

STANDING COMMITTEE ON CLIMATE CHANGE,
ENVIRONMENT AND WATER

Inquiry into ACT Greenhouse Gas Reduction Targets

FINAL REPORT - AUGUST 2010

Committee membership

Ms Meredith Hunter MLA	Chair
Mr John Hargreaves MLA	Deputy Chair (Member of the Committee since 20 November 2009. Mr Hargreaves was not a Committee Member during the development of the interim report)
Mr Zed Seselja MLA	Member
Ms Mary Porter AM MLA	Member (to 19 November 2009)

Secretariat

Ms Margie Morrison	Secretary
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Resolution of appointment

On 9 December 2008 the ACT Legislative Assembly agreed by resolution to establish general purpose standing committees to inquire into and report on matters referred to it by the Assembly or considered by the committee to be of concern to the community, including:

(f) a **Standing Committee on Climate Change, Environment and Water** to examine matters related to climate change policy and programs, water and energy policy and programs, provision of water and energy services, conservation, environment and ecological sustainability.

The Assembly agreed that each standing committee can consider and make use of the evidence and records of the relevant standing committee appointed during the previous Assembly.¹

¹ Legislative Assembly for the ACT, *Minutes of Proceedings No 2*, 9 December 2008, pp 15-18.

Terms of Reference

On 11 December 2008 the ACT Legislative Assembly adopted the following terms of reference for the inquiry into ACT Greenhouse Gas Reduction Targets.

That this Assembly:

(1) notes:

(a) expert scientific evidence confirms that human activity is causing a significant increase in global temperatures, which will have a dramatic impact on the sustainability of existing ecological systems and human settlements;

(b) climate change is one of the greatest economic, social and environmental challenges facing the ACT community, and must be addressed accordingly and that it is imperative that the ACT moves to a low carbon future both swiftly and equitably;

(c) Australia is a signatory to the United Nations Framework Convention on Climate Change and that the most recent Conference of the Parties agreed that emissions reductions of 25 – 40% will be necessary by 2020 (compared to 1990 levels); and

(d) the scientific understanding of climate change is evolving rapidly, and the ACT Climate Change Strategy and its greenhouse gas reduction target should be responsive to the best available scientific knowledge and experience to contribute to a safe climate outcome;

(2) resolves that the Standing Committee on Climate Change, Environment and Water inquire into and report on:

(a) an appropriate target to be established in legislation, including:

(i) an appropriate date for the peaking of greenhouse gas emissions in the ACT;

(ii) an appropriate target for the reduction of greenhouse gas emissions in the ACT by 2012; and

(iii) an appropriate target for the reduction of greenhouse gas emissions in the ACT by 2020;

(b) appropriate monitoring, reporting and review processes to accompany the target; and

(c) the following issues associated with achieving the greenhouse gas reduction target:

(i) the efficacy of existing programs within the current ACT Climate Change Strategy *Weathering the Change*, and the need for additional programs in the Strategy;

(ii) the ACT's future energy supplies, taking account of the draft ACT Government Energy Strategy due to be published in late 2008 and options for sourcing or producing sufficient renewable energy to meet the needs of the ACT;

(iii) climate change impacts on the sustainability of existing ecological communities;

(iv) social equity and economic issues, costs and opportunities in achieving this target;

(v) the relationship between the ACT's legislated target and policy and measures agreed to and implemented at a national level;

(vi) the acceptability of local and offshore offsets;

(vii) the need to ensure that the ACT does not transfer its greenhouse emissions to other jurisdictions;

(viii) the adequacy of existing data collection and methodology for the purpose of establishing a baseline year of 1990 or 2000 and for future monitoring and reporting purposes; and

any other related matter; and

(3) resolves that the Committee shall report by 30 July 2009.²

- On 23 June 2009 the Assembly amended this resolution and extended the reporting date for the inquiry to 'by 17 September 2009'.³
- On 15 September 2009 the Assembly resolved that 'the Committee shall present an interim report by 17 September 2009 and present a final report by the last sitting in March 2010'.⁴
- On 16 March 2010 the Assembly amended this resolution and further extended the reporting date to the last sitting day in August 2010.⁵

²Legislative Assembly for the ACT, *Minutes of Proceedings no 4*, 11 December 2009, pp 44–45.

³Legislative Assembly for the ACT, *Minutes of Proceedings no 24*, 23 June 2009, p 259.

⁴Legislative Assembly for the ACT, *Minutes of Proceedings no 33*, 15 September 2009, p 364.

⁵Legislative Assembly for the ACT, *Minutes of Proceedings no 54*, 16 March 2010, p 619.

Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ANAO	Australian National Audit Office
CBA	Cost benefit analysis
CEA	Cost effectiveness analysis
COAG	Council of Australian Governments
CPRS	Carbon Pollution Reduction Scheme
DCCEE	Department of Climate Change and Energy Efficiency
DECCEW	Department of the Environment, Climate Change, Energy and Water
EPB	Existing Policy Baseline
GHG	Greenhouse Gas
ICRC	Independent Competition and Regulatory Commission
IPCC	Intergovernmental Panel on Climate Change
OCSE	Office of the Commissioner for Sustainability and the Environment
RET	Renewable Energy Target
UNFCC	United Nations Framework on Climate Change

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RECOMMENDATIONS

RECOMMENDATION 1

1.27 The Committee recommends that the ACT Government provides an update to the Assembly during the September 2010 sitting period about the timeline for the public release of the final energy policy, *Weathering the Change* Action Plan 2 and the consultancy report from Kinesis.

RECOMMENDATION 2

1.28 The Committee recommends that the ACT Government release the final energy policy, *Weathering the Change* Action Plan 2 and the consultancy report from Kinesis by the last sitting day in October 2010.

RECOMMENDATION 3

2.46 The Committee recommends that the ACT Government investigate the feasibility of implementing an opt out approach to the GreenPower scheme and its potential impacts on ACT residents. The outcomes of the investigation should be reported to the Assembly before any action is taken.

RECOMMENDATION 4

3.19 The Committee recommends that the ACT Government draw on the work of the ICRC to adopt a cost/efficiency evaluation methodology to evaluate any programs implemented to reduce greenhouse gas emissions.

RECOMMENDATION 5

3.20 The Committee recommends that the ACT Government establish a set of criteria to inform the development of other evaluation methodologies to assess greenhouse gas emission mitigation strategies.

RECOMMENDATION 6

3.21 The Committee recommends that the ACT Government: (a) advise the Assembly about the evaluation methodologies that will be applied to evaluate greenhouse gas emission mitigation strategies and programs (b) advise the Assembly how it will report against the evaluation methodologies and the timetable for reporting.

RECOMMENDATION 7

3.37 The Committee recommends that the ACT Government conducts an assessment of current sustainable energy policies against the COAG complementary measures. This assessment should be presented to the Assembly by the last sitting day in 2010.

RECOMMENDATION 8

4.9 The Committee recommends that the ACT Government implement measures to further encourage local community action similar to the Victorian initiative which registers the estimated impact of local projects.

1 INTRODUCTION

Conduct of the inquiry

- 1.1 On 11 December 2008 the Legislative Assembly for the ACT referred the matter of ACT greenhouse gas emission reductions targets to the Standing Committee on Climate Change, Environment and Water for inquiry and report by the end of June 2009. On 23 June 2009 the Assembly resolved to extend the inquiry reporting date to 'by 17 September 2009'.⁶
- 1.2 On 15 September 2009 the Assembly resolved that 'the Committee shall present an interim report by 17 September 2009 and present a final report by the last sitting in March 2010'.⁷ On 16 March 2010 the Assembly resolved that 'the Committee shall present a final report by the last sitting day in August 2010'.⁸
- 1.3 In developing the interim report, the inquiry received 36 submissions, held 11 public hearings and deliberated at 17 private meetings. In the period between the presentation of the interim report and the final report, the inquiry received two additional submissions, held one public hearing and deliberated at 14 private meetings. A list of the submissions received and public hearings conducted in the preparation of the final report are at Appendix A and B respectively. The full list of submissions received during the course of this inquiry can be found on the inquiry website at the following location:
<http://www.parliament.act.gov.au/committees/index1.asp?committee=112&inquiry=753&category=14>.
- 1.4 The Committee notes that the interim report was a comprehensive document, drawing on a number of sources, evidence and witnesses. The information presented was extensive and addressed the key issues identified in the broad ranging terms of reference.

⁶Legislative Assembly for the ACT, *Minutes of Proceedings no 24*, 23 June 2009, p 259.

⁷Legislative Assembly for the ACT, *Minutes of Proceedings no 33*, 15 September 2009, pp 363-364.

⁸Legislative Assembly for the ACT, *Minutes of Proceedings no 54*, 16 March 2010, p 619.

- 1.5 The Committee made 31 detailed recommendations and called on the ACT Government to set ambitious targets for reducing GHG emissions by 2015, 2020 and 2050. The initial recommendations included support for the consideration of climate change legislation in the Assembly in the first half of 2010; a medium-term legislative target of a 40 per cent reduction in ACT emissions by 2020 on 1990 levels; delivery of set targets by introduction of legislated mandatory and consistent public reporting, as well as independent review of policy programs and progress; and the incorporation of sustainability or triple-bottom-line considerations into climate change policies and programs as well as the broader requirement of requiring a climate change analysis of all major policies, projects and programs.⁹
- 1.6 One member of the Committee expressed opposition to the 40 per cent target as outlined in the interim report.
- 1.7 Despite the ongoing challenges, the Committee encouraged the ACT Government to demonstrate leadership in seeking to reduce greenhouse gas emissions as soon as possible and as efficiently and cost effectively as possible.
- 1.8 The interim report noted that the Committee's inquiry has been made more difficult by uncertainty about:
- the Australian Government's proposed Carbon Pollution Reduction Scheme (CPRS);
 - the potential outcomes from the international climate change negotiations due to take place in Copenhagen in December 2009;
 - the lack of detailed analysis from the ACT Government on cost-benefit analysis of its existing climate change strategies; and
 - uncertainty about the direction of energy policy in the ACT.
- 1.9 Given these uncertainties, the Committee resolved to delay the finalisation of the inquiry to allow for consideration of the ACT Government's zero net

⁹ ACT Standing Committee on Climate Change, Environment and Water, *Inquiry into ACT Greenhouse Gas Reduction Targets, interim report*, September 2009, accessible at: <http://www.parliament.act.gov.au/downloads/reports/CCEW02%20Green%20Gas%20revised%20in%20errata.pdf>

emissions road map, draft energy policy, the outcomes in Copenhagen and the evolution of the CPRS.¹⁰

Structure of the report

- 1.10 In developing this final report the Committee has particularly focused on the areas requiring further analysis identified in the interim report. In addressing these additional sections, the Committee sought to minimise duplication of the findings and recommendations of the interim report.
- 1.11 Chapter 1 provides background information to the inquiry, outlines the structure of this report and discusses the Government response to the interim report.
- 1.12 Chapter 2 analyses climate change issues in an ACT context with a particular focus on the *Draft Sustainable Energy Policy 2010-2020*, the ACT GreenPower Scheme, and 2010-11 Budget initiatives.
- 1.13 Chapter 3 focuses on the challenges of assessing climate change mitigation strategies within a cost effectiveness analysis framework. This chapter also considers the importance of accurate and comprehensive reporting and review.
- 1.14 Chapter 4 provides an update about national initiatives such as the Carbon Pollution Reduction Scheme and Renewable Energy Targets.
- 1.15 Chapter 5 concludes the report with a brief summary of the outcomes of the United Nations Climate Change Conference held in Copenhagen in December 2009.
- 1.16 The recommendations in the final report are in addition to those set out in the interim report.

¹⁰ ACT, *Parliamentary Debates*, Legislative Assembly, 15 September 2009, pp 3914-3915, (Meredith Hunter MLA).

Acknowledgements

- 1.17 The Committee thanks all those who contributed to the inquiry by making submissions, providing additional information and appearing before it to give evidence.

Government response to interim report

- 1.18 The Government tabled its response to the inquiry's interim report on 17 November 2009. The response noted a broad level of agreement with the Committee's recommendations. Of the 31 recommendations, the Government agreed with 13, agreed in principle with 16 and noted 2 recommendations.¹¹
- 1.19 In response to recommendations relating to targets, the Government indicated its commitment for Canberra's emissions to peak by 2013, with the city becoming carbon neutral by 2060. The Government also announced its intention to set a medium term target as high as possible in the range of 25 to 40%.¹²
- 1.20 The Government response noted the ongoing development of a number of key documents including:
- Climate Change (Greenhouse Gas Reduction Targets) Legislation;
 - revised Weathering the Change Climate Change Strategy and associated Action Plan 2;
 - framework for ACT Government Carbon Neutrality;
 - development of draft Sustainable Energy Policy;
 - development of triple bottom line assessment framework; and
 - development of Future Waste Strategy.

¹¹ ACT Government, *Government response to the interim report of the Legislative Assembly inquiry on ACT Greenhouse Gas Reduction Targets*, November 2009.

¹² ACT, *Parliamentary Debates*, Legislative Assembly for the ACT, 17 November 2009, p 5107, (Simon Corbell MLA).

Committee comments

- 1.21 The Committee acknowledges the broad level of agreement in the Government response and the timeframes outlined for the development and public release of key policy documents. However, the Committee is concerned about the considerable delay with the finalisation of a number of documents.
- 1.22 The Committee was advised during annual reports hearings that the Department of the Environment, Climate Change, Energy and Water (DECCEW) had commissioned two consultancies to provide analysis and advice to inform the development of a number of policies: sustainable energy policy, revision of *Weathering the Change: Action Plan 2*, legislation for energy efficiency in buildings and options to achieve zero net emissions.¹³
- 1.23 One consultancy report, *ACT Greenhouse Gas Emissions: Existing policy baseline projections to 2050* from Heuris Partners, was released in April 2010. The second consultancy report (from Kinesis) has not been released publicly. It is the Committee's understanding that Kinesis is providing advice on the effectiveness of *Weathering the Change* Action Plan 1.¹⁴
- 1.24 The Committee had intended to include an analysis of both consultancy documents as well as Action Plan 2 but unfortunately much of this information is not yet publicly available.
- 1.25 Notwithstanding the current local national and international challenges, it is important that the ACT Government show leadership in this area, particularly in terms of developing strong and comprehensive legislation and the policy documents to support implementation of the legislation.
- 1.26 The Committee remains committed to the targets set out in its interim report and will continue to monitor programs, policies and initiatives that are implemented to reduce greenhouse gas emissions.

¹³ *Transcript of Evidence*, 28 October 2009, pp 45-47.

¹⁴ *Transcript of Evidence*, 28 October 2009, p 45.

RECOMMENDATION 1

- 1.27 The Committee recommends that the ACT Government provides an update to the Assembly during the September 2010 sitting period about the timeline for the public release of the final energy policy, *Weathering the Change* Action Plan 2 and the consultancy report from Kinesis.

RECOMMENDATION 2

- 1.28 The Committee recommends that the ACT Government release the final energy policy, *Weathering the Change* Action Plan 2 and the consultancy report from Kinesis by the last sitting day in October 2010.

2 CURRENT SITUATION IN THE ACT

- 2.1 The Committee notes the support in the ACT community for environmental programs. For example, Canberrans are leading the nation in terms of GreenPower consumption, using more than double the amount of GreenPower per capita than the next best performing jurisdiction.¹⁵ There are also a range of community groups working on sustainability and environmental related projects.¹⁶
- 2.2 This section provides a brief overview of the current situation in the ACT as well as explores some of the key policy documents.

ACT Profile

- 2.3 The ACT Government recently released the *ACT Greenhouse Gas Inventory 2008*, a report compiled by consulting firm Pitt and Sherry Pty Ltd which examined emission levels from 2007-08.
- 2.4 Key findings from the *ACT Greenhouse Gas Inventory 2008* include:
- The ACT's GHG emissions were 4.15 million tonnes CO₂-e in 2008, a 1.2% reduction on the emissions (4.23 million tonnes CO₂-e) for 2007;¹⁷
 - Although the trend shows two years of emissions reduction since 2006, the level of emissions for 2008 is still inline with the long term trend with a 12% increase on 2000 and 29% on 1990 levels respectively;
 - The ACT produces the lowest per capita emissions of all Australian states and territories, at 12.1 tonnes CO₂-e per person in 2008, a reduction of 2.9% since 2007. This is largely because the ACT has very small manufacturing and agriculture sectors;¹⁸

¹⁵ ACT Government media release, *ACT leads Australia in clean energy consumption*, 14 June 2010.

¹⁶ Office of the Commissioner for Sustainability and the Environment, *Annual Report 2008-09*, p 28.

¹⁷ Pitt & Sherry, *ACT Greenhouse Gas Emissions: ACT Greenhouse Gas Inventory 2008*, June 2010, p 1.

¹⁸ Pitt & Sherry, *ACT Greenhouse Gas Emissions: ACT Greenhouse Gas Inventory 2008*, June 2010, p 4.

- The majority of the ACT's emissions are from fossil fuel use: electricity (62%), transport fuels (23%) and natural gas (9%). 3% is from industrial processes and 2% is generated from waste;¹⁹
- Electricity consumption by the non-residential sector forms the largest part of electricity related emissions with 37%, followed by residential electricity with 26%;²⁰ and
- The ACT stands out as the top user nationally of energy in the non-residential sector reflecting the high proportion of office space for government operations and national institutions, as well as the more extreme climate in the ACT compared to the other population centres.²¹

2.5 The Committee notes that the public availability of up to date emissions inventory data is essential to ensure that climate change mitigation strategies and programs are appropriately developed and monitored.

Emissions Data

2.6 The ACT produces about 4 million tonnes of greenhouse gas emissions per year from four main sources:

- 64 per cent from energy generation (occurs outside the ACT's borders but consumed in the ACT);
- 24 per cent from transport fuels;
- 9 per cent from natural gas use; and
- 3 per cent from waste.²²

¹⁹ Pitt & Sherry, *ACT Greenhouse Gas Emissions: ACT Greenhouse Gas Inventory 2008*, June 2010, p 3.

²⁰ Pitt & Sherry, *ACT Greenhouse Gas Emissions: ACT Greenhouse Gas Inventory 2008*, June 2010, p 5.

²¹ Pitt & Sherry, *ACT Greenhouse Gas Emissions: ACT Greenhouse Gas Inventory 2008*, June 2010, p 7.

²² ACT Government, *Draft Sustainable Energy Policy 2010-2020*, December 2009, p 3.

- 2.7 The ACT economy stands out amongst Australian jurisdictions in terms of the virtual absence of any manufacturing industry or agriculture. ACT emissions are dominated by three sectors; residential, commercial and transport accounting for two thirds of ACT emissions.²³
- 2.8 A research report commissioned by DECCEW and prepared by Heuris Partners provides ACT end use emissions projections out to 2050 on the basis of Commonwealth and ACT Government policies in place as at June 2009 that most directly impact emissions. The report advises that the existing policy baseline (EPB) has been established to ‘provide a baseline against which the ACT Government can evaluate the potential impacts of alternative demand and supply emissions mitigation and abatement measures in pursuit of its zero emissions goal’.²⁴
- 2.9 The EPB modelling is then used to explore the implications for emissions from possible improvements in energy efficiency that might occur in the absence of further major policy interventions as the stock of buildings, vehicles and appliances turns over. Two different scenarios have been modelled and the report provides an analysis of the interaction of technical improvements in energy efficiency and energy end use behaviour and emissions in the ACT.
- 2.10 The report cautions about the ‘rebound effect’ which refers to the risk of potential gains (greater energy efficiency, technological advances) in one area being offset by excess use in another area, for example – an increase in consumption or the provision of more powerful vehicles.²⁵
- 2.11 The impact of the rebound effect may be reduced by ensuring that a range of initiatives are in operation and that information provided to the community about programs is as comprehensive as possible.

²³ Heuris Partners Pty Ltd, *ACT Greenhouse Gas Emissions: Existing policy baseline projections to 2050*, February 2010, p 12.

²⁴ Heuris Partners Pty Ltd, *ACT Greenhouse Gas Emissions: Existing policy baseline projections to 2050*, February 2010, p 8.

²⁵ Heuris Partners Pty Ltd, *ACT Greenhouse Gas Emissions: Existing policy baseline projections to 2050*, February 2010, p 11.

Challenges with incomplete ACT data

- 2.12 Heuris Partners observe that ‘data are very limited about energy use (and hence emissions generation) within the residential and commercial sectors’ and difficulty was experienced in sourcing data on ‘critical elements of the ACT’s transport task which is the other large generator of greenhouse gas emissions’.²⁶
- 2.13 The report goes on to note that additional data and analysis of these sectors would increase understanding of energy use and broaden the ‘scope for emissions reductions in these sectors over the medium/longer term’.²⁷
- 2.14 An up to date and accurate ACT emissions profile is an important component when discussing policy and implementing programs that aim to reduce GHG emissions. This profile will ensure that programs are tailored as much as possible to ensure maximum results and efficiency.

Draft Sustainable Energy Policy 2010 – 2020

- 2.15 The Minister for Energy released the *Draft Sustainable Energy Policy 2010-2020* on 21 December 2009. The draft policy was open for community consultation until 5 March 2010 and two public information sessions were hosted by the ACT Government in February 2010.
- 2.16 When releasing the draft policy, the Minister noted that ‘the Draft Sustainable Energy Policy 2010-20 is an important policy framework for achieving emissions reductions, which will play a pivotal role in meeting the Government’s target of carbon neutrality’.²⁸
- 2.17 The Committee notes that 35 submissions relating to the draft policy were received by DECCEW, 15 from individuals and 20 from organisations and businesses. The range of individuals and groups represented reflects the

²⁶ Heuris Partners Pty Ltd, *ACT Greenhouse Gas Emissions: Existing policy baseline projections to 2050*, February 2010, p 7.

²⁷ Heuris Partners Pty Ltd, *ACT Greenhouse Gas Emissions: Existing policy baseline projections to 2050*, February 2010, p 7.

²⁸ ACT Government media release, *Draft Sustainable Energy Policy released for public comment*, 21 December 2009.

community interest in the document. DECCEW has indicated that the final Energy Policy would be released in mid 2010.²⁹

- 2.18 A number of key issues were identified in the submissions to DECCEW including:
- Energy efficiency;
 - Retrofitting existing commercial and residential buildings;
 - Transport;
 - Renewable energy targets; and
 - Consistent reporting mechanisms to monitor and review energy savings and greenhouse gas emission reductions.

Committee comments

- 2.19 The Committee notes the ongoing delay of the release of the draft policy as the Minister for Energy, Mr Simon Corbell MLA, advised the Committee that the draft Energy Policy would be released in the third quarter of 2009.³⁰
- 2.20 The Committee supports the principles underpinning the draft policy and acknowledges the important role of energy initiatives in reducing greenhouse gas emissions in the ACT.
- 2.21 The Committee looks forward to the release of the final energy policy and encourages the Government to carefully consider the information submitted through the public consultation process when finalising the policy.

Energy efficiency

- 2.22 The International Energy Agency acknowledges that 'energy efficiency offers a powerful and cost-effective tool for achieving a sustainable energy future'.³¹
- 2.23 The *Draft Sustainable Energy Policy 2010-2020* supports this focus stating that 'there are significant and increasing opportunities for Canberrans to reduce

²⁹ ACT Government media release, *Draft Sustainable Energy Policy released for public comment*, 21 December 2009.

³⁰ *Transcript of Evidence*, 13 May 2009, p 194.

³¹ International Energy Agency website http://www.iea.org/subjectqueries/keyresult.asp?KEYWORD_ID=4122 (accessed 15 July 2010).

energy consumption and therefore greenhouse gas emissions through energy efficiency measures'.³²

- 2.24 An increased focus on energy efficiency is widely supported in the submissions received about the draft energy policy. A number of submissions discuss energy efficiency measures and their potential to significantly contribute to reducing greenhouse gas emissions in the ACT.³³
- 2.25 The Energy Efficiency Council encourages the ACT Government to focus on the largest and most cost-effective opportunities for energy efficiency – energy efficiency in government operations, retrofitting existing commercial buildings and working with large energy users.³⁴
- 2.26 The Committee is aware that the 2010 Building Code of Australia took effect from 1 May 2010 containing enhanced energy efficiency measures. The code requires all new homes to be built to a six star energy efficiency rating equivalence and also includes domestic lighting efficiency requirements and increased energy efficiency and environmental sustainability requirements for commercial buildings.³⁵
- 2.27 The Committee notes that the 2010-2011 ACT Budget includes a new accountability indicator under output class 1.2 in DECCEW to 'advise Government on options for Energy Efficiency Legislation'. This advice relates to possible new legislation which would place a requirement on businesses in the energy sector to undertake efficiency measures.³⁶ The draft energy policy states that the scheme under development will be based on those already

³² Department of the Environment, Climate Change, Energy and Water, *Draft Sustainable Energy Policy 2010-2020*, p 13.

³³ Department of the Environment, Climate Change, Energy and Water, submissions on the *Draft Sustainable Energy Policy 2010-2020*, 1, 13, 15, 17, 19, 23, 25, 29, 30, 33, 34 & 35, accessible at: <http://www.environment.act.gov.au/energy/energypolicy>

³⁴ Energy Efficiency Council, submission to the *Draft Sustainable Energy Policy* public consultation, p 8, accessible at: <http://www.environment.act.gov.au/energy/energypolicy>

³⁵ ACT Planning and Land Authority website, *BCA 2010 energy efficiency changes*, accessible at: http://www.actpla.act.gov.au/customer_information/industry/bca_2010_energy_efficiency_changes

³⁶ ACT Budget 2010-11 *Budget Paper No. 4*, p 293.

developed in the United Kingdom, South Australia, Victoria and New South Wales.³⁷

- 2.28 The Committee welcomes this development and sees this as a positive first step in encouraging businesses to achieve greater energy efficiency. It is important that this scheme be developed in consultation with businesses in the energy sector.
- 2.29 The Committee will monitor progress against this new accountability indicator through the annual inquiry into annual and financial reports.

Renewable energy

- 2.30 Investing in renewable energy is another key opportunity to reduce GHG emissions. The draft energy policy states that ‘renewable energy generation is the key to creating a sustainable energy supply for the future’.³⁸
- 2.31 In 2007–08, Australia produced 290 petajoules (PJ) of renewable energy, equivalent to 5% of Australia’s total primary energy consumption of 5,572 PJ. Bagasse (sugar cane waste) was the largest source of renewable energy (39%), followed by wood and wood waste (33%) and hydroelectricity (15%). Other biofuels, wind and solar (including solar hot water) contributed 13%.³⁹
- 2.32 The draft energy policy states that the ACT will aim to use renewable energy for at least 25 per cent of all electricity consumption by 2020 with an interim target of 15 per cent by 2012.⁴⁰
- 2.33 The non-executive Climate Change (Greenhouse Gas Emissions Targets) Bill 2008 (No 2) presented to the Assembly on 10 December 2010 outlines the following targets:
- to increase by 31 December 2014 the proportion of renewable electricity used in the ACT to at least 20% of the electricity used in the ACT; and

³⁷ Department of the Environment, Climate Change, Energy and Water, *Draft Sustainable Energy Policy 2010-2020*, p 8.

³⁸ Department of the Environment, Climate Change, Energy and Water, *Draft Sustainable Energy Policy 2010-2020*, p 6.

³⁹ Australian Bureau of Statistics, *Australia’s Environment: Issues and Trends*, Jan 2010, p 16.

⁴⁰ Department of the Environment, Climate Change, Energy and Water, *Draft Sustainable Energy Policy*, p 14.

- to reduce by 31 December 2020 the per capita use of electricity in the ACT by at least 25% to a per capita use of electricity in the ACT that is equal to or less than 75% of the 1990 levels.⁴¹

GreenPower

- 2.34 Greenpower refers to electricity generated from approved renewable energy resources such as solar, wind, biomass and hydroelectricity commissioned after 1 January 1997.⁴²
- 2.35 GreenPower is a government renewable energy accreditation program that enables consumers to pay a premium for electricity generated from sources like mini hydro, wind power and biomass which produce no net GHG emissions.⁴³
- 2.36 More than half of all households nationally were aware of GreenPower in 2008 and this figure was even higher in the ACT with over 70% of households indicating that they were aware of the GreenPower scheme. The support for the scheme is further illustrated by the high proportion of people in the ACT who stated that they were willing to pay more to support GreenPower – 36.1% in the ACT compared to 32.5% nationally.⁴⁴
- 2.37 A recent report shows that in 2009, the number of customers consuming GreenPower grew by 24% in the ACT to 15,788 customers which translates to about 10% of all connections.⁴⁵ The Minister for Energy has indicated that in the ACT it can cost as little as \$2.63 extra a week to connect to GreenPower.⁴⁶
- 2.38 Although a higher proportion of Canberrans indicated their willingness to pay more to support GreenPower compared to other jurisdictions, it is important that the additional cost is minimal to enable as many households to connect to GreenPower as possible.

⁴¹ Climate Change (Greenhouse Gas Emissions Targets) Bill 2008 (No 2), accessible at: http://www.legislation.act.gov.au/b/db_33727/current/pdf/db_33727.pdf

⁴² Australian Bureau of Statistics, *Australia's Environment: Issues and Trends*, Jan 2010, p 54.

⁴³ Australian Bureau of Statistics, *Australia's Environment: Issues and Trends*, Jan 2010, p 17.

⁴⁴ Australian Bureau of Statistics, *Australia's Environment: Issues and Trends*, Jan 2010, p 18.

⁴⁵ ACT Government media release, *ACT leads Australia in clean energy consumption*, 14 June 2010.

⁴⁶ ACT Government media release, *ACT leads Australia in clean energy consumption*, 21 June 2010.

- 2.39 The ACT Government has indicated that they will consider placing a requirement on retailers to provide additional volumes of GreenPower.⁴⁷ The Committee believes that this should be a priority in the final sustainable energy policy. Whilst it is a legislative requirement for energy companies to offer GreenPower as the first choice product to new customers, more action should be taken to encourage existing customers to choose GreenPower.
- 2.40 The legislation introduced by the ACT Government in 2009 requires energy companies to offer GreenPower as the first choice product to new and re-connecting customers. In addition to this, suppliers must offer and make a GreenPower product available to all existing customers at the customer's request.⁴⁸
- 2.41 The Committee feels it would be beneficial to evaluate the impact of the introduction of the ACT GreenPower Scheme in 2009. The 24 per cent increase in customers consuming GreenPower in 2009 may be a direct reflection of the introduction of the legislation. Alternatively, these customers may be existing customers who have been using green power for some time.
- 2.42 Interestingly, over 70% of people living in the ACT have indicated that they are aware of the GreenPower scheme, however green power only accounts for 10% of connections. This suggests that taking additional measures to encourage participation in the scheme could have a significant impact.
- 2.43 One possible option is to implement an 'opt out scheme' whereby the default option is for customers to participate in the GreenPower scheme unless otherwise advised. While the underlying principle of this approach is to increase participation in the scheme, it should be explored with caution. The Committee is aware of some of the concerns raised through the public consultation process leading up to the commencement of the GreenPower scheme relating to an 'opt-out' approach.⁴⁹

⁴⁷ Department of the Environment, Climate Change, Energy and Water, *Draft Sustainable Energy Policy 2010-2020*, p 14.

⁴⁸ Australian Capital Territory, *Utilities (Electricity Retail) Licence Conditions Direction 2009*, Disallowable instrument DI2009-21 0 Explanatory Statement

⁴⁹ Independent Competition and Regulatory Commission, GreenPower Scheme website: http://www.icrc.act.gov.au/energy/electricity/greenpower_scheme

- 2.44 One member of the Committee expressed in-principle concern about an 'opt out' approach to green energy.
- 2.45 The Committee is supportive of additional scoping work being undertaken relating to an 'opt out scheme' and supports measures to spread the cost base across as many households as possible.

RECOMMENDATION 3

- 2.46 **The Committee recommends that the ACT Government investigate the feasibility of implementing an 'opt out' approach to the GreenPower scheme and its potential impacts on ACT residents. The outcomes of the investigation should be reported to the Assembly before any action is taken.**

2010-2011 Budget Initiatives

- 2.47 The Committee notes the new initiatives announced in the 2010-11 Budget relating to climate change and reducing greenhouse gas emissions. The Budget allocated \$2.6 million over four years for measuring and reporting against the Government's greenhouse gas reduction target of zero net emissions by 2060.⁵⁰ The Government has also indicated that the initiative will enhance DECCEW's capability to:
- Design and implement energy efficiency projects;
 - Meet the Government's commitments through COAG to national energy reforms; and
 - Establish a Carbon Neutral Framework for the ACT Government.⁵¹
- 2.48 The Committee is aware of information provided to the Select Committee on Estimates 2010-2011 which outlined how this funding will be allocated.⁵² In particular, \$407,000 allocated to address information gaps and disaggregate data to inform cost effective ways to reduce greenhouse gas emissions in government operations and \$305,000 for accessing technical advice, including

⁵⁰ ACT Budget 2010-2011 – Paper No. 1: Speech, p 16.

⁵¹ 2010-2011 Budget Paper No. 3 *Budget Overview*, p 87.

through the ICRC, on greenhouse gas performance against targets and effectiveness of policies and programs. The funding for technical advice remains at a similar level for 2011-2012 and then reduces to \$107,000 and \$110,000 for 2012-2013 and 2013-2014 respectively.

- 2.49 The Committee also notes the new funding announced in the 2010-2011 Budget of almost \$1.3m over four years to increase the renewable energy uptake. The Government hopes to increase its green power use from 30 per cent in 2009-2010 to 32.5 per cent in 2010-2011.⁵³
- 2.50 The Committee welcomes the Government's commitment to renewable energy in leading by example and increasing its use of clean energy but is concerned that more could be done to encourage greater uptake of renewable energy across the community.

What Can I do? Campaign

- 2.51 The Committee is aware of an initiative led by the Office of the Commissioner for Sustainability and the Environment (OCSE) entitled 'What can I do?' which is split up into three components:
- *What can I do in my home?*
 - *What can I do in my travels?*
 - *What can I do for the festive season?*
- 2.52 The Committee welcomes these initiatives as they play a vital role in raising community awareness about reducing GHG emissions and offer practical support and suggestions for taking action.
- 2.53 Whilst acknowledging the importance of developing these initiatives, the Committee notes that an integral component of such initiatives is a robust evaluation mechanism.

⁵² Select Committee on Estimates 2010-2011, Answer to question taken on notice number 277. Accessible at: <http://www.parliament.act.gov.au/downloads/issues-papers/Corbell%20Environment%202010.pdf>

⁵³ ACT Budget 2010-2011 Budget Paper No. 3, *Budget Overview*, p 77.

18 STANDING COMMITTEE ON CLIMATE CHANGE, ENVIRONMENT AND WATER

- 2.54 Regular review and monitoring is essential to ensure that the program/initiative is raising community awareness and meeting its objectives. Monitoring and reporting is discussed further in chapter three of this report.

3 ECONOMIC MODELS AND ENVIRONMENT POLICY

Introduction

- 3.1 In the interim report, the Committee noted that the inquiry had been hindered due to the lack of publicly available analysis of the costs and benefits of existing climate change strategies. The Committee included a number of recommendations relating to the importance of robust evaluation of policies and programs and the public reporting of such analysis.
- 3.2 In particular, recommendation nine in the interim report stated the following:
The Committee recommends that the Government undertake social, environmental and economic impact analysis of all policies and programs introduced to implement legislated targets and that this analysis be publicly available
- 3.3 In its response to the interim report, the Government agreed in principle to the recommendation and stated the following:
Programs and policy options will be subject to appropriate social, environmental and economic analysis. The ACT Government will establish a new role for the ICRC in providing independent advice on the robustness of the analyses. The ACT Government is developing a triple bottom line assessment framework for consideration of Government policies, programs, projects and initiatives.⁵⁴
- 3.4 In light of this response, the Committee wrote to the Independent Competition and Regulatory Commission (ICRC) to seek advice about different models and evaluative tools that may be used to assess the efficacy of greenhouse gas reduction strategies and associated policies and programs.

⁵⁴ ACT Government, *Government response to the interim report of the Legislative Assembly inquiry on ACT Greenhouse Gas Reduction Targets*, November 2009, p 11.

Background

- 3.5 The ICRC provided a submission to the inquiry in 2009 and appeared at a public hearing on 22 July 2009. The ICRC's 2009 submission included a suggested cost/benefit evaluation methodology to assist with assessment of the social equity and economic issues, costs and opportunities in programs implemented to meet greenhouse gas emissions targets.
- 3.6 At the public hearing in July 2009, the ICRC outlined three key principles that are fundamental when looking at program and policy options in the ACT:
- Requirement for some degree of complementarity between programs implemented in the ACT and programs implemented nationally and in other jurisdictions;
 - An evaluation model should be consistently applied in the policy development stage to assist decision making; and
 - The importance of the process of monitoring and publicly reporting on the effectiveness of programs.⁵⁵
- 3.7 Upon the invitation of the Committee, the ICRC has provided a second submission to the inquiry which provides additional information about the proposed evaluation methodology and discusses the framework in the context of a cost effectiveness analysis approach to decision making. This additional analysis builds on the three principles previously outlined by the ICRC.
- 3.8 The Committee supports the three principles outlined by the ICRC and these will be discussed in more detail in this chapter of the report.

Cost effectiveness analysis

- 3.9 The ICRC advised the Committee that cost effectiveness analysis (CEA) provides for a systematic evaluation of the costs and benefits that are associated with a particular policy or program. CEA allows for the stand-alone analysis of a single policy option focusing on whether there are net economic

⁵⁵ *Transcript of Evidence*, 22 July 2009, pp 315-318.

benefits from adopting the policy.⁵⁶ This approach is also valuable as it can be used to evaluate several prospective policies or programs, usually associated with a monetised accounting of the costs and benefits.

- 3.10 CEA differs from traditional cost benefit analysis as it recognises that not all options can easily be compared. ‘The objective of CEA is to identify those projects that generate positive net economic benefits to society taking into [account] all quantifiable and non-quantifiable effects including environmental and social impacts’.⁵⁷ The results of CEA studies can then be compared – if not directly, then against defined objectives. Once a target for reducing GHG emissions has been adopted, a CEA will help identify the policy option that gains the most in meeting the target.
- 3.11 The ICRC discuss the CEA principles in their submission ‘to allow consideration of the use of this technique, and then to allow the relevant agency to develop further how this methodology might be applied in the context of the ACT’s application of its greenhouse gas reduction program’.⁵⁸

Effectiveness evaluation framework

- 3.12 The ICRC has presented a cost/efficiency evaluation methodology for application when considering policy and program options to achieve GHG savings. The ICRC’s framework is outlined below in Figure 1.⁵⁹
- 3.13 This methodology framework may assist with the identification of the benefits and costs for particular policy/program options.⁶⁰ The ICRC observes that it is not always possible to value all impacts in monetised terms and it may be necessary to quantify non-monetised impacts in another way (for example,

⁵⁶ Independent Competition and Regulatory Commission, submission No. 39, *Cost effectiveness analysis*, July 2010, p 1.

⁵⁷ Independent Competition and Regulatory Commission, submission No. 39, *Cost effectiveness analysis*, July 2010, p 2.

⁵⁸ Independent Competition and Regulatory Commission, submission No. 39, *Cost effectiveness analysis*, July 2010, p 8.

⁵⁹ Independent Competition and Regulatory Commission, submission No. 39, *Cost effectiveness analysis*, July 2010, pp 2-3.

⁶⁰ Independent Competition and Regulatory Commission, submission No. 39, *Cost effectiveness analysis*, July 2010, p 4.

tonnes of GHG). When this quantification occurs, it should be adopted consistently across the various options under consideration.⁶¹

- 3.14 The ICRC goes on to note that ‘the application of this assessment methodology will bring to light a number of further practical issues that will need to be addressed and resolved particularly when reviewing environmental programs or policies...it provides a framework within which a rigorous and consistent approach can be used to inform decision makers on the best available option to adopt given the information on costs and benefits that is available.’⁶²

Figure 1. Suggested Cost/Efficiency Evaluation Methodology

-
1. Determine efficiency of proposed GHG reduction program
 - a. Estimate GHG savings
 - b. Estimate cost to achieve GHG savings
 - c. Determine efficiency factor as measured in either:
 - i. Dollars per unit of GHG abated or
 - ii. Units of GHG abated per dollar
 2. Benchmark against alternative programs
 - a. Comparison by:
 - i. Efficiency factor
 - ii. Total GHG abated
 3. Determine social benefits
 - a. Determine who can take advantage of the program (i.e., beneficiaries)
 - b. Determine how program is funded
 - c. Evaluate potential increase in social (CSO) obligations
-

⁶¹ Independent Competition and Regulatory Commission, submission No. 39, *Cost effectiveness analysis*, July 2010, p 5.

⁶² Independent Competition and Regulatory Commission, submission No. 39, *Cost effectiveness analysis*, July 2010, p 12.

Committee comments

- 3.15 The Committee recognises that this framework can be used as a planning mechanism for program and policy development. In the context of environment policy, this framework may be applied to assess different programs against designated GHG reduction targets.
- 3.16 Under circumstances where program comparisons are made, it is important that this is done with a 'like against like' approach. To the extent that monetary costs can be compared this should occur, in conjunction with a consideration of other non-monetary costs. Caution should be exercised when monetary costs can not be applied.
- 3.17 The framework from the ICRC provides a broad set of principles for analysis of the potential impact of climate change policies. The Committee recognises that this framework may not be an adequate tool for assessing all programs and it may be necessary to encompass a broad range of evaluative tools to ensure that analysis is comprehensive.
- 3.18 Due to the range of ancillary benefits and possible costs, these evaluative tools should be informed by a broad set of criteria that are publicly available. For example:
- Clear indication of assumptions, sensitivity analyses and the data used to inform assumptions;
 - Consideration of the full life of the project as potential costs and benefits of environmental programs may not be experienced for some time;
 - Consideration of the opportunity cost of implementing chosen policies;
 - Wide assessment of the potential impacts of policy (for example, will effects be experienced outside the ACT?);
 - Analysis of the direct and indirect effects;
 - Broader economic policy; and
 - Social and welfare impacts and the regressive effect on non discretionary expenditure – offset or mitigation measures.

RECOMMENDATION 4

- 3.19 **The Committee recommends that the ACT Government draw on the work of the ICRC to adopt a cost/efficiency evaluation methodology to evaluate any programs implemented to reduce greenhouse gas emissions.**

RECOMMENDATION 5

- 3.20 **The Committee recommends that the ACT Government establish a set of criteria to inform the development of other evaluation methodologies to assess greenhouse gas emission mitigation strategies.**

RECOMMENDATION 6

- 3.21 **The Committee recommends that the ACT Government:**
(a) advise the Assembly about the evaluation methodologies that will be applied to evaluate greenhouse gas emission mitigation strategies and programs
(b) advise the Assembly how it will report against the evaluation methodologies and the timetable for reporting.

Triple bottom line assessment

- 3.22 In their submission, the ICRC indicated that triple bottom line assessment shares similar principles to CEA as it seeks to consider a wider range of issues than simply the financial outcomes or those that can be readily valued in dollar terms.⁶³
- 3.23 Differences arise as triple bottom line assessment seeks to provide a comprehensive picture of the effectiveness of a particular policy across a defined period (for example, a financial year), whereas CEA provides a framework to consider the effectiveness of policy and program options over their projected life and also against each other.
- 3.24 The ICRC further noted that the adoption of triple bottom line reporting across Government is valuable in the context of CEA 'as it requires departments and

⁶³ ICRC Submission *Cost effectiveness analysis*, p 3.

agencies to consider policies and programs in terms other than simply financial costs or outcomes, and thus helps to provide the raw data and assessment perspective on policy options and programs that can be used in CEA analysis'.⁶⁴

- 3.25 The Committee is aware that the Chief Minister's Department published a pilot Triple Bottom Line Annual Report for 2008-2009 with the purpose of providing a model for triple bottom line reporting across the ACT Government.⁶⁵
- 3.26 The pilot stage of triple bottom line reporting in ACT Government departments provides an ideal opportunity to develop connections between the triple bottom line method of analysis and the ICRC's cost effectiveness evaluation methodology.

Monitoring and reporting

- 3.27 The Committee notes that monitoring and review are important components of programs implemented to reduce greenhouse gas emissions. These are mechanisms that facilitate greater community awareness as well as public accountability and transparency and the Committee is supportive of these principles.
- 3.28 The Committee's Report on Annual and Financial Reports 2008-2009 recommended 'that DECCEW include in its annual report a report on each greenhouse gas abatement program that includes greenhouse gas savings resulting from the program and the cost of the program for each year of the program'.⁶⁶
- 3.29 The Committee will continue to monitor this in the context of departmental annual reports and the regular review of key policy documents.
- 3.30 As noted in a recent performance audit of the Department of Climate Change and Energy Efficiency by the Australian National Audit Office (ANAO), the

⁶⁴ ICRC Submission *Cost effectiveness analysis*, p 3.

⁶⁵ ACT Chief Minister's Department, *Pilot Triple Bottom Line Annual Report 2008-09*

⁶⁶ Standing Committee on Climate Change, Environment and Water, *Report on Annual and Financial Reports 2008-2009*, p 10.

implementation of a 'consistent approach to measuring program abatement is essential if the [Commonwealth] Government is to make informed decisions about the most efficient and cost effective abatement policies'.⁶⁷

- 3.31 Whilst the ANAO review focused on Commonwealth departments, the same principle may be applied to ACT Government decisions. The ANAO goes on to note that:

A consistent approach to reporting abatement across agencies would enhance transparency and facilitate a clearer assessment of program achievements. It would also enable comparison between measures and across time periods⁶⁸

- 3.32 The ANAO recognises that it can be difficult to distinguish between targeted mitigation activities and other actions as a range of factors can contribute to emission reductions, such as the cost of energy, economic activity and human behaviour. However, greater consideration of broader economic abatement drivers would assist in establishing a credible baseline and identifying the impact of government action.⁶⁹

- 3.33 The Committee understands that the DCCEE is finalising guidelines to assist with abatement costing measurement methodology focusing on three key areas:

- Step by step approach to calculating emissions reductions from a policy or measure;
- Advice on data integrity; and
- Worked examples to demonstrate how to calculate emissions and costs.⁷⁰

⁶⁷ Australian National Audit Office, *Performance Audit Report No. 27 2009-10: Coordination and Reporting of Australia's Climate Change Measures*, 20 April 2010, p 91.

⁶⁸ Australian National Audit Office, *Performance Audit Report No. 27 2009-10: Coordination and Reporting of Australia's Climate Change Measures*, 20 April 2010, p 95.

⁶⁹ Australian National Audit Office, *Performance Audit Report No. 27 2009-10: Coordination and Reporting of Australia's Climate Change Measures*, 20 April 2010, p 87.

⁷⁰ Australian National Audit Office, *Performance Audit Report No. 27 2009-10: Coordination and Reporting of Australia's Climate Change Measures*, 20 April 2010, p 91.

COAG complementary measures

- 3.34 The Committee is aware that the state and territory governments in Australia agreed at COAG in November 2008 to review their climate change mitigation policies against agreed ‘complementarity principles’, aiming to minimise duplication with Commonwealth initiatives. The timeline for these reviews has been extended and the final reports are expected to be completed by mid 2010.⁷¹ It is the Committee’s understanding that the ACT Government review is still to be finalised.
- 3.35 In a report prepared for the Select Committee on Estimates 2010-11, economic consultant firm, ACIL Tasman noted that:
- There are circumstances in which complete correction of one particular market failure may require the multiple market failures be corrected’. It is now widely recognised in the economics literature that this applies in the case of climate change market failure. There is now strong support among interested economics specialists for a multi-instrument policy framework comprising emissions pricing plus [emphasis in original] complementary measures to correct interacting market failures impeding complete internalisation of greenhouse gas external costs through emissions pricing.⁷²
- 3.36 The Report also notes that ‘it may be useful to assess whether current ACT government policies in relation to sustainable energy satisfy the COAG complementary measures’.⁷³

RECOMMENDATION 7

- 3.37 **The Committee recommends that the ACT Government conducts an assessment of current sustainable energy policies against the COAG complementary measures. This assessment should be presented to the Assembly by the last sitting day in 2010.**

⁷¹ Australian National Audit Office, *Performance Audit Report No. 27 2009-10: Coordination and Reporting of Australia’s Climate Change Measures*, 20 April 2010, p 50.

⁷² Select Committee on Estimates 2010-11, *Appropriation Bill 2010-2011: Volume 1*, June 2010, p 163.

⁷³ Select Committee on Estimates 2010-11, *Appropriation Bill 2010-2011: Volume 1*, June 2010, p 164.

4 NATIONAL INITIATIVES

Carbon Pollution Reduction Scheme

- 4.1 The Commonwealth Government's bill for the Carbon Pollution Reduction Scheme⁷⁴ was reintroduced to the Australian Parliament in February 2010 and passed by the House of Representatives on 11 February 2010. The bill was introduced to the Senate on 22 February 2010.
- 4.2 On 27 April 2010, it was announced that the Commonwealth Government would delay the implementation until after the end of the current commitment period of the Kyoto Protocol and 'only when there is greater clarity on the action of other major economies including the US, China and India'.⁷⁵
- 4.3 Although the decision to delay commencing an emission trading scheme until 2013 does little to create a stable environment for climate change policy, the Committee believes that there is an important role for state and territory jurisdictions to play to achieve greenhouse gas reduction targets.

Voluntary action

- 4.4 A criticism of the proposed CPRS was the lack of incentives for voluntary action, particularly at the individual and community level. Notwithstanding this criticism, the Committee notes programs currently in operation to encourage voluntary reduction of greenhouse gas emissions.

⁷⁴ Carbon Pollution Reduction Scheme Amendment (Household Assistance) Bill 2010, Carbon Pollution Reduction Scheme (Charges—Customs) 2010; Carbon Pollution Reduction Scheme (Charges—Customs) 2010; Carbon Pollution Reduction Scheme (Charges—Excise) 2010; Carbon Pollution Reduction Scheme (Charges—General) 2010; Carbon Pollution Reduction Scheme (Consequential Amendments) 2010; Carbon Pollution Reduction Scheme (CPRS Fuel Credits) 2010; Carbon Pollution Reduction Scheme (CPRS Fuel Credits) (Consequential Amendments) 2010

⁷⁵ Department of Climate Change and Energy Efficiency website
<http://www.climatechange.gov.au/government/initiatives/cprs.aspx>, April 2010.

- 4.5 The Victorian Government launched 'Climate Communities', an initiative to promote voluntary action on climate change in December 2009.⁷⁶ The Climate Communities initiative will deliver a grants program as well as establishing a number of regional coordinators to work with communities to encourage voluntary action.
- 4.6 The program will maintain an annual register of the estimated impact of projects that receive Climate Communities grants to enable groups and individuals to quantify their efforts.⁷⁷
- 4.7 The Committee notes the commitment by local governments across Australia to reduce greenhouse gas emissions. State and territory local government associations have 'developed a range of guides and tools to help councils understand and adapt to climate change'.⁷⁸
- 4.8 The Committee supports programs that facilitate effective action by individuals. Individual action will be a significant contributor to achieve GHG reductions; however government action must be the primary means of ensuring that reductions are achieved.

RECOMMENDATION 8

- 4.9 **The Committee recommends that the ACT Government implement measures to further encourage local community action similar to the Victorian initiative which registers the estimated impact of local projects.**

National Renewable Energy Targets

- 4.10 The Committee notes legislation passed in the Commonwealth Parliament in June 2010 to separate the Renewable Energy Target (RET) into two parts from

⁷⁶ State of Victoria, Department of Premier and Cabinet, 2009, *Climate Communities: A Victorian Government initiative to promote voluntary action on climate change*.

⁷⁷ State of Victoria, Department of Premier and Cabinet, 2009, *Climate Communities: A Victorian Government initiative to promote voluntary action on climate change*, p 5.

⁷⁸ H Grennan, 'Practical local approach to cutting gas emissions', *The Sydney Morning Herald*, 1 December 2009.

1 January 2011 – the Small-scale Renewable Energy Scheme (SRES) and the Large-scale Renewable Energy Target (LRET).

- 4.11 The Commonwealth Minister for Climate Change and Energy Efficiency, Senator Penny Wong noted that the changes ‘will provide certainty to large renewable energy projects and to households wanting to do their bit to tackle climate change’.⁷⁹ This new legislation seeks to strengthen the compliance and enforcement framework in the RET and includes a new civil penalty regime, enforceable undertakings and injunction powers.⁸⁰ It is anticipated that these revised arrangements will deliver on the Commonwealth Government’s 20 per cent by 2020 Renewable Energy Target.
- 4.12 The Commonwealth Department of Climate Change and Energy Efficiency website stated that the combined, the new LRET and SRES are expected to deliver more renewable energy than the existing 45,000 gigawatt-hour target in 2020. The degree to which the 20 per cent target is exceeded will depend on the uptake of small-scale technologies by households, small business and community groups. The LRET portion of the target will be increased to ensure the 20 per cent by 2020 target is still met if the uptake of small scale technologies is lower than anticipated.⁸¹

International renewable energy targets

- 4.13 Renewable energy targets have also been an international priority with reports earlier this year that Europe is on track to meet – and perhaps exceed – its goal of generating 20 per cent of its energy from renewable sources. Preliminary forecasts from the European Commission concluded that renewables,

⁷⁹ Minister for Climate Change, Energy Efficiency and Water, media release, *Australia moves to clean energy future*, 25 June 2010.

⁸⁰ Department of Climate Change and Energy Efficiency, *Enhanced Renewable Energy Target – fact sheet*. Accessible at:
<http://www.climatechange.gov.au/government/initiatives/~media/publications/renewable-energy/06072010-enhanced-ret-fact-sheet.ashx>

⁸¹ Department of Climate Change and Energy Efficiency, *Enhanced Renewable Energy Target – fact sheet*. Accessible at:
<http://www.climatechange.gov.au/government/initiatives/~media/publications/renewable-energy/06072010-enhanced-ret-fact-sheet.ashx>

Federal election

- 4.14 The federal election was announced during the preparation of this report and the Committee acknowledges that a number of announcements relating to climate change have been made in the context of the election campaign.
- 4.15 Despite the interrelationship between initiatives developed by the national and state/territory jurisdictions, a detailed analysis of policy announcements during an election campaign is outside the scope of this inquiry. The Committee will continue to monitor national developments with a particular focus on the implications for the ACT.

⁸² European Commission, *Summary of the member state forecast documents*, July 2010, accessible at: http://ec.europa.eu/energy/renewables/transparency_platform/forecast_documents_en.htm

5 UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

- 5.1 The United Nations Climate Change Conference (the Conference) was held in Copenhagen from 7–19 December 2009. It included the fifteenth Conference of the Parties to the United Nations Framework on Climate Change (UNFCCC) and the fifth Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol.
- 5.2 The Conference marked the culmination of a two-year negotiating process to enhance international climate change cooperation under the Bali Roadmap. The high level segment of the Conference on 16-19 December was attended by close to 115 world leaders.

The Copenhagen Accord

- 5.3 The Committee met with an official from the then Department of Climate Change in February 2010 who discussed the Conference and the proceedings which culminated in the adoption of the Copenhagen Accord.
- 5.4 The Committee was advised that a group of countries established an agreement called the Copenhagen Accord (the Accord) which established a broad set of principles. The Accord was agreed by 30 countries at the final plenary session of the conference and this increased to 93 countries in the month following the Conference.⁸³
- 5.5 The Accord notes ‘that climate change is one of the greatest challenges of our time. We [countries in attendance] emphasise our strong political will to

⁸³ *Transcript of evidence*, 17 February 2010, pp 330-331. Letter from Ms Hand to the Standing Committee on Climate Change, Environment and Water, accessible at: <http://www.parliament.act.gov.au/downloads/exhibits/LTR%20-%20from%20Ms%20Hand%20re%20transcript.pdf>

urgently combat climate change in accordance with the principle of common but differentiated responsibilities and respective capabilities’.⁸⁴

- 5.6 The Accord agrees with the view of the IPCC Fourth Assessment Report that a reduction in global emissions is required to hold the increases in global temperature below 2 degrees Celsius.⁸⁵ The peaking of global and national emissions as soon as possible is a priority under the Accord, and it is recognised that ‘the timeframe for peaking will be longer in developing countries’.⁸⁶ A copy of the Accord is included at Appendix C.
- 5.7 Under the Accord, Annex I parties commit to implement the quantified economy-wide emission targets for 2020. Non-Annex I parties will implement mitigation actions. Annex-I countries include those countries that were members of the OECD as at 1992. These countries bear more onerous obligations than other countries. Non-Annex-1 broadly refers to developing countries, but also includes countries like Singapore.⁸⁷
- 5.8 The Committee was advised that although the Accord is not a legal binding agreement, its development should be viewed as a significant step forward as ‘it is the first time in a post-Kyoto environment where developing countries have agreed that they – not necessarily as fully as you would like or as perfectly as you would want – will allow their domestic actions to be listed in an international context’.⁸⁸

⁸⁴ United Nations Framework Convention on Climate Change (UNFCCC), *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009. Addendum. Part Two: Action taken by the Conference of the Parties at its fifteenth session* (2010).

⁸⁵ United Nations Framework Convention on Climate Change (UNFCCC), *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009. Addendum. Part Two: Action taken by the Conference of the Parties at its fifteenth session* (2010).

⁸⁶ United Nations Framework Convention on Climate Change (UNFCCC), *Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009. Addendum. Part Two: Action taken by the Conference of the Parties at its fifteenth session* (2010).

⁸⁷ *Comprehending Copenhagen: A Guide to the International Climate Change Negotiations*, November 2009, p 6.

⁸⁸ *Transcript of evidence*, 17 February 2010, p 331.

Implications for the ACT

- 5.9 The Committee notes that the sixteenth Conference of the Parties to the United Nations Framework on Climate Change will take place in Mexico in November and December 2010 and that discussion about establishing a legally binding agreement is ongoing.
- 5.10 The uncertainty in the international and national environments presents a range of challenges for the ACT and other jurisdictions across Australia.
- 5.11 The Committee was advised by Ms Hand, Australian Ambassador for Climate Change from the then Department of Climate Change that:
- We should all get started immediately. It is so apparent that this is the way the world is evolving and that this is an open question. Whether you fall into the sceptics camp or not, it is a form of risk management about energy sourcing and the way we live in terms of resource management. All over the world sensible governments are doing sensible things.⁸⁹
- 5.12 When responding to a question from the Committee about the opportunity for action by state and territory level jurisdictions, Ms Hand stated the following,
- As things stand now, there is no immediate mandated role for those layers of government but it is inconceivable, once mitigation action kicks in by governments, that those layers of government would not be involved.⁹⁰
- 5.13 The Committee was further advised about cities across the world, with state of the art ways of recycling and reducing emissions in waste, who are building relationships with cities in Asia to harness practical perspectives on action. Small towns are also developing a number of practical initiatives that may be transferable on a larger scale.⁹¹
- 5.14 The Committee supports the view that there are a number of local actions that can be implemented to reduce the adverse affects of climate change. Despite

⁸⁹ *Transcript of evidence*, 17 February 2010, p 338.

⁹⁰ *Transcript of evidence*, 17 February 2010, p 332.

⁹¹ *Transcript of evidence*, 17 February 2010, pp 338-339.

some national and international uncertainty, the ACT Government should show strong leadership on this issue.

6 CONCLUSION

- 6.1 This report should be considered in conjunction with the interim report tabled in the Assembly in September 2009. In the interim report the Committee made 31 detailed recommendations and called on the ACT Government to set ambitious targets for 2015, 2020 and 2050. Other recommendations were made in a range of areas including: improved reporting and monitoring mechanisms, detailed Government reporting on departmental sustainability performance and facilitating cooperative relationships with a range of stakeholders.
- 6.2 The final report updates information in key areas with a particular focus on the areas requiring further analysis identified in the interim report.
- 6.3 The recommendations in the final report are in addition to those set out in the interim report.
- 6.4 The Committee notes the ongoing challenge of responding to climate change and the range of mitigation strategies and policies being explored. A number of the issues raised in the course of this inquiry are multi-faceted and, could be conducted as a number of individual inquiries.
- 6.5 Although the presentation of this final report to the Assembly indicates the finalisation of the Committee's Inquiry into ACT Greenhouse Gas Reduction Targets, the Committee will continue to monitor developments in this area.

Meredith Hunter MLA

Chair

19 August 2010

APPENDIX A: SUBMISSIONS

List of submissions

The submissions received and authorised for publication in preparing the Final Report are listed below:

No.	Author
38	Mr David Gould
39	Independent Competition and Regulatory Commission

APPENDIX B: PUBLIC HEARINGS

Witnesses attending public hearings

The following witnesses attended the Committee's public hearings for the inquiry and responded to Members' questions:

17 February 2010:

- Ms Louise Hand, Australian Ambassador for Climate Change, Department of Climate Change and Energy Efficiency

APPENDIX C: Copenhagen Accord

Decision 2/CP.15
Copenhagen Accord

The Conference of the Parties,

Takes note of the Copenhagen Accord of 18 December 2009.

Copenhagen Accord

The Heads of State, Heads of Government, Ministers, and other heads of the following delegations present at the United Nations Climate Change Conference 2009 in Copenhagen:¹

Albania, Algeria, Armenia, Australia, Austria, Bahamas, Bangladesh, Belarus, Belgium, Benin, Bhutan, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Burkina Faso, Cambodia, Canada, Central African Republic, Chile, China, Colombia, Congo, Costa Rica, Côte d'Ivoire, Croatia, Cyprus, Czech Republic, Democratic Republic of the Congo, Denmark, Djibouti, Eritrea, Estonia, Ethiopia, European Union, Fiji, Finland, France, Gabon, Georgia, Germany, Ghana, Greece, Guatemala, Guinea, Guyana, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kiribati, Lao People's Democratic Republic, Latvia, Lesotho, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Maldives, Mali, Malta, Marshall Islands, Mauritania, Mexico, Monaco, Mongolia, Montenegro, Morocco, Namibia, Nepal, Netherlands, New Zealand, Norway, Palau, Panama, Papua New Guinea, Peru, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Rwanda, Samoa, San Marino, Senegal, Serbia, Sierra Leone, Singapore, Slovakia, Slovenia, South Africa, Spain, Swaziland, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Tonga, Trinidad and Tobago, Tunisia, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Uruguay and Zambia,

In pursuit of the ultimate objective of the Convention as stated in its Article 2,

Being guided by the principles and provisions of the Convention,

Noting the results of work done by the two Ad hoc Working Groups,

Endorsing decision 1/CP.15 on the Ad hoc Working Group on Long-term Cooperative Action and decision 1/CMP.5 that requests the Ad hoc Working Group on Further Commitments of Annex I Parties under the Kyoto Protocol to continue its work,

Have agreed on this Copenhagen Accord which is operational immediately.

1. We underline that climate change is one of the greatest challenges of our time. We emphasise our strong political will to urgently combat climate change in accordance with the principle of common but differentiated responsibilities and respective capabilities. To achieve the ultimate objective of the Convention to stabilize greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, we shall, recognizing the scientific view that the increase in global temperature should be below 2 degrees Celsius, on the basis of equity and in the context of sustainable development, enhance our long-term cooperative action to combat climate change. We recognize the critical impacts of climate change and the potential impacts of response measures on countries particularly vulnerable to its adverse effects and stress the need to establish a comprehensive adaptation programme including international support.

2. We agree that deep cuts in global emissions are required according to science, and as documented by the IPCC Fourth Assessment Report with a view to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius, and take action to meet this objective consistent with science and on the basis of equity. We should cooperate in achieving the peaking of global and national emissions as soon as possible, recognizing that the time frame for peaking will be longer in developing countries and bearing in mind that social and economic development and poverty

¹ Some Parties listed above stated in their communications to the secretariat specific understandings on the nature of the Accord and related matters, based on which they have agreed to be listed here. The full text of the letters received from Parties in relation to the Copenhagen Accord, including the specific understandings, can be found at <<http://unfccc.int/meetings/items/5276.php>>.

eradication are the first and overriding priorities of developing countries and that a low-emission development strategy is indispensable to sustainable development.

3. Adaptation to the adverse effects of climate change and the potential impacts of response measures is a challenge faced by all countries. Enhanced action and international cooperation on adaptation is urgently required to ensure the implementation of the Convention by enabling and supporting the implementation of adaptation actions aimed at reducing vulnerability and building resilience in developing countries, especially in those that are particularly vulnerable, especially least developed countries, small island developing States and Africa. We agree that developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries.

4. Annex I Parties commit to implement individually or jointly the quantified economy-wide emissions targets for 2020, to be submitted in the format given in Appendix I by Annex I Parties to the secretariat by 31 January 2010 for compilation in an INF document. Annex I Parties that are Party to the Kyoto Protocol will thereby further strengthen the emissions reductions initiated by the Kyoto Protocol. Delivery of reductions and financing by developed countries will be measured, reported and verified in accordance with existing and any further guidelines adopted by the Conference of the Parties, and will ensure that accounting of such targets and finance is rigorous, robust and transparent.

5. Non-Annex I Parties to the Convention will implement mitigation actions, including those to be submitted to the secretariat by non-Annex I Parties in the format given in Appendix II by 31 January 2010, for compilation in an INF document, consistent with Article 4.1 and Article 4.7 and in the context of sustainable development. Least developed countries and small island developing States may undertake actions voluntarily and on the basis of support. Mitigation actions subsequently taken and envisaged by Non-Annex I Parties, including national inventory reports, shall be communicated through national communications consistent with Article 12.1(b) every two years on the basis of guidelines to be adopted by the Conference of the Parties. Those mitigation actions in national communications or otherwise communicated to the Secretariat will be added to the list in appendix II. Mitigation actions taken by Non-Annex I Parties will be subject to their domestic measurement, reporting and verification the result of which will be reported through their national communications every two years. Non-Annex I Parties will communicate information on the implementation of their actions through National Communications, with provisions for international consultations and analysis under clearly defined guidelines that will ensure that national sovereignty is respected. Nationally appropriate mitigation actions seeking international support will be recorded in a registry along with relevant technology, finance and capacity building support. Those actions supported will be added to the list in appendix II. These supported nationally appropriate mitigation actions will be subject to international measurement, reporting and verification in accordance with guidelines adopted by the Conference of the Parties.

6. We recognize the crucial role of reducing emission from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism including REDD-plus, to enable the mobilization of financial resources from developed countries.

7. We decide to pursue various approaches, including opportunities to use markets, to enhance the cost-effectiveness of, and to promote mitigation actions. Developing countries, especially those with low emitting economies should be provided incentives to continue to develop on a low emission pathway.

8. Scaled up, new and additional, predictable and adequate funding as well as improved access shall be provided to developing countries, in accordance with the relevant provisions of the Convention, to enable and support enhanced action on mitigation, including substantial finance to reduce emissions from deforestation and forest degradation (REDD-plus), adaptation, technology development

and transfer and capacity-building, for enhanced implementation of the Convention. The collective commitment by developed countries is to provide new and additional resources, including forestry and investments through international institutions, approaching USD 30 billion for the period 2010–2012 with balanced allocation between adaptation and mitigation. Funding for adaptation will be prioritized for the most vulnerable developing countries, such as the least developed countries, small island developing States and Africa. In the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance. New multilateral funding for adaptation will be delivered through effective and efficient fund arrangements, with a governance structure providing for equal representation of developed and developing countries. A significant portion of such funding should flow through the Copenhagen Green Climate Fund.

9. To this end, a High Level Panel will be established under the guidance of and accountable to the Conference of the Parties to study the contribution of the potential sources of revenue, including alternative sources of finance, towards meeting this goal.

10. We decide that the Copenhagen Green Climate Fund shall be established as an operating entity of the financial mechanism of the Convention to support projects, programme, policies and other activities in developing countries related to mitigation including REDD-plus, adaptation, capacity-building, technology development and transfer.

11. In order to enhance action on development and transfer of technology we decide to establish a Technology Mechanism to accelerate technology development and transfer in support of action on adaptation and mitigation that will be guided by a country-driven approach and be based on national circumstances and priorities.

12. We call for an assessment of the implementation of this Accord to be completed by 2015, including in light of the Convention's ultimate objective. This would include consideration of strengthening the long-term goal referencing various matters presented by the science, including in relation to temperature rises of 1.5 degrees Celsius.

Quantified economy-wide emissions targets for 2020

[illegible]

Nationally appropriate mitigation actions of developing country Parties

[illegible]

9th plenary meeting
18–19 December 2009