

# **A Solar Thermal Future for Port Augusta**

***The role of business and government  
players in facilitating a shift to renewables.***

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# Drivers for Change

- Carbon pricing
- Playford B - inefficient, greenhouse intensive and at the end of useful life
- Health risk
- Leigh Creek coal becoming scarce
- The Clean Energy Future Plan potential funds to close down 2000 MWh of coal power with Hazelwood and Playford B at the top of the list
- Gas
  - A fossil fuel, becoming scarce
  - A greenhouse gas when burnt and a potent greenhouse gas when leaked
  - Desperate gas rush towards coal seam, shale and coal gasification sources
  - Exposed to carbon pricing and parity with the International gas prices
  - Cost of connection compared with other sites (e.g. Tepko and Torrens Island)
  - Best regarded as a short term transitional fuel
- The need of wind turbines for standby energy partners
- Goodwill
  - The community support renewables, all levels of government support renewables, businesses are looking for future-proofing opportunities

# Barriers

- High up front Capital cost
  - Competition for funding assistance – Need to put forward project proposals with multi partner commitments , Local and State Government support for Federal Government financial assistance.
  
- Investors and Project proponents need Power Purchase agreements to get large scale renewable projects off the ground, yet we don't yet have the big mining and manufacturing sector committing to large scale renewable or projects to:
  - To buy the electricity
  - To buy the Renewable Energy Certificates (RECS) or as GreenPower
  
- Australian Energy Market Commission (AEMC) - View that energy planning overly concerned about rules rather than planning, and is not integrated with climate mitigation policy.
- Not enough collaboration between likely and unlikely partners
- Transmission capacity
- Risk aversion -Short term risks to minimise long term risks

# Potential Role for BHP Billiton

## - Olympic Dam Mine Expansion

- Largest open cut mine in the world
- CONTEXT - South Australia's current electricity consumption is around 16,000 GWh per year
- The expansion will increase electricity use at the mine from 870 GWh per year up to 5,250 GWh per
- Renewable commitment proposed for the desalination plant and associated pumping of 400 GWh per year (equating to 7.6% renewables for the expanded mine)
  - BHPB has not yet committed to GreenPower accreditation, or South Australian renewables
- On Site electricity recovered from waste heat
  - Committed to build a 250 MW waste heat electricity plant
  - Could recover up to 1500 GWh but no commitment for outcome
- Open invitation to discussions

# Opportunities

- Need for change and a desire for change
- Great location at Port Augusta and in region
- A mining boom
- Olympic Dam mine expansion – BHP Billiton commitment to the sustainability of South Australia
- Federal Government funding opportunities
  - Clean Energy Finance Corporation
  - Clean Energy Future Fund
  - Renewable Energy Demonstration Fund
- Willingness to try
- Alinta, local government, state government (warming), BZE, AYCC, CLEAN SA, Conservation Council, Doctors for the Environment, SANTOS, universities, thousands of individual supporters and more
- Review of South Australia's Climate Change Legislation - NOW
- Vote with your choices - generate your own renewables or contribute to accredited GreenPower or percentage of accredited GreenPower



# The Role of the State Government

Leadership, facilitation, advice, encouragement, participation and in some areas, regulation.

- Review of South Australia's Climate Change Legislation

Support increasing the 2050 target to 80% reductions

- Support a 2020 Greenhouse target and a greenhouse reduction pathway
- Support increasing the 33% renewable generation target by 2020 to 40%-50% or more
- Support the low emissions intensity standard to rule out coal power
- Support that new gas plants can only be approved if coupled with equal size renewable projects
- Support Playford B to be replaced with a large scale CST plant in legislation

Send to [climatechange@sa.gov.au](mailto:climatechange@sa.gov.au)

This list of suggested points and a link to the discussion paper are on the front page of the Conservation Council SA website:

[www.conservation.sa.gov.au](http://www.conservation.sa.gov.au)



Thank you  
*and go for it!*

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