Cross-Scale Barriers to Climate Change Adaptation in Local Government, Australia

Workshop Three Report

15 MAY 2012

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UTS:INSTITUTE FOR SUSTAINABLE FUTURES
15 MAY 2012

ABOUT THE AUTHORS

The Institute for Sustainable Futures (ISF) was established by the University of Technology, Sydney in 1996 to work with industry, government and the community to develop sustainable futures through research and consultancy. Our mission is to create change toward sustainable futures that protect and enhance the environment, human well-being and social equity. We seek to adopt an inter-disciplinary approach to our work and engage our partner organisations in a collaborative process that emphasises strategic decision-making.

For further information visit: **www.isf.uts.edu.au**

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Australian Centre for Excellence in Local Government (ACELG)

For further information visit: **http://www.acelg.org.au/**

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CONTENTS:

1 BACKRGOUND

Local Governments across Australia are confronted with an ever increasing exposure to climate change impacts from drought to flooding, sea level rise and heat-waves. However, even with best intentions there are significant barriers that restrict or prevent good adaptation planning and management in the local government context. To build on the good work that is being done, this project aims to identify what these barriers are, based on strong stakeholder informed knowledge, and to suggest ways to enable effective climate change adaptation in local government. The overall objective of this study is to synthesise a set of critical barriers to adaptation planning and implementation by local government in Australia thereby defining the adaptation interventions to move to a climate resilient delivery of local government services.

The research involves the following methods:
- Desktop analysis of regulatory framework around adaptation planning and key adaptation programmes in Australia and a synthesis of common barriers to adaptation experienced in Australia and overseas
- Key informant interviews with national stakeholders involved in adaptation planning
- 5 case studies from Local Councils in NSW and other states demonstrating how particular barriers have been overcome
- Three workshops with various stakeholders which include:
  - Workshop 1 (January 2012): Identify critical barriers and causes with Local Government representatives in NSW
  - Workshop 2 (April 2012): Re-prioritse barriers and identify methods of overcoming barriers with multi-level stakeholders
  - Workshop 3 (May 2012): Gain consensus and barriers and causes from national stakeholders and examine the feasibility of some of the practical actions identified in workshop 2.

This independent research project is funded by the National Climate Change Adaptation Research Facility (NCCARF) and being undertaken by The Institute for Sustainable Futures (ISF) at the University of Technology Sydney (UTS). Key advice will be provided to the project by the Australian Centre for Excellence for Local Government based at UTS.

2 WORKSHOP AIMS

The overarching objective of this study is to identify enabling actions to overcome cross-scale barriers that limit planned adaptation to climate change impacts within local government (LG), thereby defining the adaptation capacity interventions to move to a climate resilient delivery of LG services.

The first workshop aimed to synthesise a set of critical barriers to three key phases of the adaptation process, namely, understanding, planning and implementation, and to identify the processes that gave rise to these barriers. The focus of the second workshop was to validate the cross-scale barriers and underlying causes identified in workshop one and identify practical actions that could be undertaken to overcome the barriers.

The third workshop (this report) was designed to gain consensus on the enabling actions identified through workshop 2, the targeted interviews and the case studies. National and local NSW stakeholders were invited to examine the feasibility of some of the practical actions identified, with the aim of producing eight key enabling actions to put forward as a viable means to overcome the cross-scale barriers facing adaptation at the local level.

3 WORKSHOP PROCESS

Invitations to the workshop were sent to representatives from various Local, State and Federal government agencies in New South Wales and Canberra. The second workshop was attended by 17 participants (see Appendix A). Prior to the workshop participants were sent a short briefing note outlining the activities of the workshop (refer to Appendix B).

3.1 WORKSHOP PRESENTATIONS

Workshop participants heard presentations from the research team on the background to the research, the expected outcomes and the progress to date, as well as a summary of the proposed enabling actions for discussion (these are provided in Appendix C).

Liz Johnstone, Manager, Planning Policy & Projects, Municipal Association of Victoria (MAV)
Liz Johnstone discussed her experience in overcoming cross scale barriers in three different sectors in Victoria including:
  • Vancouver Agreement (www.vancouveragreement.ca/the-agreement/)
  • Sex Industry Strategic Management Group
  • CASBE – Council Alliance for a Sustainable Built Environment (www.mefl.com.au/what-we-do/projects/sdapp/casbe.html)
The key message was that through collaboration and good communication change can be achieved (see Appendix D for more details on the presentation).

Mark Batty, Executive Manager Environment & Waste at Western Australia Local Government Association (WALGA)
Mark Batty spoke about his experience in ensuring the health of the Swan-Canning River System in Perth. The management process involved numerous stakeholders, including 27 local councils, numerous state government departments and others such as the Swan River Trust. Mark's key message was that to ensure the issue is relevant for all stakeholders, as by doing so they will collaborate and ensure a good outcome for everyone. Institutional arrangements were an important element of the approach, and evidence based policy and programs contributed to bringing stakeholders on board.

3.2 WORKSHOP ACTIVITIES

The following section outlines the set of group activities undertaken by participants during this workshop. The activities were divided into three general sessions. Four groups comprising 3-4 participants representing different agencies were seated at separate tables according to the four thematic enabling actions that were identified in Workshop 2 and through the interviews. The thematic approaches were:

1. Improved co-operative governance, co-ordination and communication
2. Better understanding and use of information and knowledge
3. Frameworks for problem definition and planning
4. Adequate resources to plan and implement responses

3.2.1 ACTIVITY 1: INITIAL FEASIBILITY TESTING OF THE PROPOSED ACTIONS

As an approach to allow participants to begin to engage with the content of the meeting, participants were requested to individually review the full list of proposed activities that emerged from prior workshops and interviews (see Appendix C). At their tables, participants then discussed their *first impressions* on what seemed most interesting and useful as an action, whether any seemed irrelevant, and whether there are any additional actions that seemed important to also consider. These were noted by a designated scribe at each table.

3.2.2 ACTIVITY 2: MAPPING THE PROPOSED ACTIONS

Participants then considered in detail only the 3-4 proposed actions designated to their table. They were then asked to map these 3-4 proposed actions for each table according to their likely *impact* and the *effort* required to implement them. Prepared butchers paper with a matrix of impact versus effort was provided for this activity. The actions were written on post-it notes and placed in the relevant quadrant – according to impact and effort (see Results section for details).

Based on this mapping exercise, the two actions which had greatest impact and least effort (based on their placement on the matrix) were chosen by each group to discuss further, using the following prompting questions:
1. Taking a national view, consider the feasibility of the action:
   • Are there any states or territories where this action would be less useful? Why?
   • Is there anywhere this would be hard to implement? Why?
2. Have you seen this approach work well in other sectors? Where?
3. What would it take to make it work? (why, when, who, where, how, what)
   Who do you think could create this change? Who do you think would need to be consulted or involved along the way?
   What social, technological, environmental, economic or technical changes might also need to be addressed to help create supportive conditions for this action?

3.2.3 ACTIVITY 3: PLENARY DISCUSSION

A plenary discussion focusing on commonalities and differences was facilitated, which placed emphasis particularly on actions that are nationally 'do-able' or not. Butchers papers from each group were placed at the front of the room, allowing participants to see where each group rated each of their proposed actions. Participants were asked to reflect on their proposed actions in context of earlier presentation of overcoming barriers in other context, and also whether there was disagreement amongst groups as to the placement of the actions on the matrices.

4 RESULTS & DISCUSSION

The results for the above activities are presented below. They are grouped according to the thematic areas described above.

4.1 IMPACT VERSUS EFFORT MATRIX

Amalgamated results of each tables matrix mapping exercise are presented in Figure 1. This shows a general trend of most of the proposed actions lying in the high impact, high effort quadrant. Two proposed actions were thought to be low impact – those being "Encourage higher use of insurance" and "Develop new funds for adaptation", with the latter lying at the high effort end.
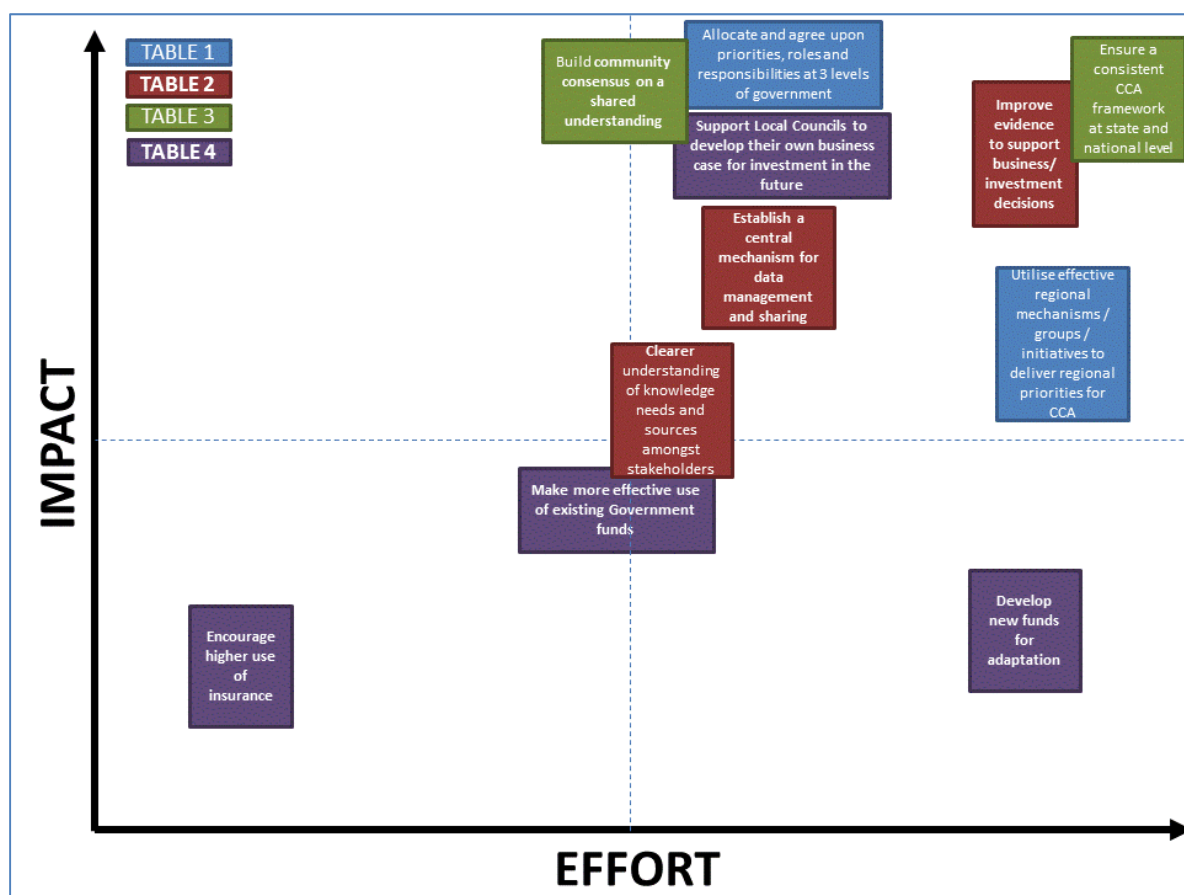
Figure 1: Matrix mapping of proposed actions according to impact and effort.

The placement of all proposed actions on the "Impact Versus Effort" matrix portrayed an interesting message. The actual implementation of the actions to overcome the cross-scale barriers local governments face, whilst having a potentially high impact, will require considerable effort to achieve.

The top two prioritised enabling actions for each theme were discussed further, and are described below.

4.2 IMPROVED CO-OPERATIVE GOVERNANCE, CO-ORDINATION AND COMMUNICATION

"Allocate and agree upon priorities, roles and responsibilities at the three levels of government"	
National feasibility & impediments:	- Not relevant to ACT. - Generally the same because most of Australia has 3 tiers of Government
Other sectors where this approach has work well:	- Health: clear understanding of issue (aging) - Place management (e.g. Cabramatta in the 80's), clear identification of issues - Coast & clean seas initiative
What would it take to make it work?	- State government action to pressure commonwealth - Political will, pressure from the community - Education - Data (clearly shows responsibility)
"Utilise effective regional mechanisms / groups and initiatives to deliver regional priorities for CCA"	
National feasibility & impediments:	- Depends on jurisdiction but issues always cross boundaries
Other sectors where this approach has work well:	- Sydney Coastal Councils Group - CASBE - Local Government Shared services etc. - procurement etc. - Community planning
What would it take to make it work?	- State Government recognition & support (but legislative change probably not needed) - Regional events (floods etc.) - Find a non-political space - Access to funds - Regional leaders - Events - Emergence of new funds - Political will to participate

4.3 BETTER UNDERSTANDING AND USE OF INFORMATION AND KNOWLEDGE

"Frameworks to improve evidence to support business/ investment decisions"	
National feasibility & impediments:	- Equally useful to all states and LGs - Harder to implement with less political support, more remote communities less resources ($) or less research capacity
Other sectors where this approach has work well:	- Health sector? – Health intervention around –heart disease, food safety leading to behaviour change + regulations and legislation + infrastructure investment - National flood info database – specific geographical recurrence (??) – Cyclones?
What would it take to make it work?	- Government state & Federal + Local - Together - Insurance - IP resources technical expertise - Research Community - Banks - Financial services - Super funds/investigators - Local community/businesses
"Establish a central mechanism for data management and sharing"	
National feasibility & impediments:	- Envisaged as a national portal but @ regional 'nodes' and maintained at local Government level - Indigenous communities where lack of data or tech expertise - E.g. of Commonwealth thinking of linking resilience actions to disaster payments> carrot & stick
Other sectors where this approach has work well:	- Insurance council flood database - Biodiversity connection clearing houses - Great Barrier Reef Authority? - CAL Adapt - UKCIP program (??)
What would it take to make it work?	- GEOSCIENCE <-> LPMI <-> Local Government - Government > public good > OEH flood studies open access - Different levels of usage (raw, synthesised, tools?) - Quality frequency & input charter to ensure data integrity

4.4 FRAMEWORKS FOR PROBLEM DEFINITION AND PLANNING

"Ensure a consistent CCA framework at state and national level (policy / legislation)"	
National feasibility & impediments:	- International agreement on adaption (perhaps coupled with sustainability) would "smooth path" to national policy & legislation - Policy positions @state level may impede national agreement - COAG unlikely to deliver in a timely way - Alignment by states to a federal position will be problematic

Other sectors where this approach has work well:	- Migratory Bird Agreements – wetland agreement (RAMSAR, JAMBA, CAMBA)
	- Aged Care and Health Agreement (@COAG)
	   > However: All have key drivers/motivation
	    - Community Support/international pressure
	    - Clear Issues definition
	    - Potential for happy endings
	    - Measurable & reportable

What would it take to make it work?	- WHO: Australian Government – National head of power. - WHY: - WHEN: - May evolve out of Rio+20 - National forums (proposed activity) - Bottom up imperative > critical mass - Environmental/social crisis
"Build community consensus on a shared understanding of the seriousness of climate change and the need to act"	
National feasibility & impediments:	- Limitations to Australian Government effectiveness to engage community - Councils better established for this role w/- support from state & Fed - Key issues: Uncertainty in climate change – fine line between proactive & reactive responses "crying wolf" will turn community away
Other sectors where this approach has work well:	- Brisbane Drought Campaign (110 per day) - Manly Council <-> Cardno (consultants) - Hessell (LESS tool) - Bob Webb (ANU reviewing web based tools) - Vic Climate Dogs - GreenCross "Harden Up Queensland"
What would it take to make it work?	- When: Now - How: Funnel $s & messages to local government - Australian Government – stay clear of it (generally don't do it well) Fund doco's films creative endeavours & local government - What: Human health & climate events - & what can be done – "call to arms" - Visual models & Infograms – Actions & Consequence e.g. 3 modelling - M

4.5 ADEQUATE RESOURCES TO PLAN AND IMPLEMENT RESPONSES

"Support Local Councils to develop their own business case for investment in the future"	
National feasibility:	- No. Applicable everywhere. Potential difference across jurisdictions e.g. different states - Maybe in areas with low/spread out populations & lots of infrastructure it would be more difficult
Other sectors where this approach has work well:	- WA does regional planning for land use. - NSW – regional plans – land use planning. Different people have different ideas about success. - Regional waste management planning in WA – create regional plan which guides Council waste plans. - Maybe CMAs in NSW? But unsure how they interact with councils
What would it take to make it work?	- Commonwealth sets generic framework – very broad way (maybe provide funds or redirect better funds) (Dependant on Commonwealth feeling that adaption is in their remit) - State governments use existing regions e.g. Regional Development Australia, land use regions - Create a role to coordinate input from relevant communities of interest (could be state Government,: could sit in a Council; could be in any organisation - Mandate involvement in process by players PLAYERS: - 3 levels of government-(Maybe 2?); infrastructure owners/operators; academics; RDAs; industry associations; indigenous land councils etc. - Need consistent methodology to produce outputs which are usable & defendable in business case preparation
"Make more effective use of existing Government funds and develop new funds for adaptation"	
National feasibility & impediments:	Yes, Should happen everywhere. Although national level will only work for commonwealth funding.. if better accountability/responsibility definition exists, funding will presumably be more effective, with less overlaps & better focus
Other sectors where this approach has work well:	-
What would it take to make it work?	- Funding is useless without good governance/ frameworks - Funding needs to be targeted, rather than an open call for applicants - Maximise investment in existing programs. Avoid abandoning projects after phase 1. Where a good project has been done, provide more funding to carry it through to completion. Where expertise and skills already exist, keep funding, rather than starting new projects from scratch - Prioritise funding that builds capacity among people who will be implementing outcomes. Avoid giving lots of funding to consultants (except maybe in research)

4.6 DISCUSSION

Workshop activities allowed workshop participants to validate, discuss and prioritise proposed actions to overcome cross scale barriers to adaptation at the local government level. The varying experiences of participants, with experience across Australia and from local government and non-local government context, allowed for a robust discussion around the feasibility, appropriateness and suitability of the proposed actions. As a result, many tables of participants revised the wording of the actions, with others being amalgamated and some being considered redundant or inappropriate.

Table One was comprised of state government representatives, a local government representative and one from a local government association from inter-state. Table One discussed the thematic area surrounding governance and leadership. The group discussed the wording of the first two proposed actions which were:
- "Enhance collaborative planning between all three levels of government to provide clear leadership" and
- "Establish workable and proven inter-agency mechanisms (cross jurisdictional) to improve co-operative governance at State level"

The group decided to combine these actions into one, being "Allocate and agree upon priorities, roles and responsibilities at the three levels of government".

Table One also reworked another of the proposed actions, which was originally "Utilise or establish new effective regional mechanisms/groups and initiatives to co-ordinate strategic regional planning, approaches and information". The group agreed that establishing new mechanisms or groups was not needed; rather efforts should be pursued through already existing and established groups and approaches. The proposed action was therefore reworded as "Utilise effective regional mechanisms / groups and initiatives to deliver regional priorities for CCA".

Table Two included a state government representative, a representative from a local government association from inter-state and representatives from a water utility. This table's enabling activities related to information and knowledge, and the group debated the merits of a national protocol for open source data, as well the possible mechanisms to manage a centralised data and knowledge system. It was unanimously agreed that a system to manage the wide range of data sources of varying reliability was key to ensuring that all tiers of government work of the same page.

Table Three was comprised of a state government representative, a representative from a local government association from inter-state and a representative from a university. This table's enabling activities related to consistent frameworks and shared understanding of climate change and adaptation issues. The group discussed the challenge of obtaining community consensus, and the possible need to draw on appropriate language so as to side-step potential emotional barriers associated with climate change. By using words such as "risk", "resilience" and "variability", the group agreed that mentioning the words "climate change" can be avoided.

Table Four was comprised of a state government representative, a local government representative, an academic and an insurance industry representative. This table focussed on the thematic area of resourcing of climate change adaptation. Table Four decided to merge two of the proposed activities - Make more effective use of existing Government funds AND develop new funds for adaptation into one, noting that funds are useless if they are not well used.

Table Four also made additional comments regarding their first proposed action around supporting local governments to develop their own business case. They noted that "Support

needs to consist of an overarching regional strategy which provides the broader framework for adaption planning." This support needs to be complemented by:

- Clear accountabilities and reliabilities
- Strong data, technical advice, quantitative info, not just funding

5 SUMMARY

This workshop forms the last of a series of three workshops which brought together various stakeholders relevant to climate change adaptation planning and implementation at the local government level. This final workshop was attended by participants from across Australia, allowing for a national perspective on the appropriate nature of the proposed enabling actions to overcome barriers to adaptation. While previous workshops had focused on barriers and causes, this workshop focused primarily on discussion of proposed actions to overcome the barriers to adaptation.

The overarching message is the acknowledgment that the issues confronting effective adaptation to climate change are not unique and are to a large extent systemic in terms of institutional processes. A number of examples have presented that illustrate how these systemic cross-scale barriers can be overcome. Throughout the series of workshops, what has emerged is a strong push for local governments' responsibilities to be recognised or acknowledged at state and national levels, and for these responsibilities to be supported by appropriate resourcing. This is supported by the fact that the impacts of climate change are felt at the local level, thus needing to be managed by local governments. While local government representatives acknowledge there are some mechanisms for support, more needs to be done to allow for a response to the impacts of climate change that balances the likely environmental, social and economic impacts that are already emerging at the local level. It is broadly accepted by the participants that by framing the adaptation response as risk mitigation approach, less resistance to adaptation planning is likely to be experienced.

> The key enabling actions to overcoming cross-scale barriers to adaption at the local government level include the following:
>
> 1. Build community consensus on, and a shared understanding of, the seriousness of climate change risks and the need to act, through training and the delivery of a consistent message from all tiers of government;
> 2. Allocate and agree upon priorities, roles and responsibilities at the three levels of government for addressing climate induced risks for improved co-operative governance, co-ordination and communication;
> 3. Improve the national climate change adaptation framework to guide complementary state and national level policy and legislation;
> 4. Utilise effective regional mechanisms / groups and initiatives to deliver regional priorities for climate change adaptation and establish new one where necessary;
> 5. Develop a consistent risk planning frameworks to support Local Councils in developing their own business cases for investment and to improve the evidence to support business/ investment decisions;
> 6. Establish a central mechanism for data management and sharing;
> 7. Make more effective use of existing Government funds and develop new funds for adaptation, to ensure continiuty in the implementation of the plans.

6 WORKSHOP FEEDBACK AND EVALUATION

The workshop concluded with participants completing a workshop evaluation form (see Appendix E). The evaluation form asked participants to rate various elements of the day. The majority of the respondents thought the workshop was "useful" or "very useful" for connecting with peers working on similar issues, hearing about new resources and research that might help with their work, and for discussing, reflecting and learning.

Additional questions and their responses can be found in Appendix F.

Specific feedback received related to Workshop 3 included answers to the following questions:

"What would you most like to see emerge as a result of this project?" with responses including:
- Some champions in different organisations to take the different recommendations that are relevant to them forward (with others in other organisations)
- Better planning and environmental decision- making by public authorities. Improved understanding and engagement by stakeholders including community.
- A strategy to enable better integration of climate change adaption across all tiers of government, especially across local Govt
- Some clear steps to improve adaption governance, accountabilities & responsibilities, especially in NSW
- Material my organisation could utilise in advocating for improvements to policy, programs & governance around CCA
- Outputs that engender policy & program improvements in each tier of Govt
- Clarity about what the states/Feds can do to support Local Government role in CCA

Participants were also asked **" who would benefit from the findings"** and **"What is the best way to disseminate research findings from this project?"** with the following answers obtained:
- Planning and policy at state and commonwealth levels & LG Associations for incorp into LG policy debate and discussion
- CCA Managers -policy makers, researchers, program designers and evaluators
- All Stakeholders. Public/Govt/Corporate/NGOs/Indigenous land councils
- All councils across all states; council groups eg Sydney coastal councils. All state govt agencies. Relevant Federal departments
- Hopefully local Government would be key beneficiary but it should be as broadly useful as practicable
- All 3 levels of Government, including decision makers, workers in adaption space
- Senior policy makers
- All state local government associations & ALGA. Relevant departments in state & Aus Govt. NCCARF synthesis and integration re: future synthesis. Regional bodies – NRM, CMAs, RDAs etc.
- For LGAs – use existing networks. Possibly use ACELG to inform Commonwealth as well as ALGA, ROCs
- Web based, NCCARF website. Existing networks (RoCs and SOGs etc) – generate some media interest if possible
- Online. Maybe a summary seminar - just publishing a report never reaches the right people
- Make a visually engaging , short (10-15 Min) presentation so that practitioners & community champions 'get' the key findings and outcomes.

APPENDIX A: LIST OF ATTENDEES

	Name	Role	Organisation
1	Philip Booth	UNSW / NCCARF	p.booth@unsw.edu.au
2	Judith Preston	Macquarie University	judith.preston@mq.edu.au
3	Geoff Evans	Lake Macquarie Council	grevans@lakemac.nsw.gov.au
4	Karen Douglas	Wyong Shire Council	DOUGLASK@wyong.nsw.gov.au
5	Jennifer Hearn	OEH	Jennifer.Hearn@environment.nsw.gov.au
6	Brooke O'Rourke	Insurance Australia Group (IAG)	Brooke.O'Rourke@iag.com.au
7	Greg Greene	Sydney Catchment Authority	greg.greene@sca.nsw.gov.au
8	David Mitchell	NSW Department of Planning & Infrastructure	David.Mitchell@planning.nsw.gov.au
9	Amanda Neirinckx	NSW Department of Planning & Infrastructure	Amanda.Neirinckx@planning.nsw.gov.au
10	Suzanne Dunsford	OEH	Suzanne.Dunford@environment.nsw.gov.au
11	Jessica Sullivan	Sydney Water	jessica.sullivan@sydneywater.com.au
12	Natalie Quinn	Sydney Water	NATALIE.QUINN@sydneywater.com.au
13	Liz Johnstone	MAV (VIC)	ljohnstone@mav.asn.au
14	Dorean Erhart	LGAQ (Qld)	dorean_erhart@lgaq.asn.au
15	Mark Batty	WALGA (WA)	mbatty@walga.asn.au

APPENDIX B: BRIEFING NOTE
Cross-scale barriers to climate adaptation in local government, Australia

Workshop 3 Agenda and Background Document:

This workshop background reading pack is for confirmed participants of the research workshop being held on Tuesday 8th May 2012 by the Institute for Sustainable Futures (ISF).

It contains venue and event details, a workshop overview, and more details about each of the workshop activities.

Participants of the workshop will be acknowledged in the final report, which will be sent to all interested participants.

We look forward to seeing you on the day.

Event and venue details

When: Tuesday, 8th May 2012
Registration at 9:30am for 10am start, close by 1pm (followed by a light lunch)

Where: University of Technology Sydney:
Aerial Function Centre – Harris Room
Level 7, Building 10
235 Jones St, Ultimo
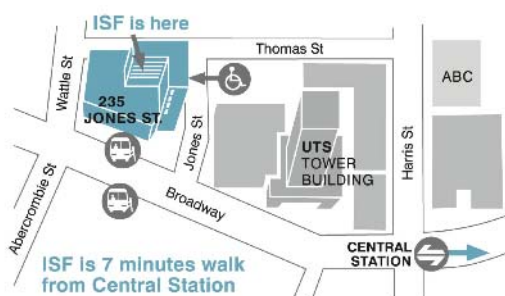
Getting there: UTS is a 7 minute walk from Central Station. Limited metered street parking is available near to UTS.

Contact details: anna.gero@uts.edu.au or (02) 9514 4605 or 0402 227 662 on the day.

Make your valuable input on the critical barriers to adaptation planning by local government in Australia. Prior to the workshop, we ask you to familiarise yourself with the cross-scale barriers and causes identified in the research (see Table 1) and think about how you can contribute to each of the group activities mentioned below.

Project Background

1) What is this research about?

Local Governments across Australia are confronted with an ever increasing exposure to climate change impacts from drought to flooding, sea level rise and heatwaves. However, even with best intentions there are significant barriers that restrict or prevent good adaptation planning and management in the local government context. To build on the good work that is being done, this project aims to identify what these barriers are based on strong stake-holder informed knowledge and to suggest ways to enable effective climate change adaptation in local government. The overall objective of this study is to synthesise a set of critical barriers to adaptation planning and implementation by local government in Australia thereby defining the adaptation interventions to move to a climate resilient delivery of local government services. Specifically, the study aims to address the following objectives:

a) Identify the mechanisms to cope with climate variability at the Local Government level which provide a proxy to identify limitations to respond to climate change impacts

b) Identify the underlying processes and structures that gives rise to these barriers, for example, process and governance structures, and how do actors and the context of the system of concern contribute to the barriers?

c) Suggest options of how barriers will be overcome through end-user engagement, thereby defining the adaptation capacity interventions to move to a climate resilient delivery of Local Government services

2) Why is this research important

Research to date has identified common barriers to adaptation planning within Local Government in Australia which include leadership, competing priorities, planning process, information constraints and institutional constraints (Measham et al., 2011). Similar insights are drawn from international studies (Dessai S, Lu X, 2005). Although these studies have recognised the cross-scale integration and collaboration needs, many of these studies have focused largely on local government itself and internal barriers, rather than understanding the broader multi-governance system and cross-scale barriers that shape adaptation responses at the Local Government scale.

3) What data collection methods does this research adopt?

The research involves the following methods:

- Desktop analysis of regulatory framework around adaptation planning and key adaptation programmes in Australia, synthesise of common barriers to adaptation experienced in Australia and overseas

- Key informant interviews with national stakeholders involved in adaptation planning

- 5-8 case studies from Local Councils in NSW and other states demonstrating how particular barriers have been overcome

- Three workshops with various stakeholders which include:

    - Workshop 1 (January 2012): Identify critical barriers and causes with Local Government representatives in NSW

    - Workshop 2 (April 2012): Re-prioritse barriers and identify methods of overcoming barriers with multi-level stakeholders

    - Workshop 3 (May 2012): Gain consensus and barriers and causes from national stakeholders.

4) What theories is this research adopting?
The research will be guided by theories related to multi-level governance and Earth Systems Governance. Theories from multi-level governance are used to describe the management of collective issues, the various stakeholders involved and the processes used to influence adaptation actions and outcomes (van de Meene, Brown, & Farrelly, 2011). It emphasises the significance of cross-scale (both horizontal and vertical) interactions among structures and processes across multiple spatial scales. Multi-level governance literature which has its roots in the political sciences was developed to capture the networked and multi-scale jurisdictional nature of policy making and demonstrate that the outcomes at the local level are shaped by institutions at multiple levels (Bisaro, Hinkel, & Kranz, 2010; A. Smith, 2007).

5) What conceptual framework guides the research methodology?
The work by Moser and Ekstrom (2010) provides a useful diagnostic framework for characterising and organising barriers at different phases of the adaptation process across space and time and locates possible points of intervention to overcome a given barrier (see Figure 1). Moreover, it questions how best to support adaptation at all levels of decision-making; and thereby improve the allocation of resources and strategically design processes to address the barriers.
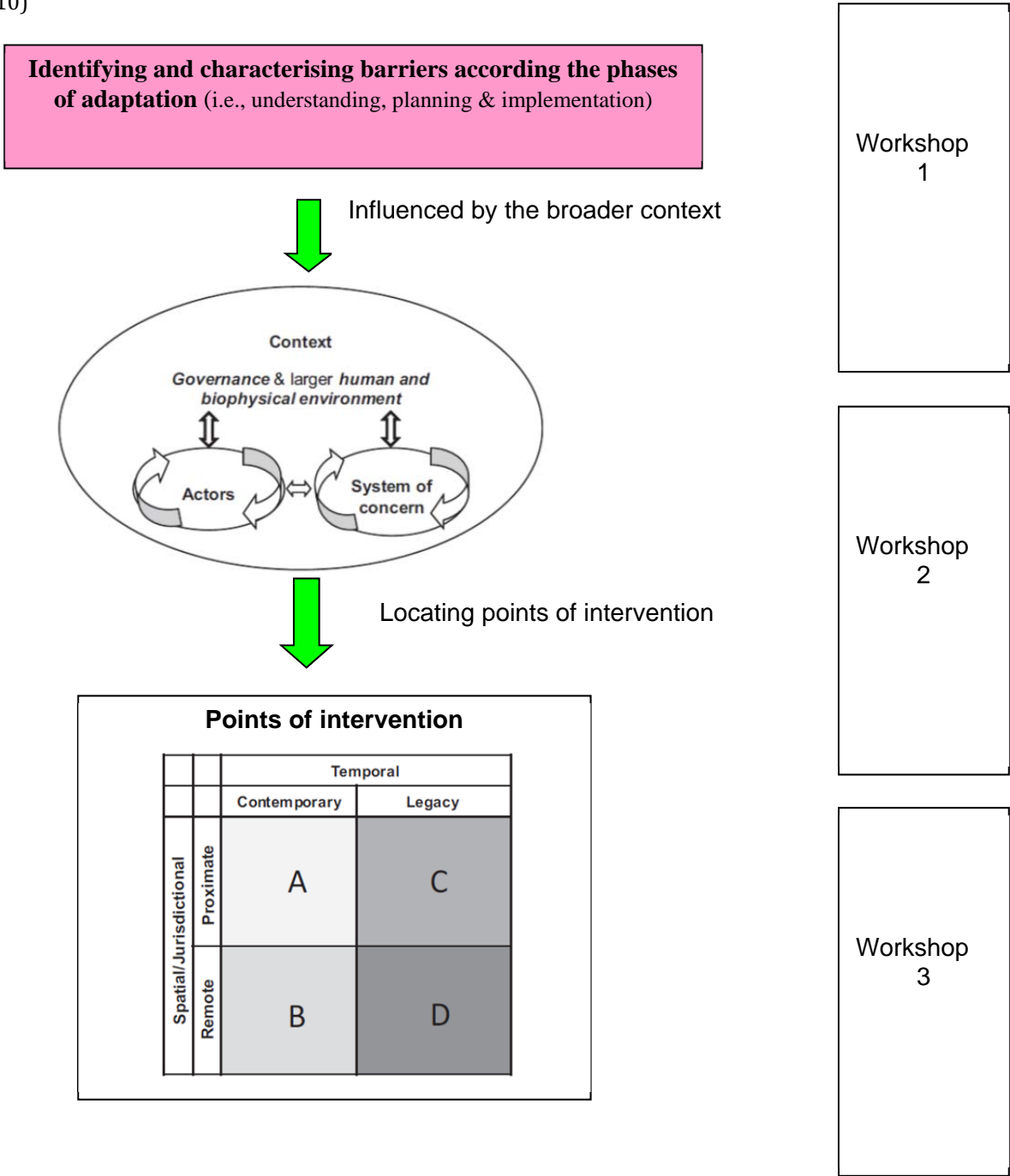
6) Who is carrying out the research?
This independent research project is funded by the National Climate Change Adaptation Research Facility (NCCARF) and being undertaken by The Institute for Sustainable Futures (ISF) at the University of Technology Sydney (UTS). Key advice will be provided to the project by the Australian Centre for Excellence Local Government based at UTS. ISF was established as a flagship research institute of the University of Technology, Sydney in 1996. Their mission is to create change towards sustainable futures through independent, project-based research. More information about ISF can be found by visiting our website: http://www.isf.uts.edu.au

7) What if I require further information? If you would like any further information please feel free to email Dr Pierre Mukheibir at ISF on pierre.mukheibir@uts.edu.au or call him on 9514 4962.

Table 1: Cross scale barriers and their underlying causes: priorities from w/shops 1 & 2

Understanding	Planning	Implementation
1) *Poor leadership from above (Cross cutting)* • No Statutory obligations • Lack of ownership of the implications of CC impacts • Short political timeframes, agendas and cycles – which do not coincide with planning time frames, reluctance to make long term decisions • Lack of incentives to do now – rather defer cost to future office bearers or other arms of governance • No acknowledgement that the issues cut across all tiers of government		
2) *Limited co-operative governance (Cross cutting)* • Poor communication between tiers of government • Inconsistent messages • Local decisions over-ridden by higher tiers		
3) *Lack of information and knowledge* • No investment in the collection of data over the long term • Poor data sharing • Inconsistency of the available data and climate projections – lack of "certainty" of the data and availability of the "latest" data. • Scale of the problem has not been made relevant at the local government level • Misinformation by the media and strong industry lobby groups • New issue for some • Skeptics in some councils • In adequate training for engineers, planners and councilors	4) *Lack of definition of problem and planning* • Lack of guidance and consistent frameworks – planning and regulatory. • Unclear who's role it is to plan • Legal responsibilities unclear	5) *Limited funding* • Prioritization of funds at different tiers of government, due to competing priorities, which is exacerbated by short vs long term agendas • Funding constraints at local government level for large capital adaptation projects, partly due to rate capping at state level. • Limited funding for RD and pilots • "cost" of already sunk capital in existing infrastructure that is now viewed as vulnerable under CC impacts.

Figure 1: Conceptual framework for examining cross-scale barriers (adapted from Moser & Ekstrom 2010)

APPENDIX C: SUMMARY OF ENABLING ACTIONS FOR CONSIDERATION

TABLE 1	**Enhance collaborative planning between all three levels of government to provide clear leadership** - Establish an intergovernmental adaptation forum with relevant representatives from all three levels of government (eg. Local, State & Federal government) - This could be co-ordinated at the State level, with the same Commonwealth representative sitting on every State's forum designed to shape national planning framework with clear roles and responsibilities **Establish workable and proven inter-agency mechanisms (cross jurisdictional) to improve co-operative governance at State level** e.g. local government and state planning departments, - Shape state planning framework with clear roles and responsibilities - Provide clarity on roles and responsibilities - Investigate existing or alternate mechanisms/groups - Take advantage of informal networks across governments **Utilise or establish new effective regional mechanisms/groups and initiatives to co-ordinate strategic regional planning, approaches and information** - e.g ROCs, RDAs, CMAs, LGSAs - Establish and maintain a publications library/ database - Establish a directory service for adaptation to find relevant staff in different agencies/ Councils etc. - Progress beyond the fragmented decision making through a commitment to regional strategic planning. **Identify and support climate change champions at all levels of government**

TABLE 2	**Provide a clearer understanding of knowledge needs and sources amongst stakeholders**
	- Knowledge providers meet the needs of stakeholders to guide decisions
	- Government roles and responsibilities are clarified to assist decisions
	- Implement institutional capacity building initiatives
	
	Improve evidence to support business/ investment decisions
	- Monetary value of adaptation options & interventions recorded (acknowledge that engineering options are not always the best)
	- Establish M&E criteria
	- Clarify the accountability of/for decision makers to achieve more rigor in decision making
	- Determine minimum types, scale, specificity of information requirements underlying decisions
	- Sharing of lessons on a national scale, tracking what is happening for continuous learning
	- Guidance material and resources developed centrally for LGs
	- CCA Audit tool to assess if CCA plans will deal with future requirements OR a self-assessment mechanism to help Councils know where their focus is
	
	Establish a central mechanism for data management and sharing
	Eg. Establish a new State or Federal coordinating body such as an 'Adaptation Office' to facilitate knowledge sharing and funding. This would be responsible for considering:
	    - Consistent Information
	    - expertise and information gaps
	- Create more opportunities for councils and states, to share their data with each other

TABLE 3

Ensure a consistent CCA framework at state and national level (policy / legislation)
- Legislative reform process, creating new legislation
- Reaching political consensus across all levels of government
- Redefining the role of COAG
- Develop a "target to shoot for" – a coordinated and stepped approach to guide CCA planning

Build community consensus on a shared understanding of the seriousness of climate change and the need to act
- Implement widespread education of climate change impacts and adaptation across the community
- Develop co-ordinated education campaigns targeting all sectors of society
- Ensure a consistent message from all tiers of government

Mainstream adaptation
- Flexibility within government (adaptive planning)
- Incorporating uncertainty in planning and operation
- Collaboration between sectors and government departments around planning and implementation

Make adaptation fair and equitable
- Encourage participatory decision making (genuine engagement and community participation, accountable etc.)
- Creation of an "Adaptation Watchdog" (an independent body), ensuring economic, social, cultural equity in adaptation decision making

TABLE 4

Make more effective use of existing Government funds
- Tracking where money is currently spent now to service our values and economy
- Focus on re-allocation of funds rather than new money (e.g. focus on public goods like width of beach rather than sea walls for private property)
- Rationalising / bringing together small 'pots of money' into a bigger fund
- Ensuring Regional Development Agency funding includes climate adaptation criteria

Support Local Councils to develop their own business case for investment in the future
- Councils should develop budgets for implementation in their own right
- State and Federal funding should supplement Local Government commitments
- Relieve the technical capacity shortage for planning and implementing CCA

Develop new funds for adaptation
- E.g.   - Link up with carbon tax e.g. take 5% & invest in adaptation,
            - Set up a 'Future fund' for adaptation,
            - Special levies to recover costs of adaptation. e.g. coastal infrastructure works
- State policy currently provides the mechanism for raising funds and there are restrictions on this for rates and special levies. State government should provide approval for local governments to raise funds independently.

Encourage higher use of insurance
- Private insurance to reduce costs for councils after a natural disaster/legitimate risk management/preventative measure can reduce premiums.

APPENDIX D: MUNICIPAL ASSOCIATION OF VICTORIA: PARTICIPANT PRESENTATION

Municipal Association of Victoria

Cross-Scale Barriers to Climate Change Adaptation in Local Government

Workshop 3

May 2012

MAV
MUNICIPAL ASSOCIATION OF VICTORIA

Vancouver Agreement

What: 5 year agreement among 3 levels of government to support local community solutions to economic, social, health & safety issues.

Why: Crime, drug use and homelessness in the downtown east side having broader economic and social impacts

Attributes:

- Agreement about the problem
- Outcome focus, monitored and reviewed
- New & innovative solutions advanced collectively
- Participation by individuals for the long haul leading to strong relationships
- Peer recognition - IPA Canada, UN, etc

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VANCOUVER AGREEMENT STRUCTURE

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Sex Industry Strategic Management Group

What: Identification of a lead agent and legislative change to enforcement of illegal activity associated with the sex industry

Why: Poorly coordinated, ineffective enforcement across agencies and disagreement about the problem

Attributes:

- Lead agent
- More holistic approach to issues – business licensing; planning; sex trafficking;
- Complementary enforcement approaches – CAV: trafficking in legal brothels; VicPol – illegal brothels; with Councils, Federal Police, ATO, Department of Immigration and Citizenship
- Better resource and information sharing across agencies   ......*early days*....

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CASBE: Council Alliance for a Sustainable Built Environment

What: a collective of councils utilising the planning permit process to assess and improve sustainable design

Why: lack of National / State leadership, uncertainty about how, tension between planning & building instruments and how to measure

Attributes:

- Didn't wait for ask permission
- 11 councils with 15 others interested in using the same methodology
- Better use of resources in an emerging field – briefings, training, tools, documentation etc
- Flow on to council owned / managed buildings and new projects
- Slow; not cost effective – but becoming harder to ignore

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Solution to barriers / common attributes

- Understand the problem and agree on the outcome sought
- Improve interaction (vertical and horizontal)
- Understand and involve those with greater decision making power or influence and vice versa - get on with what you can get on with
- Identify who is accountable and what they are accountable for
- Allocate resources (funding, information, data, technical capacity) so obligations can be met
- Equity considerations

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APPENDIX E: EVALUATION FORM

NCCARF Local Government Workshop:
Cross scale barriers to climate change adaptation
Tuesday 3rd April 2012
Evaluation Form

1. **Overall, how would you rate today's workshop in terms of:** (Please Circle)

   Connecting with peers working on similar issues, creating networks etc.

   Very Useful   *Useful*   *Somewhat useful*   *Not useful*

   Hearing about new resources and research that might help with your work

   Very Useful   *Useful*   *Somewhat useful*   *Not useful*

   Discussion, reflection and learning

   Very Useful   *Useful*   *Somewhat useful*   *Not useful*

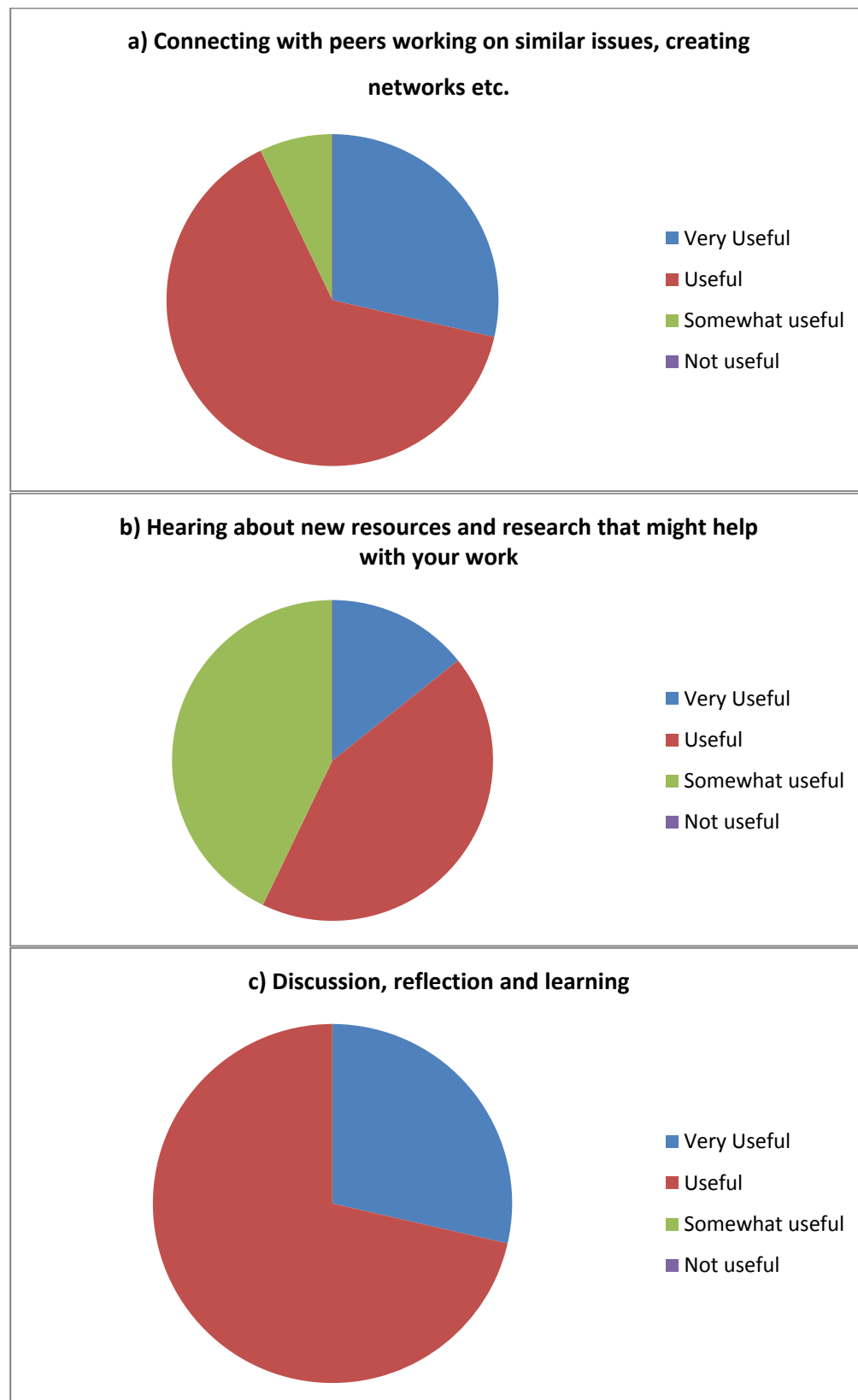2. **What would you most like to see emerge as a result of this project?**

3. **Who would benefit from the findings of this research?**

4. **What is the best way to disseminate research findings from this project?**

5. **Any suggestions for next time?**

APPENDIX F: RESPONSES TO EVALUATION FORM

Q1. Overall, how would you rate today's workshop in terms of:

a) Connecting with peers working on similar issues, creating networks etc.

Very Useful
Useful
Somewhat useful
Not useful

b) Hearing about new resources and research that might help with your work

Very Useful
Useful
Somewhat useful
Not useful

c) Discussion, reflection and learning

Very Useful
Useful
Somewhat useful
Not useful

What would you most like to see emerge as a result of this project?

- Regional adaption planning that is targeted, (based on existing knowledge) monitor areas that could be piloted. Governance is key.
- Some champions in different organisations to take the different recommendations that are relevant to them forward (with others in other organisations)
- Better planning and environmental decision- making by public authorities. Improved understanding and engagement by stakeholders including community.
- A strategy to enable better integration of climate change adaption across all tiers of government, especially across local Govt
- Clear practical ideas for facilitation effective climate change adaption
- A unique outlook on the area of barriers & adaption
- Some clear steps to improve adaption governance, accountabilities & responsibilities, especially in NSW
- Implementation actions. Way forward
- Practical recommendations
- Material my organisation could utilise in advocating for improvements to policy, programs & governance around CCA
- outputs that engender policy & program improvements in each tier of Govt
- Clarity about what the states/Feds can do to support LG role in CC adaption
- Clarification of decision authority between state and local governments

Who would benefit from the findings of this research?

- Planning and policy at state and commonwealth levels & LG Associations for incorp into LG policy debate and discussion
- CCA Managers e-policy makers, researchers
- All Stakeholders. Public/Govt/Corporate/NGOs/Indigenous land councils
- All councils across all states; council groups eg Sydney coastal councils. All state govt agencies. Relevant Federal departments
- Hopefully local Government would be key beneficiary but it should be as broadly useful as practicable
- All levels of Government
- All Government workers in adaption space-local, state & federal
- Local council
- Decision makers at the 3 levels of Govt
- Senior policy makers
- All state local government associations & ALGA. Relevant departments in state & Aus Govt. NCCARF synthesis and integration re: future synthesis. Regional bodies – NRM, catchment Mas ,RDAs etc.
- Program desogners and evaluators (ie don't leave it to the policy wonks(??) on their lonesome)
- Hopefully councils and communities
- All public sector administrators and related service users and providers

What is the best way to disseminate research findings from this project?

- For LGAs – use existing networks. Possibly use ACEL4(??) to inform Commonwealth as well as ALG??
- Through relevant peak & regional organisations, CeS?, LGA, Rocs, ICAust
- Govt bodies, LGSA, Insurance bodies. Conference/seminars for interested persons. Related websites. Provide findings for seminar participants.

- Web based – on website, Facebook etc. Seminar/conferences, council/agency champions
- Web page; generate some media interest if possible
- Online. Maybe a summary seminar
- NCCARF website. Existing networks (RoCs and SOGs etc)
- Electronically
- Briefing…just publishing a report never reaches the right people
- Direct to "Connectors" eg state LG Associations, regional groups etc
- Make a visually engaging , short (10-15 Min) presentation so that practitioners & community champions 'get' the key findings and outcomes.
- Briefing sessions. Web
- Through local government ROCs as the recommendations are likely to refer to regional coordination.

Any suggestions for next time?

- Perhaps a longer session
- Good format-perhaps more presenters from interstate
- I like the format – very useful
- There is no next time
- More time for discussion
- Tight programme. Perhaps a little more time to provide greater depth to comments. Group rating of activities to achieve consistency in assessment of priorities
- Tighter flow & continuity of experiences ie, ask one or two people from previous table groups to stay with the topic & bring continuity to/for new arrivals
- Test with "real world" examples. (This may have been done through the case study process)
- If you have 4 staff in the room and only 4 workshop tables, perhaps scribing and time management / guidance could be facilitated by staff (as establishing an atmosphere of trust and exchange can take time)