

Climate Change Workshop- Adaptation Stakeholder Event, Adelaide

Friday 11 September 2015, 9:30am-12.30pm

Objective of workshop

To involve industry, government and the community in exploring options for the next phase of developing and implementing climate change adaptation initiatives.

Desired outcomes

- Provide the opportunity to network with others working in the space of Climate Change adaptation
- Update participants on the development of the new Climate Change Strategy for South Australia, and how this strategy will build on existing adaptation work, and
- Identify priorities for the next stage of Climate Change policy work – with a focus on climate change adaptation.

Workshop principles

- Assumes and recognises the high degree of involvement and commitment of stakeholders in attendance who have been key partners in implementing the adaptation framework.
 - Conversation based workshops which promote 2-way dialogue between all stakeholders
 - Whilst conversation based, workshops include clear prioritizing of issues/topics raised
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1. FUTURE FOR ADAPATION PLANNING AND IMPLEMENTATION

In a group activity, participants were asked to contribute their ideas relating to Climate Change Adaptation Planning or Implementation in the future. They were asked, “In 10 years time (that’s 2025!) what do you hope you might have achieved in relation to Climate Change Adaptation Planning or Implementation?”

RESPONSES

- Planning integrated into Council’s Strategic Planning, Asset Management and Financial Management.
- Integrated whole of government ~ Regional Planning linked with legislation.
- Integration understood! Planning that is suited to interdependent objectives.
- Brought about the general use of light coloured roofs.
- All vulnerable coastal areas flood mapped and adaptation plans prepared.
- Increased urban vegetation to cool and shade urban areas.
- Established an Electric Car Manufacturing Facility in North Adelaide.
- Embedded Climate Change into day to day decision making across Governance, State, National, Local, Industry and Community.
- The view on the words “Climate Change” to be converted to something we understand and can handle.

- Contribute to an increased uptake of renewable energy, in particular solar energy.
- Monitoring and evaluation system so we can see what has been achieved to date.
- An ecologically literate community with the knowledge and understanding to make informed decisions.
- The politics has changed such that our Australian and Government gets onto the world Climate Change path.
- Better capturing of rainwater/stormwater for irrigation and other uses.
- Implement the protection of health and wellbeing in climate change adaption policy.
- Decided there are limits to both Economic Growth and Population Growth and developed policy accordingly.
- Climate change considerations (e.g. projections data) is integrated into decision making ~ particularly those decisions that have long consequence lifetimes.
- Adaptation is strongly correlated with how much we can manage the risk by management. In 10 years time, it will be useful to have a clear planning on black carbon emission management strategy.
- Integrated approach to planning and design – engineers, planners, designers, asset managers etc.,
- Drastically develop the energy efficiency of new buildings >>reach European standards.
- Well vegetated urban environments with greater than 30% canopy cover.
- Climate change being embedded into decision making for asset planning.
- All Regional Plans being implemented and also integrated to include issues that cross boundaries e.g. water.
- Decision makers can translate science into decision making as part of ‘normal’ process.
- Linked/connected green and blue spaces throughout towns and cities.
- Climate change adaptation and action become a standard way of doing things for government and the broader community.
- Climate change is at the forefront of everyday members of the public who are happy to find short and long term strategies willingly.
- Ownership of the adaptation issues is not driven by government but by the community.
- Regional cohesion and clear leadership and vision.
- Climate change adaptation embraced and asked for from council residents.
- Social and health outcomes.
- The incorporation of climate change considerations into all NRM planning processes.
- Implement building retrofitting schemes for energy efficiency. Double the retrofit uptake every five years.
- State government (all sectors) able to respond and collaborate on regional decisions.
- General community members can identify their adaptation actions.

2. PRIORITIES FOR NEXT STAGES (2-5 YEARS) OF CLIMATE CHANGE ADAPTATION IN SA

Small group conversations enabled participants to talk about what they felt should be the priorities for the next stages (2-5 years) of Climate Change Adaptation in South Australia. They were asked, “What are the priorities for the next stages (2-5 years) of Climate Change Adaptation in South Australia?”

RESPONSES

Table 1

- Statewide Green Infrastructure Plan.
- Address tree-canopy inequity – no shrubs less than 30% tree canopy planned.
- Using technology to monitor and minimize energy consumption e.g. lights, heating and cooling.
- Iconic Projects – Open space and Green space –requirement for new housing.
- Natural ecosystem services underpin every urban landscape 2-5 years. All current natural ecosystems are protected enhanced or restored.
- Building design and standards that are climate adaptive/sensitive and low carbon.
- New standards reflect changing circumstances.
- Policy based on: reiterative policy making based on monitored and evaluation of data.
- Tree canopy coverage is equitable geographically ~ 2-5 years plan for rollout across the state.
- State target for tree canopy 30%.
- Change of conversation.
- Feedback loops on what works and what doesn't work.
- Legislation that enables climate change incorporated into all levels of decision Planning/Infrastructure Bill and others.
- Funding research and development (e.g. New Horizons) of new carbon abatement opportunities.
- Pale or high albedo roofs (France) or solar on all houses or green roofs and development.
- Climate adaptive buildings.
- New master planning process for long term adaptation initiatives.
- Do whatever behavior change programs are required.
- Step change in accepted and mandated design and construction of residential buildings.
- Do iconic adaptation projects with associated master plans.
- Using the science we have at our disposal.

Table 2

- Development assessment decisions firmly linked with climate change projections e.g. sea level rise along coast unless can be responded to by innovative design e.g. transportable buildings, use by dates on development when will need to be relocated etc. have shifted from planning to action.
- Climate change unit should be in Energy and Resources Portfolio.
- All future climate change events to be carbon neutral.
- Captains of industry champion climate action: property; energy and water.
- Get Planning Reform at SA Government level for roof colours.
- Water sensitive urban design (WSUD) well integrated into infrastructure.
- Business and industry are more aware of the need to adapt.
- To have a storm water infrastructure that will withstand increased rainfall intensity.
- The community has been brought along with the draft works and planning for each of the sector plans.
- All Regional adaptation plans across the state are completed.
- Cultural shift to make decision in light of uncertainty.
- Co-ordinated response from State Government to implementing adaptation that state government is responsible for.
- A “proposed” business plan is in draft format for what needs to happen now, soon and long term timeframes.
- See implementation of Regional Climate Change Action Plans – achieve some initial outcomes.
- Resolve issues around development against Coast Protection Board advice/policies either Development Act/Regulations or Coast Protection Act.
- Whole community understands what society/government/communities and individuals are and can do for Climate Change Adaptation.
- We have moved from plans and strategies to action and implementation.
- Community understand the impacts of predicted Climate Change and what their response might be.

Table 3

- Start planning for next 5-10 years.
- Overarching approach for SA – integrate Region Action Plans into looking at whole of state approach – capture issues that cross regions.
- Integrate Climate Change decision making into existing management plans where possible – not reinventing the wheel – more easy to get buy in.
- Identifying the state roles, leaders and partners for each state challenge.
- Openness about what is behind Government thinking on its solutions with the wider community.
- National funding mechanism for adaptation implementation.
- Urban heat island prevention plan.
- Short term:
 - Tour Down Under
 - Super Elnino
 - Planning Reform.
- Medium term:

- Governance
- Planning
- Legislation
- Long term:
 - Towns, Precincts
 - Infrastructure.
- A clear way to show that investing now is cheaper than waiting in terms of adaptation options.
- Simplistic planning as opposed to complex. A simple targeted plan so targets are achievable.
- A suitable funding platform to keep the cost of ongoing planning realistic.
- Assess risks and vulnerabilities of key infrastructures.
- Impact on water resources – grey water recycling.
- Do the hard work for adaptive governance and risk-based decision making. NB: Elected officials and CEOs don't necessarily care about this.
- Black Carbon profiling for reducing the risks.
- Facilitate integration of water sensitive urban design and green infrastructure in urban planning – mandatory design standards.
- Agreements for industry to collaborate in adaptation planning.
- Helping vulnerable and energy stressed communities.
- Adaptation initiatives determining people's willingness to pay.
- Identify common adaptation issues across regions. Don't miss out on regional specific issues.
- Communicate – investing now in adaptation saves money in the long term.

Table 4

- Accept mistakes and changes.
- Clarify the responsibility among national, state, regional and city governments.
- Develop the energy efficiency of built environment/retrofitting/>> boost the building industry.
- Implementation mechanisms.
- Heat Island Prevention Plan – greening.
- Attract business and industry for adaptation solutions.
- Policy → Research → Practitioners → Planners → Impact Pathways.
- Once embedding and integration have been achieved, moving the conversation toward 'resilience' in a general sense.
- Partnership agreements i.e. SA Health and Local Government.
- Encouraging car usage reduction ~ particularly to CBD.
- Get the rest of the regional adaptation plans off the ground.
- New strategic/financial model for coastal zone management.
- Streamlining sector agreements self serve.
- Roles and partners for implementation clarified. Health: SA Health partnering with Local Government; Partnering with sustainable housing.
- Transform research into policy > more communication two-way.
- Planning reform that supports resilience for:
 - Environment

- Safe living
 - Fire
 - Flood
 - Heat
 - Sea level rise.
- Clarifying the roles and responsibilities of Government, non-government organisations, private sector and individuals.
- Deeper integration of climate change impacts into strategic and operational processes.
- Preparing health system to maintain service delivery in light of higher demand due to changing climatic conditions and capacity planning.
- Integrated urban planning which accounts for expected higher frequency in extreme weather events, lower rainfall and higher temperatures.
- Strengthening sector agreements. Simply sector agreements to promote greater individual level action.
- Investigating the most viable primary industries in a lower rainfall, higher temperature scenario.
- Planning reform to support good planning: environment; fire; heat; flood and sea level rise.
- Bipartisan federal agreement on adaptation planning.
- Monitoring and evaluation.
- Adaptive Management and governance.
- Resilience of communities/environment planned for.
- State Government implementation response with \$\$\$.
- Risk based decision making frameworks.
- Value Health and Wellbeing to better include these benefits in Climate Change Adaptation decision making.
- Diversifying income bases.
- Embedding; Training/Briefing (key decision makers).
- Prioritization and action planning.
- Public Private Partnerships.
- GAPS – Policy; Legislation; Strategy.

Table 5

- Housing design and real estate includes an energy efficiency rating ~ what is the ongoing cost to live in this house.
- Selling the message ~ focus on opportunity not cost \$\$ ~ if cost why? When will the cost happen?
- Target your message and how you want them to change behavior.
- Need to tap into people's needs and drivers ~ motivation!
- What motivates people and communities?
- Target school kids ~ intergenerational change.
- Message for Community ~ "What's in it for me?"
- Actual impacts on people ~ e.g. with sea level rise warning!
- Empower community with scientific facts give them confidence with lack of government consensus and 'overload' of information.

- Probabilistic decision making coping with decision maybe wrong ~ coming to terms with uncertainty.
- Cost benefit analysis and cost of inaction factored into decision making.
- Risk assessment ~ decision making and associated costs for implementative factoring.
- We talk about resilience not Climate Change.
- Integrating plans into processes.
- Getting language right. 'Change' isn't quite right ~ more resilience.
- No more about whether Climate Change is real focus on more what we need to do.
- Climate Change accounting standard (Canadian model) put the experts in to policy development (Government provides convening power.)
- Target message audience to understand what different groups need to know and what they can do!
- How you market to the public a planned outcome that is not confronting as not everyone is conversant around Climate Change.
- Integration of academic research, policy and practice/messaging on the ground.
- Building Codes – information sharing.
- Behavioral change.
- Improve wellbeing to avoid Climate Change.
- Accessibility education.
- Define the influence of Climate Change.
- Work out adaptation processes and governance by doing e.g. Coastal Zone.
- Programs to support community driven action as 'champions'.
- Consistency with branding because community don't really care which level of government.
- Increased cultural competency in behavior change process.
- Integration of Climate Change Adaptation messaging into existing community-based programs.
- Community led adaptation.
- Resilience! Not Climate Change Adaptation language.
- Community Champions.

Table 6

- Energy efficiency building. Retrofitting scheme, creating jobs, boosting the building industry that is currently slowing down.
- Whole of government partnerships.
- Influence messages in 'new media' e.g. positive news re adaptation.
- Monitoring and evaluation of adaptive change over time.
- Translating water and climate research into more economic and commercial activity, i.e. jobs.
- In the bushfire protection area (lives and property) an adaptive approach where risks (especially in the Hills Face Zone) are continually assessed as the climate warms and dries, and as those areas get more and more developed.
- Leveraging of media to encourage people to make/accept changes to their daily lives and long term plans.

- Port Adelaide area – agreement viz responsibility for providing (and funding) adaptation response/protection (need for a coordinated large-scale response rather than tackling adaptation at individual property scale through development policy).
- Better understand of cross-sectoral decision making implications (includes industry).
- Positive adaptation messaging through media/social media.
- Linking adaptation to community values and beliefs.
- Coastal adaptation governance/coordination.
- Setting up a fund contributed by developers for coordinated Water Sensitive Urban Design (WSUD) approach.
- Integrated whole of (State Government) support for regional based decisions.
- Funding storm water management plans.
- Developing a shared vision of integrated outcomes over a 30-50 year horizon transformation not just adaptation.

Table 7

- Social isolation due to extreme heat events. How do we connect people to cool refuges? Issue around refuges closing during extreme heat events - to unadaptable buildings.
- More certainty in policy for businesses, households in regards to their energy efficient developments/changes e.g. solar panels, feed-in tariff.
- Encourage bottom-up changes to increase the general population's knowledge of climate change adaptation, energy efficient built environment/transport and behavior changes.
- Every Government Strategy has to demonstrate how you are integrating Climate Change Adaptation into their organization. You must report publically annually on how much is happening.
- To measure the results in adaptation/mitigation so far → feedback loop for policy.
- We don't need to have this conversation in 2-5 years.
- Civil action against government re: inaction on climate responses.
- Political pressure has become untenable to do nothing.
- No more conversation about 'climate change' → more conversations happening about 'is my patch doing enough in response!'
- Monitoring and evaluation of adaptation to see impacts and effects of change.
- Whole of government ~ DEWNR, DPTI and Health, SAFECOM (top –down) partnerships.
- Media, Culture, Social Media – education of general public about Climate Change Adaptation.
- Green infrastructure mandated in Planning Legislation.
- Improved accessibility.
- Community behavioural change.
- State to lead national states response to Climate Change and Adaptation in essence of national leadership.
- Complete and consolidate first round adaptation planning having moved on implementing outcomes.
- Coordinated response from State Government re adaptation actions.
- Building Code of Australia (BCA) reforms that support climate adaptation outcomes.

- Climate Adaptation planning embedded in Zone Emergency Management Planning.
- Planning reform, climate change adaptation is embedded in new legislation and regulations.

3. TOOLS AND ENABLERS

Participants were asked to individually list their top 3 priorities for the Climate Change strategy and then as a whole group sorted them in to themes under the following headings.

Partnerships

- Regional cohesion (government agencies and industry) → vision → areas requiring transformation → uptake by State Government.
- Getting the community on board.
- Coordinated response from State Government re: implementation of priorities from regional adaptation planning.
- Make implementation of Adaptation Plans happen in:
 - Local Councils
 - State Government
 - Business and Industry
 - Development Planning
- Educating the local communities so that they take the initiatives in the long run.
- Formalise commitment to action across the State (at all levels of governments, organisation etc.) based on analysis/review of regional adaptation plans.
- Key agencies/organisations to know what role each has → crossover opportunities and collaboration → where are the dependencies. Think Federal, State and Local Government, Industry groups and associations.
- State roles, responsibilities and partnerships clarified.
- Integrated whole of Government regulation and planning for climate change mitigation and adaptation with reporting requirements.
- Whole of government partnerships for Climate Change Adaptation e.g. DEWNR, HEALTH, DPTI and SAFECOM.

Funding

- Priority given fund RD & E for adaptation technology in rural and regional landscapes (farms/public land) e.g. new horizons; landscape designs for carbon planting.
- Investments and funding around innovation to upsell future community to make a carbon free transition.
- Targeted solutions ~ remedy could be driven by the 'owners' of the problem or 'funded' by those who share the problem.
- Improve transport provision and infrastructure.
- Change daily living in energy and travel, waste, water usage.
- Education in behaviour change in daily living that helps climate change.
- Adaptation actions across the state are prioritized and have a funding framework.

- Implementation of actions identified under regional adaptation plans.
- Must be realistically funded so solutions can be addressed.
- National funding mechanism for adaptation and resilience.
- Identify a funding mechanism for Climate Change Adaptation implementation at local, state and even federal level.
- Coastal zone management ~ government and action and use this as a test case for cross-sector.
- Regional coastal adaptation/protection plans prepared for all at risk coastal settlements. (Requires increased investment from State Government to support regional Councils).

Government Role

- Climate Change Adaptation is integrated into all government (State and Local) decision making (strategic planning, funding and projects.)
- Integrated decision making with science/data feeding in.
- Facilitate integration of water sensitive design and green infrastructure into urban planning e.g. in design standards for residential dwellings.
- Mandatory solar for new developments.
- Proper planning for greenhouse gas emission reduction priority ~ setting the priority for black coal emissions.
- Implementation of adaptation.
- Increase in urban green infrastructure or vegetation and energy efficient transport options.
- Implement energy initiatives:
 - Less urban lighting
 - Light roofing
 - Energy storage within commercial buildings
 - Lights out overnight.
- Adapt West regional adaptation plan completed.
- Implementing actions for regional climate change adaptation plans.
- Make the changes to SA Planning policy library that will prevent development decisions being made today that will exacerbate issues in the future. This needs to be strongly coupled with capacity building of Local Government staff and Elected Members and the broader community.
- Requirement for open space and green space.
- Development at a state wide Green Infrastructure strategy and embedding this in legislation – policy and planning.
- Planning reform that supports resilience for safe living:
 - Fire
 - Flood
 - Heat
 - Sea level rise
 - Environment protection.
- Integrate regional adaptation plans into overarching SA plan ~ capture issues that cross boundaries e.g. water.

- Integrated planning in order to address the issues prevailing keeping in mind the constraints others are having.
- Embedding Climate Change in business as usual activity/decision making.
- Make water-sensitive design mandatory for new infrastructure/buildings. If it is not feasible to deliver on-site retention/treatment, establish a fund (similar to urban tree fund) through the Development Act to follow developers/government agencies to make a payment in lieu, which will go towards funding community scale water sensitive urban design infrastructure.
- Reach some agreement re: who (state/local/private) has responsibility for providing community-scale protection (e.g. sea walls).
- Drive changes to engineering standards to ensure they reflect future climate projections.
- Legislative change to ensure that new development does not occur against State Government/Coastal Protection. Board advice/policy/direction. Changes to Development Act/Coastal Protection Act.
- All future Climate Change events Australia and world wide to be carbon neutral.
- Develop and cultivate where we are happy with uncertainty and can just deal with it rather than fear it.
- Incorporating Climate change concepts into processes rather than even talk about Climate Change.
- Planning reform that considers climate change adaptation requirements in development planning decision making.
- Integrate/embed Climate Change Adaptation into planning implementing so it is best for you.
- Cohesion across state and regions. Adaptation planning is a complex tangled web. How might we simplify it and concentrate on the real priorities.
- Mandate that any State funded project valued at over \$10million are climate ready.
- Drastic increase of energy efficiency requirements in building codes both for new developments and for major renovations.
- All members of the Climate Change and Carbon Neutral Adelaide Cabinet Task Force hold a media event where they state, in clear terms, what the climate impacts of Climate change are for their portfolios and what they are going to do about it. From that point on all cabinet members speak about climate impacts.
- Garner Australian Government political support for global action.
- Voting for an alternative Federal Government.
- Government consensus.

Other

Monitoring and Evaluation

- Clear way to show that adaptation investment is cheaper now than waiting 10 years. Accepted way to prioritise and stage investments.
- Adaptive management and governance processes institutionalised within State Government/NRM and Local Government.

- Support adaptive management and operational monitoring, evaluation and feedbacks to ensure we deal with uncertainty.
- Quantification and monitoring of strategy, actions and outcomes.
- Monitoring and evaluation framework to being to demonstrate change and impacts of change.
- How do we know we are making a difference? Monitoring and Evaluation across regions and levels of government ~ tricky stuff! (of Regional Adaptation Plans)
- More expectable future policy in Climate Change Adaptation, energy efficiency schemes and government subsidies.

Engagement and Communication

- Increase general population knowledge of Climate Change Adaptation, mitigation, energy efficiency of their built environment their role and responsibility in behavior change. Plus foster bottom-up approaches and initiatives.
- Community engagement. (x 3)
- Support for grass-roots/local action to drive community understanding.
- Brag about what you've saved.
- Changing the conversation.
- Money saved is money made.
- Develop innovative ways to build knowledge and capacity of broader community re Climate Change.
- The language/dialogue to clearly speak to audiences ~ communication of the actual issues.
- Communications Plan – genuine public understanding Climate Change and the Adaptation challenge.
- Develop a series of long term behavior change campaigns in the same way we do for public health.
- Getting the public on-side ~ the need for action in the context of the Murdoch press.
- Bringing the broader community onto a realistic and effective climate change pathway.
- Engagement and ownership across all stakeholders moved from awareness-raising and acceptance to action.
- Determine communities' willingness to pay for adaptation
- Community engagement and capacity building in relation to Climate Change Adaptation.
- Improved communication and marketing from perspective of audience – to get Climate Change embraced by everyone.
- Re-focus language of CCA to resilience.
- Engage with Communities ~ target the messaging for different audiences ~ Simple language that anyone can understand.
- Demystify the problems to a suite of outcomes largely agreed by the community – can be different for different regions.
- Public education and cultural change.

- Positive adaptation messaging through media to influence community perceptions and understanding.
- Upskill community with targeted engagement and messaging with clear ideas around how they can help to solve the problem.
- How to engage major/critical infrastructure providers/managers in the process: (Public vs commercial interests)
 - Flinders Ports
 - Adelaide Airport
 - Energy generators
 - Bolivar etc.

Risk Taking

- Less science, more risks and action. Mistakes will happen but that is OK.
- Identify and implement 'no regrets' actions that increase general resilience (social, economic and environmental) and provide benefits independent of adaptation (e.g. promoting cycling/walking, implementing good ecological restoration).
- Risk-based decision making/consequential decision-making processes institutionalised within State Government/NRM and Local Government.

Iconic Adaptation

- Identify the top 7 iconic adaptation projects that will help the State adapt e.g. Metro Green Infrastructure, Coastal Defence/retreat strategy.
- Introduce 'tree canopy' targets for all urban areas e.g. minimum 30% tree canopy coverage.
- Economic valuation of Green Infrastructure ~ cost/benefit analysis ~ to form basis for business case.
- Adelaide Storm Water Management Plan ~ able to account for severe (1/50 year) event. Taking account of future development expectations.
- State Strategic:
 - Undertake analysis to identify areas/systems that are at highest risk and may require transition strategies (rather than attempting to maintain existing systems) e.g. irrigation of river, northern cropping systems).

Green Adelaide Plan – Botanic Gardens role. In drying climate how can we make Adelaide more verdant? Taking into account Climate change and Development trends, a low water use green oasis ~ best practice water sensitive urban design.

The content contained in the workshop outcomes summary does not reflect the position, policies or views of the Government of South Australia. We have made every effort to record comments as accurately as possible. However any inappropriate comments have been removed.