

CLIMATE CHANGE STRATEGY FOR SA, 2015

Summary of Submission

My overall response to the Government's initiative is a big WOW and THANKS

After an introductory statement setting out a context for my submission there are four parts to it:

- Part A Additional Consultation Papers
- Part B It's Time for Bold Action
- Part C 100% Renewal Energy & CST Industry
- Part D Financing Issues

Introduction

At the United Nations Framework Convention on Climate Change 21st Conference of Parties in December this year the nations of the world effectively determine whether they will collectively take bold action on behalf of humanity to mitigate climate change arising from human induced global warming or not.

It is widely agreed that this is the last opportunity for humanity to take action to mitigate "Dangerous and Irreversible Climate Change" whilst there are many who believe it is already too late.

I support this exercise because it takes up the huge challenge of "having a go" on behalf of humanity. It is important that we recognize that the scale of the task is enormous and the trajectory of change is very steep. If only humanity acted on the message from the 1992 Rio Janeiro 1st Conference of Parties!!!

The National commitments in the lead up to Paris only reduce greenhouse emissions to 3 degrees of warming and serious negotiations at Paris and of over the next 12 months will be needed to reach the 2 degree target.

Accordingly, the development of this Climate Change Strategy and its critical implementation plans has to be more aggressive, urgent and push us all out of our comfort levels. **The future for our children, grand-children and future generations of South Australians' are in our hands now.**

Part A Additional Consultation Papers

In developing the Climate Change Strategy I suggest that the following two documents be taken into consideration along with the five “Developing a New Climate Strategy for South Australia” consultation papers and the “Low Carbon Investment Plan for South Australia strategy paper

Diesendorf M (2015) *100% Renewable Electricity for South Australia*. Conservation Council of South Australia, Adelaide.

Integrated Transport & Land Plan, 2013

Part B It's Time for Bold Action

SA is at a crossroads today.

Do we allow the state to be slip into irrelevancy on account of us not having an adequate strategy and plan to address climate change and/or the spine to push-back against the self-interested power of the eastern states?

OR

Do we boldly create the Weatherill era to match those of Playford and Dunstan by rapidly transforming SA and Adelaide into the best place in Australia to live, work and to invest.

There are Climate Change realities, competitive opportunities, economic & financial opportunities and a political need for this Strategy to be completed, endorsed by the SA Parliament and for bold multi-strand implementation plans to be activated **as a matter of urgency**.

1, Climate Change Realities

Global warming is now occurring faster than anticipated and the 2050 political target dates from Copenhagen are drastically out of date as the new “Crunch-Time” is now closer to 2030 rather than 2050. An example of this is the statement that “Sea level rise of between 4.7mm and 4.9mm per year has been recorded in South Australia since 1992” (BOM 2015) on Page 11 of the Overview Consultation Paper which stands in stark contrast to the 3.2mm rate stated in the Sea Level section of the “State of the Climate 2014” (CSIRO & BOM) on Page 12.

Further it is being reported that the aggregate of the Intended Nationally Determined Contributions, announced by countries in the lead up to the Conference of Parties in Paris later this year, may prevent 3°C of warming but are seriously short of protecting the “2°C Guardrail for Dangerous Climate Change” politically set at Copenhagen. Consequentially, if the nations of the world decide that collectively Climate Change is to be seriously addressed then emission targets will have to be seriously increased and this has important ripple down implications for the targets and ambitions being

defined in this exercise of “Developing a New Climate Change Strategy for South Australia”.

2, Competitive Opportunities

The Race is on for

1. A Carbon Neutral Capital City CBD
2. A State delivering 100% Renewable Energy
3. A State delivering stable renewable electricity prices with annual price rises of <1%
4. A State gaining the greatest percentage reduction in fossil fuelled commuter miles on account of improved public transport services, and the provision of bikeways and 24/7 safe pedestrian walkways.
5. A State gaining the highest per capita adoption of electric cars and light commercial vehicles.
6. A State demonstrating innovative solutions in decarbonizing freight and parcel delivery and waste removal.

The Prize will be that Adelaide/SA will significantly increase its attractiveness as a great place to live, work and raise a family. This will attract population, investment and business growth.

The SA Community and Government start this race in **Poll Position**

Firstly, South Australia is internationally recognized for its transition to renewable electricity generation by way of wind and solar PV. The fact that the sky has not fallen in as we have reached our present situation gives South Australians’ confidence and the will to go on and tackle the harder aspects of reaching the goal of 100%Renewables. Further, our success on the energy front gives confidence that we can take steps into the energy needs of transport and the big field of energy efficiency. Our international credibility also enables our state to enter international dialogue around cutting edge technical issues, attracting innovating businesses and it is in the loop for relevant pure and applied research outcomes as they arise

Secondly, South Australia is doing its homework. The Developing a New Climate Change Strategy for South Australia exercise develops a launching pad for action. Through the preparation of the consultation papers current knowledge is summarized and key issues for the future identified. These documents facilitate and gave focus to the community consultations. The work by staff and the community in developing the “Integrated Transport & Land Plan, 2013” and the “Low Carbon Investment Plan for South Australia” has also significantly added to our states preparedness for the challenges ahead. Complementary to the above, the initiative of the Conservation Council SA to engage Dr Mark Diesendorf to produce the “100% Renewable Electricity for South Australia” Report adds a major technical input to the state’s advantage.

3, Economic & Financial Opportunities

With the change in the nation's Prime Minister new opportunities and a new language has emerged in the debate on economic and financial matters. This change plays into the hands of a State Government who is able act quickly, before the doors of opportunity are closed by conservative and free market forces reassert themselves.

Australia's economic situation is depressed and now the possibility of adopting a Keynesian approach of Governments' stimulating economic activity by supporting nation building infrastructure projects has been allowed to enter the public discourse. Public Transport, Renewable Energy and Urban Renewable are prime areas of focus for the Commonwealth Government and these particularly fit into the implementation of the State's Climate Change Strategy.

The concept of 'good' Government debt has also been released for rational discussion. The practice of Governments' prudently borrowing funds, in the same way as do households and businesses, to enable high quality infrastructure projects to be mounted is no longer a political impossibility.

4, Political Need

There are now two years remaining of the current political term before the State enters election mode. This also adds to the urgency in locking down the Strategy and getting the implementation underway so that the benefits to South Australia and its population from this exercise are not placed on the knife edge of a State Government election.

Part C 100% Renewal Energy & CST with Storage

Mark Diesendorf in the Report:

Diesendorf M (2015) *100% Renewable Electricity for South Australia*.
Conservation Council of South Australia, Adelaide.

charts a path to 100% renewable electricity generation in SA within 15 years.

I ask that this Report be thoroughly studied including meaningful discussions with Dr M Diesendorf.

In the report mention is made of the need to support wind and solar PV "Base Load" with a "Despatch-able Power Station" and the options are gas turbine and Concentrating Solar Thermal with Storage. Although CST with storage has not reached its long-term cost curve I believe Australia/South Australia is wealthy enough to adopt this technology now and help bring the cost curve down for later adopters. Further, it breaks a linkage to gas usage in the state.

As an aside I would like the State's Energy Efficiency units demonstrate how households can economically switch from gas to renewable electricity

The Despatch-able Power Station plays a pivotal role in managing the electricity grid and I ask that in the first instance the operation of this power station be held in State government hands. After a new “Renewable” Australian electricity grid has been created and stabilized, the sale of the power station can be considered.

Our geographic location is ideal for Adelaide to become the R & D hub and industrial base for an Australian Large Solar (with and without) Storage Industry.

Part D Financing Issues

This is an area where the change in Prime Minister has created an opportunity which the State can use if it can act before the reactionary conservative forces close the option. Further, interest rates are at historically low levels.

There is good debt and the use of good debt to fund prudent infrastructure projects, particularly when there is a downturn in the economy is to be commended.

It is important to recognise that the cost of moving to 100% renewable energy and to undertake energy efficiency initiatives is rapidly decreasing as societies across the planet face these common challenges and find innovative solutions. It is interesting to note that it was only in 2010 that we studied with interest the Beyond Zero Emissions “Zero Carbon Australia Stationary Energy Plan” which had a modest cost of 3% of Australia’s GDP. Today it is so much less.

My grand-parents funded their retirement in the 1950’s drawing on their MMBW Semi Governmental Bonds which were established to fund the visionary Melbourne water supply network.

I propose that consideration be given to the State issuing a large tranche of 30 year Climate Change Infrastructure Bonds with a 3.5 - 4% interest rate. They should be transferable through the Australian Bond Market and I expect that they will meet an important role for Conservative and Balanced investment and superannuation packages.

Ian Carman
15 October, 2015