



Australian
National
University

Working paper 2011/4

Participant Recommendations and Report

Climate Change and the Public Sphere Project

Deliberative Forum
ACT and Goulburn
28 – 30 May, 5 June

ANU College of Arts and Social Science

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EXECUTIVE SUMMARY

This report seeks to provide a policy relevant complement to the main body of work for the (CCPS) embodying the recommendations of citizens from the Australian Capital Region who have carefully examined a series of climate change scenarios for two specific sites in the region (ACT and Goulburn-Mulwaree), participated in an intensive three-day deliberative process, and developed their recommendations regarding what should happen in their region to prepare for the potential changes. While the scope of the research and the recommendations are regional in focus, it should be noted that the nature of the project outcomes also has implications for the governance of climate change at all levels of government.

The 'Climate Change and the Public Sphere' (CCPS) is a 3-year Australian Research Council-funded project that aims to gain a more in-depth understanding of how members of the public currently perceive and will potentially react to climate change. A key component of this project was a 3-day deliberative forum held in the Australian Capital Region. Based on the Citizens' Jury format, the forum involved a group of 35 randomly-selected citizens who had already examined potential climate change scenarios during the interview phase of the project. These participants had the opportunity to hear from an array of experts, meet with local policy makers, talk through their concerns about the impact of climate change on the region, and collectively come up with some solutions. The event generated lively and constructive discussion and producing two important outcomes, as outlined below.

The Forum Experience

Data collated by the research team indicates that the forum had a substantive impact on the way many of the participants perceive the issue of climate change. The results clearly show that the forum experience empowered many individuals, giving them far greater clarity about the science and politics of climate change. There was also a clear trend towards wanting specific and urgent action on climate change mitigation and adaptation. But, although the experience of attending the forum solidified the challenge that climate change poses for the region, it also gave many of the participants a greater sense of optimism about our capacity to respond to this challenge.

The Policy Recommendations

The participants were tasked with producing practical policy recommendations in relation to climate change. Working in small groups, collectively they developed dozens of policy recommendations across a wide range of issue areas. (A detailed summary of these

recommendations is provided in the report, and a full list is included in Appendix A.) Overall, a number of key cross-cutting themes could be seen to emerge. These included:

Fair and Equitable Incentive Pricing

Participants were adamant that tiered pricing structures for water and energy consumption should be introduced to ensure that those who waste resources pay more, but at the same time that the cost of living does not place too big a burden on the financially disadvantaged.

The Importance of Leadership

There was a strong sense that government needed to take firm leadership role in relation to climate change, not just through policies, but through clear communication and symbolic action.

Constructively Engaging with the Public

There was a feeling that climate change requires genuine buy-in from the community. As such, participants felt that more should be done to promote two-way communication between government and the public about this issue.

Planning for an Uncertain Future

Participants felt that more emphasis should be put on long-term risk management in relation to climate change, rather than the short-term “political” decisions that often get made. The threat presented by climate change is so large that politics-as-usual cannot be allowed to persist.

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1 INTRODUCTION

The Climate Change and the Public Sphere Project (CCPS) project is premised on the adage that while greenhouse gas emission reduction is a necessarily global effort, climate change adaptation is local. Local and specific impacts need to be addressed in local and specific contexts and in the face of changing perceptions over time, particularly as climate changes.¹ But the project is also sensitive to the wider national and international political context, not only because of the interdependence of adaptation and mitigation, but also because of the enabling role of the Federal Government in Australia and its leadership role regarding the issue.² Most importantly, it recognises the importance of the role of individuals and communities as part of any successful climate change strategy, and that individual expectations and responses will impact the effectiveness of adaptation.³

Moreover, if climate change is local and community based, then it is entirely appropriate that the community should have an input into the development of climate change adaptation policy. The position taken in this report is that the best way to achieve effective community input into adaptation policy is to provide citizens' with the knowledge and the environment to develop their positions.

Knowing how to best respond to climate change in the future is difficult for citizens, as it is for decision makers. To overcome some of these challenges a smaller group of participants in the CCPS project participated in a deliberative forum to develop both their understanding about climate change, and their ideas about what should be done to improve adaptation.

¹ Macintosh (2010) A theoretical framework for adaptation policy

² For example Tol (2005) Adaptation and mitigation: trade-offs in substance and methods
However, the conclusions from this research strongly disagree with Tol's assessment that National governments cannot and should not contribute to adaptation policy.

³ As does the recent Australian Government position paper on climate change adaptation.
Australian Government (2010) Adapting to Climate Change in Australia: An Australian Government Position Paper

The forum has brought together a broadly representative range of perspectives⁴, worked through different individual positions, provided evidence and the opportunity to interact with experts and to consider how the community might best move forward to meet the challenges presented by the range of potential climate futures.

To be sure, there remained much work to be done at the end of what was an intensive three-day deliberative process. But the participants, by their own reckoning, had come a long way. This report documents the process that participants contributed to and the positions that they arrived at as a result of their deliberations.⁵

1.1 The Climate Change and the Public Sphere Project

The CCPS forum was conducted as part of a wider 3-year Australian Research Council-funded project involving scholars from across social, political and natural science disciplines within the Australian National University (<http://delibdem.anu.edu.au/ccps>).

The aim of the project is to gain a more in-depth understanding of how members of the public currently perceive and will potentially react to climate change. The project employed rigorous research methods to achieve these aims including: regionally modelled climate scenarios; Q-sort opinion charting; qualitative interviewing; and a deliberative event, the results of which are the focus of this report.

1.1.1 Research Rationale

The research is based on the assumption that social adaptation to climate change depends critically on the way that humans actually respond to the challenges that it may

⁴ It should be noted that two of the participants who identified themselves as sceptics began participation in the forum but did not return for the second day. The first of these expressed a high level of stress after clashing verbally with another member of the forum. The second departed after feeling frustrated that he could not get his views across to the group (and was very unfortunately subjected to special attention by the comedy act that was intended to provide the opportunity to decompress at the conference dinner after a demanding first day). One individual who self-identified as a climate change sceptic did remain for the duration of the process, despite also clashing with another member of the group at the outset. Two of these individuals expressed disappointment that the forum did not adequately cater for their views. This raises an interesting and difficult problem for the design of the forum. The topic of the forum was supposed to be focussed on climate change adaption, which is something that is difficult to contribute to if you do not believe in anthropogenic climate forcing or indeed that the climate is changing. Despite this problem it was decided to push ahead with a wide range of perspectives among the selected participants on the grounds that, if indeed climate is changing (human induced or otherwise) it will have an effect on climate change sceptics and non-sceptics alike. As such it was important to at least give anyone an opportunity to contribute to the Forum outcomes.

⁵ For more detailed analysis of the way in which the participants transformed their positions and the wider implications for climate change governance and adaptation see Hobson and Niemeyer (2011) Public responses to climate change: The role of deliberation in building capacity for adaptive action See also Niemeyer and Hobson (2010) Is Deliberative Democracy the Solution to Governing Climate Change? Evidence from the Field

present. However, to date we have limited knowledge about how such adaptation might proceed and how it can be improved. This is in part because future societies cannot be modelled in the same way as the biophysical climate. Yet, we can go some way to addressing this knowledge gap through developing an understanding of how members of the public perceive climate change and how intentions to respond are shaped and informed by such perceptions.

Intentions by individuals to adapt are influenced by a complex array of contexts and factors, but in the broad it involves our assessments of risk, our capacity to adapt, our perceptions of responsibility and our willingness to act. Perceptions are formed from both personal experiences and the broader public sphere: that is, the multiple forms of public discourse that we are exposed to and participate in.⁶ An important contextual factor is the relationship of the community to its system of governance. Attitudes towards leaders, trust in political processes etc will all have an impact on the nature of the collective response to climate change and the ability to govern in the face of its impacts.

Yet another important factor concerns the actual nature of the public sphere — the public sphere being the everyday space in which issues are discussed at different levels from the interpersonal through to the mass media. The public may respond to newspaper headlines and talk-back radio, but the resulting dynamics are a poor foundation on which to base important policy decisions. This is because contemporary public response to news ‘sound bites’ does not adequately predict the public response to climatic (and associated economic, cultural and institutional) changes in the future. And the nature of the public discourse surrounding climate change can be counterproductive. The debate has become somewhat polarised and sensationalised, making it difficult to locate informed, well-considered opinions. The result can be a distortion of the expressed will of the public⁷ and a sub-optimal adaptive and policy outcome as decision-makers respond to distorted public signals.

The question then remains how best to find out about the prevailing nature and dynamics of the public sphere so that we are better positioned to support meaningful public engagement with the societal challenges a changing climate will bring. This is important because collective social, political and economic adaptation requires that all actors, given the opportunity, should have input into decision-making processes. Public engagement is not only important because it facilitates a far better understanding of the

⁶ See for example Krosnick, Holbrook, Lowe and Visser (2006) *The Origins and Consequences of democratic citizens' Policy Agendas: A Study of Popular Concern about Global Warming*

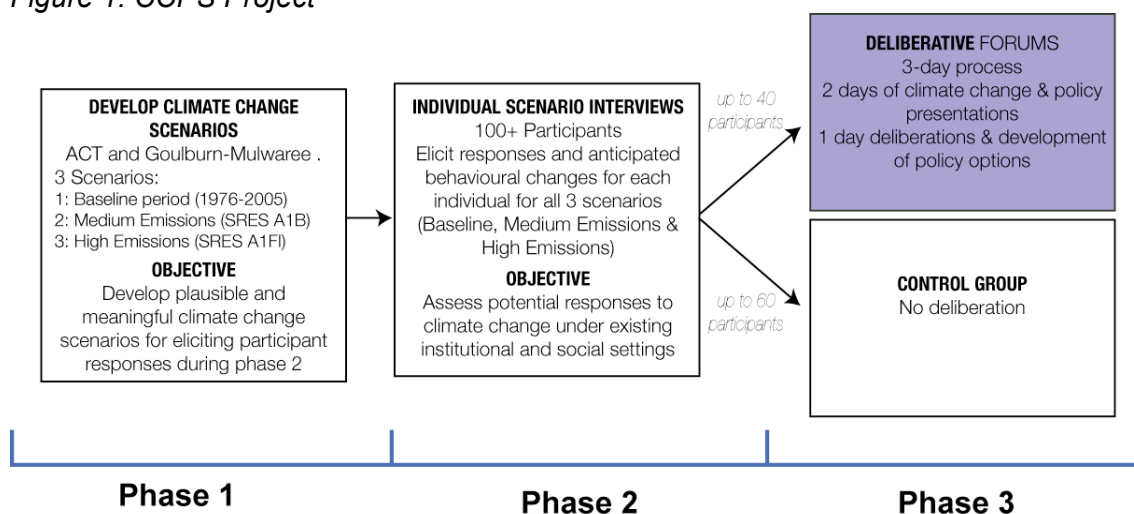
⁷ Niemeyer (2011) *The Emancipatory Effect of Deliberation: Empirical Lessons from Mini-Publics*

public mind; it is also vital in creating shared capacity and willingness to adapt to climate change both now and into the future.

1.1.2 Research Approach

The CCPS project used a number of methods to develop an understanding of how the public might respond to climate change in the future, how this response might be improved, and what decisions need to be made to prepare for that future. The research itself involved three phases — scenario development, scenario interviews and public deliberation — represented in Figure 1 and described in more detail below.⁸

Figure 1. CCPS Project



Phase 1. Developing a series of climate change scenarios covering the ACT and Goulburn-Mulwaree regions

A range of future climate change scenarios for low, medium and high emission pathways have been produced in conjunction with leading climate scientists from The Australian National University. The scenarios following different emissions pathways are based on two Special Report on Emission Scenarios (SRES) developed by the Intergovernmental Panel on Climate Change:⁹

Baseline Scenario: Average climate data around 1990

Medium Scenario: Based on the SRES A1B scenario (2050, 2100)

⁸ The scenarios were developed by a team of ANU researchers, led by Prof Michael Hutchinson. The presentations used for the scenarios is available online at <http://deliberativedemocracy.anu.edu.au/ccps/scenarios/>. There will be a forthcoming report documenting the process used to develop the scenario material.

⁹ IPCC (2001) Climate Change 2001: The Scientific Basis. Intergovernmental Panel on Climate Change Third Assessment Report

High Scenario: Based on the SRES A1FI scenario (2050, 2100)

The content of the scenarios included a series of animated maps showing changes in the climate and the potential impacts (e.g. in changes to grape production). The scenarios also included 'storylines' about the potential effects of climate change at local, national and international levels. The climate scenarios have been generated for two time slices. The 2050 time slice was used as the reference period (which participants were asked to imagine themselves living in) and the 2100 time slice was used as a reference point marking where the impact of that particular emissions trajectory was heading into the future.

Phase 2. Interviewing participants about their potential responses to each of the climate change scenarios

The scenarios were presented to over 100 research participants recruited from the public in the ACT and Goulburn-Mulwaree regions using a one-to-one interview format. Participants were first asked about their current perceptions of and responses to climate change (baseline period). The climate change scenarios were then presented, each followed by an exploration of the participant's ideas about how they might respond. These responses are formally captured using a survey technique based on Q methodology — the results of which are included in the CCPS project report.¹⁰

Phase 3. Developing a 'considered' response to potential climate change under deliberative conditions

The third, deliberative part of the research, which is reported on here, involved a sample of 35 interviewees — broadly representative of different community viewpoints mapped in phase 2 of the study — participating in an intensive three day deliberative forum, modelled on the Citizens' Jury format. The actual process of the forum is elaborated on below.

1.2 This Report and Scope of Recommendations

The objective of this report is to communicate the nature of the participants' deliberations and the recommendations that they made during the CCPS forum in respect to climate change policy — both mitigation and adaptation. The report is aimed at decision makers, as well as interested members of the policy community. Being funded by the ARC for

¹⁰ Niemeyer and Hobson Is Deliberative Democracy the Solution to Governing Climate Change? Evidence from the Field See also Hobson and Niemeyer

research purposes, the CCPS forum itself was not commissioned by any particular decision making body. However, the findings from the forum are intended to be policy relevant and decision makers involved in the forum have expressed an interest in the results.

This report contains a series of recommendations that were developed by the participants (listed in Appendix A). These range from general to the very specific, covering an array of themes relevant to climate change policy.

1.2.1 The Status of Participant Recommendations

The recent public debate regarding the proposal to run a Citizens' Assembly on climate change in the lead up to the last Federal election demonstrates that there is a widespread misunderstanding regarding the status of deliberative mini-publics and the way that the results should inform public policy. Part of this confusion stems from the fact that there is not yet agreement among deliberative scholars and practitioners about what influence such events should have. The positions vary between the view that they should directly determine policy and that they should merely inform policy.

While many of the participants in the CCPS forum hope that their recommendations will make a direct contribution, the position taken in this report is that the CCPS outcomes should at least generally inform decision-making, at a minimum using the content of the report to identify the priorities within the community as they were developed in a deliberative context under an improved understanding of the risks and consequences associated with climate change.

The citizens' participating in the CCPS forum have had an opportunity to learn about and consider the implications of potential climate change in a way that far exceeds the normal everyday experience. They also bring to the process a broadly representative array of values, beliefs and aspirations among the community that is unlikely to be found among experts. This is important because climate change involves decisions that combine knowledge with uncertainty and risk. Decision-making processes need to take into account the interaction between these, the values of society, and the dynamics between these issue components. An important aim of the CCPS project has been to

develop an understanding of these dynamics, which are reported in other publications produced by the research.¹¹

Deliberative events such as the CCPS forum bring a small but broadly representative section of the public closer to an ideal democratic process of decision-making. The improved understanding of the issue dynamics and participant recommendations covered in this report provide an important policy insight, resulting from the considerable effort of participants to learn and deliberative about climate change adaptation. Our hope is that policy makers adopt the hard work of the participants in a similarly ideal fashion.

1.3 The Content of this Report

The report culminates in the presentation of participant recommendations arising from the CCPS deliberative forum. Prior to that the context in which the participants developed their findings — the CCPS deliberative forum — is described in some detail. This is followed in the next section by an elaboration on how the participant positions evolved during their involvement in the CCPS project, which is necessary to understand the way in which public values, perspectives and aspirations might evolve as climate changes, thus permitting a dynamic view of the policy space in which decisions could be made rather than a static one. The concluding section then collates the participant recommendations across both important policy areas as well as cross-cutting themes covering important strategic areas for adaptation policy.

¹¹ Hobson and Niemeyer ; Niemeyer and Hobson (2011) Distilling Climate Change for Public Consumption: The Respective Roles of Scenarios and Deliberation; Niemeyer and Hobson (2011) Deliberation and Climate Change: What can deliberative democracy contribute to adaptive capacity?

2 THE CCPS DELIBERATIVE FORUM

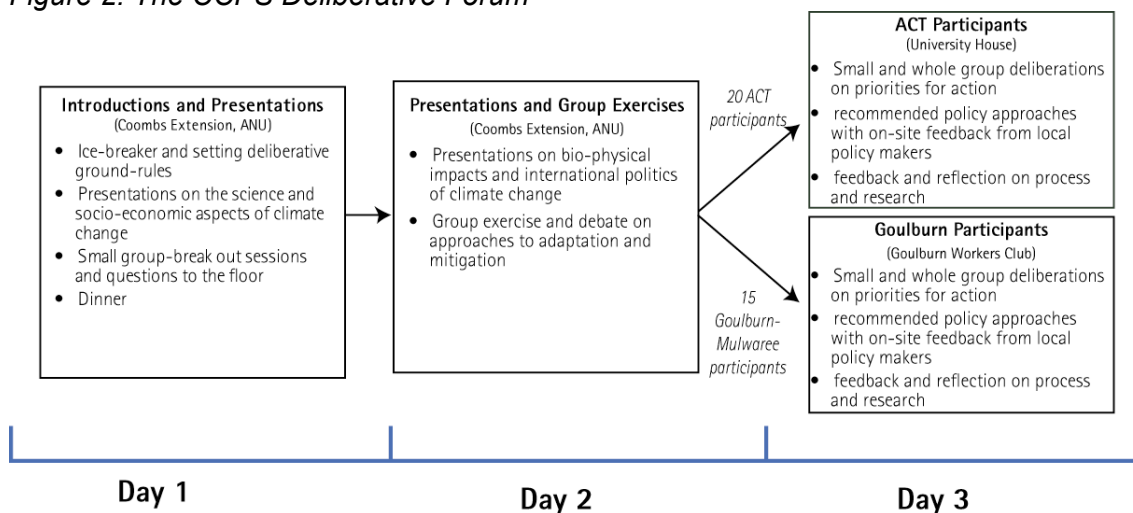
The Climate Change and the Public Sphere Deliberative Forum involved a diverse group of 35 citizens. They were part of 40 selected from the 104 who participated in the climate change scenario interviews (Phase 2) on a 'discursively representative' basis¹² — that is, the deliberative group as a whole included the full range of perspectives in relation to climate change policy.

The forum involved an intensive 3-day deliberative forum that was modelled on the Citizens' Jury format. Participants had the opportunity to hear from and interact with experts as well as deliberate together to address a common problem. In this case, the charge given to participants was to develop recommendations that can help improve the adaptive response to climate change.

The underlying research purpose of this event was to bring citizens together to discuss issues related to climate change mitigation and adaptation and investigate how experiences involving a high level of social capital and information affected their perspectives. It was also intended to produce policy recommendations arising directly from participant deliberations.

The CCPS deliberative forum was designed to enable participants to learn more about various aspects of climate change from a range of experts and have an opportunity to ask questions of these experts and to reflect upon their own responses and opinions with other participants. The participants worked together to formulate recommendations for decision-makers that will facilitate adaption to the projected changes in the ACT and Goulburn-Mulwaree region. A detailed timetable from the forum can be found in Appendix B, with a summary of the process below in Figure 2.

¹² Dryzek and Niemeyer (2008) Discursive Representation

Figure 2. The CCPS Deliberative Forum

As the forum brought together a diverse range of participants from across both regions, the broad mix of perspectives ensured a lively and energetic discussion. But, although the beginning of the process was sometimes difficult in terms of negotiating very different perspectives, what ultimately stood out was the constructive and respectful nature of the deliberations.¹³ The very nature of this outcome demonstrates that it ought to be at least possible to improve the discussion surrounding climate change in the broader public sphere, although reproducing this kind of ideal on a wider scale is a considerable challenge.¹⁴

The opportunity to engage in the deliberative forum had a significant effect on many participants. Almost all found participating in the forum to be a challenging, exhausting but immensely rewarding experience. The event imbued many with a new sense of optimism about climate change and our capacity to respond, and it even inspired some to take personal action in relation to this pressing issue.

During the forum, participants learnt more about various aspects of climate change from a range of experts and reflected upon their own responses and opinions with other participants. The participants worked together to formulate recommendations for

¹³ It should be mentioned that two participants departed the process at the conclusion of day 1. One sceptic left because of the stress involved with dealing with the different perspectives and the way in which some participants initially interacted with those perspectives. Another, deep climate sceptic left the process without providing a reason, but apparently did so because of a perception that persons' particular perspective was not getting enough of an airing as a minority view. Nevertheless, a number of climate sceptics remained to participate in the forum and, following a number of robust exchanges within particular sections of the group, a greater level of tolerance and reciprocal understanding of those perspectives was finally achieved. But it should be noted that it took much of the three days of the to get to that point, such is the difficult nature of the climate change issue. This dynamic is covered in greater detail in the CCPS project report.

¹⁴ See Niemeyer The Emancipatory Effect of Deliberation: Empirical Lessons from Mini-Publics

decision-makers that facilitate adaptation to the projected changes in the ACT and Goulburn-Mulwaree regions. Participants from both areas worked together for the first two days of the process, before being divided into two 'regional' groups on the third day. The idea behind the separation of the groups was to make recommendations that were specific to each region. (However, given the strong level of overlap, it has been decided to collate the recommendations together; see below.)

During the third day of the process, participants began the process of developing broad policy recommendations related to climate change adaptation. The issues were then divided between the groups (i.e. one issue theme per table), and participants could choose which single issue they wanted to focus on between water; energy; land management; and society and governance. After the initial small-group deliberation, local policy-makers addressed each recommendation and gave feedback to each group. Afterwards, the groups revised the recommendations and then, as a whole group, voted on which ones were acceptable enough to all to proceed through to the report. It is these recommendations that are covered at the end of this report.

3 PARTICIPANT RECOMMENDATIONS

This section is dedicated to the actual recommendations put forward by participants in the three-day CCPS Deliberative Forum on climate change policy. It has already been noted above that participants emphasised mitigating to avoid climate change, but accepted that preparing for adaptation was also an essential and necessary priority.

The process of developing recommendations was a challenging part of the deliberative forum. With the issue of climate change covering such a wide scope and the participants having absorbed an enormous amount of information over the preceding two days, it was very demanding to then translate this knowledge into workable policies that were neither too broad to be instructive nor too specific. Participants were briefed about how they might pitch their recommendations to make them useful for policy makers. They also had the benefit of getting feedback from policy makers after their first round of deliberation on the recommendations that had been developed at that point.

The result is a series of recommendations that share many overlapping themes. There was not sufficient time to comprehensively work through all the recommendations during the deliberative forum, so the CCPS project team has worked on organising and condensing the recommendations. This report was then fed back to participants, who were given the opportunity to comment during a follow up meeting in December 2010.

It was originally intended to provide a separate report for the Goulburn-Mulwaree and ACT participants — having developed their recommendations on separate days. However, given the strong overlap between the outcomes from the two groups it was decided to combine the report. Where a particular recommendation relates more strongly to one of the two case study areas, this will be highlighted in the text.

Before going on to discuss the recommendations at length, it is important to reiterate a caveat. The recommendations should not be read as a list of demands. In some cases, there will be logistical and even constitutional barriers to the implementation of certain recommendations — issues that could not be dealt with given the time and resource constraints of the forum. A number of recommendations are directly actionable, others are already in the process of implementation. However, all the recommendations act as a guide to the nature of citizens' concerns and their preferences in terms of the direction of policy action.

3.1 Cross-cutting themes

There were a number of cross-cutting themes that came up in relation to all these issues. These include:

3.1.1 Fair and Equitable Incentive Pricing

There was general acceptance that, in order to manage water and energy supplies, pricing should be an important mechanism for capping demand. However, participants were adamant that this should not result in across-the-board price rises, as this would unfairly punish the socio-economically disadvantaged. Instead, there was a call for tiered (described in the deliberations as “dual-tariff”) pricing schemes that would financially punish those who waste resources without burdening those who do not. It was felt that such a scheme would be an equitable way to produce effective outcomes in terms of reducing energy and water consumption.

3.1.2 The Importance of Leadership

The relative importance of government versus community involvement has already been discussed in the previous section. Clearly both are important to participants. Moreover, both were seen as complements rather than substitutes as part of a comprehensive approach to climate adaptation. Rather than crowd out community-based initiatives, the way in which participants referred to the involvement of government often related to an important enabling role. Leadership in particular was raised as being important; be it in the form of soft forms of governance (simply providing leadership through communication) through to leading the way via the uptake and demonstration of adaptive technologies from which the community can base their evaluations and decisions. Indeed there appears to be a dynamic in which greater leadership by government ultimately facilitates a lower level of demand on government resources as part of the adaptive process.

3.1.3 Constructively Engaging the Public

There was a feeling that climate change represents such a significant threat that it could rip apart the very fabric of society. As such, the participants believed that in order to deal with this challenge effectively, government adaptation efforts will require genuine buy-in from the community. In particular, participants felt that more should be done to promote two-way communication between government and the public about climate change, so that citizens were more aware of the issues and could have more of a say in regard to policy direction.

3.1.4 Planning for an Uncertain Future

Participants felt that more emphasis should be put on long-term risk management in relation to climate change. There was a sense that decision making on issues such as land and water management often reflects short-term thinking, and can be affected by

political interests. Instead, participants believe that climate change presents such a large threat that politics-as-usual cannot be allowed to persist. The message is that although there may be immediate financial and political costs associated with purchasing new technology, limiting land development and so on, these investments will reap long-term benefits.

3.2 Recommendations by Theme

The recommendations put forward by participants focus on a few key issues. Water — in particular, water conservation — was an issue of great concern for all participants from the ACT and particularly the Goulburn-Mulwaree region. Energy was also an important topic, and reflects the fact that participants were very keen to consider ways in which greenhouse emissions can be reduced as well as measures directly related to climate adaptation.¹⁵

The third theme covers planning and land management, which was seen as a critical area in respect to adaptation, as well as mitigation of climate impacts. Finally, there was a strong level of concern in respect to how government should deal with the climate change issue as well as engage with the public.

3.2.1 Water

Water was the most important issue across both study areas. Although some recommendations made by participants aimed to increase water supply, the main focus was on mechanisms for making savings in water use. Many saw considerable scope for increased efficiency.

a) Incentives

Both regions showed interest in using market mechanisms to achieve socially desirable outcomes in relation to water management. There was a view that the current approach (at least in the ACT) did not provide the correct incentives to innovate and/or use water efficiently.

Recommendation 1. Implement a dual tariff water pricing system

One recommendation that emerged in both regions was the use (or extension) of a pricing system incorporating elements of an equitable water allocation combined with a charge. In this approach, a set amount of water is applied for an annual fee, beyond

¹⁵ An exercise toward the end of day 2 where participants provided a relative weighting regarding whether policy should be focussed on mitigation to avoid the impacts of climate change or adaptation to the effects of climate change fell firmly in favour of mitigation. See the CCPS report for a more detailed analysis.

which water is charged on a volumetric basis. The key is that the volumetric charge is sufficiently punitive to achieve water use reductions. “Dual tariff” was the working name used for the scheme by the groups.

“You're allowed to have so many thousand litres per billing period and perhaps that's free and anything above that you pay a premium so if you want to use it for your garden fine but you pay.”

Recommendation 2. Introduce subsidies/tax benefits for water efficiency

Both regions also stressed the importance of incentive schemes that allowed for an economically viable means for individuals and households to reduce their overall water consumption. This might include subsidising the costs involved in installing and/or running water tanks, grey water use appliances, and water efficient appliances.

b) Smart Planning

Participants also believed that effective planning could achieve significant efficiency gains in the management of water. It was felt that policies were needed to reduce current water consumption and prepare for future crises.

Recommendation 3. Enforce environmental codes for new developments (GM)

There was a good deal of emphasis on the need to either upgrade or more vigorously enforce building codes in order to improve water use efficiency and facilitate the recycling of water (either on-site or centrally). Participants were generally adamant that codes should be strictly applied to new developments, with existing housing and infrastructure given greater discretion to implement water efficiency improvements.

Recommendation 4. Implement soil management strategies (GM)

Many participants felt that soil management was a key issue both for reducing water use and ensuring agricultural productivity in the region. Specific proposals included: initiating a lime bounty; developing clear guidelines for gardening/agriculture; and reinstating the Soil Conservation Service to oversee this issue.

Recommendation 5. Integrate water management plans with other jurisdictions (GM)

In Goulburn, there was a feeling that the region is in a particularly vulnerable position both in terms of the way water resources are currently managed, and its potential exposure to severe droughts. Specific proposals included: negotiating appropriate compensation with downstream authorities; and establishing emergency pipeline sources between towns/cities.

c) Innovation and Technology

Many participants felt that there should be greater investment in new water management technologies. In fact, most felt that this could be an area of growth, as ideas and products could potentially become valuable exports.

Recommendation 6. Apply existing water efficiency / water capture technologies

Many participants felt that, due to short-term thinking, not enough was being done to take advantage of existing technologies that would greatly improve our ability to reduce water consumption and increase water resources. Specific proposals included: installing smart meters in homes (ACT); using moisture probes in public gardens/agricultural land (GM); and assisting innovative water capture eg. dam blankets, fog nets (GM).

Recommendation 7. Invest in Research and Development

Research and development was a key topic of discussion for participants in both regions. Ideas ranged from developing new technologies and systems to simply working out how to implement current technologies and systems more efficiently. Specific proposals included: researching the most viable and energy/water efficient placement of water tanks (GM); conducting studies into the possibility of sewer mining (ACT); and observing/coordinating with authorities in similarly drought-prone regions (GM).

d) Citizen Engagement

Participants highlighted the importance of their role — as citizens — in reducing water consumption. However, they also expressed a high degree of confusion about what they might actually do to help. The key, they argue, is effective communication.

Recommendation 8. Provide clear, detailed, and practical messages on water use

Many participants were frustrated because, while aware of the water efficiency message, they did not know how it applied to their daily lives. Proposals for making the message more specific and concrete included: having local authorities conduct water efficiency assessments of homes and provide advice on improvements (ACT); developing detailed guidelines for acceptable water usage per household in conjunction with smart meters (ACT); and providing advice on gardening methods.

“We need to be told more of the detail. I just feel that with the drought management strategy, we’ve been told not to use water, but we haven’t been told enough of the really intelligent stuff.”

Recommendation 9. Use innovative communication strategies (ACT)

Participants realised that it is hard to ensure that messages about water efficiency get through to people, as many “tune out” from or simply miss public promotions. Therefore,

an innovative and holistic campaign is needed. Specific proposals included: using a variety of media (mail outs, TV ads, billboards, school campaigns etc); and using artists and sportspeople to champion messages.

e) Government Leadership

As well as being responsible for implementing the new policies and providing the effective communication outlined above, there was also a feeling that government needs to take a symbolic leadership role.

Recommendation 10. Lead by example

Participants felt that government should lead the way by conspicuously reducing water consumption. Proposals included: adopting water consumption technologies; creating public demonstration gardens (ACT); and reinvesting WAC funds in water management (ACT).

“You spoke about the Xeriscape Gardens...What about if the government ran its own buildings and had that sort of sustainable garden? So they are not just saying 'look, here's an example of what you could do', they're saying 'we are doing it.'”

3.2.2 Energy

This issue generated a lot of debate for both regions. As with the discussions on water, participants debated whether governments should try to implement strategies that lessened energy use, or if they should focus on finding new sources of energy. The majority of participants from Goulburn and ACT supported initiatives that looked to decrease energy use for households, industry and government.

a) Incentives

As with water, it was thought that a market mechanism that rewards conservation and punishes excessive use could be a very effective way to reduce overall energy use.

Recommendation 11. Implement a tiered pricing system¹⁶

This proposed scheme is similar to the dual tariff on water (see above). There is an equitable allocation charged at a low base rate. Above the allocation there is a significant increase—high enough to discourage use. Participants recognised that there may already be a system in place. If so, they argued there should be an adjustment to the tariffs, increasing the top rate for electricity and adding an extra tier (a triple tier

¹⁶ This specific recommendation emerged in Goulburn only, but a similar sentiment was expressed in the ACT.

system). In addition, a monitoring system should be built in so people can check their usage.

“I don’t want someone to be penalised who is being sensible by suddenly upping their bill. I want to say ‘Look, you who use a gross amount of electricity are going to pay a lot.’”

b) Smart Planning

There was a feeling that low energy efficiency was a problem in most homes and businesses. Accordingly, participants suggested that stricter regulations should be in place to make new developments (both commercial and residential) more energy efficient. Likewise, older buildings and homes should be retrofitted wherever possible.

Recommendation 12. Introduce a system of mandatory / desirable building standards (GM)

These standards would be applied to all new buildings. Specific suggestions for what the appropriate standards might consist of included: a big reduction of the need for artificial lighting, heating and cooling; a system of central electricity management (in households) combined with a monitoring system; and the use of recycled building materials.

c) Innovation and Technology

As they did with water, participants felt that the potential for innovation in the energy sector was being squandered. There was also concern about inequitable access to technologies and strategies.

Recommendation 13. Encourage innovation and knowledge sharing

Participants thought more effort and resources should be put into developing and pooling expertise nationally so that local authorities can then select the best energy efficiency initiatives for their own region. Specific proposals included: cooperating with other Australian authorities; financially assisting the development and implementation of new technologies; and conducting research overseas and in the community on energy efficiency.

“Researchers have to sell their innovations overseas because there’s no support for that sort of thing within Australia, and we end up losing money from that.”

d) Citizen Engagement

Once again, participants felt that it was vital for citizens to be engaged via effective communication and education. Only through a multiplicity of channels/programs, they thought, would messages get through.

Recommendation 14. Disseminate all information (national, state, local) to the public

This suggestion is not just that governments should share information with each other, but that such information should become publically available through online publications, TV, newspaper and radio announcements and mail-outs, education campaigns etc.

e) Government Leadership

As with water, there was a consensus that actions speak louder than words. The most effective way for government to lead on this issue is to act as a role model.

Recommendation 15. Government should adopt solar power and solar water heating

Participants thought it essential that councils/governments be seen to utilize renewable energy sources like solar. However, it was agreed that any initiative should be sensitive to heritage issues, judged on a case-by case basis rather than as a mandatory program.

“I think it would be good for government to take the lead symbolically on conservation, such as... to have a tree with solar panels [like in Copenhagen]... even if it didn't produce anything, it would stimulate ideas.”

3.2.3 *Land Management*

The issue of land management emerged in both the ACT and GM discussions. In general, it was felt that because land management cuts across a number of areas of climate change concern—especially biodiversity, agricultural productivity, and water management—it is something that needs to be carefully addressed.

a) Smart Planning

Participants thought the issue of planning to be crucial to land management. In general, it was felt that some prior planning decisions had displayed poor judgment and created long-term problems in relation to agricultural productivity in particular.

Recommendation 16. Develop and enforce an effective long-term zoning strategy¹⁷

Some participants felt that the existing zoning provisions were either inadequate or being implemented in the wrong way. They felt more needed to be done to promote agricultural efficiency and limit the geographic spread of development. Specific proposals included: limiting small landholdings on arable land; creating a zone specifically for agriculture; allocating non-arable land for development; and bundling infrastructure to restrict damage to property.

“Stop these people from having their ten and forty acre blocks because they're ruining agricultural land throughout.”

¹⁷ Once again, this specific recommendation emerged in Goulburn but a similar sentiment was expressed in the ACT,

Recommendation 17. Develop corridors for flora and fauna (GM)

In addition, there were concerns about local species dying off due to climate change. As such, it was felt that, in cooperation with neighbouring authorities, steps should be taken to develop and protect ecological corridors.

b) Innovation and Technology

With climate change likely to disrupt local vegetation and agriculture, some participants wanted investment in research and development in this area.

Recommendation 18. Allocate funding for research and action on vegetation (GM)

It was suggested that, instead of replacing native trees as they die out, research should be done to work out what vegetation will thrive in the climate the region is likely to have under a climate change scenario.¹⁸

3.2.4 Society & Governance

In addition to their concerns about the impacts of climate change on common resources, what came through very strongly in the forum was a sense of alarm about how climate change might affect society. It was felt that there would have to be major changes in the region's health service, economy, and public transport delivery. More fundamentally, many participants felt that the threat of climate change should actually change the way we go about making and implementing collective decisions.

a) Incentives

The impact of climate change on society was a particular concern among participants in relation to the provision of health services. Participants feared that the health service might become overwhelmed in future due to the health issues caused by climate change. As such, they argued that more focus should be placed on preventative health, of which a key plank would be providing incentives for individuals to make healthier lifestyle choices.

Recommendation 19. Provide incentives for individuals to increase their resilience (ACT)

It was thought that steps should be taken to reduce the burden on government resources by promoting health and illness prevention. Specific proposals included:

¹⁸ It is notable that this is not dissimilar to a 'whole of landscape' perspective that emerged out of a deliberative engagement by the ACT Commissioner for the Environment. See Niemeyer (2010) Analysis Of The Act Tree Management Opinion Charting Exercise: Conducted as part of the Tree Investigation Strategic Communications Workshop

increasing financial incentives for preventative health activities e.g. gym memberships; and increasing subsidies for preventative health consultations.

b) Smart Planning

Given the dramatic changes expected to occur in the coming years, participants felt that thoughtful planning could help to cushion the social ill-effects and put the region in a position to thrive in the future.

Recommendation 20. Facilitate the use of green transport

Participants felt that current transport habits (with most individuals using private cars) were unsustainable. Instead, they believe we will have to better utilize green alternatives. Specific proposals in the ACT included: providing energy efficient public transport (possibly light rail); building on existing bike path networks (and making them more pleasant to ride); and campaigning for equitable and safe road use for pedestrians/cyclists/public transport users.

Recommendation 21. Create attractive pathways for a low carbon workforce (ACT)

Participants were concerned about the economic impacts of climate change, with many jobs being made obsolete in the near future. Accordingly, they felt efforts should be made to identify and provide training and support for jobs that are going to be needed in a low carbon future.

c) Citizen Engagement

Participants were adamant that, in order for the necessary climate change adaptations to be implemented in future, citizens would need to be involved in a deep and meaningful way. They were particularly concerned about the potential impact of climate change on social capital, so these suggestions were thought to both improve policymaking and boost “community spirit.”

Recommendation 22. Promote initiatives that incorporate citizens in climate change planning (GM)

It was felt that citizens should be actively included in climate change policymaking to get them thinking about the issue in new ways. Specific proposals included: creating education programs, having special events/days (eg. “Plant a tree day”), communicating through various media (TV, radio, internet, and noticeboards etc.), holding small neighbourhood based focus groups, and re-initiating local work groups to implement policies.

“We need to get almost everyone involved in deliberative democracy...especially on an urgent issue like climate change.”

Recommendation 23. Create an information tool that facilitates action between governments and the people (ACT)

Participants felt there should be a 'one stop shop' via website or phone hot-line where people can obtain advice / knowledge about climate change. They argued it should act as a non-partisan, two-way communication channel between governments and citizens and provide a trusted, centralised and comprehensive information base for mitigation and adaptation to climate change.

"No other issue is as important; it is a state, national and international issue which needs resources and personnel. The issues raised would be recorded and would educate governments about what people want. At the same time this facilitation and consultation would educate people and act as an information resource for everyone through different media channels."

3.2.5 Government Leadership

As with specific issues like water and energy, it was felt that the most important contribution government could make was to lead by example. Through demonstration and early adoption of green technologies and systems, government could show its commitment to dealing with climate change.

Recommendation 24. Construct a 'climate change adaptation' display village (GM)

This display centre would act as a 'one-stop shop' that brings together local and regional businesses, and a government information hub to showcase environmentally friendly methods of housing construction, energy-efficient / water-efficient appliances, advice on how individuals and communities can adapt to climate change within the home etc.

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APPENDIX A. FULL LIST OF RECOMMENDATIONS

While the summary report above attempts to synthesize and distil the participants' recommendations into a few key points, this appendix lists the full range of policy options raised in the forum. Some ideas were opposed by certain members of the group, in which case they are followed by "minority dissent." Other ideas received strong support from a few members but opposition from the majority, in which case they are followed by "minority view." Ideas relating specifically to one region are marked ACT or GM.

A.1. List of Main Recommendations

Water

Recommendation 1.	Implement a dual tariff water pricing system	13
Recommendation 2.	Introduce subsidies/tax benefits for water efficiency	14
Recommendation 3.	Enforce environmental codes for new developments	14
Recommendation 4.	Implement soil management strategies	14
Recommendation 5.	Integrate water management plans with other jurisdictions (GM)	14
Recommendation 6.	Apply existing water efficiency / water capture technologies	15
Recommendation 7.	Invest in Research and Development	15
Recommendation 8.	Provide clear, detailed, and practical messages on water use	15
Recommendation 9.	Use innovative communication strategies	15
Recommendation 10.	Lead by example	16

Energy

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Recommendation 13.	Encourage innovation and knowledge sharing	17
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Land Management

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Recommendation 18.	Allocate funding for research and action on vegetation	19

Society & Governance

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Government Leadership

Recommendation 24.	Construct a 'climate change adaptation' display village.	21
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APPENDIX B. CCPS FORUM TIMETABLE

CCPS Deliberative Forum Program of Sessions



27/05/2010

Day 1 Friday 28 May (ACT & Goulburn Participants)

Sess. No.	Session Name	Start Time/ Duration/ Location	Description of Session	Speakers/Session Leader
	Bus Pick up in Goulburn	7:00 AM		Simon Niemeyer , CCPS Lead Researcher
		Greengrocers on Clifford		
1	Registration	9:00 AM 30Min Coombes Extension Lecture Theatre 1.04	Registration desk will be open and refreshments available	Imogen Ord-Evans , CCPS Team; Elaine Dos Santos , CCPS Team; Juliana Dias , CCPS Team
2	Introductions	9:30 AM 30Min Coombes Extension Lecture Theatre 1.04	Icebreaking Exercise, Introductions of both Research Team and Participants	Kath Fisher , CCPS Facilitator; Simon Niemeyer , CCPS Lead Researcher
3	Welcome from Decision Makers	10:00 AM 10Min Coombes Extension Lecture Theatre 1.04	A welcome to participants from key decision makers relevant to climate change adaptation.	Simon Corbell , Attorney General, ACT Minister for the Environment
4	Introduction to Research	10:10 AM 15Min Coombes Extension Lecture Theatre 1.04	Describing the Research Project and Setting the Scene	Simon Niemeyer , CCPS Lead Researcher
5	Opinion Charting	10:25 AM 45Min Coombes Extension Lecture Theatre 1.04		Simon Niemeyer , CCPS Lead Researcher
6	Morning Tea	11:10 AM 20Min Coombes Extension Lecture Theatre 1.04		
7	Public Responses to Climate Change	11:30 AM 15Min Coombes Extension Lecture Theatre 1.04	Findings of the research so far	Simon Niemeyer , CCPS Lead Researcher
8	Intro to deliberative processes	11:45 AM 15Min Coombes Extension Lecture Theatre 1.04		Kath Fisher , CCPS Facilitator
9	Guidelines for Participation	12:00 PM 30Min Coombes Extension Lecture Theatre 1.04		Kath Fisher , CCPS Facilitator
10	Introduction to Climate Science I: Understanding Risk and Predictions	12:30 PM 30Min Coombes Extension Lecture Theatre 1.04	Introduction to the basic science of coming up with climate change predictions and what the science actually tells us.	Mark Stafford Smith , Science Director, Climate Adaptation Flagship, CSIRO; Will Steffen , Executive Director, Climate Change Institute; Aust Gov Chief Climate Advisor
11	Lunch	1:00 PM 60Min Uni House Drawing Room		
12	Introduction to Climate Science	2:00 PM 20Min Coombes Extension Lecture Theatre 1.04	Overview of the Science behind climate change.	Will Steffen , Executive Director, Climate Change Institute; Aust Gov Chief Climate Advisor
13	Climate Change Scenarios: Use and Limitations	2:20 PM 20Min Coombes Extension Lecture Theatre 1.04	Overview of Climate Change and Probabilities of what is likely to happen.	Michael Hutchinson , Professor of Spatial and temporal analysis of environmental data and digital terrain analysis; Janette Lindesay , Associate Professor, Fenner School for Society and Environment - ANU; Will Steffen , Executive Director, Climate Change Institute; Aust Gov Chief Climate Advisor
14	Small Group Deliberation	2:40 PM 25Min Coombes Extension Lecture Theatre 1.04	Small group discussion regarding the presentations and development of questions.	Jacqui Russell , ; Bora Kanra , ; John Boswell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Imogen Ord-Evans , CCPS Team
15	Climate Change Panel Session	3:05 PM 20Min Coombes Extension Lecture Theatre 1.04	Panel session fielding questions regarding the presentations covering the "Understanding Climate Change" theme.	Will Steffen , Executive Director, Climate Change Institute; Aust Gov Chief Climate Advisor; Michael Hutchinson , Professor of Spatial and temporal analysis of environmental data and digital terrain analysis; Janette Lindesay , Associate Professor, Fenner School for Society and Environment - ANU; Mark Stafford Smith , Science Director
16	Afternoon Tea	3:25 PM 15Min Coombes Extension Lecture Theatre 1.04		
17	Economic Impact of Climate Change	3:40 PM 20Min Coombes Extension Lecture Theatre 1.04	Economic costs and benefits associated with climate change.	Steve Hatfield-Dodds , Assistant Secretary of the Analysis and Strategic Projections branch of the Department of Climate Change and Energy Efficiency
18	Health Impact	4:00 PM 30Min Coombes Extension Lecture Theatre 1.04	Health impacts associated with climate change.	Liz Hanna , Co-Convenor, and Coordinator Rural Impacts Research - ANU
19	Social/Psychological Impacts	4:30 PM 20Min Coombes Extension Lecture Theatre 1.04	Psychological and cultural impacts associated with climate change.	Richard Eckersley , Australia 21
20	Small Group Deliberation	4:50 PM 20Min Coombes Extension Lecture Theatre 1.04	Small group discussion regarding the presentations and development of questions.	Jacqui Russell , ; Bora Kanra , ; John Boswell , ; Mike Bennell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Imogen Ord-Evans , CCPS Team
21	Panel Session: Climate Change Impacts	5:10 PM 20Min Coombes Extension Lecture Theatre 1.04	Panel Session covering presentations on Climate Change impacts in the greater Capital Region. Fielding questions from participants.	Liz Hanna , Co-Convenor, and Coordinator Rural Impacts Research - ANU; Steve Hatfield-Dodds , Assistant Secretary of the Analysis and Strategic Projections branch of the Department of Climate Change and Energy Efficiency ; Richard Eckersley , Australia 21
23	Dinner	6:30 PM 150Min Uni House Common Room	Dinner at University House, including entertainment by Rod Quantock and short speeches by other dignitaries.	Rod Quantock , Comedian, educator

Day 2 Saturday 29 May (ACT & Goulburn Participants)

27	Water Impact	9:20 AM 20Min <small>UHI House Common Room</small>	The impact of Climate Change on Rainfall and Water Availability in the greater Capital Region	Leigh Crocker , Manager, Water Division. ACTEW; Carmel Pollino , Research Fellow, Fenner School for Society and Environment; Tony Jakeman , Director, iCAM, Fenner School
28	Fire Impact	9:40 AM	The impact of Climate Change on fire risk in the greater Capital Region	Geoff Cary , Senior Lecturer in Fire Science - ANU
29	Ecological Impact	9:55 AM	Presentation on the potential ecological impacts associated with climate change.	Brendan Mackey , Director, ANU Wild Country Research and Policy Hub
30	Agricultural impacts	10:10 AM	Agricultural impacts	Steve Crimp , Climate Impacts Analyst - CSIRO; David Dumaresq , Senior Lecturer, Sustainable Agricultural Systems, Fenner School
31	Small Group Deliberation	10:30 AM	Small group discussion regarding the presentations and development of questions.	Jacqui Russell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Simon Niemeyer , CCPS Lead Researcher; John Boswell , ; Imogen Ord-Evans , CCPS Team
32	Panel Session: Climate Change impacts	10:50 AM	Panel Session covering presentations on Climate Change impacts in the greater Capital Region. Fielding questions from participants.	Brendan Mackey , Director, ANU Wild Country Research and Policy Hub; Leigh Crocker , Manager, Water Division. ACTEW; Geoff Cary , Senior Lecturer in Fire Science - ANU; Carmel Pollino , Research Fellow, Fenner School for Society and Environment; David Dumaresq , Senior Lecturer, Sustainable Agricultural Systems, Fenner School; Steve
33	Morning Tea	11:20 AM		
34	The Global View: Economics	11:50 AM	Overview of prospects for Global mitigation of and adaptation to climate change from an economic perspective	Frank Jotzo , Research Fellow - Resource Management in the Asia-Pacific Program - ANU
35	The Global View: Politics	12:05 PM	The objective here is to give participants a good sense of the realities of whatever choices they are going to make in terms of prioritization.	Hayley Stevenson , Postdoctoral Fellow - Political Science program - ANU
36	Sorting out our priorities	12:20 PM	What are the big picture priorities (mitigation, adaptation)	Janette Lindsay , Associate Professor, Fenner School for Society and Environment - ANU
37	Small Group Deliberation	12:35 PM	Small group discussion regarding the presentations and development of questions.	Jacqui Russell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Simon Niemeyer , CCPS Lead Researcher; John Boswell , ; Imogen Ord-Evans , CCPS Team
38	Panel Sessions: Adaptation and mitigation: differences and similarities	12:55 PM	Panel session covering the issues of global climate mitigation and the relative emphasis on mitigation and adaptation.	Hayley Stevenson , Postdoctoral Fellow - Political Science program - ANU; Frank Jotzo , Research Fellow - Resource Management in the Asia-Pacific Program - ANU; Janette Lindsay , Associate Professor, Fenner School for Society and Environment - ANU
39	Lunch	1:15 PM		
40	Introduction to Allocation Exercise	2:15 PM	General introduction describing what is going to happen in the allocation exercise	Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Simon Niemeyer , CCPS Lead Researcher
41	What is this thing called priority?	2:25 PM	Small group discussion regarding the nature of the priorities that need to be considered and who should be responsible for doing what in terms of mitigation and adaptation	Jacqui Russell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Simon Niemeyer , CCPS Lead Researcher; John Boswell , ; Imogen Ord-Evans , CCPS Team
42	Allocation Priority Exercise	2:45 PM	Participants vote on priorities of mitigation and adaptation from a number of priority 'identities' ie. self/community/government/business	
43	Afternoon Tea	3:05 PM		
44	Small Group Reflections	3:25 PM	Small group session reflecting on the process so far and hopes for the rest of the process.	Jacqui Russell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Simon Niemeyer , CCPS Lead Researcher; John Boswell , ; Imogen Ord-Evans , CCPS Team
45	Whole Group Reflections	3:50 PM	Group Session reporting back the small group discussion regarding the forum so far.	Kath Fisher , CCPS Facilitator

Day 3 Sunday 30 May (Goulburn Participants Only)

Sess. No.	Session Name	Start Time/ Duration/ Location	Description of Session	Speakers/Session Leader
47	Morning Introduction	9:00 AM 15Min Goulburn Workers Club Function Room		Kath Fisher , CCPS Facilitator
48	Housekeeping	9:15 AM 5Min Goulburn Workers Club Function Room		Kath Fisher , CCPS Facilitator
49	Briefing for the Day	9:20 AM 10Min Goulburn Workers Club Function Room	Summary of outcomes so far and introduction to the rest of day.	Simon Niemeyer , CCPS Lead Researcher
50	Identifying Key Impacts	9:30 AM 30Min Goulburn Workers Club Function Room	Group identification of important climate impacts requiring adaptation.	Jacqui Russell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Imogen Ord-Evans , CCPS Team; Simon Niemeyer , CCPS Lead Researcher
51	Reporting Key Impacts	10:00 AM 40Min Goulburn Workers Club Function Room	Reporting back to the larger group of the key impacts identified in the breakout groups.	Kath Fisher , CCPS Facilitator
52	Morning Tea	10:40 AM 20Min Goulburn Workers Club Function Room		
53	Overview of Policy Space: What can be done?	11:00 AM 10Min Goulburn Workers Club Function Room	Overview of what could be possible in terms of policy actions to address climate challenges.	Simon Niemeyer , CCPS Lead Researcher; Maxine Cooper , ACT Commissioner for Sustainability and Environment and Climate Change
54	What is being done in Goulburn-Mulwaree/NSW	11:10 AM 30Min Goulburn Workers Club Function Room	Overview of what the local government can do and is doing to adapt to climate change.	Carol James , Mayor, Goulburn-Mulwaree; Jack Miller , Local Council Officer - Goulburn-Mulwaree Council; Anne Muir , Regional Director, South East Division of Primary Industry & Investment NSW
55	Developing Actions need to Adapt to Climate Change	11:40 AM 40Min	Preliminary Development of Actions	Jacqui Russell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Imogen Ord-Evans , CCPS Team; Simon Niemeyer , CCPS Lead Researcher
56	Reporting Actions	12:20 PM 40Min Goulburn Workers Club Function Room	Reporting first round of recommendations to decision makers	Kath Fisher , CCPS Facilitator; Carol James , Mayor, Goulburn-Mulwaree; Maxine Cooper , ACT Commissioner for Sustainability and Environment and Climate Change; Jack Miller , Local Council Officer - Goulburn-Mulwaree Council
57	Lunch	1:00 PM 40Min Goulburn Workers Club Station Room		
58	Feedback on Actions	1:40 PM 20Min	Feedback from Decision Makers/Actors on actions recommended by participants	Carol James , Mayor, Goulburn-Mulwaree; Maxine Cooper , ACT Commissioner for Sustainability and Environment and Climate Change; Jack Miller , Local Council Officer - Goulburn-Mulwaree Council; Anne Muir , Regional Director, South East Division of Primary Industry & Investment NSW
59	Revisiting and Refining Actions	2:00 PM 20Min	Small group reworking of original Recommendations/Actions	Jacqui Russell , ; Kersty Hobson , Research Fellow, Department of Human Geography - ANU; Imogen Ord-Evans , CCPS Team; Simon Niemeyer , CCPS Lead Researcher
60	Reporting Actions/Recommendations II	2:20 PM 30Min Goulburn Workers Club Function Room	Reporting back on any changes made to recommendations	Kath Fisher , CCPS Facilitator
61	Large Group Discussion on Policy Development	2:50 PM 30Min	Whole of group feedback on the recommendations made so far.	Kath Fisher , CCPS Facilitator
62	Afternoon Tea	3:20 PM 15Min Goulburn Workers Club Station Room		
63	Spare Session on Policy Development	3:35 PM 30Min Goulburn Workers Club Function Room		Kath Fisher , CCPS Facilitator
64	Opinion Charting	4:05 PM 45Min		Simon Niemeyer , CCPS Lead Researcher
65	Participant Feedback	4:50 PM 30Min		Kath Fisher , CCPS Facilitator
66	Where to from here?	5:20 PM 10Min		Simon Niemeyer , CCPS Lead Researcher
67	Close and Thank you	5:40 PM 10Min		Kath Fisher , CCPS Facilitator; Simon Niemeyer , CCPS Lead Researcher

Day 3 Saturday 5 June (ACT Participants Only)

Sess. No.	Session Name	Start Time/ Duration/ Location	Description of Session	Speakers/Session Leader
47	Morning Introduction	9:00 AM 15Min		Kath Fisher , CCPS Facilitator
48	Housekeeping	9:15 AM 5Min <small>Coombs Extension Lecture Theatre 1.04</small>		Juliana Dias , CCPS Team
49	Briefing for the Day	9:20 AM 10Min <small>Coombs Extension Lecture Theatre 1.04</small>	Summary of outcomes so far and introduction to the rest of day.	Simon Niemeyer , CCPS Lead Researcher
50	Identifying Key Concerns	9:30 AM 60Min <small>Coombs Extension Lecture Theatre 1.04</small>	Group identification of important climate impacts requiring adaptation.	Simon Niemeyer , CCPS Lead Researcher; John Boswell , ; Imogen Ord-Evans , CCPS Team; Mike Bennell ,
51	Reporting Key Concerns & Voting	10:30 AM 10Min <small>Coombs Extension Lecture Theatre 1.04</small>	Reporting back to the larger group of the key impacts identified in the breakout groups.	Kath Fisher , CCPS Facilitator
52	Morning Tea	10:40 AM 20Min <small>Coombs Extension Foyer</small>	Morning tea in the room???	
53	A Perspective on Climate Change and Policy	11:00 AM 20Min <small>Coombs Extension Lecture Theatre 1.04</small>	Presentation by Maxine Cooper	Maxine Cooper , ACT Commissioner for Sustainability and Environment and Climate Change
54	What is being done in the ACT	11:20 AM 60Min <small>Coombs Extension Lecture Theatre 1.04</small>	Overview of what the local government can do and is doing to adapt to climate change. 15 min for questions on sticky notes	Kathryn Tracy , Senior Policy Officer - Department of Climate Change, Energy and Water; Catherine Keirnan , Principal Design Officer, Design Policy, Planning Services Branch, ACT Planning and Land Authority; Stewart Chapman , Think Water, Act Water - Department of Climate Change, Energy and Water
55	Developing Preliminary List of Recommendations	12:20 PM 40Min <small>Coombs Extension Lecture Theatre 1.04</small>	Preliminary Development of Actions	Simon Niemeyer , CCPS Lead Researcher; John Boswell , ; Imogen Ord-Evans , CCPS Team; Mike Bennell ,
56	Lunch	1:00 PM 30Min <small>Uni House Drawing Room</small>		
57	Feedback on Actions	1:30 PM 30Min <small>Uni House Drawing Room</small>	Feedback from Decision Makers/Actors on actions recommended by participants	Catherine Keirnan , Principal Design Officer, Design Policy, Planning Services Branch, ACT Planning and Land Authority; Kathryn Tracy , Senior Policy Officer - Department of Climate Change, Energy and Water; Maxine Cooper , ACT Commissioner for Sustainability and Environment and Climate Change; Simon Corbell , Attorney General, ACT Minister for
58	Revising and Refining Key Recommendations	2:00 PM 75Min <small>Coombs Extension Lecture Theatre 1.04</small>	Small group reworking of original Recommendations/Actions with input from available decision makers	Simon Niemeyer , CCPS Lead Researcher; John Boswell , ; Imogen Ord-Evans , CCPS Team; Mike Bennell ,
59	Afternoon Tea	3:15 PM 15Min <small>Coombs Extension Foyer</small>		
60	Reporting Actions/Recommendations	3:30 PM 30Min <small>Coombs Extension Lecture Theatre 1.04</small>	Reporting back on any changes made to recommendations	Kath Fisher , CCPS Facilitator
61	Opinion Charting and feedback form	4:00 PM 45Min <small>Coombs Extension Lecture Theatre 1.04</small>		Simon Niemeyer , CCPS Lead Researcher
62	Participant Reflections	4:45 PM 30Min <small>Coombs Extension Lecture Theatre 1.04</small>	Large group session in which participants are invited to give their reflections on the process.	Kath Fisher , CCPS Facilitator
63	Where to from here?	5:15 PM 10Min <small>Coombs Extension Lecture Theatre 1.04</small>	Brief overview of what will happen after the forum, including discussion of any follow up work the participants are interested in.	Simon Niemeyer , CCPS Lead Researcher
64	Close and Thank you	5:45 PM 10Min <small>Coombs Extension Lecture Theatre 1.04</small>		Kath Fisher , CCPS Facilitator; Simon Niemeyer , CCPS Lead Researcher