162 Stewart Martin 181015

SOUTH AUSTRALIA CLIMATE CHANGE STRATEGY

I would like to make the following comments about South Australia's proposed climate change strategy.

1. **Electricity Generation**. Currently SA generates approximately 40% of its electricity from renewable sources. Hence a target of at least 60% by 2025 and rather than the proposed 50% should be easily achievable. Further targets of 75% by 2035 and 90% by 2050 should also be set.
2. **Greenhouse Gas Emissions**. The current proposed target to reduce emissions by 60% of 1990 levels by 2050 should also be revised upwards. If the target of keeping the global temperature rise to less than 2C by 2100 is to be achieved, then the scientific consensus is that global emissions should be reduced by at least 80% relative to 1990 levels by 2050. South Australia should be aiming to at least match this target.

In order to reach the targets of increased renewable generation and reduced GHG emissions the following strategies should be considered.

- **Electricity Interconnectors.** In order to optimise and maximise the use of renewable energy in South Australia the interconnectors between SA and NSW and Victoria should be strengthened. As both solar and wind resources are highly variable this will enable the export and import of electricity between states as and when required and greatly assist with the management of the electricity supply.

  Electricity and Gas Tariffs. Greenhouse gas emissions are proportional to energy use not power demand hence tariffs should be set to encourage energy conservation. Therefore tariffs should be primarily based on energy consumption, not peak demand and stepped so that the price/unit increases with use.

  Electricity tariffs in particular should be transparent, easily understood and not penalise the installation of photovoltaic arrays on commercial, community or residential buildings.

- **Ensuring the compliance of the 6 star rating for new homes**. Provide sufficient resources to ensure that all new homes and extensions meet required energy efficient building standards. This is necessary as according to a recent report by Pitt and Sherry and Swinburne University on the National Energy Efficient Building Project (NEEBP) the compliance with existing energy efficiency codes is poor and many homes do not meet the required standards. This is largely due to the lack of resources to enforce the standards.

- **Micro grids and Smart Grids**. Investigate the effectiveness of the implementation of micro grids with distributed generation in regions at the end of grid lines. Suitable regions would be for examples: Elliston, Ceduna and Hawker.

- **Energy Storage**. Investigate options for pumped storage at Whyalla and the Beetalo Valley, East of Port Pirie. Studies are available from the Melbourne Energy Institute.

    - Support the installation of battery storage at commercial and residential levels in order to maximise the use of solar and wind energy.

- **Community Solar.** Establish a grant scheme to support community-owned renewable energy projects.

- **Renewable Energy at Port Augusta.** Run a reverse auction to replace the power station at Port Augusta with a renewable source.

- **Housing SA Public housing**. Ensure the proposed renewal of 4500 homes achieves high sustainability standards, facilitates onsite electricity generation and favours materials manufactured in SA.

- **Fossil fuel exploration.** Commit to phase out fossil fuel exploration as soon as possible and in the meantime ensure our most iconic and valuable natural environments and agricultural areas are protected.

- **Coastal Defences**. Invest in coastal defence measures such as seagrass beds and mangrove forests that absorb large quantities of carbon dioxide while protecting our coastline from erosion and storm surges.

    - **Revegetation.** Support the revegetation of degraded and cleared land with native flora and provide wildlife corridors to connect habitat across public and private land.
    - Prioritise the purchase of carbon offsets from these projects.
    - Increase the number of rangers to manage protected areas with emphasis on employing indigenous people where appropriate.
    - Reduce heat island effects in low socioeconomic areas of Adelaide by significantly increasing the number of street trees.

- **Transport**. Extend and electrify Adelaide's train and light rail networks. •
    - Develop a network of electric vehicle charging stations across the metropolitan region.
    - Create signature events that show how Adelaide can become a carbon neutral city, such as a 'Car Free Adelaide' day.
    - If necessary introduce a congestion charge for cars entering the CBD in peak hours to reduce traffic congestion and increase the use of public transport.

- **Street Lighting**. Phase out inefficient street lighting and replace with LED or other more efficient alternatives.

- **Collaborative economy.** Provide policy support and capital investment to grow the collaborative economy; an economy that minimises resource use and maximises employment by facilitating sharing of goods and services and localising artisans and entrepreneurs.