

Regional Low Carbon Development Issues in Yorke and Mid North Region, South Australia



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Agenda

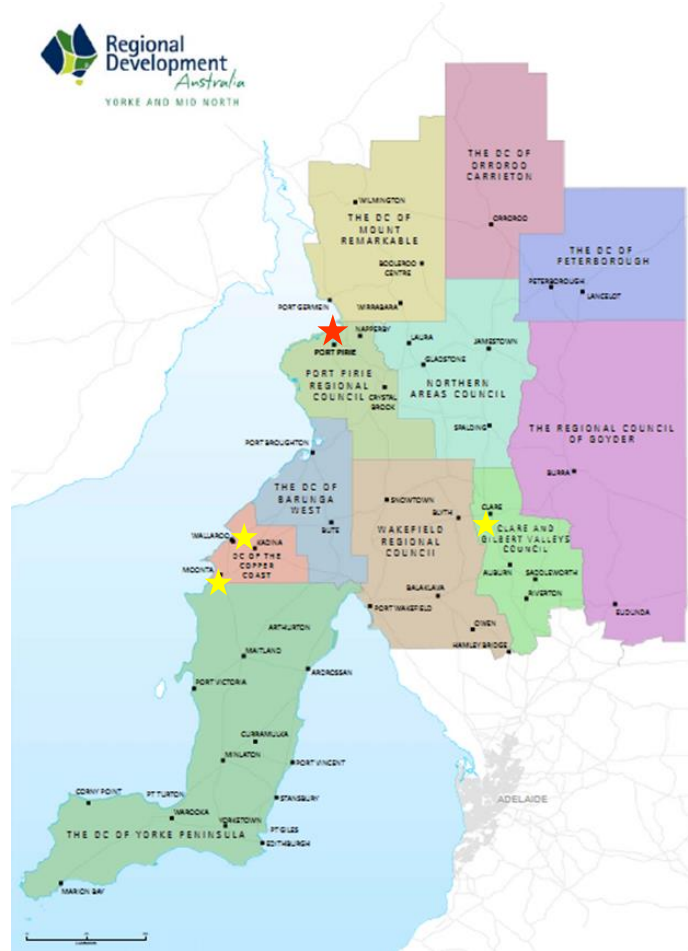
- Introduction
- Regional Assessment
 - Land Use Restrictions
 - Resources
- Community Preferences Survey
- Financial Investment Survey
- Workshops
- Conclusions



Introduction - Yorke and Mid North



Regional Development Australia
YORKE AND MID NORTH



Population by age 2011							
	0-14		15-64		65+		Total
Yorke and Mid North	13,419	18%	44,893	60%	15,937	21%	74,250
South Australia	289,166	18%	1,088,480	66%	260,586	16%	1,638,233
National	4,212,473	19%	15,034,921	67%	3,076,539	14%	22,323,934

Highest level of schooling finished					
	Year 12	Year 11	Year 10	Year 9	Year 8
Yorke and Mid North	28.27%	21.98%	22.07%	8.64%	11.09%
South Australia	44.76%	18.08%	16.68%	5.31%	6.76%
National	49.23%	8.90%	20.89%	5.68%	5.92%

Population over 15 with post-school qualifications				
	2001	2006	2011	% chg
Yorke and Mid North	23.03%	27.72%	32.94%	43%
South Australia	31.73%	36.43%	41.71%	31%
National	34.27%	38.97%	44.39%	30%

Yorke and Mid North Demographics

Average wage and salary income				
	2004	2009	Chg	% chg
Yorke and Mid North	\$27,790	\$35,592	\$7,802	28%
South Australia	\$33,623	\$41,896	\$8,273	25%
National	\$36,889	\$46,599	\$9,710	26%



Regional Assessment

Land Use Restrictions

- Environmental land use restrictions
 - National and state mandated protections
 - Upper and lower Mid North corridor areas
- Restrictions incorporated in Council Development Plans
 - Wind farms
 - Solar panels



Regional Assessment

Resources

- Abundant wind
- Good to very good solar
- Good to very good biomass
- Very good tidal/wave prospects
- Some geothermal potential



Group 1	strongly against	against	somewhat against	neutral	somewhat in favour	in favour	strongly in favour	against	in favour
solar panel	0.0%	0.0%	0.0%	0.0%	0.0%	38.1%	61.9%	0%	100%
solar farm	0.0%	0.0%	0.0%	14.3%	14.3%	38.1%	33.3%	0%	86%
nuclear	19.0%	0.0%	9.5%	19.0%	14.3%	28.6%	9.5%	29%	52%
household wind turbine	0.0%	4.8%	19.0%	33.3%	19.0%	4.8%	19.0%	24%	43%
wind farm	19.0%	0.0%	23.8%	15.8%	0.0%	19.0%	23.8%	43%	43%
hydro (wave)	0.0%	0.0%	5.0%	40.0%	30.0%	15.0%	10.0%	5%	55%
geothermal	0.0%	4.8%	4.8%	38.1%	33.3%	19.0%	0.0%	10%	52%
waste to energy	0.0%	0.0%	4.8%	9.5%	38.1%	42.9%	4.8%	5%	86%
biomass	0.0%	0.0%	14.3%	23.8%	38.1%	19.0%	9.5%	14%	67%

Group 2	strongly against	against	somewhat against	neutral	somewhat in favour	in favour	strongly in favour	against	in favour
solar panel	4.8%	0.0%	0.0%	4.8%	10.5%	19.0%	61.9%	5%	91%
solar farm	4.8%	4.8%	4.8%	0.0%	14.3%	23.8%	47.6%	14%	86%
nuclear	33.3%	9.5%	14.3%	0.0%	19.0%	9.5%	14.3%	57%	43%
household wind turbine	4.8%	4.8%	0.0%	23.8%	14.3%	23.8%	23.8%	10%	62%
wind farm	10.5%	10.5%	10.5%	15.8%	10.5%	21.1%	21.1%	32%	53%
hydro (wave)	5.0%	0.0%	10.0%	15.0%	10.0%	40.0%	20.0%	15%	70%
geothermal	14.3%	0.0%	9.5%	4.8%	14.3%	28.6%	28.6%	10%	71%
waste to energy	15.0%	0.0%	0.0%	10.0%	15.0%	30.0%	30.0%	15%	75%
biomass	5.3%	0.0%	0.0%	15.8%	31.6%	26.3%	21.1%	5%	79%

Group 3	strongly against	against	somewhat against	neutral	somewhat in favour	in favour	strongly in favour	against	in favour
solar panel	0.0%	0.0%	0.0%	3.0%	12.1%	18.2%	66.7%	0%	97%
solar farm	3.1%	0.0%	0.0%	6.3%	3.1%	40.6%	46.9%	3%	91%
nuclear	21.9%	15.6%	18.8%	9.4%	12.5%	12.5%	9.4%	56%	34%
household wind turbine	3.2%	3.2%	3.2%	19.4%	25.8%	32.3%	12.9%	10%	71%
wind farm	21.9%	3.1%	3.1%	9.4%	18.8%	21.9%	21.9%	28%	63%
hydro (wave)	0.0%	0.0%	0.0%	15.6%	15.6%	40.6%	28.1%	0%	84%
geothermal	3.3%	3.3%	16.7%	3.3%	6.7%	36.7%	30.0%	23%	73%
waste to energy	0.0%	0.0%	0.0%	6.3%	15.6%	46.9%	31.3%	0%	94%
biomass	0.0%	9.7%	0.0%	12.9%	6.5%	35.5%	35.5%	10%	77%

Community preferences survey



Financial Investment Survey

- 1) Low carbon energy financial investment levels are falling due to market uncertainties
- 2) Predicted 2 – 5 years before market turnaround
- 3) Local actions key during the interim



Which do you think are the most important factors to promote low carbon investment in a community or region?

General	Very important	Important
Higher energy prices/consumption	15	9
Regional or local leadership	11	10
Policy		
Federal or state requirements (RET)	17	7
Local leadership	15	6
Social		
Providing a better future for children	15	7
Local or regional leadership	12	9
Economic		
Cost reductions	14	10
Diversifying the regional economy	14	6



Which of these do you think are the most important barriers to low carbon investment in a community or region?

General	Very important	Important
Regulatory or policy uncertainty	15	5
Lack of knowledge/understanding	13	8
Policy		
Legal or regulatory conflicts/confusion	11	11
Low priority of low carbon transition in local or regional government/communities	11	8
Social		
Too many unreliable sources of information	10	11
Distrust of scientific or government information resources	10	10
Economic		
High upfront capital costs	15	7
Lack of leadership	12	9



Workshops

What is the ideal vision of the future low carbon Yorke and Mid North region?

- Local self-sufficiency
- Regional and local scale energy generation
- Improved regional and state-wide transportation
- Market-based or alternative solutions?
- Needs:
 - Values discussion
 - Education
 - Leadership



Conclusions

- Yorke and Mid North is well placed to maximise use of abundant renewable energy resources, solar preferred
- Existing wind farms produce significant energy; new proposals meeting resistance
- Some variation in community preferences across the region, especially in nuclear and wind farms
- Local actions can prepare region for when financial investment uncertainty decreases (2 – 5 years)
- Workshops indicate a local/regional scale low carbon future vision potentially at odds with State Government concept of commercial scale installations
- Engagement and responsiveness is an issue



Thank you.

Questions?



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