Local Adaptation Pathways Program Forum Report



'from risk to action'

Looking Backward: Evaluation Looking Forward: Implementation





ICLEI – Local Governments for Sustainability

ICLEI – Local Governments for Sustainability (ICLEI) is an international association of local governments and national and regional local government organisations that have made a commitment to sustainable development. More than 1200 cities, towns, counties and their associations worldwide comprise ICLEI's membership.

ICLEI Oceania

ICLEI Oceania is the secretariat for the Oceania region. Its Melbourne head office is hosted by the City of Melbourne and which was established in 1999. ICLEI Oceania's focus is to work predominantly with local governments in Australia and New Zealand. The Oceania office has been active in the Asia region with work undertaken on climate change action in support of local government in Indonesia, China, Korea and Taiwan.

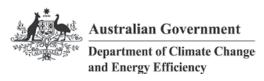
ICLEI Oceania undertakes collaborative work with Federal and State government departments and agencies, where that work builds the capacity of local governments to achieve sustainable communities, and supports those departments and agencies to progress their sustainable outcomes in partnership with the local government sector.



We acknowledge the contribution of the Department of Climate Change and Energy Efficiency:

Colin Steele Sharon Larkin Cate Coddington Huong Vu

Funded by the Australian Government Department of Climate Change and Energy Efficiency



Contents

Introduction	3
Executive Summary	4
Background	5
Local Adaptation Pathways Program Forum Program – from risk to action	6
Forum Summary	7
Looking Back: Evaluation	8
Looking Forward: Implementation	
Consultant Integrated Recommendations	14
Forum Report Appendices	16
A - LAPP Forum Agenda	16
B - Forum Participants	17
C - The Hon Mark Dreyfus QC MP Address	18
D - Forum Chair, Presenters & Facilitators	19
E - Breakout Group Reports • Key Leanings from the LAPPs	20
F - Breakout Group Reports • Actions and Conditions for successful adaptation by councils	25



Introduction



"The Climate Commission in its May 2011 report "The Critical Decade – Climate Change 2011: Update of science, risks and responses", states that 'we know beyond reasonable doubt that the world is warming and that human emissions of greenhouse gases are the primary cause. The impacts of climate change are already being felt in Australia and around the world with less than 1 degree of warming globally. The risks of future climate change – to our economy, society and environment – are serious, and grow rapidly with each degree of further temperature rise'.

For Australia, managing the risks and vulnerabilities associated with climate change and the resultant extreme weather related events is no longer the sole province of desk top research but has hit the ground with many communities experiencing floods, fire and drought.

Local councils have been on the frontline of the more frequent extreme weather events including heat waves, storms, cyclones, bushfires and droughts. Local councils therefore need to identify and address climate change risks and opportunities, and increasingly respond to climate change policies and regulations developed by other spheres of government.

There is therefore an increasing realisation across a number of local councils of the need to change the way they plan their cities and towns, design their buildings and infrastructure, diversify their water supplies and improve water efficiency and manage coastal areas.

As the level of government closest to the impacts of extreme weather related events local councils are expected by their communities to manage, assess and take action to both minimise risks and vulnerabilities and to maximize the opportunities to build sustainable communities.

Local councils are also expected to service the information needs of the community and provide appropriate education programs on local risks and vulnerabilities and satisfy due diligence requirements on behalf of their residents, businesses and industry in a changing climate.

The Australian Government through the Department of Climate Change and Energy Efficiency (the Department) initiated the Local Adaptation Pathways Program (LAPP) in response to the local government sector's need to increase their awareness of, and adaptive capacity to respond to, the impacts of climate change. The LAPP Forum was held to bring together LAPP participant councils and regional organisations and document the learnings and outcomes from the LAPP program.

Executive Summary

The Department provided funding to 40 LAPP projects covering around 90 local councils through two grant rounds – Round 1 covered mostly coastal and urban councils and Round 2 regional and remote areas of Australia.

The Department engaged ICLEI – Local Governments for Sustainability (ICLEI – Oceania) to conduct a forum at the Melbourne Town Hall on 19 May 2011 to evaluate the LAPP and recommend next steps.

The Forum was separated into two phases:

- 1) Looking back: an evaluation based on break-out groups and presentations which yielded twelve (12) lessons; and
- 2) Looking forward: proposing actions and future changed conditions based on break-out groups, presentations and a panel which identified nineteen (19) distinct climate change adaptation actions.

Additionally, the consultant re-configured the actions and lessons learnt from the LAPP participants into a sequential program of integrated recommendations for consideration by the Department.

Consultant Integrated Recommendations:

- Establish the LAPP vulnerabilities and actions database as an open resource for the local government sector;
- Develop a framework (input, review and evaluation process and on-line system) to continue to add to and manage the database as new projects are created;
- 3. Involve new adaptation programs from the beginning in this mechanism to ensure continuity of knowledge management;
- 4. Resource a long-term partnership approach with key local government sectoral organisations and identified other sectors to build common language, frameworks and approaches to climate change adaptation;
- 5. Continue this approach to develop crosssectoral regional partnerships for new climate change adaptation project development;
- 6. Publish appropriate case studies that provide guidance and inspiration; and
- Resource a series of roundtables for local governments across the country to increase understanding of, and access to, the above tools.





Background

The Department has provided support to local councils and their regional organisations to turn climate change risk into action through the Local Adaptation Pathways Program (LAPP). The LAPP provided funding to assist councils to undertake climate change risk assessments and develop action plans to prepare for the likely local impacts of climate change.

The Department identified the need for local government to respond to the impacts of climate change and provided funding to 40 LAPP projects covering around 90 councils.

Under Round 1 of the LAPP, more than 60 local councils received funding for a total of 33 projects. This funding totaled \$1.5 million. The majority of these councils were located in coastal and urban areas.

Under Round 2 of the LAPP, 30 councils in regional and remote areas of Australia received a total of \$874,000 to complement and build on the work from Round 1.

The Department engaged ICLEI - Oceania to conduct a forum to allow LAPP participants to share their learnings and actions and provide a degree of guidance to future investments in local climate change adaptation and increasing resilience.

ICLEI - Oceania conducted the LAPP Forum on behalf of and in consultation with the Department to meet the following objectives:

- To provide an effective sharing of information and common learnings of the LAPP program as part of development of the adaptation policy agenda through a one day forum; and
- To bring together management representatives of councils who participated in the LAPP to share their learnings and outcomes and to provide a degree of guidance to future Departmental investments in local adaptation and resilience.

The approach taken by ICLEI and agreed to by the Department was to conduct an evening reception and a one day forum at the Melbourne Town Hall 18-19 May 2011 and invite representatives from the 40 funding recipients (councils and regional organisations) of LAPP funding, as well as climate change and adaptation officers from state governments, the local government associations, Attorney-General's Department and the Department of Regional Australia.

The outputs agreed upon were to establish a key list of learnings as identified by LAPP participants; a list of key success factors (potential actions and council and

community conditions) for adaptation; and a list of barriers and solutions to achieving success at the local level on climate change adaptation.

The outcomes from the Forum were to be:

- 1) a final report reflecting the debate and communication exchange at the forum;
- a recommended audience for the final report identified through the forum discussion; and

3) consensus on the need for a common language in relation to climate change risk assessment and adaptation action.

The conduct of the Forum was part of the evaluation process recommended in the Walter Turnbull Draft Report, engaged by the Department to review the LAPP in November 2010.

The review found that the LAPP achieved its objectives to assist local governments to:

- Increase the adaptive capacity of councils through identifying and prioritising the risks of climate change;
- Develop strategies to manage those risks;
- Build community resilience; and
- Identify knowledge gaps and areas for further investigation.

The review findings concluded that -

'The LAPP process has provided an opportunity to promote positive outcomes from climate change impact risk assessments and developing adaptation strategies for local government. The Department needs to build on the success of LAPP and better engage with local government using the outcomes of the LAPP'.

The review recommended that an opportunity be provided for LAPP participants to share their learnings in a forum with other participants, together with representatives from Federal and State Government Departments and Local Government Associations.

The forum it stated would be an opportunity for the Australian Government to provide leadership in climate change risk assessment and building adaptive capacity, and in developing a national perspective on how local governments are adapting to the impacts of climate change.



Local Adaptation Pathways Program Forum

(Appendix A)



A Reception at the Melbourne Town Hall on Wednesday 18th May hosted by Department of Climate Change and Energy Efficiency and ICLEI – Oceania, provided participants with the opportunity for pre-forum networking.

Martin Brennan, Senior Associate, ICLEI - Oceania welcomed participants and expressed ICLEI's pleasure at being part of a collaborative effort involving local councils, local government associations, and the Department to drive the work of local government toward meeting the challenges and the opportunities of local climate change adaptation.

Dr Cathy Oke, City of Melbourne Councillor and Chair of the ICLEI Oceania Board, ICLEI International Executive Committee Member welcomed representatives on behalf of the City and ICLEI Oceania. The City of Melbourne is Host City to ICLEI - Oceania and has a commitment to a 'thriving and sustainable city' and to a low carbon future.

John Ginivan, Acting Executive Director, Planning Policy and Reform, Department of Planning and Community Development (DPCD), Victoria provided an address on the role of DPCD and other State planning bodies around the country in adaptation planning and the respective roles of Federal, State and local government in climate adaptation.

The Forum opened on Thursday 19th May with a call on participants (Appendix B) by the Forum Chair Martin Brennan and Colin Steele on behalf of DCC&EE to contribute their diverse experiences, expertise and knowledge to ensure that the LAPP learnings would guide future engagements with the Department and provide the local government sector with direction. The

Forum was therefore structured to enable participants to look back and evaluate their LAPPs through presentations, breakout groups, a keynote address and a plenary discussion and in the afternoon to look forward to implementation with breakout groups, a Panel discussion and a concluding 'Where to from here?' plenary.

The keynote speaker The Hon. Mark Dreyfus, QC, MP Parliamentary Secretary for Climate Change and Energy Efficiency, provided an overview of the Government's climate change policies in both mitigation and adaptation and emphasized the role of local government as being at the 'pointy end of climate change impacts' and therefore the need for collaboration with the Federal Government to turn risk into action (Appendix C).

Karl Mallon, CEO Climate Risk Pty provided an analysis of his Report – 'Learnings from the LAPP' with a focus on 'Risk and vulnerability outcomes' and 'Key actions' from the LAPPs. Wayne Wescott, Sustainability Consultant, was the Forum Facilitator and facilitated the plenary sessions and Panel discussion. The breakout groups with expert facilitators formed an integral part of the Forum enabling participants to provide the Department with guidance on future collaboration with local government on climate change adaptation and resultant investments (Appendix D).

The breakout group deliberations were reported back to the plenary sessions and facilitated by Wayne Wescott to enable a wider discussion of their findings and recommendations. The Forum Report captures the lessons learnt from undertaking the LAPP, the findings on key actions and conditions together with a set of integrated recommendations developed by ICLEI – Oceania.

Forum Summary

Looking Back: Evaluation

Lessons learnt from undertaking the LAPP:

- Increased knowledge on climate change in Councils
- 2. Created a sectoral knowledge bank on adaptation
- 3. Demonstrated the diversity of local government vulnerabilities and potential actions
- 4. Identified the lack of common language in climate adaptation
- Revealed a distinctive local government approach and set of needs with regards to climate change hazards
- 6. Identified governance issues across local-State-Federal governments
- 7. Focused on perceived conflicts between growth and sustainability
- 8. Established a costs-related approach for future actions
- Determined that many potential actions are outside Council's mandate
- 10. Provided for the engagement of different sectors
- 11. Illustrated the dilemmas of employing consultants

Looking Forward: Implementation

Findings on key actions and conditions:

The following findings on key actions and conditions were the result of the breakout group discussions by the LAPP participants and were recorded and reported to the plenary session.

- Explore different funding models for recurrent and long-term adaptation: including legislative changes to require Councils to allocate dedicated funding;
- 2. Identify existing resources allocated to adaptation within Councils: this ensures that existing services and works that are adapting to climate change are identified and potentially strengthened
- 3. **Shift to a risk framework:** risk from climate change considers and integrates infrastructure, ecosystem values and community well-being
- 4. Create new tools for local risk identification: at the local level it is difficult to assess alternative risk scenarios and costly to do individually
- Disseminate existing scientific information more effectively: especially focusing on climate modeling and asset mapping
- 6. Develop more effective warning systems for vulnerable communities: in particular related to bushfires and floods but more generally to emergency events
- Increase access to localized data: encourage dissemination of relevant data for local governments

- 8. **Provide more consistent methodologies and frameworks:** these are effective not only at the local level but in the complementary State and Federal arenas, for example, sea-level rise prediction
- 9. **Translate scientific information into appropriate community language:** jargon does not cross sectors well, so it needs to be understood in terms that make sense to sectors of the population
- 10. Translate climate change language into appropriate professional language: for example, asset managers respond to hazard, community planners respond to vulnerability, and corporate staff respond to business improvement
- 11. Develop community education programs that support Council decision-making processes: these should be integrated into existing approaches with a focus on climate change
- 12. Provide for regulatory responses that are Statebased but consistent nationally: these recognize that governments provide market signals to industries and can provide for standards that go beyond the minimums
- 13. Encourage procurement and decision-making is based on whole-of-life costs: many Council decisions are based upon existing financial year considerations or departmental budget systems that externalize cost
- 14. Create other internal pathways such as corporate, strategic and business plans for implementation of adaptation: including use of the Risk Register, land-use planning systems, community development planning and disaster planning
- 15. Audit existing planning protocols for adaptation conflicts: this includes issues such as the potential conflict of heritage needs and solar panels; and medium density approaches as opposed to the need to provide for backyards in housing developments
- 16. **Develop new partnerships science, researchers** and data providers: building on some of the above approaches, local government needs to have a clear joint agenda with scientists and data providers on their local needs and how they can be met
- 17. Develop new partnerships risk transfer between insurers, utilities and governments: encourage appropriate costing of risk between sectors to manage the risk and develop suitable business cases for action
- 18. Develop new partnerships focus on regional groupings of Councils: share resources where appropriate for both the planning and research components as well as implementation
- 19. **Provide clearer leadership nationally:** many of the messages currently are confused or contradictory which makes selling climate change adaptation approaches locally more difficult

Consultant Integrated Recommendations

The following integrated and sequential program of recommendations by the consultant are the result of a reconfiguration of the actions and lessons learnt from the LAPP participants.

- 1. Establish the LAPP vulnerabilities and actions database as an open resource for the local government sector
- 2. Develop a framework (input, review and evaluation process and on-line system) to continue to add to and manage the database as new projects are created
- 3. Involve new climate change adaptation programs from the beginning in this mechanism to ensure continuity of knowledge management
- 4. Resource a long-term partnerships approach with key local government sectoral organisations and identified other sectors to build common language, frameworks and approaches to climate adaptation
- 5. Continue this approach to develop cross-sectoral regional partnerships for new climate adaptation project development
- 6. Publish appropriate case studies that provide guidance and inspiration
- 7. Resource a series of roundtables for local governments across the country to increase understanding of, and access to, the above tools

Looking Back: Evaluation

Lessons learnt from undertaking the LAPP

Summary: Lessons learnt from undertaking the LAPP

- Increased knowledge on climate change in Councils
- 2. Created a sectoral knowledge bank on adaptation
- 3. Demonstrated the diversity of local government vulnerabilities and potential
- 4. Identified the lack of common language in climate adaptation
- 5. Revealed a distinctive local government approach and set of needs with regards to climate hazards
- 6. Identified governance issues across local-State-Federal governments
- 7. Focused on perceived conflicts between growth and sustainability
- 8. Established a costs-related approach for future actions
- 9. Determined that many potential actions are outside Council's mandate
- 10. Provided for the engagement of different sectors
- 11. Illustrated the dilemmas of employing consultants

Purpose of this session

The purpose of this session within the Forum was to understand the lessons learnt from the experience of LAPP

Process

This session had a mixture of information through presentations and collective break-out groups. They involved:

- A presentation by Karl Mallon on 10 key lessons learnt from the Climate Risk perspective of all of the LAPP reports
- Consideration of a speech by Parliamentary Secretary Mark Dreyfus
- Collective experience of participants within five break-out groups which considered the question: "what are your key learnings from LAPP", which was given to attendees before the Forum
- Interaction of a plenary session which allowed for questions and comments and brief overviews of the break-out groups' deliberations

Context of these discussions

This session focused on understanding the experience of LAPP. It should be noted that some of the attendees were not themselves directly involved, either through personnel change or because they represented a sectoral association at the Forum.

It was also clear that there was a wide diversity of experience, given the difference in size, budgets, demographics and staff of the different local governments. Rather than provide many different comments, we have tried to gather together as many comments that are common or similar and group them so that we have a picture of where attendees tended to agree.

There was a general consensus that the LAPP process was extremely positive and beneficial for a number of reasons. These are explored.

Lessons learnt from undertaking the LAPP (Appendix E)

1. Increased knowledge on climate change in Councils

There was general agreement across the Forum participants that the LAPP process built on the existing knowledge base of local governments and in many cases developed new knowledge sets on specific issues, such as vulnerabilities (to sea-level rise, for example) and potential actions (such as engineering options).

LAPP also assisted with connections. One break-out group noted that it had begun the "process to improve understanding between risk and vulnerability". Specifically, it focused on new issues for some Councils and raised understanding of their compounding nature. For example it was noted that food security – "changing land use and food production areas of the future" – became central for some.

As well, many participants reported that there was an increased awareness of the issue of climate change itself and subsequent broader understanding of the local impacts of the issue beyond the global debates. This was seen as particularly useful in relation to senior staff and elected officials who were perceived as either lukewarm or hostile to discussions on the issue.

2. Created a sectoral knowledge bank on adaptation

The LAPP process created a database of both vulnerabilities and actions that is particularly useful for the local government sector. The 3000 unique identified actions – of which 1000 are common – from a menu of options that has the potential to dramatically reduce the costs of research for the rest of the local government sector, as well as the potential to accelerate action by identifying a ready-made set of options.

This knowledge bank is useful for individual councils that are now faced with implementation of their LAPP as they can identify low-cost and early action options, some of which (it is possible) may not have been developed in their own LAPP.

It should be noted that the very size and complexity of the final reports was a significant issue for some councils. Break-out group comments included that they were "not happy with the final plans and ease of implementing" and that the document was "very overwhelming".

3. Demonstrated the diversity of local government vulnerabilities and potential local actions

The LAPP project described the variety of hazards and vulnerabilities across the councils – although there is common ground, there is also significant diversity based on geographical, historical and climate zone positioning.

Four groups of primary climate change hazards were identified (temperature, precipitation, wind and seas) while approximately 3000 risks have been consolidated to roughly 300 key risks.

Similarly, the LAPP program identified six generic adaptation actions (reduce exposure and vulnerability,

plan for and manage risk, seize opportunities and increase the capacity to adapt) by councils to act on climate change adaptation.

4. Identified the lack of common language in climate adaptation

Forum participants reported that there were significant differences in the language that different sections within Councils used to discuss climate change, as well as in their local communities. Words such as "risk", "hazard", "adaptation" and "vulnerability" have significantly different meanings to these audiences.

This lack of common language is a constraint on the conversation that LAPP has built on or commenced in local communities.

5. Revealed a distinctive LG approach and set of needs with regard to climate hazards

Forum attendees identified a specific set of issues for local governments in relation to climate adaptation responsibilities. These related to, firstly, the boundaries of regulatory responsibility with both State and Federal governments – a common issue across the local government sector. Many issues cross these different mandates and local governments need to be clear about when they are responsible for the setting of policy, management of operations or combination of both.

Second, local governments have a large and diverse group of stakeholders within their municipalities and their responsibilities also cross over: there are different views on settlement of flood plains, bush-fire prone areas and so on among these groups, with economic interests often being central to the debate.

Therefore, participants noted that local governments are often in a difficult position, advocating action to others, trying to co-align forces and sometimes (as with sea-level rise) required to pick between competing constituencies.

6. Identified governance issues across local-State-Federal governments

A common theme, identified as a general issue of stakeholder management, is the mismatch of governance arrangements between the three levels of government – identified by a break-out group as a "co-dependence". The out-of-sequence and different sea-level rise estimates made by the Federal Government and State Governments is an example and it was noted that this would lead to "uncertainty".

Forum participants noted that local governments receive different and sometimes competing messages from the other levels of government and that this is not just based on political parties or ideology. One break-out group summed it up as a desperate need for "complementary State/Federal adaptation frameworks (to be put) in place".

Nevertheless, it is instructive that some Forum participants identified "good co-operation" between regional and individual Councils, sharing information but delivering locally, while others felt that they missed

this opportunity. It was identified that there was no communication between Councils Australia-wide undertaking LAPPs and that this was also a missed opportunity.

7. Focused on perceived conflicts between growth and sustainability

As one break-out group described it, we learnt the "pressure that a growth fetish puts on adaptation". The risks associated with land use, such as fires and sea-level rise, a growing population and continued expansion of our cities creates an obvious tension.

LAPP provided an avenue – among many others – for some of these tensions to be explored, especially as it provided a risk format to examine the issue, rather than continuing older debates.

Forum participants noted that these tensions were particularly explicit in the "growth areas', where (it was asserted) State Governments resisted some of the climate change implications

8. Established a costs-related approach for future actions

One of the difficult activities for Councils is to quantify some of the costs and benefits of potential adaptive actions. As was noted, "what the costs of adapting and not adapting are". LAPP was seen to provide a positive aspect by discussing these issues, though not always to resolution.

It was noted by a break-out group that the cost "of adaptation at the initial phase is relatively small compared to later costs of non-action" and this was seen as an important component in assessing the business case for adaptive action, along with "whole of life costing".

9. Determined that many potential actions are outside Council's mandate

LAPP plans identified many actions across sectors and some posed a dilemma for the councils.

An example: "Work with insurance providers to ensure that all properties in the area are affordably insurable. Promote full insurance cover within the community", which the relevant council considered to be beyond its mandate and control.

This focus on mandate and boundaries is a live debate across many areas of local government operations and policies. Many participants called for regulation as a way to clarify these mandate issues: one break-out group noted that "guidelines are not good enough" and that there needed to be better "parameters for planning".

10. Provided for the engagement of different sectors

A major focus of Forum participants was the approach to building engagement of different sectors of the community to climate adaptation. This has two drivers: a resistance to the notion that "government" will solve the problem and an understanding that the constraints on any one sector require co-operation across many sectors. These sectors include the media (singled out as a major influence on community attitudes), small and large businesses, banks, energy and water utilities, other levels of government and community organisations.

11. Illustrated the dilemmas of employing consultants

There was a wide diversity of views on the effectiveness of employing consultants to undertake the LAPP projects. Some local governments agreed with (as they put it) the "value and expertise of approved consultant", though the short timeline was noted.

Others suggested that there was a certain "very generic" (or "cookie cut") approach to the reports that undermined their value, while others saw that consultants became educators of the Council (a valuable role) rather than to "draw out from participants" their knowledge.

This diversity - both of local governments and the consultants involved - makes it difficult to build a common view. The short timelines, need to build Council involvement and avoidance of template approaches suggests that future programs utilizing consultants need to make sure that these approaches are front and central.



Looking Forward: Implementation

Summary: Key actions and conditions

- Explore different funding models for recurrent and long-term adaptation
- 2. Identify existing resources allocated to adaptation within Councils
- 3. Shift to a risk framework
- 4. Create new tools for local risk identification
- 5. Disseminate existing scientific information more effectively
- 6. Develop more effective warning systems for vulnerable communities
- Increase access to localized data 7.
- 8. Provide more consistent methodologies and frameworks
- 9. Translate scientific information into appropriate community language
- Translate climate change language into appropriate professional language
- Develop community education programs that support Council decision-making processes
- Provide for regulatory responses that are State-based but consistent nationally
- Encourage procurement and decision-making is based on whole-of-life costs
- Create other internal pathways such as corporate, strategic and business plans for implementation of adaptation
- 15. Audit existing planning protocols for adaptation conflicts
- 16. Develop new partnerships science, researchers and data providers
- 17. Develop new partnerships risk transfer between insurers, utilities and governments
- 18. Develop new partnerships focus on regional groupings of Councils
- Provide clearer leadership nationally

Process

This session had a mixture of information from presentations, collective break-out groups and an interactive panel. They involved:

- A presentation by Karl Mallon on council actions
- Experience of five break-out groups which considered the question: "what actions and conditions would make for successful climate adaptation in your council?"
- Interaction of a plenary session which allowed for questions and comments and brief overviews of the break-out groups' deliberations
- Interaction of a panel session (comprising the facilitators of the five groups) with question and

Context of these discussions

As in many break-out groups, there was a wide variety of perspectives and approaches, none more so that in proposals for actions and changes to Council conditions that might have an impact on climate change adaptation.

Participants were not required to identify specific organisations or people that might implement the proposed actions, though some did on the basis that they thought that they were the logical key actor. Therefore, we have gathered up some of these actions into a coherent programmatic response in the third section that could more easily identify the roles of different levels of government.

Nevertheless, the range of actions discussed is noted here under categories that make sense of the diversity and try to build a common view of next steps.

Findings on key actions and desired changes to conditions (Appendix F)

1. Explore different funding models for recurrent and long-term adaptation

There was considerable discussion on funding models including:

- Possible allocation of funds from a Federal Adaptation Fund, though there needs to be a focus on appropriate application timelines (as one break out group noted, "local government budget cycles" are crucial in this process)
- Legislative changes at the State level which would require Councils to allocate dedicated funding
- A focus on recurrent, long-term funding rather than one-off short term funding
- An incentives based approach to infrastructure adaptation is worth exploring
- Potential approaches might even include (as one break-out group noted) "levy/fund models from rate base" – politically difficult but based at least on long term and sustainable approaches
- Identify existing resources allocated to adaptation within Councils

Forum participants had a desire for clearer guidelines to Councils to allocate existing budget items (such as emergency bushfire trail management) against climate change adaptation. This ensures that existing services and works that are adapting to climate change are identified and potentially strengthened. One break-out group noted that this would help to "badge climate change adaptation actions".

It would also help to build the political argument that there is already investment in climate change adaptation and that further investment is not an issue of type but of

3. Shift to a risk framework

There are a number of approaches that different bodies use to understand climate change adaptation. The Forum participants suggested that a risk management

approach is effective as it considers and integrates infrastructure, ecosystem values and community well-

As well, a more formal approach allows, as one facilitator noted, the identification of "risk owners", who could then be held accountable for managing the risk. Another facilitator then noted that the insurance perspective had been particularly powerful.

It should be noted that some participants understood that there would be other frameworks (especially around growth and sustainability) that need to be considered as well.

4. Create new tools for local risk identification

At the local level, it is difficult to assess alternative risk scenarios, based on both extrapolated climate scenarios and uncertainty over time frames. This makes it difficult and costly to do these scenarios individually by locality.

The Forum participants called for new tools that could be made available to understand these different risk scenarios, and crucially, that these tools are made available freely or at low cost for individual councils.

Additionally, there is an opportunity to simplify the integration of State GIS tools with local systems and have them able to relate more directly to national approaches. There may be other opportunities for tools (one breakout group requested "user manuals to capture knowledge and maximize operational use and adaptability") as well as integration with other Federal and State activities.

5. Disseminate existing scientific information more effectively

In addition to the above point, there was a call for broader scientific information to be made more available across the community. Within Councils, there is a need for effective dissemination of the linkages and implications of scientific information, especially focusing on climate modeling and implications for asset mapping.

6. Develop more effective warning systems for vulnerable communities

This was a specific action that was identified in the break-out groups – as possibly a key echo of the recent emergency actions in Queensland. It was in particular related to bushfires and floods but more generally to emergency events.

7. Increase access to localised data

The climate data that is available, which is generally sourced via CSIRO, is national and regional in scale many local studies seem to rely on extrapolations of broader work.

Forum participants encouraged the further dissemination of relevant data for local governments. Locally "relevant special mapping", "specific vulnerability mapping", "cost abatement curves for action" were all noted.

As well, there is the potential for integration with a variety of initiatives such as the National Heatwave Response Program.

8. Provide more consistent methodologies and frameworks

As identified in the lessons section, participants noted the need for more consistent methodologies (categorizing vulnerabilities, understanding limits of control and so on) as well as frameworks within which councils must operate.

A facilitator noted the need for a "legally-agreed" approach, which assumes a common legislative methodology.

9. Translate scientific information into appropriate community language

Councils work within a rich context of community interest and support – ultimately as a level of democracy, they must ensure that there is a common understanding

Jargon does not cross sectors well, so explanations of climate change adaptation need to be understood in terms that make sense to different sectors of the population. Local governments play a part in this but there is also a role in translating scientific information to both terms and systems that sectors of the community will understand.

10. Translate climate change language into appropriate professional language

A facilitator noted that climate change might not be on the agenda if not for LAPP. A critical part of that agenda is the development of relevant language.

For example, asset managers respond to hazard, community planners respond to vulnerability, and corporate staff respond to business improvement

11. Develop community education programs that support Council decision-making processes

There was a substantial debate about community education approaches – one facilitator in particular focused on the difference between information programs and community education programs.

Ideally, these should be integrated into existing approaches so the messages are aligned either with other issues such as broader sustainability or emergency management. This still allows for the notion (as one facilitator stated in the panel session) that LAPP can provide a "space" to discuss climate change safely.

12. Provide for regulatory responses that are Statebased but consistent nationally

This approach recognizes that governments provide market signals to industries and can provide for standards that go beyond the minimums. There is a fair debate on whether this type of regulatory approach is reasonable within local government, but regardless of the type of response (as in how interventionist it may be), there was a very strong feeling that the approach should be national and consistent.

As one break-out group envisaged as a highly desired situation: "National/State standards for longevity and taking into account climate change to ensure infrastructure... is future proof".

13. Encourage procurement and decision-making based on whole-of-life costs

It was noted that many Council decisions are based upon existing financial year considerations or departmental budget systems that externalize costs. A condition change within local governments that would make a significant difference to budget processes would be if councils considered the entire life-cycle costs of a decision.

This occurs with some decisions at the moment with some Councils (in particular in infrastructure investments) but it would be fair to say that the vast majority of decisions do not rest on this basis.

14. Create internal pathways such as corporate, strategic and business plans for implementation of adaptation

One facilitator noted that LAPP had provided an opportunity to re-brand climate change action in the Council. Often, such action is locked into one specific section or department (such as an environment or sustainability unit).

By including the use of the Risk Register, land-use planning systems, community development planning and disaster planning, the variety of officers and staff involved in considerations of climate change adaptation was increased.

Similarly, many attendees noted the need to incorporate adaptation plans into both broader climate change or sustainability plans and eventually into the corporate planning system: a "whole of organization" approach as one break-out group noted.

15. Audit existing planning protocols for adaptation conflicts

A facilitator noted that LAPP needs to "turn into something that we can use" - an urgent need for practical outcomes was shared by some of the participants.

One approach suggested would focus on understanding current planning controls and how they might be opportunities or constraints on climate adaptation: this includes issues such as the potential conflict of heritage needs and solar panels; and medium density approaches as opposed to the need to provide for backyards in housing developments.

16. Develop new partnerships - science, researchers and data providers

Building on some of the above approaches, local government needs to have a clear joint agenda with scientists and data providers on their local needs and how they can be met.

It was suggested that this is not easily done on a case by case basis as the research and other terms may have already been set – for example, the boundaries of action for NCCARF project explicitly excludes non-adaptation work, a limitation that is unrealistic in the sphere of influence of local governments. Improving communication between NCCARF and LAPP projects is an obvious opportunity.

In order to deal with this mismatch, it was proposed that there be a deliberate attempt to bridge this gap. Existing institutions are already moving on this approach: for example, it was noted that the Australian Centre for Excellence in Local Government has recently focused on this issue. The outcomes of this approach need to be disseminated across the local government sector.

17. Develop new partnerships – risk transfer between insurers, utilities, developers and governments

One theme that emerged was the desire to encourage the appropriate costing of risk between sectors in order to manage the risk and develop suitable business cases for action.

This requires a clearer demarcation between different parts of the risk equation and an agreement that risk can be transferred at a suitable cost. This then builds a clearer identity for both the risk and the subsequent ability to hedge, manage and trade that risk.

For local governments, this is critical, as in a confused state of allocation of risk, there is the temptation to simply do nothing that might incur a liability in the future.

This approach may require some formal structures as different actors in the development process ensure that their interests are being represented.

18. Develop new partnerships - focus on regional groupings of Councils

Local Governments have a long history of resourcesharing, both informally and formally through Regional Organizations of Councils. Given the amount of resources that are needed to develop a plan in the first place (let alone to implement the actions that arise from them), this was a logical focus for Forum participants.

Participants noted that there was an opportunity to share resources where appropriate for both the planning and research components as well as implementation, and that this was in the early stages of the LAPP project, before too many of the final recommendations had been developed.

19. Provide clearer leadership nationally

Forum participants felt in general that there was a need for a strong message of support for climate change action to come from the Federal Government. It was noted that many of the messages currently are confusing or contradictory. This is not necessarily a consequence of attitude of the Federal Government so much as the nature of the broader federal sphere (which in a sense reflects the controversial state of the debate on carbon pricing and climate change in general).

Regardless of the reasons for this confused set of messages, local governments are clearly stating that their actions need to be supported by an unequivocal approach from the Federal Government. Anything less makes selling climate change adaptation approaches locally more difficult.

Consultant Integrated Recommendations

Summary: Integrated recommendations for the Federal Government:

- Establish the LAPP vulnerabilities and actions database as an open resource for the local government sector
- Develop a framework (input, review and evaluation process and on-line system) to continue to add to and manage the database as new projects are created
- 3. Involve new adaptation programs from the beginning in this mechanism to ensure continuity of knowledge management
- 4. Resource a long-term partnerships approach with key local government sectoral organisations and identified other sectors to build common language, frameworks and approaches to climate change adaptation
- 5. Continue this approach to develop crosssectoral regional partnerships for new climate change adaptation project development
- 6. Publish appropriate case studies that provide guidance and inspiration
- Resource a series of roundtables for local governments across the country to increase understanding of, and access to, the above

Given the large amount and range of material gathered within a short timeframe, the consultant has developed the above recommendations gained from the LAPP experience.

This sequential and programmatic approach could be done in stages, in parallel or all at once, depending upon resources and other strategic priorities.

1. Establish the LAPP vulnerabilities and actions database as an open resource for the local government sector

The database of vulnerabilities and actions should be on-line and available freely to anyone. The pathways for those wishing to interrogate this database need to be clear - involving criteria based searches ("actions that are low cost") and relevant to the stages of climate change adaptation planning that Councils undertake ("education materials for local residents").

Additionally, this database could be strengthened by adding a resource link section that identifies materials from other local governments around the world that may provide new approaches, further political backing for local action by demonstrating the success of others, further lessons learned (both success and failure), templates for evaluation and contacts for realtime updates.

2. Develop a framework (input, review and evaluation process and on-line system) to continue to add to and manage the database as new projects are

The database is a potential "treasure trove" (as has been noted), but needs not only a navigation pathway but also a program of engagement to maximize its benefits.

Forum participants noted the lost opportunity in connecting to other LAPP projects. In similar vein, the database of vulnerabilities and actions provides a set of options that should be connected to a wider program that encourages:

- New projects (such as CAPP) to enter their data directly into the database and use the database as part of their research process
- Existing LAPP participants to use the database to encourage implementation of their plans, especially where there are resource constraints
- Other stakeholders, including researchers and potential finders, to utilize the database to discover best practices, strong investment actions and linkages to similar vulnerabilities
- 3. Involve new adaptation programs from the beginning in this mechanism to ensure continuity of knowledge management

Specifically, there is an opportunity to gather the new CAPP participants in the next few months and conduct a similar Forum to this one. The purpose would be to ensure the sharing of knowledge and understanding from the LAPP, but also to educate the new participants in the use of the database.

This could involve all of the new participant project managers and could be done in August to September. Ideally, this would be followed up by a similar meeting in the middle of 2012 (perhaps at the ALGA General Assembly), where the cumulative learning of all of these projects could be gathered and articulated to the sector.

4. Resource a long-term partnership approach with key local government sectoral organisations and identified other sectors to build common language, frameworks and approaches to climate adaptation

A strong message from the Forum was the need for longterm developed relationships with a group of stakeholders including developers, researchers, insurers and data providers.

The major sectoral associations (the ALGA and the State associations, ICLEI Oceania, the professional associations such as Planning Institute of Australia, universities and other professional groups such as Australian Centre for Excellence in Local Government and other local government networks such as the Council of Capital City Lord Mayors) have many and varied relationships to these stakeholders. Forum attendees wanted a clearer set of relationships that would mean a clearer set of messages between the various parties.

This partnership approach would try to identify common alignments for these groups and build:

- agreed terminology and language
- co-ordinated frameworks for action, in particular in relation to costs and benefits and risk management frameworks
- common approaches to the linkages between climate change mitigation and adaptation

A further opportunity exists to investigate new funding approaches that are more sustainable, based on a more robust business case and focusing on the management of risk.

5. Continue this approach to develop cross-sectoral regional partnerships for new climate change adaptation project development

A more focused version of this stakeholder approach would build on the model being developed in the Coastal Adaptation Decision Pathways (CADP). The timeframe for the CADP is very short, but the model of crosssectoral and regional partnerships is a useful one. Experience with the Area Consultative Committees and Regional Development Australia suggests that it is in long-term relationships that the richest and most productive work will be done.

In order to foster these partnerships, it is proposed that the Federal Government directly support the development of these partnerships – utilizing existing relationships or supporting new ones, depending on context and costs and benefits.

The facilitation of partnerships is a lengthy and timeconsuming process, which requires a sophisticated understanding of different drivers and agendas and an agreement to pursue common goals. Australian experience of this approach is mixed but when it is effective it is suggested that this is a powerful methodology.

6. Publish appropriate case studies that provide guidance and inspiration

Short examples of council action are always instructive and often inspirational, and there are many stories from the LAPP experience that would benefit both new adaptation projects and the wider sector.

These case studies could focus on (in particular) early actions to encourage implementation; traps to avoid in the consultation phase; simple cost-benefit approaches and so on.

Depending upon resource constraints, there are opportunities to lock in more of this approach to new adaptation projects (that is, document new activities as they are being developed rather than wait until they are completed).

Consideration should also be given to utilizing new technologies and media, including the use of video and audio capture, consultation processes using social media and virtual presentation of major lessons learned.

7. Resource a series of roundtables for local governments across the country to increase understanding of, and access to, the above tools

As with the need to develop a program to support the use of tools, so (experience tells) we should demonstrate the effectiveness of these tools and program face to face and on-site, if possible.

Given resource constraints and the potential focus on regional partnerships, it is proposed that the Federal Government consider a series of roundtables in regional Australia which would:

- Demonstrate the utility of the vulnerabilities and actions database with practical application and potential staff training, depending upon the level of complexity
- Explain the framework that has been developed around the database, including risk management principles, ways to approach the growth/ sustainability tension and so on
- Provide face to face examples that are relevant to that region of case studies of planning, integration and action
- Foster the regional partnerships that already exist and develop new ones through this roundtable process

Local Adaptation Pathways Program: from risk to action

IAPP FORUM AGENDA

RECEPTION Wednesday, 18th May: 5.30pm to 7.30pm 10.30am: **Morning Break** Melbourne Town Hall - Melbourne Room, Level 2 10.45am: Speaker: The Hon. Mark Dreyfus, QC, MP, Parliamentary Secretary Participant Registration Climate Change and Energy 6.15pm: Introductions: Martin Brennan, Efficiency Senior Associate, ICLEI - Oceania Adapting to climate change - risk 6.20pm: Welcome: Dr Cathy Oke, to action Councillor, City of Melbourne, Plenary and Break Out Group 11.15am: Chair, ICLEI - Oceania Board, summary: Key Learnings from Member ICLEI International **LAPPs Executive Committee** Facilitator: Wayne Wescott Address: John Ginivan, Acting 6.30pm: 11.45am: Presentation: Karl Mallon and **Executive Director, Planning Policy** Colin Steele & Reform, Dept of Planning and Key actions from the LAPPs Community Development. Plenary Discussion: What has 12.05pm: **LAPP FORUM** happened to your LAPP? Thursday, 19th May: 7.45am to 5.00pm Facilitator: Wayne Wescott Melbourne Town Hall - Supper Room, Level 3 12.30pm: **Lunch Break** 7.45am to 8.45am: Networking Continental Breakfast 1.15pm: **Looking Forward:** 8.00am to 8.45am: Participant Registration **Implementation** 9.00am: **Forum Opening Introduction:** Wayne Wescott Chair: Martin Brennan, Senior **Break Out Groups:** What actions Associate, ICLEI - Oceania and conditions would make your Facilitator: Wayne Wescott, council successful in climate Sustainability Consultant adaptation in the future? 9.10am: **Looking Back: Evaluation** 2.45pm: Plenary and Break Out Group Speaker: Colin Steele, Advisor, **Summary:** Actions and conditions Local and State Government for successful adaptation Relations, Department of Climate Facilitator: Wayne Wescott Change and Energy Efficiency Afternoon Break 3.00pm: Purpose of Forum and outline of 3.15pm: **Panel Discussion:** the aims and objectives of LAPP Facilitator: Wayne Wescott 9.20am: Speaker: Karl Mallon, CEO, **Panel:** Rolf Fenner; Peter Maganov; Climate Risk Pty Ltd Greg Hunt; Maggie Hine; Risk and vulnerability outcomes **Rob Weymouth** from the LAPPs: Presentation on key **Q&A Session**: Barriers and risks identified in the LAPP solutions to effective action **Break Out Groups:** What were the Facilitator: Wayne Wescott

4.45pm:

5.00pm:

Plenary: Colin Steele and

Martin Brennan

Close

Where to from here?

9.35am:

key learnings from your LAPP? **Introduction:** Wayne Wescott **Group Facilitators:**

> Rolf Fenner, ALGA: Portico Room Peter Maganov, Randwick Council: Melbourne Room

Greg Hunt, SE Councils Climate Change Alliance: Supper Room 1 Rob Weymouth, WALGA: Supper

Room 2

Maggie Hine, Onkaparinga City:

Regent Room

Local Adaptation Pathways Program: from risk to action

LAPP FORUM PARTICIPANT LIST

State	Council/Department/Organisation	Representative
Vic	ICLEI Oceania	Martin Brennan
Tas	Devonport City Council	Carol Bryant
WA	Rockingham City Council	Kim Byrnes
Vic	City of Wangaratta	Bronwyn Chapman
Vic	ICLEI Oceania	Hazen Cleary
WA	Southern Metropolitan Regional Council	Shelley Cocks
ACT	Dept of Climate Change & Energy Efficiency	Cate Coddington
WA	City of Geraldton-Greenough	Murray Connell
Vic	ICLEI Oceania	Bernie Cotter
NSW	Armidale Dumaresq Council	Carol Davies
Vic	Shire of Campaspe	Bill Denton
NSW	Cessnock City Council	Tricia Donnelly
Tas	Climate Change Office	Libby Doughty
ACT	Parliamentary Secretary for Climate Change & Energy Efficiency	Hon. Mark Dreyfus QC, MP
Tas	Burnie City Council	Patrick Earle
Qld	Cairns Regional Council	Sarah Faulkner
ACT	ALGA	Rolf Fenner
NT	LGA NT	Shenagh Gamble
SA	LGASA	Adam Gray
WA	City of Cockburn	Jennifer Harrison
Vic	Mansfield Shire Council	Suzie Healy
SA	City of Onkaparinga	Maggie Hine
Vic	SE Councils Climate Change Alliance	Greg Hunt
Vic	Towong Shire Council	Charles Knight
		Sharon Larkin
ACT	Dept of Climate Change & Energy Efficiency	Andrea Lomdahl
Vic	City of Boroondara	
Vic	City of Melbourne	Yvonne Lynch
NSW	Randwick City Council	Peter Maganov
WA	City of Bayswater	Jeremy Maher
Qld	Redland City Council	Helena Malawkin
ACT	Climate Risk Pty Ltd	Karl Mallon
WA	City of Swan	JeremyManning
Vic	City of Melbourne	Beth Mclachlan
WA	Shire of Murchison	Cr Sandy McTaggart
NSW	Wollongong City Council	Tony Miskiewicz
Qld	Ipswich City Council	Peter Napier
WA	Mandurah City Council	CraigPerry
Qld	Gold Coast City Council	Louise Robb
Qld	Office of Climate Change	David Robinson
Vic	ICLEI Oceania	Helen Scott
Vic	NE Greenhouse Alliance	Nikki Scott
Vic	City of Melbourne	Ian Shears
Qld	Logan City Council	David Spolc
ACT	Dept of Climate Change & Energy Efficiency	Colin Steele
WA	Bassendean Town Council	Simon Stewert-Dawkins
Vic	Municipal Association of Victoria	Simone Stuckey
Tas	Launceston City Council	Jim Taylor
NSW	Bellingen Shire Council	Ian Turnbull
WA	Eastern Metropolitan Regional Council	Yulia Volobeuva
ACT	Dept of Climate Change & Energy Efficiency	Huong Vu
NSW	Tweed Shire Council	Dan Walton
Vic	Sustainability Consultant	WayneWescott
WA	WALGA	Rob Weymouth
NSW	Port Stephens Shire Council	Sally Whitelaw
Vic	Sustainability Victoria	Karen Wilson
NSW	Blue Mountains City Council	Alison Winn
Qld	Sunshine Coast Regional Council	Sally Wright
-		

Adapting to climate change: from risk to action

Local Adaptation Pathways Program Forum

Melbourne Town Hall, 19 May 2011

Thank you for inviting me to addres this forum and for the warm welcome.

Firstly, I respectfully acknowledge that we are meeting on the traditional land of the Kulin Nation, now known by its European name of Melbourne.

I pay my respect to their elders past and present.

I am very pleased to be able to join you today. The Local Adaptation Pathways Program Forum represents a great opportunity for you to share your experiences and to help us shape future Australian Government policy on climate change adaptation.

Local Government is at the pointy end of climate change, dealing directly with risk to communities and community assets. While the devastating impacts of floods and bushfires in recent times cannot be directly linked to climate change, they do foreshadow some of the weather extremes that are likely to become more commonplace over the next few decades.

The decisions you make and the actions you take on climate change will have long-lived consequences for the wellbeing of your communities.

So far today, some of you have spoken about your experience with the Local Adaptation Pathways Program and how it has helped you to identify the main risks to your operations and helped you to develop action plans to respond to those risks. I encourage you to share this information, not only with each other, but with those of us here from the Australian, state and territory governments. This interaction is fundamental to successful individual and joint adaptation action.

You are here because the Commonwealth recognises the importance of Local Government in the national climate change effort. For all levels of government, our primary focus is the well-being of the Australian community.

As Parliamentary Secretary for Climate Change and Energy Efficiency, I would like to reiterate my Government's strong commitment to meet the challenge of climate change.

The Government has a strong three-part strategy for action on climate change - Australia must play our role in helping to shape a global solution; we must reduce our own carbon pollution; and we must prepare for the climate change we can no longer avoid.

Today I would like to speak to each of the three areas of action.

1. International cooperation

Last year, I had the privilege of representing Australia, along with the Minister for Climate Change and Energy Efficiency, the Hon Greg Combet AM MP, at the global Climate Change Conference in Cancun. What came out of that conference was a balanced package of measures that will substantially advance the global effort to combat climate change.

193 out of 194 participants accepted the agreement. Moreover, the overwhelming spirit amongst delegates was to return to their respective countries empowered to tackle climate change.

Action against climate change requires a global effort and Australia is committed to playing our part in that effort. Nationally, the Australian Government is hard at work on both the mitigation and adaptation fronts. Since returning to Australia, I have been particularly engaged in the preparation work for the introduction of a carbon price – a measure that will enable Australia to meet our international emissions reductions commitments.

2. Mitigation

The second pillar of the Australian Government's climate change strategy is mitigation - reducing our carbon emissions through the introduction of a carbon price and important work on energy efficiency.

Carbon Price

The carbon price will drive the clean energy future that we need for our economic, social and environmental well-being. It will target the largest polluters and create incentives for businesses to reduce carbon pollution and invest in low pollution technologies. It will encourage consumers to use energy more

The Government has made it clear that generous household financial assistance will be provided to help cope with costs in the short-run. Earlier this month, I announced with the Minister for Climate Change and Energy Efficiency, Greg Combet, and Jenny Macklin, Minister for Families, Housing, Community Services and Indigenous Affairs, a call for community input to develop the household assistance package. We have established a working group of community sector leaders and draw on their advice to ensure we get the targeted assistance package right.

The Government proposes that the carbon price commences on 1 July 2012, subject to the Government's ability to negotiate agreement with a majority in both houses of Parliament and passing legislation this year.

We plan to transition to an emissions trading scheme within three to five years after the introduction of a carbon price. The European Union has had an emissions trading scheme in place for a number of years and it is working. Europeans continue to enjoy their way of life. Business and industry continues, and Europe is on track to meet its carbon reduction targets.

But it is not the Government's policy to rely solely on a carbon price to address climate change and meet our bipartisan emissions reduction targets. Support for renewable energy and energy efficiency are also essential parts of the solution.

The Government has a range of complementary policies in place to support the development and deployment of renewable energy. The most significant of these is the Renewable Energy Target (RET), which aims to deliver on the government's commitment for the equivalent of at least 20 per cent of Australia's electricity to come from renewable sources by 2020. The Renewable Energy Target also includes incentives to help Australian households, businesses and community groups do their bit on climate change. For example, the Renewable Energy Target encourages the move towards rooftop solar photovoltaic panels and solar water heaters.

The Government is also providing significant funding for research, development and demonstration of clean energy technologies, including renewables, through the Clean Energy Initiative (CEI). The Clean Energy Initiative includes the Solar Flagships Program and the Australian Centre for Renewable Energy (ACRE).

Energy Efficiency

As I mentioned, a complementary area of the mitigation work is also energy efficiency. I have a strong interest in this area. I also have Ministerial responsibility for energy efficiency. Coupled with a carbon price, energy efficiency will play an important role in reducing Australia's greenhouse emissions.

Energy is a critical input to almost all aspects of Australian life: it drives our economy, keeps our homes comfortable, moves us from place to place, delivers goods and services, and is exported to the world. By increasing the efficiency in the way we use our energy, we can improve the productivity of our economy as well as reduce carbon pollution. To do that requires action across our economy, across all sectors of our society, and of course, the leadership of all levels of government.

The Australian Government has an extensive and busy energy efficiency agenda. Our work includes regulating for more efficient industries, providing incentive programs, trialing a more efficient kind of energy supply, providing a wide range of information resources and working on improving the energy efficiency of the Government's own operations.

The National Strategy on Energy Efficiency is a landmark agreement between Australian, state and territory governments setting out a work plan for energy efficiency improvements in all sectors of the Australian economy. The Strategy is wide-ranging and includes measures to strengthen energy efficiency standards for appliances, equipment, buildings and vehicles. A number of measures under the Strategy will also provide Australians with better information and training to assist them in making informed choices to improve their energy efficiency.

Work is currently underway to develop the national Greenhouse and Energy Minimum Standards or GEMS legislation for appliance and equipment efficiency. This legislation will provide a nationally consistent minimum energy performance standards and rating labels for consumer goods.

There are other ways the Government is helping the community manage rising energy costs. The Government has commenced the Commercial Building Disclosure, a national program that encourages the improvement of the energy efficiency of large office buildings. Legislation was introduced last year to require building owners to disclose a Building Energy Efficiency Certificate to prospective buyers and tenants for large office spaces.

On 4 May, Minister Combet joined local member for Chifley, Ed Husic, to unveil a 50kilowatt grid-connected solar electricity system at Blacktown City Council Works Depot, in Western Sydney. This was done as part of the Solar Cities Initiative, which trials innovative energy options for the community.

Since its launch in July 2007, Blacktown Solar City has contributed to an estimated \$3 million in electricity savings to the residents of the Blacktown Local Government Area and reduced greenhouse gas emissions by approximately 17,500 tonnes of CO2. The Solar Cities program will also receive additional funding in the 2012-2013 Budget.

To date, the Solar Cities initiative has seen over 4,500 kilowatts

of photovoltaic cells installed within Australian communities and 20,000 smart meters put into Australian homes. The seven solar cities are Adelaide, Alice Springs, central Victoria, taking in Bendigo and Ballarat, Perth, Townsville, Moreland and Blacktown.

The smarter use of energy is clearly an important area of endeavour for Local Government. Many Councils have an energy efficiency policy. Most of you have no doubt found that energy efficiency makes good business sense, and it is one of the fastest and most cost-effective ways to reduce carbon pollution. Using energy wisely and efficiently enhances long-term productivity and reduces pressure on budgets from increasing electricity

In my own electorate, for example, Frankston City Council is improving the energy efficiency of Council buildings, street lighting and equipment. Street-lighting is the largest single source of greenhouse emissions for Council, representing approximately 50 per cent of total emissions.

For many years, the 80W mercury vapour lamp has been the standard lamp found in most residential, minor road streetlamps. Thousands of these inefficient lamps are now being changed to 28 watt tubular fluorescent lamps under the National Strategy on Energy Efficiency. This bulk changeover will save 68 per cent of the energy and greenhouse emissions in the street lighting sector.

All of these energy efficiency initiatives undertaken by the Government work hand-in-hand with a price on carbon, to drive a less carbon-intensive future for Australia.

Adaptation

Lastly, I would like to turn to adaptation. Adaptation is the third pillar of Australia's long-term climate change strategy.

The science is telling us that even if the most optimistic emissions reductions scenarios are realised, some climate change is now inevitable. We will need to adapt to the unavoidable impacts and I think we are all aware that will bring its own challenges.

As an original member of the House of Representatives Committee that was tasked with inquiring into issues related to climate change and environmental pressures on Australia's coastal areas in 2008, I know there are many thousands of kilometres of the Australian coastline at risk from the threat of rising sea levels and extreme weather events. Much of our coastal infrastructure and many of our coastal communities are vulnerable. With 99 per cent of our traded goods passing through our ports and harbours, sea level rise and storm surge also represent direct threats to the ongoing prosperity of our economy. In that process I also heard from and read the submissions of many who work or live in the coastal zone and I know that responding to these issues will be complex.

The Australian Government has recognised coastal adaptation as a national priority and many of the recommendations made by the House of Representatives Committee are being pursued.

In late 2009 the Australian Government released the report Climate Change Risks to Australia's Coast; a first-pass national assessment. The report considered the risks to all our coastal assets - natural ecosystems, beaches and landscapes, our settlements and industry. Some of you here today represent councils that feature prominently in that assessment.

The report presented new analysis of the exposure of residential properties around Australia. Some \$63 billion (based on the

Appendix C

2008 replacement value) worth of residential properties are potentially exposed to a sea level rise of 1.1metres. The report also recognised there are reform issues that will need attention - for example around the way we currently plan and approve development. Some of those issues may require consistency or coordination in our approach.

The report confirmed that the climate change risks to Australia's coastal areas are widespread, that our exposure will increase into the future, and that it will increasing be difficult for any one level of government to manage.

Leadership by governments will be critical if adaptation action, particularly in the coastal zone, is to be effective. Government roles in planning and setting benchmarks will be central to risk management. There are also significant public good assets which governments manage.

Having said that, everyone has a role in adaptation: communities and the private sector, as well as government. For communities and the private sector to be able to play their part they need information and they need to be engaged.

The Australian Government released a series of sea-level rise maps late last year that visualised the potential impacts of sea level rise and inundation. The maps provide a tangible sense of the impacts from climate change for cities and communities. The maps highlight low-lying areas that are more vulnerable to inundation from sea level rise combined with a high tide; an event that could be expected to occur at least once a year [the maps are relevant to the 2100 period]. They are an example of the type of information we will need to use to engage with our communities and the private sector and ensure they are playing their role in helping Australia adapt to the unavoidable impacts of climate change.

You are here today because your Councils recognised they need to understand the impacts of climate change and manage those risks into the future. The Local Adaptation Pathways Program was the first adaptation partnership initiative between the Australian and Local Governments. It invested in local governments that were willing to take a leadership role and begin that process of identifying what climate change will mean for your local area.

This forum is being held because we are keen to hear from you about what you have learnt and what are the most important things we now need to be doing to ensure Australia is well positioned to manage the climate change risks into the future.

One of the messages we have heard, particularly from local government, was that you had some understanding of the areas that might be at risk, but it was difficult to know what to do next; what was the best way forward. Especially when the science couldn't tell you exactly when and how the climate will change in the future.

This was an important message. Recently I announced that the Australian Government will invest up to \$3.2 million in partnerships to help develop robust decision and investment pathways that build community and industry resilience in the coastal zone. This investment will help local governments, infrastructure operators and major utilities such as water suppliers explore how best to plan investment decisions to meet the increasing impacts of climate change over time. This will be particularly important for long-lived assets such as ports, water supply, drainage and waste systems.

The new Coastal Adaptation Decision Pathways program will build on our LAPP experience. And it will continue to build that leadership group across local government.

Successful projects will support the transformation of business operations and help build resilience to longer-term climate change risks. They will show how we can manage risks in ways that accommodate future climate uncertainties, explore thresholds and trigger points for decision-making, and how best to protect vulnerable assets.

The Expression of Interest process for projects extends to 23 May 2011, and I hope that successful projects will start in June

Key challenges for decision makers will be to identify what assets are likely to become vulnerable to disruption or failure in the future and under what conditions. This understanding of risk will help inform what action needs to be taken to ensure that essential services can continue to be delivered. This means we need to start planning now, identifying options for adaptation and robust investment pathways.

Conclusion

The partnership between the Commonwealth and Local Government will be critical in the face of the challenges arising from climate change. The Local Adaptation Pathways Program, LAPP, was one early manifestation of this partnership. I hope that LAPP has been as useful to your individual councils as it has been for the Commonwealth.

The Australian Government is committed to helping forge a global solution; ensure Australia can reduce its carbon emissions including through improved energy efficiency; and make sure we are well positioned to adapt to the unavoidable impacts of climate change. However, governments at all levels have a leadership role to play in creating the right frameworks and in building capacity to respond effectively to climate change.

Responding to climate change will be a substantial and ongoing challenge for all Australians well into the future. Your involvement in the Local Adaptation Pathways Program and in this forum is the engagement and leadership we need to ensure we have the ability to meet that challenge. I'm looking forward to what will come out of today. To hear about what each of you has learned and the key messages you take from your involvement in preparing to manage climate change risks; it will play a part in shaping future national adaptation policy.

Thank you for the opportunity to speak and I look forward to working with you as we seek to meet the challenges of climate change.

Local Adaptation Pathways Program: from risk to action

Forum chair, Presenters and Facilitators

Chair:

Martin Brennan, Senior Associate, ICLEI - Oceania

Martin was a founding member of the ICLEI - Oceania Secretariat in 1998. As Deputy CEO Martin was responsible for providing political and partnership support to ICLEI campaigns and highlevel briefings to elected representatives and management together with maintaining cross-sectoral partnerships.

His role internationally has included attending the United Nations Climate Conferences and has promoted the local government sector's role in achieving a low carbon future in Indonesia, Korea, Vietnam, Taiwan and China. He was a former Melbourne City Councillor.

Presenters:

The Hon. Mark Dreyfus, QC, MP

The keynote speaker was The Hon. Mark Dreyfus, QC, MP Parliamentary Secretary for Climate Change and Energy Efficiency who was appointed Cabinet Secretary as well as Parliamentary Secretary for Climate Change and Energy Efficiency in September 2010.

Mark is a prominent Melbourne barrister and Queen's Counsel. He has frequently appeared for and advised Victorian and the Commonwealth governments. Including several landmark cases in the High Court, such as the Stolen Generation litigation. Mark is a former Director of the Law Council of Australia, and has served on the Victorian Bar Ethics Committee and Victorian Bar Council. He also served as a Ministerial Advisor to the Victorian Attorney General (1986 - 1987).

Karl Mallon, CEO Climate Risk Pty Ltd

Karl is director of Science and Systems at Climate Risk. He is a First Class Honours graduate in Physics and holds a Doctorate in Mechanical Engineering. Karl has worked in climate change mitigation, policy and technical analysis since 1991. He is editor and co-author of 'Renewable Energy Policy and Politics: A Handbook for Decision Making' published by Earthscan (London) and has worked with various international government and non-government organisations since 1997.

Karl currently specialises in climate change impacts risk to local government, insurance, institutional investment and works with large corporations on opportunities for operation under carbon and climate constraints.

Colin Steele, Advisor Local and State Government Relations

Colin has worked for ten years in NSW local government as a town planner, eleven years with the NSW Government, including five years in planning and 6 years in the executive of Premiers and Cabinet and, and ten years with the Australian Government in environment, housing and local government agencies.

Plenary Facilitator

Wayne Wescott, Sustainability Consultant

Wayne recently served as the Chief Executive Officer of ICLEI -Local Governments for Sustainability - Oceania and as the

Regional Director in Oceania for ICLEI International. Wayne has worked in not-for-profits, for local and state governments and has trained individuals and organisations across Australia on Local Agenda 21, and designed and established ICLEI's Cities for Climate Protection™ Program in Australia. Wayne is currently Director of Local to Global: The Sustainability Connection; Senior Sustainability Advisor for the United Cities and Local Governments - Asia Pacific; Local Government Program Manager for the Green Building Council of Australia; and Bike Futures Strategic Advisor, Bicycle Victoria.

Break Out Group Facilitators

Rolf Fenner, Senior Policy Adviser with the **Australian Local Government Association**

Rolf is a Senior Policy Adviser with the Australian Local Government Association based in Canberra. Rolf has held this position for several years and his policy responsibilities are diverse ranging from planning and building matters, emergency management, housing, regional development, indigenous affairs, cultural development, immigration and citizenship and climate change.

Maggie Hine, Group Manager Sustainability, City of Onkaparinga

Maggie Hine worked in the environmental sustainability field in state and local government and the non government sector. She is currently employed as the Group Manager Sustainability at the City of Onkaparinga in SA, a role that has included the preparation of the council's climate change strategy and corporate climate change risk assessment and adaptation plan. Her previous roles include Manager Climate Change Policy with the South Australian Government.

Greg Hunt, Executive Officer, South East Councils **Climate Change Alliance**

Greg was a Science and Environmental Studies teacher in secondary schools, became a bureaucrat in environmental education for the Education Department, and was Principal at the Zoo Education Service and Education Manager at Melbourne Museum. As Executive Officer, Greg implements programs on climate change through the Alliance, a partnership of local governments in Melbourne's south and east.

Peter Maganov, Sustainability Manager, Randwick Council

Peter is currently sustainability manager at Randwick Council looking after Council's annual environment program. Peter has over 20 years experience working on environmental management and conservation issues across local and State government in Victoria and New South Wales.

Rob Weymouth, Sustainability Facilitator, WA Local **Government Association**

Rob is the Sustainability Facilitator with the Western Australian Local Government Association based in Perth. Rolf has held this position for four years and his responsibilities is to contribute to the journey toward sustainability by Local Governments and WALGA as an organisation.

Local Adaptation Pathways Program: from risk to action

Breakout Group Reports

Group Facilitators: Rolf Fenner, ALGA

Maggie Hine, Onkaparinga City Council

Greg Hunt, South East Councils Climate Change Alliance, Victoria

Peter Maganov, Randwick City Council

Rob Weymouth, WALGA

Key learnings from the LAPPs

FACILITATOR SUMMARY - Rob Weymouth:

We learnt:

- About risk at our local level
- The restrictions that state planning policy places on
- The pressure that a growth fetish places on adaptation
- More about what the costs are of adapting and not adapting
- About involving people high up the decision making tree
- How we can be squeezed by both sides of the climate debate

Comments:

- Need to identify risk at a local level (at a spatial level) as well as high level - need for a tool appropriate for this task
- High level risks need to be developed to specific actions
- Land use planners need lines on maps tools and support needed by local government to assist in implementation
- Local government action may be restricted by state government planning policy - need coordinated dialogue between state and local
- Co-dependence between state authorities and local government - difficult to action within LAPP framework - but good to identify
- Insurance and liability issues identified for both Council and community
- LAPP broadened understanding of climate change impacts across council - especially costs relating to infrastructure
- Cost of adaptation at initial phase is relatively small compared to later costs of non-action
- Funding models for damaged asset replacement limited to existing standards
- Scale of risks dependant on who was developing LAPP - need to consider broader perspective and involve senior staff at governance level
- Involving councillors and senior staff at workshop stage raised profile
- Climate change politics "squeezed" in council and
- Community involvement in process identified some variation in priorities but still valuable
- Food security changing land use and food production areas of the future - key issue
- Growth area councils particular mindset that focuses on growth and conflicts with LAPP

- State action to drive land development in "growth areas" - climate risk factors not yet well understood by state governments - particularly planning authorities - but councils have liability
- Whole-of-life costing could be a significant driver for adaptation
- Conflicting information/analysis and assumptions from different government authorities and organisations - leads to
- LAPP begun process to improve understanding between risk and vulnerability

FACILITATOR SUMMARY - Peter Maganov:

There was a general consensus that the LAPP process was extremely positive and beneficial for a number of reasons:

- Elevated climate change up the agenda of local issues
- They wouldn't have undertaken the assessments or adaptation plans without LAPP funding
- Generally it was one of the first, or the first time the organisations brought together all relevant to consider the serious issue of climate change, that is; engineers, planners, environmentalists, governance, ecologists, risk staff
- It produced a set of documents with the opportunity or imperative to talk or work across other key strategies or policies of council
- The LAPP process highlighted and addressed some difficulties for councils and local organisations - language and terminology differences between different disciplines (engineers; planners; environmentalists) need to convert to risk language - partially successful
- Analytical capacity of local government staff to review and plan ahead on issues to 2030-2070 - hence the importance of combining the specialist knowledge/ expertise of staff
- Difficulties of local organisations to understand and decipher data uncertainties and scenario planning by organisation like Intergovernmental Panel on Climate Change around climate change and findings put together by Climate Risk. Value and expertise of approved consultants undertaking the task for councils.

This further highlighted:

- Local planning still needs some state wide analysis and context on climate change
- Differences in how completed plans/reports were adopted, endorsed, implemented and followed up by councils
- Learnt a lot about climate change at local level but not widely happy with final plans and ease of implementing

Comments:

- Good cooperation between regional and individual councils
- Involved many stakeholders (different language re climate change by engineers) within the community and different sections of council; community involvement important to highlight that it is everyone's responsibility
- There were some challenges continuing their engagement
- One limitation re use of consultants was the short timeline used i.e. 2030
- Shift of responsibility from environment/NRM officer to council and wider community
- Issue: interpretation of available climate change data, sometimes conflicting; data gaps; challenge to initiating LAPP
- The people in the room was a determinative factor in how LASPP was carried out
- LAPP risk assessment and actions plans most probably would not have been undertaken if not for Federal funding
- Process was useful to council thinking about different roles and responsibilities between local, state and Commonwealth
- Output was not sufficient to proceed frustrating
- Gaps highlighted
- Most councils adopted final reports
- Process consultants: generally added value to the process, but some made the scope limited; for example - timeline only reaching 2030; exclusion of ecologists. Report very generic because of data gaps and projecting to 2070; templates used by consultants were useful in framing and structuring project
- Terminology: different professions use different languages; communicating to councillors also a challenge. Risk language was more easily understood amongst different parties than solutions. Various interpretations of the language were also a challenge that resulted in varying priorities - dependent on the person's discipline - planner or ecologist
- Scope: some councils thinking about disasters, catastrophes; others thinking about everyday risk

FACILITATOR SUMMARY - Rolf Fenner:

- Forum has provided an opportunity to discuss outcomes and identify future opportunities and barriers
- Community education programs important to how councils address adaptation
- Consultants challenged to apply within a timeframe their expertise in a local government setting
- Engaging across council difficult to achieve but necessary to ensure a whole of council approach
- Need 'new' language to ensure risk, resilience and adaptation is covered

Comments:

- Good process to get diverse group of people together to discuss/recognise issues
- Identifying risks is good
- Analysing/risk rating a challenge: but need to push through
- Credibility of insurance methodology
- Good data from CSIRO
- Translation to community perspective challenging

- Mixed objective of consultants to be trying to "educate" rather than purely draw out from participants
- Some influencing and leading questions
- Dealing with lack of awareness
- Government guide good process clear
- Consultants did not necessarily stick to process in guide
- Risks often things already experienced, but with different pressures - so language the issue - perhaps don't frame as "adaptation"
- Leaping to simplistic inclusions and conclusions
- Some initial reluctance to participate but if stuck it out were engaged
- Challenge to keep on agenda need someone to keep driving
- People moving how to keep engaged and to engage new
- Consultants good process but would have liked them to bring more of their own experience
- A reflection session later would be good
- Consultant's time pressured to produce an outcome
- Adaptation options did not translate into decision making tool - need to build climate change into decision making framework
- Targeting departments may have produced better results i.e. identify risks by department

FACILITATOR SUMMARY - Greg Hunt:

- Very challenging for an officer to bring to council; external provider was catalyst to make journey; the journey of alerting council to the potential effects of climate change; went from an environment issue to a whole council issue; the impacts on council will affect assets; finances
- Raised awareness by councillors; identifying vulnerable assets; updating risk registers; elevate climate change to (2030) normality; strategic plan to include adaptation
- LAPP document overwhelming; disengaged at end of process as risk evaluation tedious; climate change risks amended onto risk (asset) registers; one size doesn't fit all; residents need to accept the reality of climate change - some residents do and some don't; councils need to lead the community rather than be guided by the community
- Focussed on drought/fire/flood/water; community acceptance of here and now; council set up political - so hard to enforce; reactive/strategic - governance from the top down helped direction to moving on it
- Quantify value of assets impacted by climate change; build resilience in communities due to risk; catalyst for work to be done; pitfalls in implementation; who is the risk owner; relationships with neighbouring councils; information sharing - learnings delivered locally; issue with coastal terms; inland – bushfire just as important; mapping inundation/king tides; regional and local both important

Comments:

- LAPP a catalyst for action but might have overwhelmed some; prompted a whole of council approach;
- External context is important, for example 2008 fire and 2011 floods
- Political context makes interest variable

Appendix E

- Regional approaches might make issues insufficiently specific for council action - but both are important
- Balance between strategic approach and reactive approach
- Risk is the key word to get attention, risk owner is a way to go; include in assets register - LAPP led to budget allocations
- Adaptation is a social/community issue LAPP outputs assist in this
- Climate change adaption is not only grass roots led, it should be top down; Departmental leadership is important
- Community have to accept some responsibility for their responses

FACILITATOR SUMMARY - Maggie Hine:

- Helped facilitate strategic alliances with other stakeholders that are undertaking their own climate change assessments in the region
- Focus on risk and use of standard assessment methodology allowed cross section of staff to engage in the project more easily - overcame climate change scepticism and uncertainty in science and policy and diffused any differences in opinion
- Downside of one size fits all methodology ie risk assessment approach, was that has prevented use of other methodologies such as vulnerability and resilience assessments
- Illustrated importance of having agreed/downscaled local climate change projection scenarios - preferably peer reviewed by Bureau of Meteorology/CSIRO - provided perceived objective evidence base to start process
- Allowed documentation of existing initiatives and commitments - highlight current commitments that not well recognised or promoted previously - reinforced what already doing
- Importance of reinforcing that climate change compound (intensify, accelerate) existing/known hazards and impacts that councils have been managing for some time
- Principally internally focused process no elected member engagement except for seeking approval of drafts
- Use of consultants preferred providers specified by Commonwealth - ran risk of having a 'cookie cut approach' or consultants 'walk in and walk out' with little emphasis on building ongoing internal capacity
- Missed opportunity in facilitating information/knowledge exchange between participating councils during process - some informal activity occurred but needed a formal mechanism
- Climate change adaptation importance of communication/ marketing and talking language of targeted audience - need to get over jargon
- Lack of locally relevant research importance of building **R&D** partnerships

- Risk assessment process useful to engage officers not getting bogged down in the science
- Climate modelling local scenarios useful in some cases; others the local info was not available
- Coastal management plans: LAPP assisted in prioritising actions

- Knowledge as well as scepticism; always a hurdle about why an action cannot be undertaken - affects prioritisation
- Support at high level with council/region sometimes lacking
- Work already has been done by councils to assist with climate change action - LAPP allowed this to be documented - now council relates more to climate change; remove fear of climate change
- Lack of coordination of climate change action in community - it's happening without the label but needs to be brought
- Diversity in implementation of LAPPs with region
- Look at own organisation and where/how to change - internally focused although broad reaching impact
- Agricultural organisations heavily involved, Catchment Management Authorities undertaken a lot of work - elected members question why non-core services of LG not included
- Identified a number of opportunities rather than hazards
- External consultant may not have assisted building capacity within council
- Rushed, lack of understanding by staff involved re climate change impacts; maybe not right people around table; highly subjective; no follow up support by regional body
- How to extend LAPP into broader community and with other stakeholders
- Some feeling consultants replicating previous work rolling out same results/process
- No communication between councils Australia wide undertaking LAPPS; not formalised, missed opportunity
- One department often driving process rather than across
- Some councils drove from the top to engage staff
- Minimal elected member involvement
- Most councils endorsed LAPPS; administration focussed
- More opportunities to work regionally
- Adaptation action happening but not labelled as climate change to keep elected members on side; language important; where does climate change sit? Drop separate focus on climate change - integration
- Know your audience to know how to market it to get results - use familiar language
- Relationship between types of government; communication between neighbouring councils/State on LAPPs sometimes non existent
- In some cases support from regional body lacking

Local Adaptation Pathways Program: from risk to action

Breakout Group Reports

Group Facilitators: Rolf Fenner, ALGA

Maggie Hine, Onkaparinga City Council

Greg Hunt, South East Councils Climate Change Alliance, Victoria

Peter Maganov, Randwick City Council

Rob Weymouth, WALGA

Actions and Conditions for successful adaptation by councils

FACILITATOR SUMMARY - Rob Weymouth:

Hard Factors:

- 1) Resourcing
- 2) Standards
- 3) State planning policies
- 4) Procurement and decision making on whole-of-life costs
- 5) State/Federal adaptation framework
- 6) Fine scale climate modelling

Soft Factors:

- 1) Partnering through relationships with developers
- 2) Shifting to a risk framework
- 3) Deliberative democracy

Comments:

- · Resources allocated to adaptation challenge for smaller regional councils. e.g. whole-of-life costing for assets leading to more flexible infrastructure (council funding and funding models to be considered)
- Regulatory stick: National/State standards for longevity and taking into account climate change to ensure infrastructure, etc is "future proof"
- Regulatory stick: State planning regulations and policies reflect climate change scenarios; with national consistency in approach to local situation
- Councils have internal capacity to plan, guide expenditure (for others and internal), integrate with council approach and priorities, manage contractors (as required) for both short and long term outcomes - needs dedicated long term resources (staff or experienced consultant)
- Funding applications, from Federal and State, takes into consideration local government budget cycles and provides for longer term approach - better planning (transfer of intellectual capital) - implementation and consultant partnerships for ownership by council/staff/community
- Subset of 2 previous points: consultant briefs could include initial work, transfer of knowledge and "efforts" for implementation over time. Example of action - building user manuals to capture knowledge and maximise operational use and adaptability
- Insurability of infrastructure of council assets; community privately owned
- Decision making within council, including councillors, takes

into account climate change

- External stakeholders, community/funding bodies, understand and support council decision making that provides for adaptation
- Economic modelling available
- Councils working in partnership with leading developers
- Adaptation flagships sustainable local communities

Adaptation addressed within a risk framework

- Risk from climate change considers infrastructure/natural values/community well being
- Deliberative democracy in place to confirm/underpin legitimacy to climate change adaptation decisions
- Climate modelling completed to local scale
- Sustainable/energy efficient (up in numbers as a percentage) - incentives and regulations
- Food security and energy security at local level; i.e. increase in local self sufficiency
- Recognition by insurers/state/federal government of councils that are adapting well
- Community well informed eg flood risk

FACILITATOR SUMMARY - Peter Maganov:

Conditions:

- Ongoing resourcing not one-off
- Mandated standards enabling going "above and beyond"
- Date requirements at locally relevant spatial settings vulnerability asset mapping; heatwaves

Actions:

- Not necessarily more planning find a "champion"; creating
- Understanding/disseminating science
- Support and expand staff involvement
- Costing options; implications of standards; investment decisions

Comments -

Resources must be provided on an ongoing basis, it's not so much about the amount of funding

Appendix F

- Federal/State government overarching standards mandatory and voluntary: guidelines not good enough; need parameters for planning - need to be consistent through all states. Insurers have a role; all govts must provide market signals to industries, including insurance; building standards - clause within standards to allow local government to go above and beyond the status quo
- Proactive versus reactive adaptation: dependent on executive and politician's support; already underway in some councils; one barrier - lack of coordination between councils because councils feel they are operating in a vacuum - ALGA need to explore coordination and lobbying options
- Staff management (condition: getting councillors and management on board). It should be Business as Usual in all sections of local government - how do we achieve that? Speak to people, for example, engineers in language they respond to - business improvement, efficiency.
- Top-down (Federal/State funding opportunities) + bottom up agenda (LAPP reports/plans) = managers should take heed and take action
- Linkages with food security look into protecting and choosing land use
- Choose the topics/issues to tackle (break down climate change into different components) identify what resonates with community
- Directorate level climate change champion, after council has adopted climate change strategy (so staff are obligated to follow strategy) - educate councillors
- Link strategy to corporate plan
- · Need more plans? NO
- Data: More dissemination of existing scientific info; need detailed mapping for example - infrastructure and assets mapping to determine vulnerability - required particularly for small councils -
- How much data is needed to enable us to act? Region specific vulnerability mapping
- Cost options: how to conduct cost-benefit analysis need ongoing funding; need estimation of cost of adaptive actions

FACILITATOR SUMMARY - Rolf Fenner:

- Pragmatic more \$'s yes but other things are required
- Advice on implementing LAPP through existing systems risk register; community strategic planning; land use planning; disaster planning - internalise
- Pathways where does this go? Clearer pathways for implementation
- Research synthesis to assist local government and community; what analysis has been done?
- Liability impacts; impost/costs
- Reinforce context of issues to be addressed
- Partnership funding straight to local government; State has responsibility - needs to be engaged

- Communication/messages adaptation, national message -'Slip Slop Slap'
- Not all councils are the same; some communities can better manage than others
- Warning systems may have a role
- Planning audit planning regulations and implementation of policies, audit of planning has a role; for example - heritage versus solar panels; medium density versus backyard gardens
- Come to local government first to understand what research is required; why, how we need this - applied research
- Provide clearer leadership climate change at the national
- Educating communities various programs
- National significance what can be done nationally
- Role of banks, media, industry in this space need to engage with non-government sector
- Linkages needed where is plan going to?
- · Need advice on how to take forward the plan
- Risk register plays an important role
- Integrated planning & reporting
- Adaptation plan needs to be sent to where?
- Advice up front would have saved 18 months of indecision
- Have to internalise plan or will lose its identity as climate change risk but don't panic - otherwise becomes a burden
- Will eventually become core business ongoing
- Report back to community these are top actions say where they start e.g. disaster management, etc.
- Chasm between research and usable reports
- · Regular synthesis of information
- Rider on information don't panic complete and comprehensive analysis; piece of information; own liability; impost onto people; coastal inundation impact statement for any development within; effects are incremental; some immediate, some over time; awareness that knowledge doesn't compel to doing something
- Relationship with the State; shortcutting straight between commonwealth and local government; saved on reporting requirements; Federal is much easier than State
- Partnerships already exist; some issues States need to take a lead e.g. sea level rise; responsibility for setting standards, States ensures that consistency;
- Rollout of infrastructure LGs not consulted LGs not taking over assets
- Community engagement on adaptation, food security and transport
- Messages, which may or may not be true from media are confusing and concerning
- Manage community engagement side so as not to overwhelm; provide guidance

- Big positive messages need to happen and be sent out; long term sustainable campaigns
- Not all communities the same impacts have different reasons and capacity to cope with impacts; no one size fits all
- Cumulative events; catastrophic events
- Warning systems
- Resilience may be cases they have to evacuate; goes back to role community has to play - there is some choice preparations
- Role of planning: biodiversity planning very complicated process; planning is meeting maximum community needs; environmental benefits maybe not what people/individuals want; planning can do negative things too; regulation; need to audit regulation to see if they are causing mal-adaptation; understanding implications; problems from planning often comes from planners themselves
- Planning any action prepare for the future; 99% of action in community happening without planning scheme
- Federally can't make rules but can make subjective/objective vision; council there - community interest - on ground expertise
- Feds can information; find out what the problems are within communities; then go to scientists; what is pure research; arbitrators and mediators; important role to provide certainty and leadership; consistent message
- National coordinated response between States and Territories - cultural change
- Communication on national level; "think change" doesn't really do/say anything
- Safety messages starkly to prepare individual communities - start national - one size fits all - e.g. 'slip, slop, slap'
- Government isn't the only agency that has effect/influence banks, investment, media, energy - all need to be brought in - leading to more balanced view in media

FACILITATOR SUMMARY - Greg Hunt:

- Resource base to have a dedicated person to implement plan; or to argue to share a person to write plans/policies
- Strategies to maximise resources climate change policy template
- Practicable to do usual range of works
- One greenhouse person to look after different councils; greenhouse alliances
- Regional partnerships
- Plant a seed and hope it grows
- Not all councils have done LAPPS need to take a variety of actions to keep plans going; big stick - insurers; community involvement/awareness; communication/raising community engagement; work towards a position
- Council to produce policies? State to produce policy for all councils to adopt if they want it

- Garner support from community if it includes energy efficiency, renewable energies; therefore easier to get money e.g. Onkaparinga 1% rate increase to fund adaptation works
- Consider insurance/re insurance drivers
- Research into community perceptions etc; communication education
- Projects to engage the community and a budget
- Badge adaptation actions
- To make councils successful you must look at vulnerabilities of communities
- Next step sea level rise assessment; heatwave council assets - cooling centre; National Heatwave Response Program
- Cross over between climate change and emergency management
- Important for success regional groupings of local governments; council amalgamations - new town planning scheme
- Map vulnerable areas; cost abatement curve to budget for actions e.g. sea wall funded by State and Federal Government; retreat or defend or accept
- Adaptation plan; actions over a long period of time; successful adaptation - not act too early; triggers and thresholds; monitoring program; linked to budget; KPI's; special projects linked to salary; consider suite of actions that can be done some at low cost
- Island commuting foreshore to open space at risk; purchasing future land; conservation of land; analysis of data and modelling; partnering with research universities to identify natural resource management; investment for retreat or defend; research prospectus; advocacy to State Government for joint responses
- Environment strategy; to look at climate change integrated - business as usual; nice to do and need to do environmental
- Standards Australia; climate change/building standards/ planning; don't do things until 2030; tools/modelling; high level - impacts of costs on assets; ground up
- Resource base of councils needs lifting resource sharing; policy templates; alliances/regional partnerships; research partnerships
- Community support
- Insurance/re-insurance a stick/carrot for councils
- Badge actions as adaptation actions to raise awareness
- Community involvement: engagement; education; awareness; up profile
- All to shore up preparedness to develop/implement policy
- Vulnerable communities: map them typology
- Cost/benefit of adaptation actions; thresholds; triggers; maladaptation if too early

Appendix F

- New planning scheme an opportunity to build coherence in planning
- Advocacy to State Government re planning policy

FACILITATOR SUMMARY - Maggie Hine:

- Condition changes that are needed and corresponding actions:
- More use of existing wealth of knowledge
- Establish knowledge/information exchange mechanism web based portal
- Establish exchange program between councils (buddying or secondment to allow flow exchange of expertise/ideas) possibly sponsored by LGAs/ALGA
- Build the LAPP community formalise network
- Extend information to elected members
- Mainstreaming of response whole of organisation approach:
- Better integrate LAPP outcomes with strategic plans/business plans - use examples of existing LAPPs where this occurred as case studies
- Ensuring LAPP implementation plans prepared and resourced
- Identify preferred funding models highlight investment, initial cost to achieve long term saving, preparedness
- Engage state government agencies in dialogue
- Improve connections between research (evidence base) and policy/practice:
- Improve linkages between LAPP and NCARFF research/ projects
- Establish scholarships in partnership with tertiary institutions for applied research relevant to local settings
- Legislative reform prescribing minimum requirements:
- Review relevant flood protection/building standards eg 1:500 rather than 1:100 prescriptions
- Need for consistent approach to prescribing sea level rise thresholds in development policy and land use planning
- Identify opportunities for legislative funding models ie local government acts to require councils to allocate dedicated funding in long term financial planning (financial sustainability).

CONDITIONS:

- Whole-of-organisation focus
- · How to sell importance
- Not adequately integrated, resourced, evaluated
- "Sustainability" not clearly defined
- Expectations placed on Sustainability Officer focus on a few officers only
- Consistent approach across LGs may be State can provide support: officers voice not heard; tools to assist planning/

- implementation; policy disconnect need mechanisms to bridge divide between State and local
- Political support at all levels
- Local government access to scientific information/research
- Improve link between science and policy best practice information
- Access to localised data
- Two-way communication between researchers and LG eg. embed PhD students in LG
- NCCARF (Griffin University) awareness of expansion into LG; identify and communicate research priorities meaningful to LG
- · Consistency with predictions
- Easy access to data, frameworks, statistics
- Recognition of importance of networking/knowledge/learning from officers - and resourcing
- Legislative frameworks changed: to provide budget support, action and enforcement; enabling mechanisms
- Resourcing for ongoing implementation
- Staff retention not based on short term projects and contracts - lose knowledge base
- · Recurrent funding, longer term
- Flow of funds from Commonwealth to LG
- Where do State LGAs sit?

ACTIONS:

- · Legislative reform: nationally consistent prescriptions around sea level rise (how determined not outcome) - minimum standards:
- Explaining/understanding why regional differences; low standards - for example flooding events; mainstreaming climate change in government portfolios; Resourcing - carbon tax reinvested towards adaptation - long term funding commitment
- Knowledge: improve NCCARF communication; improve communication and integration between researchers and LGs; central portal for information, data, statistics, etc; useable information/simplify integration with existing State GIS planning web-based tools; school curriculum/tertiary integration; engage young people; bursaries for staff to be seconded/exchange between councils inter/intra state; dedicated scholarships for universities to fund LG/research; dedicated climate change regional facilitators to assist with knowledge sharing, support
- Whole of organisation change: raise community awareness to influence council decisions - champions in the community; modelling of costs of not taking action - impact on investment decisions
- Resourcing: different funding models; incentives to adapt infrastructure; levy/fund models from rate base - seen as an investment not a cost; share "how" this taken up, evaluate success

Cover (L to R):

Wayne Wescott, Karl Mallon, Maggie Hine Colin Steele The Hon. Mark Dreyfus Adam Grey, Peter Maganov, Rolf Fenner, Greg Hunt

