What should be included in South Australia's new Climate Change Strategy? Notes from Stakeholder Workshop: Gawler, Tuesday 22nd September 2015

Objective of workshop

To seek input from industry, government and the community in the development of the Climate Change Strategy and Carbon Neutral Adelaide action plan.

Desired outcomes

- Increased stakeholder awareness of the objectives and process for developing the new Climate Change Strategy
- Stakeholder input/views provided regarding what should be included in the strategy, including input on innovative solutions for climate action, state-wide priorities for action in relation to adaptation, an industry-led low carbon transition and government leadership

Workshop principles

- Accessible for participation by stakeholders with varying levels of skill, knowledge and expertise
- Conversation based workshops which promote 2-way dialogue between all stakeholders
- Whilst conversation based, workshops include clear prioritizing of issues/topics raised

What should be included in the new SA Climate Change Strategy?

Small group conversations enabled participants to talk about what they felt was important to be included in the strategy. Participants were guided through a series of questions and the notes were made by each small group and are included in section 2.

As a result of these small group conversations, participants were asked to write down their top three individual priorities that they would like to see included in South Australia's Climate Change Strategy.

1. <u>Priorities for inclusion in South Australia's Climate Change strategy</u>

LEAD

- Vison.
- Low carbon Australian diet.
- Targets that are easy to understand but high for the State to achieve in.
- A plan that can be followed based on the fantastic achievements so far, for the State to follow. Selling the benefits and employing SA in low carbon generation.
- Practical small targets that people can relate to.
- Lead in recycling and reuse technologies in SA i.e. Zero Waste SA.

- Government to lead in change through Strategic Policy and Direction with buy in at all levels.
- Improve, change and modify government policy/legislation to FACILITATE investment and growth in Renewable Energy and in Innovation.
- Deregulation of carbon supplies.
- Remove monopolies.
- Encourage Local Councils to Divest the investments/finances AND to source their energy from renewable sources by changing the legislation that currently prevents this in SA.
- Setting up suitable government policy and frameworks that allow innovation to be realised.
- Government to lead by example!!
- Solar thermal at Port Augusta ~ as the 'Jewel in the Crown' of the Northern Adelaide Green Industries/Low Carbon Economy region.

REDUCE

- Communities joining together to make small changes leading to a larger impact. These communities can come together to make an impact on government legislation.
- Legislation change to compel industry to lower emissions and innovate.
- SA Government complete sustainable legislation reform to:
 - Enable better local government responses.
 - o Building standards and compliance.
 - Public transport not legislation issues.
 - Make it easier for ultra, local small scale community enterprises.
 - Compliance: have the means to be able to ensure households/businesses are doing the right thing with the use of our natural resources.eg. Water tanks joined and functional on houses.
 - \circ $\;$ Businesses to turn lights off at the end of the day when the store is closed.
- Make solar panels available to low income people in rental properties.
- Make more land available and fund community gardens.
- Conserving forest/farmland (to use carbon). We need to listen to aboriginal people.
- Reduce carbon emissions.
- Renewable Energy State including repower Port Augusta and near 100% target.
- State wide nature links and bio-sequestration plan.
- Green streetscapes to prevent head islands (including more underground power lines.
- Revegetation and action.
- Legislate to remove bad options e.g. energy efficiency waste management (and enforce it!).
- Planting better native trees etc.
- Reduce waste; rubbish dumps; recycling. We have become a very disposable society.
- Focus on long term affordability not just upfront cost.

ADAPT

- Green roofs.
- Demonstrating the economic benefits of adapting to Climate Change.
- Energy efficient homes and finance to support them.
- Disaster resilient homes and households. Design construction and education.
- Create and strengthen local community action and connections.
- Adaptation yet BUT Mitigation must be a priority! (There are NO jobs, NO economy on a dead planet!)
- Adaptation must be inclusive and policy driven. Change legislation to increase adaptation.
- Agriculturally and environmentally. Supporting grassroots projects at agricultural bureaus, community groups etc.

INNOVATE

- Need a plan to transition to low carbon economy to ensure employment, investment and export opportunities.
- Support community-scale responses to Climate Change and to build local resilience e.g. Transition Towns and Sustainable Communities.
- Recognise the work being done at grassroots and the impact of this work and movement in the future. e.g. Innovation of community groups, land care, agricultural bureaus and industry in adapting to Climate Change ~ Capture; Promote; Encourage and Support.
- Change the thinking/attitude of big energy companies. Making them more likely to take on new innovators. Helping with research and marketing.
- Drive innovation through incentives and support to new ideas with clear economic benefits.
- Start using as much renewable energy as possible. Turn our weaknesses into our greatest strengths. Make technology that more closely emulates nature. Photosynthesis is a lot like solar power. Nature can use energy in the most efficient way possible.
- Government and Councils leading innovation.

Education

- Behaviour.
- Devotion to change.
- Community education.
- Government education.
- The average person is often unaware of the full extent of the impact of their actions. As long as the utility/service is available, no one is bothered by the consequences. Educate people on THEIR OWN direct impact on the environment. We need to educate the next generation and we can't do that if we're oblivious.
- Need combination of Incentives; Regulation and Education to bring community along the journey.

- Introduce some sort of program in the school system on education and new innovation of Green/Renewable Energy.
- Incorporate climate awareness into primary school curriculum.
- Education of younger generation of carbon emissions and about the environment in general.
- Education across themes of Innovate; Reduce and Adapt:
 - Climate Change.
 - What the issue is!
 - Fostering/mentoring/encouraging innovation.
 - Reduction and low carbon options.

Research

- Mandatory policies for households.
- Policy.
- Correct research, policy and education.
- Change.
- Concentrating on technological advances towards renewable energy.
- Technological innovation.
- Technology about reusable rare earth minerals.
- Technology on moving electricity.
- Other ways of harvesting energy whether that's geothermal, solar, wind, hydro or other ideas.
- Recycling.

2. Notes from Small Group Conversations

2.1 LEAD: What does it mean to you for South Australia to be a leader in taking action to respond to climate change?

Table 1 notes

- Learn about environment at young age.
- Government to give people a reason/incentive to want to make a change.
- More money for innovation and new ideas.
- Grow food on roofs in CBD and donate food to homeless shelter.
- First steps for change so others can follow.
- Set/be an example for future generations.
- Setting an example for the future.
- Make it a requirement for all houses to have solar and rain tanks.
- Make change affordable for all people.
- Rental properties need to have solar and rain water tanks provided.

Table 2 notes

- Need to plan for employment.
- Create a policy framework where we can export technology and innovation overseas.
- Creating an environment to attract overseas business investment and electric cars etc.
- Government to set policy and frameworks to promote renewable energy technologies and use of renewable energy.
- Need to stop thinking as an individual and work on a whole "only on the edge of extinction will we learn to live together".
- Think big! We need risk taking and transformative change. Business as usual won't work.
- Holden to make electronic cars.
- Reforming green power markets.
- Beyond what is already required by law.
- A different approach to COAG complementary principles.
- Government can use its 270,000,000 kwts demand to pull new SA renewables into being.
- Repower Port Augusta (solar thermal or PV) if achieved can be the platform for a renewable state.

Table 3 notes

- Create processes that suit our:
 - \circ Environment.
 - $\circ \quad \text{Regions.}$
 - \circ People.
 - $\circ \ \ \text{Industry}$
 - Agriculture.
- Education to our own state; to other states and territories and globally.
- Working with our strengths e.g. wind and solar.
- Pride!
- Ambitious targets!
- Education ~ provide information to educate more workshops and more students able to access information and education.
- Challenging the concepts of continuous growth and population growth.
- Lead by doing; planning; buy green energy; do more; target setting and high targets not easy.
- Sell achievements of SA renewables ~ Sell benefits. Use good news stories e.g. days of 100% power or renewables.
- Set a strategic plan that connects to community and business. Easy to follow.
- Solar potential and even wind production could be even more improved.
- Separate out "the economy' and 'the good of the community'.
- Build community leadership support organisations like Transition Gawler.

- NR/Govt partner with industry/community/agricultural groves for on-ground change at grassroots level.
- Have a strategic plan to deal with Climate Change so the community can join in.
- NR/Govt. ~ Important to lead by example ~ government, industry and individuals!

Table 4 notes

- Clear our name.
- Other people say "Wow, we should do what they are doing!"
- Need to replace manufacturing with something ~ why not renewable energy and adaptation technology?
- Appeal to adapt has direct benefits to business but targets (mitigation) too abstract.
- Clear strategic direction. Policy and regulatory certainty.
- Why? Adapting to climate change is good for business and economy.
- Long term goals.
- Strategies that are immune to political cycle ~ not 'climate change' but other benefits.

2.2 ADAPT: How can government, communities, businesses and individuals work together to prioritize and fund activities that build our resilience to climate change?

Table 1 notes

- Money is a barrier to energy efficiency, solar etc., for lower income people.
- Mandatory property management for rural properties.
- Next generation education.
- Government to help people build underground fire bunkers in bushfire areas.
- Fire buffers and refuges for life and equipment \rightarrow planning.
- Government, community and business work together on adaptation actions.
- School Climate Change curriculum.
- Governments need to work together Labor and Liberal

Table 2 notes

- Consideration of a price for carbon.
- Emergency Services ~ transparent around where money is spent. Need to plan for proactive approaches to reduce risk.
- You need 3 things: Incentives; compliance and education.
- Planning and design needs to factor in future conditions.
- Making adaptation changes in biodiversity ~ planting tree species that will adapt to new climate.
- Underground houses.
- Adaptation needs to incorporate mitigation.

- Need to sell the message and adaptation to the community.
- Financial incentives for energy efficient housing ~ to enable more investment in homes.
- Ensure the coming change to renewables won't have perverse incentives.

Table 3 notes

- Pay some people in each community to grown community response e.g. 'Sustainable Communities' and 'Transition Towns'
- Plan settlements away from native vegetation ~ planning reform.
- State Government must plan to adapt to a near fossil free economy.
- Build resilience ~ work with local industry, community and agricultural groups for onground projects that are driven by them, and government to provide \$, technical advice etc. that are Climate Change, adaptation and mitigation.
- Focus attention on where our food comes from. Educating farmers and growers.
- Opportunity ~ events, arsis and issues are an instigator of change. Climate change is a motivator to 'do something' ~ necessity. E.g. Mallala Ag. Bureau weather station project to know when to best spray plant, harvest etc. ~ detailed localised data.
- Adaptation vs Mitigation ~ not independent of each other. Can go hand in hand. Think outside the square for pathways and options.
- Consultation open conversation.
- Educate consumers. Cost of food goes up because cost of growing it (water etc.) goes up.
- Education to staff for on-ground impacts to landholders, farmers and the general public.
- Opportunity ~ change in land use and new crop opportunity arises.
- Next key step is working collaboratively to implement adaptation plans.
- Environmentally vs Economic ~ decisions and options.
- Supporting/purchasing/eating local produce vs export market (with carbon footprint).
- "Growth" discussion.

Table 4 notes

- People learn differently at different levels so variety of strategies is important.
- Urban open space ~ community meeting spaces ~ health and wellbeing.
- Clear linkages ~ facilitating connections that already exist.
- Inclusive ideas and policies ~ the same people do the same things. How do you get demographic mixing and involvement?
- Lots of small communities and small changes = BIG CHANGE.
- Using space in the city better gardens ~ homeless ~ less food miles ~ use space better ~ keep things cooler.
- Different jobs clean solar panels ~ identifying new work opportunities.

2.3 REDUCE: What are the opportunities for South Australia to substantially reduce our emissions?

Table 1 notes

- Clearer/more clarity around solar panel deals.
- Long term affordability of 'better' decisions e.g. solar panels.
- 'Naked food day' ~ incentives at grassroots ~ teach our young \rightarrow education.
- 'Urban Heat Island' ~ plant trees, cooling affect to reduced adaptation change required ~ aesthetically appealing.
- Less concrete ~ decreased reflection ~ free choice decision fruit trees ~ mental health benefits.
- Water security discussion ~ diesel. Roof top gardens in CBD.
- Research on wind farm on vertical wind farm on tall buildings in Adelaide.
- Integrated Pest Management e.g. glasshouses in N.A.P. and Virginia to reduce use of pesticides, improving soil health and reducing cost and carbon footprint of production.
- Build solar roads. Start off with bike lanes.
- Schools to include Climate Change subjects e.g. Accounting Adaptation and Mitigation.
- A no car day in South Australia.
- Have fruit trees for street trees.
- Technology ~ research and development for reduction e.g. cars.
- Incentives to purchase/choose better options.
- Use of lead-replacement (for leaded fuelled cars). Incentive to change the engine from leaded to unleaded or 'non-fossil fuel' fuel.
- Power sources: work with our strengths ~ wind and solar.
- Hanging gardens on tall buildings.
- More bike lanes ~ make it safer and easier to ride.
- Impact of \$ ~ Who hears the price??
- Ditch COAG Complementary Principles forever.
- Convert Holden to electric vehicles.
- Solar panels and energy efficiency for rental properties.
- Convert Holdens to make electric bikes.
- Use natural solutions to pesticides.
- Run EVs, trains and trams on green power.
- Need to disclose assumptions behind evaluating low carbon offsets.
- Powerline undergrounding targeted towards Heat Island areas and streets in Norther Adelaide.
- Change everyone's diet to more Australia native foods.
- Provide green power ticket options for public transport.
- Change street lights to LEDs. Underground powerlines and plant trees.
- Focus on long term affordability not just upfront costs.

Table 2 notes

- Car parks out front of buildings/shops not a benefit but bike parks are.
- Stop building car parks in CBD.
- 2016~ solar batteries will become available and lead to no supply costs.
- Wind power technology ~ we have a lot of coast line.
- Still a long way to go with solar and heat pumps to replicate Germany.
- Promote more park & rides.
- Use local government networks and communities to drive the transition.
- Get residential development off the grid.
- Passive solar homes.
- Having good transport infrastructure to reduce emissions.
- Solar, thermal for Port Augusta.
- Remove red tape for emission reduction opportunities.
- Better strategic planning to transition to reduce emissions by community and employment opportunities.
- Passive solar urban development and green infrastructure.
- Transport ~ push public transport and reduce private car use.
- Issues around being locked into State legislation which prevents change.

Table 3 notes

- Efficiency.
- Change business and household habits.
- Governments to lead by example e.g. office buildings lights off...
- Close coal mines and coal electricity.
- ISO Standards 14001 50001.
- Buy local ~ work local.
- Siesta's
- Government provides Tax Incentives ~ Interest free loans ~ rebates → ISO Standards 14000 50001.
- Change building designs to better suit our climate.

Table 4 notes

- Need to clearly define pathways and what reduction targets actually mean.
- Funding for compliance auditing.
- Enforce turning off lights at nights (shops) e.g. consume less.
- Lead by example.
- Legislation/regulation for energy efficiency standards in things like lighting and vehicles.
- Economic levers (i.e. carbon pricing).
- Something visible ~ see \$\$ or power ticking away when using electrical items.
- Producer responsibility for consumer items that break.

- Make the goals something that everyone can relate to ~ tons GHG doesn't mean anything to most people.
- Emissions targets are too long term/abstract. Need interim targets.
- Smart metres ~ demand management.

2.4 INNOVATE: How can South Australia be the innovator in climate change action?

Table 1 notes

- Large recycling; worm farming; vegetable growing in large supermarket chains.
- Green roofs.
- Nature corridors = carbon sequestration.
- Environmental house design.
- Create the renewable energy goal (near 100%) to drive manufacturing innovation.
- More farmers markets.
- Creative incentives for solar on rental properties.
- Wave power and a whole mix of renewables feeing electricity into the grid. Needs incentives.
- Integrated thinking. Adaptation integrated with mitigation and innovation.
- State competitions for reducing emissions.
- Green roofs for buildings, offices SA Government could follow France and legislate for green roofs or solar panel roofs.
- Create carrot stick incentives for housing developers to incorporate low carbon build and operate housing.
- Teach renewables in schools and trades.
- More sustainable housing ~ competitions and prizes.

Table 2 notes

- Look to how we use to live more simply in history ~ pedal power!
- Innovation of the year award.
- Need incentives for new innovations and technologies to stay in SA.
- Capture think tanks from young students to old, for ideas.
- Support businesses with capital investment.
- Build on existing zero wast work and progress.
- Take a chance with ideas that are out of the normal way of doing things.
- New way of marketing to promote a long term vision.
- Use Holden's \$\$ for innovation hub to make things happen, design to manufacturing.
- More innovative recycling ~ refurbishment of existing.
- Completion to drive innovation.
- Education is innovation, monitor change. Use practical case studies and ideas.
- Pedal powered TVs or homes.
- Reduce barriers to change to innovative options ~ equipment, market, \$, perception and education.
- Education of all ages on the issue in order to be able to think laterally on solutions.

- Need to foster, promote and encourage innovation from the start, not tall poppy syndrome "what is innovation?"
- Discussion of IP and manufacturing; reduce barriers to manufacturing and innovative solutions.
- Status of local governments. Barrier = State legislation.
- Thinking outside the square. Mitigation and adaptation or completely new. How can different industries work together/be integrated?
- Sharing knowledge and work together.
- Better utilisation of building spaces for gardens etc.
- Reopen CSIROs.
- Get primary school students involved in thinking differently. They have imagination.
- Primary School Think Tanks.
- Long term vision for the State developed by the people not government (political).
- Capture ideas of kids when there are far less 'limitations' to 'reality' and solutions. Foster, support, expand and apply on a larger scale. Mentor program for technical support and funding.
- Grassroots level: agricultural bureaus; community/land care groups; industry; commercial ~ fund, foster, educate and promote.

Table 3 notes

- Innovation in Government "Walk the Talk" don't keep changing 'the announcements'.
- Legislation to remove bad choices e.g. halogen lights plus compliance, or make the bad choice cost move.
- Bring together our strengths that already exist e.g. water, solar and wind. Build upon our existing work.
- Innovate ~ How to move this out of the political cycle.
- Innovative approach to bring 'unconverted' into green actions.
- Incentivise rental accommodation to install solar e.g. rove negative gearing unless houses have solar.
- Not just hi-tech innovation. People = habits. Community. Share/save. Innovation in education outreach/marketing to the 'unconverted'.
- Government could build community 'mores' so sustainability is normal but then big fines for non-compliance e.g. OHS.
- Bring the innovation into people's day to day life e.g. energy usage meters.
- Innovation ~ government very risk averse. How can we get more innovative?
- Educated kids to maintain support for renewables and sustainability.

Table 4 notes

- SA Government ~ \$; Strategy Policy ~ what will work best?
- Economy drives innovation.
- Electric car recharge station in Gawler.

- Education all next generation; government; get the knowledge out there!
- Government Policy ~ leaders in in solar energy.
- Euro IV to Euro V emissions CART Standards. Legislative change.
- Reduce emissions through development of Regional Hubs.
- The ideas are there! Policy and legislation impediments.
- Community based energy gen/supply/contracts.
- Expensive to pollute! Inaction takes over. Lead vs unleaded petrol.

2.5 LOW CARBON GENERATION: What plans or commitments does industry and community have with respect to low carbon generation?

Table 1 notes

- Small nuclear generation (regional) SMRs.
- Economic levers e.g. carbon pricing.
- Pumped hydro?
- Battery storage technologies ~ incentives to encourage uptake/development.
- Concentrated solar thermal at Port Augusta.
- Encourage diversification in portfolios of resources and energy companies.

Table 2 notes

- General power saving objects in houses.
- Reduce the barriers to change to low carbon options e.g. \$ cost/unit; cars, not just a few; set-up cost; ongoing costs; perceptions and education.
- Wireless electricity.
- Re-purpose Port Augusta for solar generation.
- Develop industry near production.
- More efficient motors. Technology (research and development). Reduce carbon footprint.
- Encouraging...(incentivising, supporting, legislating, educating) industry to produce low-carbon options; increase uptake; reduce unit cost; e.g. economics of scale.
- Life cycle impacts of choices ie. Rare earths.
- Define what is meant by low carbon.
- Research into more sustainable methods.
- Make it more efficient to move electricity (research).
- Education on what are the low carbon choices.
- Reuse rather than replace.

Table 3 notes

- Governments invest in their own technology.
- Solar panels at train stops to feed into electric trains.
- Community owned renewables needs support for legal set up.
- Community gardens to reduce transport emissions and plastic waste ~ education.
- Carbon planting revegetation projects.
- No nuclear.
- Installing solar panels etc. at public transport stations to generate energy for electronic vehicles.
- The community has lack of coordination to have a plan/commitment. This needs to be improved.
- Community gardens ultra-local food production.
- No nuke dumps!
- Household scale ~ wind turbines etc.
- Suburbs own power forms of solar/wind for self-sufficiency.
- Transition town Gawler ~ a community movement.
- Local production: convenience; transport; coordination of low carbon generation targets to aim for.
- Infrastructure of: electric trains; vehicles/solar chargers; government investment; public transport and road networks.

Table 4 notes

- Legislation to allow Councils to divest investment \$ and allow investment in renewable supplies.
- Electric cars ~ recharging stations.
- Climate Change Sector Agreement ~ Climate Change Adaptation Plan ACTIONS.
- Local power generation facilities ~ solar roads; piezo-electric pads.

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.