#### ACT Government submission to the Climate Change Authority

#### Special Review – Second Draft Report

#### Australia's climate policy options

The ACT Government welcomes the opportunity provided by the Climate Change Authority to provide input and advice to the development of climate change policy options for Australia.

The ACT Government has long been a supporter of strong action to address climate change. In 2010 the ACT Government established an ambitious greenhouse gas reduction target through the *Climate Change and Greenhouse Gas Reduction Act 2010* (the Act) of zero net emissions by 30 June 2060. The Act also establishes two interim targets for 2020 and 2050 of 40% and 80% below 1990 levels respectively, as well as a target of peaking per capita emissions by 2013.

*AP2: A new climate change strategy and action plan for the Australian Capital Territory* (AP2)<sup>1</sup> was released by the Government in October 2012. This strategy and action plan is the primary vehicle for addressing climate change in the ACT and provides a pathway for achieving the Territory's first legislated greenhouse gas reduction target of 40% below 1990 levels by 2020.

AP2 identified that reaching the 2020 target would require a dual approach of reducing emissions, and reducing overall energy consumption. The former is being achieved through the implementation of the 90% Renewable Energy Target, while the latter is focusing on increasing the energy efficiency of households and businesses through the Energy Efficiency Improvement Scheme and Actsmart household and business programs.

A review of AP2, conducted in 2015, showed that the ACT was well on track to achieve the 2020 target and that a majority of the 18 actions in AP2 were either completed or had been substantially implemented.

The ACT Government's responses to specific questions posed in the *Special Review - Second Draft Report* are provided below.

### Q.1 The Authority proposes assessing policies primarily on their cost effectiveness, environmental effectiveness and equity. Are these principles appropriate? Are there any other principles that should be applied, and if so, why?

ACT Government agrees with the principles as stated, noting that policy solutions need to be durable, systems based and provide long term certainty. Furthermore, consideration needs to be given to Moore's principles of public value in policy development/implementation<sup>2</sup>. That is, the intent and value of the policy must be clear and measurable; the policy must have legitimacy and support across the authorising and operational environments; and, there must be adequate capability, capacity and resources for policy implementation and management.

# Q.3 How does mandatory carbon pricing perform against the principles of cost effectiveness, environmental effectiveness and equity? Which type of pricing scheme is likely to be more effective and why?

The ACT Government supports an Emissions Trading Scheme as an effective mechanism to reduce greenhouse gas emissions across the Australian economy.

The ACT Government notes that ongoing uncertainty around carbon policy in Australia is one of the most significant factors undermining the efficient development of energy markets in Australia.

The ACT Government supports an economy-wide 'cap and trade' emissions trading scheme. This is considered to be the most economically efficient and flexible mechanism to achieve a given level of abatement and is consistent with the ACT Government's position presented in AP2.

The ACT Government has demonstrated that the repeal of the carbon price has had a negative effect on the Territory's efforts to reduce greenhouse gas emissions. In October 2015 the ACT Government released the annual ACT Greenhouse Gas Inventory for the 2014–15 reporting period<sup>3</sup>. This inventory showed emissions in the ACT had increased by 4.6% between 2013-14 and 2014–15. A primary source of this increase was from electricity emissions attributable to the repeal of the national carbon price and a subsequent decrease in renewables in the national energy market (NEM).

<sup>&</sup>lt;sup>2</sup> Moore, M. (1995). *Creating Public Value - Strategic Management in Government*, Cambridge: Harvard University Press.

<sup>&</sup>lt;sup>3</sup> Pitt&sherry (2015), ACT Greenhouse Gas Inventory for 2014-15, with recalculations for 2012-13 and 2013-14 (www.environment.act.gov.au/cc/acts-greenhouse-gas-emissions).

According to the independent consultant responsible for preparing the annual inventory, the amount of renewable energy in the NEM, as a share of ACT supply, decreased by approximately 44% from 2013–14 to 2014–15 due to a decrease in hydro-electricity production, which is the largest supply of renewable electricity into the NSW/ACT NEM region. The supply shortfall was made up by increased coal fired generation, predominantly sourced through the interconnectors from Victoria and Queensland and resulted in an overall increase in the emissions factor attributable to supply to the ACT. This increase in coal-fired generation since July 2015 has been reaffirmed in the latest Carbon Emissions Index (CEDEX) Electricity Update (January 2016) by pitt&sherry<sup>4</sup>.

## Q.6 What lessons can be learned from Australia and overseas on the effectiveness of renewable energy targets and energy efficiency targets, and their interaction with other climate policies?

The ACT Government supports the development of the renewable energy industry as part of an integrated response to climate change and as an effective mechanism to reduce greenhouse gas emissions from the stationary energy sector.

Following the release of AP2 in October 2012, the ACT Government established a new renewable energy target (RET) of 90% of electricity consumption by 2020 through a Disallowable Instrument under the Act. The Government also agreed to amendments to the *Electricity Feed-in (Large-scale Renewable Energy Generation) Act 2011* to enable up to 550MW of renewable energy to be contracted in order to ensure that the 90% RET was achieved. This approach will affect a reduction in the ACT's greenhouse gas emissions by 40% from 1990 levels by 2020.

The ACT's investment in large-scale electricity generation has been achieved through an innovative Feed-in Tariff (FiT) reverse auction process. Renewable electricity project proponents are required to put forward bids against a set of criteria, including price. The winners of the auction process become eligible for a FiT at a fixed price. As a 'contract for difference' approach is applied, and the price is fixed and not subject to inflation, the subsidy costs to the Territory will decrease as the value of wholesale electricity prices rise over time. This has resulted in lowest cost renewable energy being delivered to the Territory, setting a benchmark for Australia.

The lack of a nation-wide approach to facilitating the development of a renewable energy industry has required sub-national governments to fill this void. The Australian Environment Minister, speaking at a COP 21 event in Paris, said reverse-style auctions of the sort used by the ACT are 'a very effective mechanism of price discovery' for increasing renewable energy capacity and urged other states to look to the ACT Government for its leadership in this area by adopting the innovative reverse auction scheme, which has been a great success in the ACT.

<sup>4</sup> Pitt&sherry (2016) Carbon Emission Index, <u>www.pittsh.com.au/latest-news/cedex</u>.

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The lesson here is that nation states can be slow to instigate change while sub-national entities are more dynamic and demonstrating leadership and reaping the benefits of moving towards a low carbon economy. This has been highlighted by international groups such as The Climate Group that has collated and compared actions by sub-national governments and shown that these entities have implemented highly ambitious renewable energy targets.<sup>5</sup>

## Q.7 How do renewable energy targets and energy efficiency targets perform against the principles of cost effectiveness, environmental effectiveness and equity?

The high emissions intensity of National Electricity Market means that electricity is the source of 59% the ACT's emissions. Meeting the ACT's ambitious emission reduction targets requires a significant investment in renewable energy.

Through a competitive process and innovative feed-in tariff structure the ACT Government is delivering this step change to renewables at a modest average cost per household per week. It is estimated that \$4.67 per household per week will achieve the 90% renewable electricity target. This demonstrates that moving to high levels of renewable electricity is both achievable and affordable.

In a report prepared by the ACT Climate Change Council, the Council concluded that "the ACT is among the leading jurisdictions nationally and internationally in key aspects of climate change mitigation policy, including the ambition and accountability of targets, renewable energy and emissions from the waste sector".<sup>6</sup>

The pathway to 90% renewable energy will deliver a 40% reduction on 1990 levels by 2020. The ACT Government's experience can demonstrate that procuring large-scale renewable energy through the processes the Territory has in place can result in low cost renewable energy.

## Q.8 What lessons can be learned from Australia and overseas on the effectiveness of regulation, and its interaction with other climate policies?

The ACT Government is of the opinion that long term stable policy frameworks are required to provide a stable planning horizon that facilitates long term investment. Policies should be broad based and aimed at addressing underlying market failures so as to minimise the detrimental impact of government intervention on the efficient operation of markets.

<sup>&</sup>lt;sup>5</sup> The Climate Group (2015), *Unlocking Ambition: Top corporate and sub-national climate commitments* (www.theclimategroup.org/what-we-do/publications/).

<sup>&</sup>lt;sup>6</sup> Kemp, Luke; Sackett, Penny; Jotzo, Frank (2015), *Sub-National Climate Policies: How does the ACT Compare?*, ACT Climate Change Council, Canberra (<u>www.environment.act.gov.au/cc/climate\_change\_council</u>).

The ACT Government's emission reduction targets are established through the *Climate Change and Greenhouse Gas Reduction Act 2010,* and is the primary regulation driving current climate programs in the ACT. The Act provides the basis for a range of activities, including the annual reporting of the ACT's greenhouse gas emissions.

Through provisions in the Act, the ACT Government has also established the 90% Renewable Energy Target.

Expertise in developing economies of scale in purchasing and developing renewable energy facilities can be shared across jurisdictions. This will also facilitate support for innovation and development of new support industries and the knowledge economy in transitioning to a low carbon economy.

### Q.9 How could various types of regulation perform against the principles of cost effectiveness, environmental effectiveness and equity?

The ACT Government recognises that meeting the Territory's 2020 emissions reduction target will have an impact on the price of energy. Our policy framework recognises that higher energy prices can have adverse social impacts if members of our community are unable to pay increased costs or cannot afford the upfront costs required to improve the energy efficiency of their homes. Accordingly, our policy framework includes measures to mitigate these impacts on those least capable of meeting these additional costs.

A key example of our approach is the *Energy Efficiency (Cost of Living) Improvement Act 2012,* that established the Energy Efficiency Improvement Scheme (EEIS). The EEIS commenced on 1 January 2013.

The EEIS is designed to deliver energy savings to Canberra households through Tier 1 energy providers, such as ActewAGL, installing energy saving devices or measures. Since January 2013, the EEIS has substantially increased the options for low income households, including public housing tenants, to reduce energy costs and greenhouse gas emissions.

An independent review of the EEIS, completed in September 2014, concluded that participating households will save about \$1,600 over the lifetime of activities they have implemented. The review also found high participant satisfaction and significant overall benefits to continuing the EEIS. In less than three years, over 60,000 households (approximately 40% of Canberra households) have participated in the EEIS, with over 15,000 of them being priority households.

Consultation during the design of the EEIS emphasised that low income households benefit the most from energy efficiency, but are least able to make improvements without additional assistance. It was decided that a set number of abatements should occur in lowincome households and this became formalised in the EEIS through the Priority Household Target (PHT).

The EEIS obliges Tier 1 retailers to achieve a proportion of their energy savings activities in low income households. The PHT was set at 25% of total abatement each year from 2013 to 2015, above the estimated 20% of ACT households receiving energy concessions and/or holding a concession card. In practice, 29% of savings were delivered in priority households by mid-2015.

The ACT Government notes that other Australian jurisdictions (notably NSW and Victoria) have also successfully instituted energy efficiency schemes.

# Q.10 What lessons can be learned from Australia and overseas on the effectiveness of information programs and innovation support, and their interaction with other climate policies?

Through the development of AP2, the ACT Government recognised the role that community engagement plays in assisting the government to achieve the emissions reduction target. To facilitate this, AP2 included as an action the development and implementation of a Community Engagement Strategy (CES).

The CES re-affirms our commitment to effective engagement and sets out how we will build on an ongoing dialogue with the community on climate change and make sustainability information readily available to the community, households, schools and businesses.

Since the release of the ACT's first climate change strategy and action plan, *Weathering the Change* in 2007, the community's views on climate change have guided the ACT's policies and targets. It is only in working collaboratively that the challenges of achieving large-scale emissions reduction can be met.

In order to keep the Canberra community informed and engaged in climate change issues, the ACT Government releases a series of publications on a regular basis. Firstly, the ACT Government publishes an annual greenhouse gas inventory for each financial year as required under the Act. The inventory identifies greenhouse gas emissions from key sectors both within and outside of the ACT, and tracks the Territory's progress towards the targets established in the Act.

Also required under the Act is an annual report by the responsible Minister detailing actions undertaken by the ACT Government to address climate change issues over a financial year. This report is published before the end of the calendar year.

The ACT Government also prepares a six-monthly update on the implementation of actions under AP2.

Community organisations and businesses have a significant role in climate change actions. There is a role for government in building on existing partnerships with the community with the clear purpose of achieving enhanced knowledge and understanding, capacity building for informed decision making, and promoting collaborative local action.

Under the ACT Government's Renewable Energy Local Investment Framework, the Government has recognised that renewable energy industries provide a strategic growth opportunity for the Canberra economy.

The local investment benefits achieved through the ACT's renewable energy reverse auctions demonstrate a concerted effort by the ACT Government to focus developing renewable electricity as a strategic opportunity for Canberra. It also reflects a recognition by industry of Canberra as a place to invest – a high-skills economy well placed in the global renewable energy revolution.

Renewable energy jobs in the ACT have already increased by over 400% over the past five years – a rate of growth four times higher than any other Australian state or territory. The reverse auction Feed-in Tariff recipients have made a number of ACT local investment commitments.

As a result of the ACT' reverse auctions:

- Wind farm assets will be managed from a new operations centre in Canberra, creating at least 11 full time jobs (economic benefits valued at \$30 million over 20 years).
- A new national trades training centre has been established at the Canberra Institute of Technology, Bruce – The Renewable Energy Skills Centre of Excellence – which will deliver Australia's only Cert IV course in Large-scale Wind Generation and attract 30 to 40 new students each year (economic benefits valued at \$13 million over 20 years).
- Canberra universities will benefit from new courses and international research and development partnerships which will attract new students and business investment, with the Australian National University offering Australia's only Masters Course in Wind Development (economic benefits valued at \$7 million over 20 years).
- The Renewable Energy Innovation Fund will allocate \$12 million over 5 years to trades training and innovation, energy research partnerships, an energy innovation precinct and technology demonstration.

## Q.11 How do information and innovation support perform against the principles of cost effectiveness, environmental effectiveness and equity?

In mid 2013, the Environment and Planning Directorate commissioned a survey to research community views and issues about climate change in the ACT.

The survey found the community has a high awareness of climate change and a willingness to commit to reducing individual household emissions. According to the survey, the community believes it is moderately or very urgent for the ACT Government to take action to tackle climate change at a wider scale.

#### Key findings of the survey

- The majority of residents (88%) believe that climate change is a genuine problem for the future.
- Respondents accept that their own lifestyles contribute to climate change (68%).
  They accept it is not too late to take action and that taking no action would result in unfavourable consequences for their future.
- ACT householders (84%) believe that actions by householders can help make a difference in tackling climate change. While 68% believe they should personally take more action, 62% believe householders would have to make difficult or inconvenient changes to their lives in trying to help tackle climate change.
- 76% of residents believe it is moderately or very urgent for the ACT Government to take action to tackle climate change and 81% want the ACT Government to take a strong leadership role to help ACT residents tackle climate change. On average, ACT residents consider \$1.62 per day (per household) an affordable amount to pay to contribute to the cost of new infrastructure and technologies required to reduce carbon emissions.
- Most ACT residents (81%) believe they would feel good knowing the ACT Government was taking serious action to tackle climate change, and 79% believe it is a moral duty for the ACT community to take action. 62% of residents report their friends, family or work colleagues would encourage them to take action to reduce greenhouse gas emission and 56% said they would be more willing to take action if they knew that others were also taking action.
- While support for the ACT Government plans to reduce carbon emissions and tackle climate change was very high with between 73% and 95% of residents supporting each of 10 suggested initiatives, only 40% of residents believe they are aware of ACT Government plans to reduce carbon emissions.

This detailed information on the community's attitudes and knowledge of action on climate change helps to inform the degree of ambition on moving toward the zero net emissions goal, and the community's appetite for higher levels of action.

In November 2015, the Australia Institute released the findings of two sets of polling they commissioned on clean energy and divestment. Taking a nationally representative sample, approximately 3000 people were surveyed from Canberra and around Australia, the results showed:

- Three in four Canberrans surveyed (78 per cent) said they support the 100 per cent renewables target, a majority strongly supporting it.
- Three in four (75 per cent) said they were willing to pay more on their bills to achieve this target.

- Almost two in three (62 per cent) said they would be willing to pay \$5 per week more on household electricity.
- Almost three in four Australians from outside of Canberra (72 per cent) said they wanted a similar policy in their own state.
- More than half of Canberrans (54 per cent) support the ACT government divesting from fossil fuels, while around one in five oppose (19 per cent).

### **Concluding remarks**

The ACT, along with other Australian States and Territories, is implementing a significant ongoing energy work program through the COAG Energy Council. The Council is also looking at the issue of the linkages between carbon and energy market policies. This work stream has been initiated by the ACT and has been supported by all jurisdictions.

The ACT Government supports climate change action at all levels of government. During 2015 the ACT affiliated itself with key international reporting groups, including the Compact of Mayors and the States and Regions Alliance, which highlight and promote sub-national climate action. At the 21<sup>st</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change, many of these international platforms, and their representative sub-national members, participated in events to highlight the role that sub-national governments can play and contribute to global emission reductions. These organisations played a key role highlighting the importance of global action on climate change and influencing the outcomes of the COP through the Paris Agreement.

In Australia, many state and territory governments have considered how their jurisdictions can contribute to reducing emissions and have prepared climate action plans accordingly. However, it would be disappointing if the Australian Government were to rely on this subnational action as a key mechanism to achieve national targets without displaying strong leadership at the national level through its own policies and actions.