft Climate Change Policy Statement (March 2018)</i> . Reviewed by Nicole Matthews and Mark Batty.
3	July 2018	Laura Simes	Addition to include support for communities impacted, as recommended by State Council (July 2018).

ONE70
 LV1, 170 Railway Parade
 West Leederville WA 6007
 (08) 9213 2000

1.0 Policy Statement

Local Government acknowledges:

- I. The science is clear: climate change is occurring and greenhouse gas emissions from human activities are the dominant cause.
- II. Climate change threatens human societies and the Earth's ecosystems.
- III. Urgent action is required to reduce emissions, and to adapt to the impacts from climate change that are now unavoidable.
- IV. A failure to adequately address this climate change emergency places an unacceptable burden on future generations.

Local Government is committed to addressing climate change.

Local Government is calling for:

- I. Strong climate change action, leadership and coordination at all levels of government.
- II. Effective and adequately funded Commonwealth and State Government climate change policies and programs.

2.0 Rationale

2.1 Purpose and intent of this document

Climate change is a key issue for Local Governments that impacts almost all aspects of their operations and responsibilities.

This Policy Statement represents the consolidated position of Western Australian Local Governments regarding this important issue.

WALGA will promote the Climate Change Policy Statement and act consistently with its content. The Policy Statement will form the basis for WALGA's climate change advocacy on behalf of the WA Local Government sector.

Individual Local Governments are encouraged to support and utilise this Policy Statement in developing and implementing their own climate change strategies and programs, but are not bound by the Policy.

2.2 The science is clear

International scientific consensus is that climate change is occurring, and human activities are the dominant cause.

The *Fifth Assessment Report*, the latest report of the scientific consensus-based Intergovernmental Panel on Climate Change (IPCC), found:

Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased¹.

Most aspects of climate change will persist for many centuries even if emissions of CO₂ are stopped².

Surface temperatures will remain approximately constant at elevated levels for many centuries after a complete cessation of net anthropogenic CO₂ emissions. Due to the long time scales of heat transfer from the ocean surface to depth, ocean warming will continue for centuries. Depending on the scenario, about 15 to 40% of emitted CO₂ will remain in the atmosphere longer than 1,000 years. It is virtually certain that global mean sea level rise will continue beyond 2100, with sea level rise due to thermal expansion to continue for many centuries³.

Further, the IPCC has also found:

It is extremely likely [95–100%] that human influence has been the dominant cause of the observed warming since the mid-20th century.⁴

2.3 Climate change is a global threat, and Australia has committed to being part of the solution

As a signatory to the Paris Agreement under the United Nations Framework Convention on Climate Change and the United Nations Sustainable Development Goals (SDGs), Australia has committed to taking action on climate change and to ensuring that mitigation and adaptation action is equitable and consistent with the aims of the SDGs.

Local Government is committed to meeting international obligations through Australia's participation in protocols and agreements established under the UNFCCC, including but not limited to the Paris Agreement and successive international treaties.

The Paris Agreement expressly recognises the importance of engagement at all levels of government⁵. **Local Government is committed** to contributing to national and international emissions reduction targets to achieve the Paris Agreement goal of limiting global temperature rise to well below 2° Celsius and to pursue efforts to limit the temperature increase even further to 1.5° Celsius.

Local Government acknowledges that current worldwide commitments under the Paris Agreement are insufficient to achieve even the 2° Celsius goal⁶. Australia is a developed country with among the highest per capita greenhouse gas (GHG) emissions in the world⁷. Recognising this, **Local Government calls on the Commonwealth Government show international leadership, by committing to a more ambitious Paris target.**

Local Government recognises that both the impacts of climate change and the policy responses required to contribute to the avoidance of dangerous climate change have significant equity implications⁸. These equity considerations have domestic and international dimensions, for both present and future generations and for the survival of other species. Climate change disproportionately affects disadvantaged and marginalised groups⁹ including the poor and rural and regional communities.

Local Government supports an equitable transition to a carbon constrained world:

- **globally**, the right of developing countries to increase their share of global wealth in ways that remain within the ecological capacities of the planet;
- **domestically**, the need to equitably share the cost of climate change adaptation and mitigation and ensure disadvantaged and marginalised groups receive adequate support. This includes provision of support and incentives for communities impacted by the transition (eg, by fostering innovation, and supporting workforce adjustment packages and new employment opportunities).

Local Government supports the United Nations Sustainable Development Goals, and supports climate change action as part of a broader sustainable development agenda.

2.4 Local Government is already acting on climate change, but all levels of Government must act

For Australia to meet its international obligations, all levels of government must act. The Western Australian and Commonwealth Governments have an obligation to address climate change in partnership with Local Government, and in consultation with the community.

Local Government calls on the Western Australian and Commonwealth Governments to develop a formalised coordinated approach, such as in the form of a Commonwealth/State/Local Government partnership agreement or Intergovernmental Agreement, establishing consistent and coordinated principles, objectives and actions across Australia that provides for long-term planning to address climate change.

The strategic, long-term planning that Local Government seeks from the Western Australian and Commonwealth Governments includes:

- adequate ongoing funding for essential research, science and innovation to underpin climate change policy initiatives and program design¹⁰
- taking direct responsibility for the delivery of mitigation actions, adaptation and resilience planning in areas that lend themselves to centralised coordination at Western Australian or Commonwealth Government level;
- embedding climate change mitigation and adaptation considerations in Government projects and policies (government procurement, land management, development, investment strategies that move away from fossil fuels etc.);
- partnering with and resourcing Local Government to deliver community emissions reduction programs that are most effectively implemented at the Local Government level;
- removing existing barriers to climate mitigation and adaptation actions by Local Government; and
- ensuring all decisions are guided by the precautionary principle.

Local Government calls on the Commonwealth Government to develop and implement a national plan for action to:

- meet Australia's international obligations;
- ensure Australia is prepared to adapt to the impacts of climate change; and
- navigate the pathway to a low carbon economy, fostering innovation, new employment opportunities and economic growth.

Local Government calls on the Western Australian Government for a major revision and update of the 2012 climate change strategy¹¹.

2.5 Local Government urges effective mitigation action

Local Government recognises that there is a global climate emergency which requires urgent action.

Local Government is committed to reducing operational GHG emissions and supporting the reduction of GHG emissions in the community.

Local Government recognises that Australia has the capacity to contribute to global climate change mitigation, by reducing emissions now, in a way that creates positive opportunities for communities, business and the economy.

Local Government acknowledges a successful response to the challenge of climate change requires cross-sectoral action by government, business and the community.

However, there are insufficient long-term Western Australian and Commonwealth Government plans or resources directed to climate change action. There is a particularly significant policy vacuum within the Western Australian Government, with negligible demonstrated or coordinated leadership or long-term planning. Australia and the world is seeing a shift away from fossil fuels towards energy efficient and renewable technologies that includes widespread uptake of rooftop solar¹², battery storage¹³, energy trading¹⁴, virtual power plants¹⁵, electric vehicles¹⁶, energy efficiency and energy productivity¹⁷. The market, business, insurers, many Local Governments, communities and (other) State Governments are moving in this direction. **Local Governments are calling on the Western Australian and Commonwealth Governments** to accelerate action and remove barriers to transition to a low carbon, energy efficient economy.

Local Government considers a wide range of policy measures - from regulatory intervention and market-based mechanisms (such as an emissions trading scheme) through to voluntary schemes, education and behaviour change programs - are required to successfully achieve emissions reduction targets.

As part of the required national plan for action, **Local Government calls on the Commonwealth Government to** put in place efficient, effective and equitable measures to drive national emissions reductions.

Local Government is in a unique position to drive and implement mitigation programs, foster innovation and support sustainability at the community level, and has had successful collaborations and partnerships to implement such programs in the past¹⁸.

Local Government calls on the Commonwealth Government to partner with Local Government in its efforts to further reduce GHG emissions, including through:

- renewable energy projects (small scale and large scale);
- energy efficiency projects (eg, mass LED public lighting retrofits);
- waste management;
- enabling take-up of new renewable and sustainable technologies; and

- accelerating the take up of low or zero emissions vehicles (eg, Local Government electric vehicle fleets, installation of electric vehicle charging stations).

Local Government calls on the Western Australian Government to:

- follow the lead of the other States and Territories and introduce a State-level renewable energy and/or emissions reduction target;
- ensure that statutory planning policies are consistent with climate change mitigation priorities (eg, maintaining and increasing urban forest to reduce heat island effect, best practice building energy efficiency etc.); and
- drive mass LED public lighting retrofits, by addressing the regulatory hurdles and unaligned incentives that act as a disincentive to the uptake of low cost, energy efficient public lighting.

Local Government calls on the Environmental Protection Authority to take a stronger regulatory role in assessing and recommending conditions to mitigate the GHG emissions associated with major projects within the Environment Impact Assessment process¹⁹.

2.6 Local Government urges effective adaptation and resilience planning

Local Government is committed to the common goal of ensuring that Western Australia's human communities and natural ecosystems have the resources and assistance to enable them to build maximum resilience and adapt to climate change impacts that are now understood to be unavoidable.

Local Government asserts that it is the responsibility of all spheres of Australian Government to ensure that their decisions, policies and programs take into consideration the likely impact of climate change on current and future human settlements, natural resources and ecosystems and facilitate adaptation to these. These include but are not limited to disaster relief, national security, environment, energy, infrastructure and land use planning, water, housing, health and transport.

Local Government notes there are some policies, programs and limited funding for *coastal* adaptation in Western Australia, and a body of work completed in relation to bushfire planning and management. While this action is welcome, it is insufficient, and there is currently only *minimal* capacity and resourcing available to adapt to other effects of climate change, such as changes in temperature and rainfall, extreme weather events such as heatwaves and floods, flow-on effects such as the health and social impacts of climate change.

In many cases, Local Governments do not have the financial resources to shoulder the cost of implementing adaptation measures alone. This must be a shared responsibility.

Effective adaptation and resilience planning by Western Australian and Commonwealth Governments includes:

- a strategic approach to progressing and funding action for climate change adaptation and building resilience;
- adequate assistance, including funding, for Local Governments and Commonwealth and State agencies engaged in adaptation action;
- recognising and planning for the impacts of climate change on biodiversity and agricultural productivity, particularly in relation to biosecurity;
- sustainable management of water resources;
- providing greater certainty for Local Governments managing their risk and liability flowing from adaptation planning decisions;
- a State-Wide Coastal Hazard Map;
- coastal management legislation in Western Australia to define and establish principles, objects, actions, roles and responsibilities for integrated coastal zone management, with specific reference to planned and managed retreat;
- ensuring the Western Australian planning system adequately incorporates consideration of climate change effects and adaptation issues; and
- hazard identification and planning beyond coastal planning, into current and expected effects of changes on extreme weather events, bushfires, biodiversity, invasive flora and fauna, health, social impacts etc.

Local Government is also calling for national and state emergency management and disaster relief policies that adequately incorporate climate change in their planning and implementation. Western Australia Natural Disaster Relief and Recovery Arrangements (WANDRRA) financial measures need to provide funding to reinstate a damaged or destroyed asset to a more disaster resilient standard, where this is an appropriate and cost effective response based on likely recurrence of the disaster event.

¹ IPCC (2013). “Summary for Policymakers” in *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA at 4. Available at: <https://www.ipcc.ch/report/ar5/wg1/>.

² As above, at 27.

³ As above, at 28.

⁴ As above, at 17. The term “extremely likely” is defined by the IPCC as having an assessed likelihood of 95-100%: See “Chapter 1: Introduction” in *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA at 121 (footnote 2).

⁵ United Nations Framework Convention on Climate Change (2015) *Adoption of the Paris Agreement*, 21st Conference of the Parties, Paris: United Nations at 2. Available at: http://unfccc.int/files/home/application/pdf/paris_agreement.pdf.

⁶ The Climate Action Tracker (Climate Analytics, Ecofys & NewClimate Institute) calculates the gap in current policies, Paris Commitments and the emissions reductions required to keep the world at a 1.5°C and a 2.0 °C increase. Available here: <https://climateactiontracker.org/global/cat-emissions-gaps/>.

⁷ Australia has the highest per capita emissions of the OECD countries, and the seventh highest per capita in the world after Kuwait, Brunei, Qatar, Belize, Oman and Bahrain: CAIT Climate Data Explorer (World Resources Institute) (2018). *GHG Emissions Totals Excluding Land Use Change and Forestry Per Capita 2014*. Available at: <http://cait.wri.org/historical>.

⁸ Althor, G. et al. Global mismatch between greenhouse gas emissions and the burden of climate change. *Sci. Rep.* 6, 20281; doi: 10.1038/srep20281 (2016). Available at: <https://www.nature.com/articles/srep20281>.

⁹ “People who are socially, economically, culturally, politically, institutionally or otherwise marginalised are especially vulnerable to climate change” IPCC (2014). Summary for Policymakers” in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, at 6. Available at: <http://www.ipcc.ch/report/ar5/wg2/>. See also CSIRO (2015). *Climate Change Adaptation for Health and Social Services*, edited by Rae Walker and Wendy Mason. CSIRO Publishing, and L Rickards et al. (2016). *On the Frontline: Climate Change & Rural Communities*. Climate Commission. Available at <https://www.climatecouncil.org.au/ruralreport>.

¹⁰ For example, BOM and CSIRO’s Climate Change in Australia: <https://www.climatechangeinaustralia.gov.au/>, Western Australian Marine Science Institution: <https://www.wamsi.org.au/>, National Climate Change Adaptation Research Facility: <https://www.nccarf.edu.au/> and CoastAdapt: <https://coastadapt.com.au/>.

¹¹ Western Australian Government (2012). *Adapting to our Changing Climate*. Available at: <https://www.der.wa.gov.au/your-environment/climate-change/254-adapting-to-climate-change>.

¹² See for example: A Bruce & I MacGill. “FactCheck Q&A: is Australia the world leader in household solar power?” *The Conversation*. 28 March 2016. Available at: <https://theconversation.com/factcheck-ganda-is-australia-the-world-leader-in-household-solar-power-56670>.

¹³ See for example: N Harmsen. “Elon Musk’s giant lithium ion battery completed by Tesla in SA’s Mid North”. *ABC News*. 24 November 2017. Available at: <http://www.abc.net.au/news/2017-11-23/worlds-most-powerful-lithium-ion-battery-finished-in-sa/9183868>; Climate Council. *Fully Charged: Renewables and Storage Powering Australia*. 2018. Available at: <https://www.climatecouncil.org.au/resources/battery-storage-2018/>.

¹⁴ See for example: K Diss, “Blockchain technology fuels peer-to-peer solar energy trading in Perth start-up”. *ABC News*. 11 October 2017. Available at: <http://www.abc.net.au/news/2017-10-11/blockchain-technology-fuels-peer-to-peer-energy-trading-start-up/9035616>.

¹⁵ See for example: C Chang. “South Australian government strikes deal with Tesla to install free batteries to 50,000 homes”. *News.com.au*. 5 February 2018. Available at: <http://www.news.com.au/technology/innovation/south-australian-government-strikes-deal-with-tesla-to-install-free-batteries-to-50000-homes/news-story/fd04731350da176c374383f3fb25e947/>.

¹⁶ A Gray. “Countries are announcing plans to phase out petrol and diesel cars. Is yours on the list?” *World Economic Forum*. 26 September 2017. Available at: <https://www.weforum.org/agenda/2017/09/countries-are-announcing-plans-to-phase-out-petrol-and-diesel-cars-is-yours-on-the-list/>.

¹⁷ Energy productivity is an indicator of the amount of economic output that is derived from each unit of energy consumed. See, for example, the Australian Alliance for Energy Productivity project to double productivity by 2030: <https://www.2xep.org.au/>.

¹⁸ For example as delivery agents of the Commonwealth Government’s Community Energy Efficiency Program (CEEP) and Local Government Energy Efficiency Program (LGEEP) and the Cities for Climate Protection.

¹⁹ See commentary on State climate change in the EPA’s *Annual Report 2016-2017* at 38-40. Available at: <http://www.epa.wa.gov.au/annual-reports/epa-annual-report-2016-2017>.

Appendix A

Acronyms

BOM	Bureau of Meteorology
CAIT	Climate Access Indicators Tool
CEEP	Community Energy Efficiency Program
CO ₂	Carbon dioxide
CPP	Cities for Climate Protection
CSIRO	Commonwealth Scientific and Industrial Research Organisation
GHG	Greenhouse Gas
ICLEI	International Council for Local Environmental Initiatives – Local Governments for Sustainability
IPCC	Intergovernmental Panel on Climate Change
LED	Light Emitting Diode
LGEEP	Local Government Energy Efficiency Program
NCCARF	National Climate Change Adaptation Research Facility
SDGs	Sustainable Development Goals
UNFCCC	United National Framework Convention on Climate Change
WALGA	Western Australian Local Government Association
WAMSI	Western Australian Marine Science Institution
WANDRRA	Western Australia Natural Disaster Relief and Recovery Arrangements
WRI	World Resources Institute

Appendix B

Background Information

Climate change in Australia¹:

- Australia's climate has warmed in both surface air temperature and surrounding sea surface temperature by around 1°C since 1910.
- By late this century, Australia's average temperature is projected to increase by 3–5°C compared to a 1986–2005 baseline under the current global trajectory of greenhouse gas emissions, 1.5–2.5 °C for a medium emissions scenario or 0.5–1.5 °C for a low emissions scenario.
- There has been, and will continue to be, an increase in the number of days with weather conducive to fire in southern and eastern Australia. The number of days is projected to double by the end of the century under a high emissions scenario.
- May–July rainfall has reduced by around 19 per cent since 1970 in the southwest.
- Winter rainfall is projected to decrease across southern Australia, by a median of 17 per cent with a range of 2–32 per cent under a high emissions scenario by the end of the century, relative to 1986–2005, with more time spent in drought.
- Past and ongoing emissions commit us to further sea-level rise around Australia of around 6–19 cm by 2030, relative to the 1986–2005 baseline. By 2100, sea level rise could exceed two metres².
- The rise in mean sea level will amplify the effects of high tides and storm surges.

Intergovernmental Panel on Climate Change (IPCC): This is the international body for assessing the science related to climate change. IPCC assessments provide a scientific basis for governments at all levels to develop climate related policies, and they underlie negotiations at the UN Climate Conferences. IPCC reports undergo multiple rounds of drafting and review to ensure they are comprehensive and objective and produced in an open and transparent way. Thousands of other experts contribute to the reports by acting as reviewers, ensuring the reports reflect the full range of views in the scientific community.

Paris Agreement: The first-ever universal, legally binding global climate deal, adopted by 195 countries at the UNFCCC Conference of Parties in Paris, December 2015. It aims to respond to the global climate change threat by keeping a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C. It aims for global greenhouse gases to peak as soon as possible, and seeks to foster resilience and climate adaptation. Full text of the Paris Agreement is available [here](#). As of November 2017, all 195 countries have signed on to the Paris Agreement. The United States of America has indicated an intention to withdraw (it is unable to withdraw until November 2020). Further information tracking country ratifications and targets is available [here](#).

Sustainable Development Goals (SDGs): In September 2015, 193 countries (including Australia) agreed to the United Nations 17 Sustainable Development Goals (SDGs) and 169 targets. The SDGs are a successor to the Millennium Development Goals, but unlike the Millennium Development Goals, relate to all developed and emerging countries, as well as

developing countries. They aim to end poverty, hunger and inequality, take action on climate change and the environment, improve access to health and education, build strong institutions and partnerships, and more. Aims include climate action (Goal 13), affordable and clean energy (Goal 7), responsible consumption and production (Goal 12) and sustainable cities and communities (Goal 11). For further information on how the SDGs are relevant to Local Governments, see the Global Network of Cities, Local and Regional Government (UCLG) publication “The Sustainable Development Goals: What Local governments need to know”, available [here](#).

United Nations Framework Convention on Climate Change (UNFCCC): an international environmental treaty adopted on 9 May 1992. The UNFCCC objective is to "stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".

Western Australia Natural Disaster Relief and Recovery Arrangements (WANDRRA): provides a range of financial relief measures to assist communities to recover from an eligible natural disaster event, jointly funded by the Western Australian and Australian Governments, which reimburses Local Governments for the restoration and replacement of essential public assets owned by a local government to the extent necessary to restore the asset to the equivalent of its pre-disaster standard.

Western Australian Local Government action on climate change: WA Local Governments have, for a number of years, been actively engaged in a range of climate change mitigation and adaptation activity, together with education and encouraging awareness and behaviour change amongst residents. Many Local Governments have made voluntary commitments or pledges in relation to climate change, including the following:

Pledge	Description	Number of Local Government Participants
Local Government Climate Change Declaration	Developed by WALGA. A voluntary opportunity for Local Governments to demonstrate their political commitment to locally appropriate climate change adaptation and mitigation action. ³	40 (representing 65% of the WA population)
Divesting from fossil fuels	Commitment to shift money out of banks that fund fossil fuels. ⁴	12 (representing 30% of the WA population)
Compact of Mayors	A coalition of city leaders around the world committed to addressing climate change. ⁵	4
Cities Power Partnership	Launched July 2017 by the Climate Council, aims to celebrate and accelerate emission reductions and clean energy in Australian towns and cities. ⁶	10

In the past, Western Australian Local Governments have been key delivery agents of Commonwealth Government climate change mitigation programs, such as the Community Energy Efficiency Program (CEEP), the Local Government Energy Efficiency Program (LGEEP) and the Cities for Climate Protection (CCP) Program that was delivered by ICLEI with Commonwealth Government support. The LGEEP and CEEP grants assisted Local Governments in undertaking a wide range of building energy efficiency, LED public lighting and geothermal projects.

Program	Program dates	WA Local Government participants
Cities for Climate Protection	1999-2006	30
Local Government Energy Efficiency Program (LGEEP)	2011-2014	50 (includes 1 WALGA grant)
Community Energy Efficiency Program (CEEP)	2011-2016	15 (includes 1 WALGA grant)
Emissions Reduction Fund (ERF)	2014-present	2 (both transitioned from the Carbon Farming Initiative)

Adaptation is a current issue for Local Government, particularly as the effects of climate change are now unequivocally being felt, and Local Governments are in a position where they need to be planning for further effects of climate change in the future.

The Western Australian State Government provides around \$1.3 million funding per year under the CoastWest, Coastal Management Plan Assistance Program and Coastal Adaptation and Protection programs. In contrast, the New South Wales State Government (with a coastline one sixth the length of Western Australia), is providing \$63 million over five years. The Queensland State Government (with a coastline a little over half the length of Western Australia) provides \$12 million dollars over three years.

The Western Australian state planning system has encompassed coastal adaptation planning, but this has not yet been expanded to deal with other current and expected issues such as changes in temperature, rainfall and extreme weather events (including floods), heatwaves and bushfires.

¹ CSIRO 2016 *State of the Climate*. <https://www.csiro.au/en/Showcase/state-of-the-climate>.

² B Dennis and C Mooney. 2016. 'Scientists nearly double sea level rise projections for 2100, because of Antarctica'. *The Washington Post*. 30 March 2016. Available at: https://www.washingtonpost.com/news/energy-environment/wp/2016/03/30/antarctic-loss-could-double-expected-sea-level-rise-by-2100-scientists-say/?noredirect=on&utm_term=.574c448f582f.

³ For further information see here: <http://walga.asn.au/Policy-Advice-and-Advocacy/Environment/Climate-Change.aspx>.

⁴ For a list of Australian Local Governments that have committed to divest see here: <http://gofossilfree.org.au/fossil-free-councils/>. Not listed are City of Bayswater, City of Subiaco and the Shire of Mundaring, which have also recently committed to divest.

⁵ Cities of Joondalup, Perth, Melville and Mandurah. Further information about the Compact of Mayors available here: <https://www.compactofmayors.org/>.

⁶ Local Governments participating in the Cities Power Partnership are shown on the map here: <http://citiespowerpartnership.org.au/power-partners/>.