

### Research Report to:



### Community perceptions of wind farms

December 2012

### Prepared by:



# **Table of Contents**

Table of Contents	2
Table of Figures	3
List of tables	4
Key findings	5
The public supports wind farms in Queensland	5
The vast majority of locals are aware of the proposed Coopers Gap wind farm and they support it	5
Most people believe that the proposed wind farm will have a positive impacts on local aspects	5
Background	6
Research Objectives	6
Methodology	7
Sample	8
Research findings	9
Level of support for wind farms in Queensland	9
Level of support for proposed Coopers Gap wind farm	10
Level of support for local wind farm developments	11
Awareness of Coopers Gap wind farm proposal	12
Impact of Coopers Gap wind farm on local aspects	13
Knowledge of beneficiaries of proposed Coopers Gap wind farm	15
Perceived likelihood of wind farm causing illness	16
Preferred information channels	17
Appendices	18
Appendix 1: Survey instrument	18

# Table of Figures

Figure 1: Generally speaking do you support or oppose wind farms to be built in Queensland to generate electricity?
electricity:
Figure 2: Do you support or oppose the proposed Coopers Gap Wind Farm?
Figure 3: Would you support or oppose wind farm developments in the local area in the future?11
Figure 4: Have you heard of a proposal to build a wind farm in the Cooranga North area between Dalby and Kingaroy called the Coopers Gap wind farm?
Figure 5: Have you or do you personally know anyone who you think will benefit directly from the proposed Coopers Gap Wind Farm?15
Figure 6: Modern wind turbines have been operating globally in close proximity to populated areas and dwellings for over 20 years. Some people say that wind farms can cause illnesses to people living nearby.
Other people say that wind farms don't cause illness to people living nearby. Which sounds more likely to be
correct to you?

# List of tables

Table 1: Survey sample8
Table 2: Generally speaking do you support or oppose wind farms to be built in Queensland to generate electricity?9
Table 3: Do you support or oppose the proposed Coopers Gap Wind Farm?
Table 4: Would you support or oppose wind farm developments in the local area in the future?11
Table 5: Have you heard of a proposal to build a wind farm in the Cooranga North area between Dalby and Kingaroy called the Coopers Gap wind farm?12
Table 6: Based on what you know do you think the development of the Coopers Gap Wind Farm will be Very Good, Good, Bad or Very Bad for (read from list below) – if you think it won't make any difference either way just say so:
Table 7: Based on what you know do you think the development of the Coopers Gap Wind Farm will be Very Good, Good, Bad or Very Bad for (read from list below) – if you think it won't make any difference either way just say so:
Table 8: Based on what you know do you think the development of the Coopers Gap Wind Farm will be Very Good, Good, Bad or Very Bad for (read from list below) – if you think it won't make any difference either way just say so:
Table 9: Have you or do you personally know anyone who you think will benefit directly from the proposed Coopers Gap Wind Farm?15
Table 10: Modern wind turbines have been operating globally in close proximity to populated areas and dwellings for over 20 years. Some people say that wind farms can cause illnesses to people living nearby. Other people say that wind farms don't cause illness to people living nearby. Which sounds more likely to be correct to you?
Table 11: How would you like to receive information about the proposed wind farm going forward? 17

# Key findings

#### The public supports wind farms in Queensland

The vast majority of the public support wind farms. This finding is consistent with various research projects undertaken by Qdos on this issue. Over two thirds of people (67% of local respondents and 77% of respondents across QLD) support the building of wind farms in Queensland compared to just 12% of locals and 7% of respondents across QLD who oppose.

# The vast majority of locals are aware of the proposed Coopers Gap wind farm and they support it

Three quarters (75%) of locals are aware of the proposed Coopers Gap wind farm and the majority (63%) support the development.

# Most people believe that the proposed wind farm will have a positive impacts on local aspects

The majority of locals believe that the Coopers Gap Wind Farm will either make no difference or have positive impacts on a variety of local aspects. Generally, no more than a quarter of locals think that there will be negative impacts on local aspects as a consequence of the wind farm development. The greatest concern for locals is impacts on property values (39% expect negative impacts) although the majority believe the wind farm will either make no difference or will have positive impacts (50%).

### Background

AGL commissioned research to gain a greater understanding of community attitudes toward the wind industry in Queensland and the proposed Coopers Gap wind farm specifically.

Results from the research will inform the development of AGL's community engagement strategy and provide material for the revised assessment report due to be completed in the first half of 2013.

# Research Objectives

The objectives of the research were to:

- Measure awareness of the proposed Coopers Gap wind farm
- Measure community attitudes towards the proposed Coopers Gap wind farm
- Measure community attitudes towards wind farms in Queensland
- Measure and prioritise key issues and concerns related to wind farms
- Provide baseline data for time-based analysis
- Provide comparisons between the three participant categories (i.e. those within a 15 kilometre radius of the project, other local people and Queenslanders more broadly)
- Understand how (what communication channels other than the CCC) participants would like to be communicated with about proposed Coopers Gap wind farm.

# Methodology

A telephone survey of local residents within a 50 kilometre radius of the proposed Coopers Gap wind farm site in Queensland and the wider Queensland population was conducted to gather the data for this research.

Qdos obtained all available residential numbers for the areas within proximity to the proposed wind farm site and each number was called at least three times to maximise residents opportunity to participate in the research. However, not all phone numbers are able to be obtained and many people choose not to participate in surveys or are unavailable at the time calls are made.

Results of this survey are cross tabulated against respondents distance from the proposed wind farm in four categories; within 15 kilometres, 16 to 30 kilometres, 31 to 40 kilometres and 41 to 50 kilometres. The distance of 15 kilometres for the inner ring was chosen because it was the minimum distance that a reasonably statistically valid sample size (53 respondents) could be obtained in this quite sparsely populated area.

The telephone interviewing was undertaken over a 5-day period, from 11 December 2012 to 15 December, 2012 to ensure all available numbers were contacted so that a reasonable overall representative sample was attained. The total sample attained was n = 500. 400 of these surveys were conducted by calling local residential phone numbers. The remaining 100 were conducted by calling residential phone numbers across the state of Queensland.

# Sample

There were a total of n=500 resident surveys conducted.

Survey Sample					
Distance from site	Within 15 K's	53	11%		
	16 to 30 K's	105	21%		
	31 to 40 K's	108	22%		
	41 to 50 K's	134	27%		
Sample	All Locals	400	80%		
	QLD Wide	100	20%		
Total		500	100%		

Table 1: Survey sample

## Research findings

### Level of support for wind farms in Queensland

The majority of those surveyed support wind farms. Respondents from across Queensland were slightly more likely to support or strongly support wind farms than locals – 77% compared with 67%.

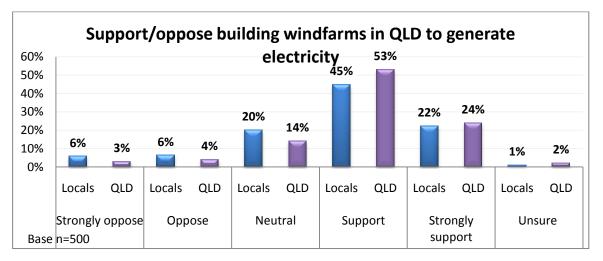


Figure 1: Generally speaking do you support or oppose wind farms to be built in Queensland to generate electricity?

#### Support/oppose building wind farms in QLD to generate electricity

		Strongly oppose	Oppose	Neutral	Support	Strongly support	Unsure	Mean
Distance from site	Within 15 K's	19%	4%	9%	36%	30%	2%	3.6
	16 to 30 K's 31 to 40 K's 41 to 50 K's	4% 5% 3%	6% 10% 4%	28% 21% 17%	36% 44% 56%	27% 20% 17%	0% 0% 2%	3.8 3.6 3.8
Sample	All Locals QLD Wide	6% 3%	6% 4%	20% 14%	45% 53%	22% 24%	1% 2%	3.7 3.9
Total n=500		5%	6%	19%	46%	23%	1%	3.8

Table 2: Generally speaking do you support or oppose wind farms to be built in Queensland to generate electricity?

### Level of support for proposed Coopers Gap wind farm

High levels of support for the wind farm development were consistent for both locals and the wider Queensland population – 63% of locals support the proposal. Although the level of support was consistent for those living within 15 kilometres of the site (60% support) the level of people opposed was higher for this sub group at a quarter (25% oppose).

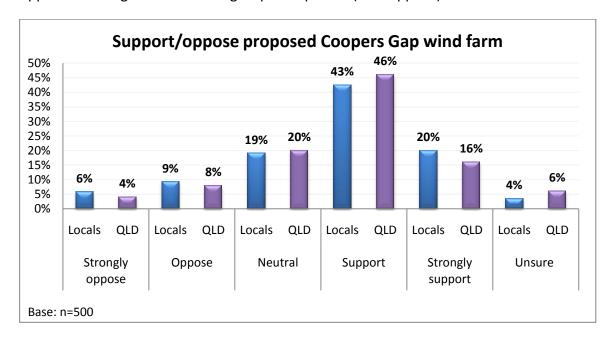


Figure 2: Do you support or oppose the proposed Coopers Gap Wind Farm?

#### Support/oppose proposed Coopers Gap wind farm

	<u> </u>	<u>'</u>	<u> </u>					
		Strongly	Oppose	Neutral	Support	Strongly	Unsure	Mean
		oppose				support		
Distance from	Within 15 K's	17%	8%	13%	34%	26%	2%	3.5
site								
	16 to 30 K's	4%	7%	22%	42%	23%	3%	3.8
	31 to 40 K's	5%	16%	16%	44%	18%	2%	3.6
	41 to 50 K's	4%	7%	22%	45%	17%	6%	3.7
Sample	All Locals	6%	9%	19%	43%	20%	4%	3.6
	QLD Wide	4%	8%	20%	46%	16%	6%	3.7
Total n=500		5%	9%	19%	43%	19%	4%	3.6

Table 3: Do you support or oppose the proposed Coopers Gap Wind Farm?

### Level of support for local wind farm developments

Of the locals surveyed, two-thirds (66%) supported future wind farm developments in their local area. The levels of those who supported local wind farm developments were consistent regardless of proximity to the proposed Coopers Gap wind farm site.

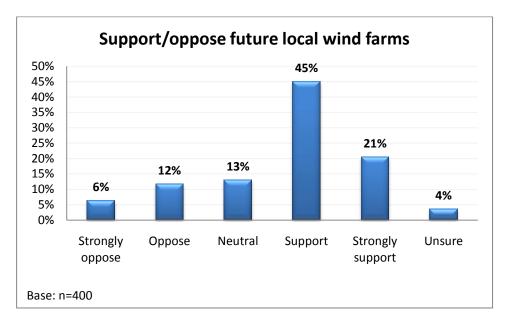


Figure 3: Would you support or oppose wind farm developments in the local area in the future?

#### **Support/oppose future local wind farms**

		Strongly oppose	Oppose	Neutral	Support	Strongly support	Unsure	Mean
Distance								
from site	Within 15 K's	17%	8%	4%	42%	28%	2%	3.6
	16 to 30 K's	6%	10%	21%	36%	23%	4%	3.6
	31 to 40 K's	5%	15%	10%	51%	18%	2%	3.6
	41 to 50 K's	4%	12%	13%	49%	18%	5%	3.7
Total n=400		6%	12%	13%	45%	21%	4%	3.6

Table 4: Would you support or oppose wind farm developments in the local area in the future?

#### **Awareness of Coopers Gap wind farm proposal**

Three out of four locals (75%) were aware of the wind farm proposal. Respondents from across Queensland were more likely to say that they hadn't heard about the proposal compared to locals; 80% compared with 25%. Those living within closer proximity to the proposed site were more likely to have heard about Coopers Gap; 90% of those living within 15 kilometres had heard of it compared to 58% of those living over 40 kilometres from the site.

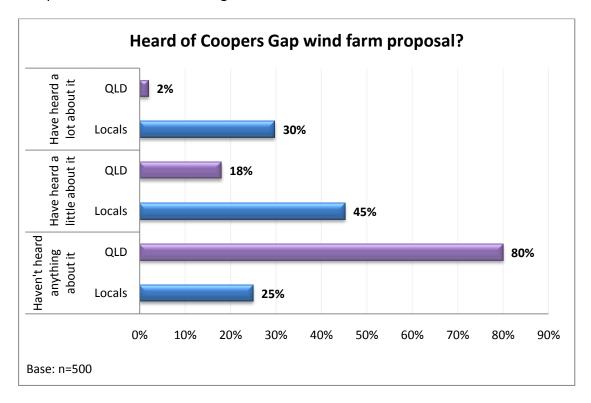


Figure 4: Have you heard of a proposal to build a wind farm in the Cooranga North area between Dalby and Kingaroy called the Coopers Gap wind farm?

#### **Heard of Coopers Gap wind farm proposal**

		Haven't heard anything about it	Have heard a little about it	Have heard a lot about it
Distance from site	Within 15 K's	9%	30%	60%
	16 to 30 K's	10%	49%	41%
	31 to 40 K's	25%	50%	25%
	41 to 50 K's	43%	45%	13%
0	A 11 1	0.507	450/	000/
Sample	All Locals	25%	45%	30%
	QLD Wide	80%	18%	2%
Total n=500		36%	40%	24%

Table 5: Have you heard of a proposal to build a wind farm in the Cooranga North area between Dalby and Kingaroy called the Coopers Gap wind farm?

### Impact of Coopers Gap wind farm on local aspects

Overall, respondents thought that the proposed wind farm would be positive for *The environment globally* (65% net good).

From the local respondents, over half thought the proposed wind farm would be positive for *Local jobs* (55% net good) and for *The local farmers involved in the wind farm (55% net good).* 

50% of local respondents thought the Coopers Gap wind farm would either make no difference or have a positive impact on *Property Values*. Some local respondents thought it could have a negative impact (39% net bad).

51% of local respondents thought the Coopers Gap wind farm would either make no difference or have a positive impact on *Noise from the wind farm*. Some local residents thought it could have a negative impact (31% net bad).

#### All locals (n=400) good/bad impact of wind farm on local aspects

	Nett Bad	Make no difference	Nett Good
		either way	
The environment globally	9%	23%	64%
Local jobs	8%	31%	55%
The local farmers involved in the wind	19%		55%
farm		16%	
Local businesses	10%	37%	45%
The local community overall	18%	31%	44%
The local environment	17%	42%	35%
Visual appearance and general amenity	23%		31%
in the local area		44%	
Property values	39%	31%	19%
The health of local people	19%	51%	15%
Your business	9%	76%	13%
Noise from the wind farm	31%	41%	10%
Live stock	21%	58%	9%

Table 6: Based on what you know do you think the development of the Coopers Gap Wind Farm will be Very Good, Good, Bad or Very Bad for ... (read from list below) ... – if you think it won't make any difference either way just say so:

### QLD wide (n=100) good/bad impact of wind farm on local aspects

	Nett Bad	Make no difference	Nett Good
		either way	
The environment globally	4%	22%	71%
Local jobs	5%	28%	56%
The local farmers involved in the wind			
farm	14%	14%	63%
Local businesses	9%	34%	47%
The local community overall	18%	31%	42%
The local environment	14%	33%	45%
Visual appearance and general amenity			
in the local area	29%	35%	32%
Property values	44%	30%	16%
The health of local people	10%	59%	20%
'Your' business	0%	100%	0%
Noise from the wind farm	31%	35%	10%
Live stock	13%	70%	9%

Table 7: Based on what you know do you think the development of the Coopers Gap Wind Farm will be Very Good, Good, Bad or Very Bad for ... (read from list below) ... – if you think it won't make any difference either way just say so:

#### Total (n=500) good/bad aspects of wind farm on local aspects

	Make no difference			
	Nett Bad	either way	Net Good	
The environment globally	8%	23%	65%	
Local jobs	7%	30%	55%	
The local farmers involved in the wind				
farm	18%	16%	56%	
Local businesses	10%	36%	46%	
The local community overall	18%	31%	44%	
The local environment	16%	40%	37%	
Visual appearance and general amenity				
in the local area	23%	42%	30%	
Property values	40%	31%	18%	
The health of local people	18%	52%	16%	
Your business	9%	76%	13%	
Noise from the wind farm	31%	40%	10%	
Live stock	19%	61%	9%	

Table 8: Based on what you know do you think the development of the Coopers Gap Wind Farm will be Very Good, Good, Bad or Very Bad for ... (read from list below) ... – if you think it won't make any difference either way just say so:

### Knowledge of beneficiaries of proposed Coopers Gap wind farm

The vast majority of local respondents (75%) do not believe that they themselves or anyone they know personally will benefit directly from the proposed wind farm. Those living within 15 kilometres of the site were more likely to say that they themselves or a friend/family member or someone they knew in the community would benefit (67%).

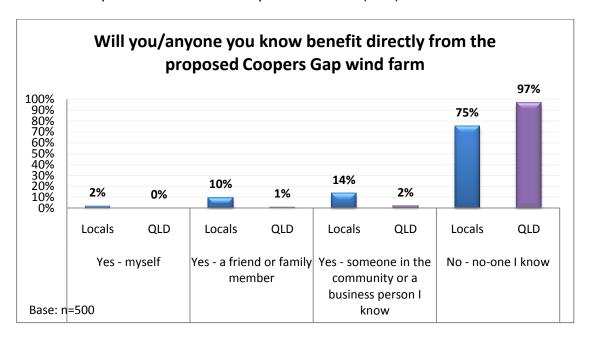


Figure 5: Have you or do you personally know anyone who you think will benefit directly from the proposed Coopers Gap Wind Farm?

#### Will you/someone you know benefit from the proposed Coopers Gap wind farm

		Yes - myself	Yes - a friend or family member	Yes - someone in the community or a business person I know	No - no-one I know
Distance from	Within 15 K's	8%	17%	42%	34%
site					
	16 to 30 K's	0%	11%	19%	70%
	31 to 40 K's	2%	7%	6%	85%
	41 to 50 K's	1%	7%	4%	88%
Sample	All Locals	2%	10%	14%	75%
	QLD Wide	0%	1%	2%	97%
Total n=500		1%	8%	11%	80%

Table 9: Have you or do you personally know anyone who you think will benefit directly from the proposed Coopers Gap Wind Farm?

### Perceived likelihood of wind farm causing illness

Most locals (58%) believe that *People can't get sick from wind farms*. Locals were, however more likely to believe that *People can get sick from wind farms* than those in the broader Queensland population; 27% compared to 16%.

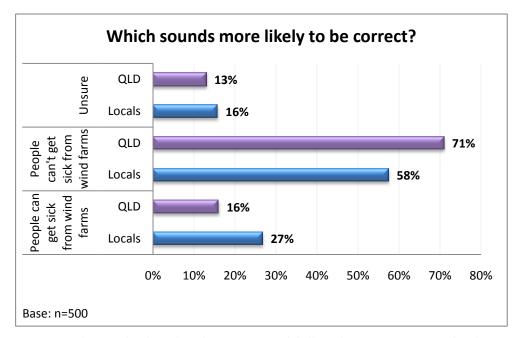


Figure 6: Modern wind turbines have been operating globally in close proximity to populated areas and dwellings for over 20 years. Some people say that wind farms can cause illnesses to people living nearby. Other people say that wind farms don't cause illness to people living nearby. Which sounds more likely to be correct to you?

#### Which sounds more likely to be correct

		People can get sick from wind farms	People can't get sick from wind farms	Unsure
Distance from site	Within 15 K's	34%	49%	17%
	16 to 30 K's	32%	50%	17%
	31 to 40 K's	27%	60%	13%
	41 to 50 K's	19%	64%	16%
Sample	All Locals	27%	58%	16%
	QLD Wide	16%	71%	13%
Total n=500		25%	60%	15%

Table 10: Modern wind turbines have been operating globally in close proximity to populated areas and dwellings for over 20 years. Some people say that wind farms can cause illnesses to people living nearby. Other people say that wind farms don't cause illness to people living nearby. Which sounds more likely to be correct to you?

### **Preferred information channels**

Locals respondents' preferred communication channel for receiving information related to the wind farm was *Advertisements in the local paper* (70%) and *Letterbox drop* (53%).

	Total n=400
Advertisements in the local paper	70%
Letter box drop	53%
Website	28%
Attending the Community Consultative Committee or speaking to a CCC representative	26%
Other public places (such as local library)	26%
Other (please advise)	17%
One-to-one discussions with AGL representative	15%

Table 11: How would you like to receive information about the proposed wind farm going forward?

### **Appendices**

### **Appendix 1: Survey instrument**

#### FINAL Coopers Gap Wind Farm survey for AGL – December 2012

Hello my name is ... [name] ... from Qdos Research and I am calling about a very short survey we are doing. Would you have a few minutes to give your views about ... some local issues?

Note for Interviewers, for the Qld wide control sample of 100 amend intro to: ... some important issues in Queensland?

- Q1. Generally speaking do you support or oppose wind farms to be built in Queensland to generate electricity?
  - 1 Strongly oppose
  - 2 Oppose
  - 3 Neutral
  - 4 Support
  - 5 Strongly support
  - 9 Unsure (Don't Offer)
- Q2. Would you support or oppose wind farm developments in the local area in the future?

Note for Interviewers, for the Qld wide control sample of 100 SKIP Q2

- 1 Strongly oppose
- 2 Oppose
- 3 Neutral
- 4 Support
- 5 Strongly support
- 9 Unsure (Don't Offer)
- Q3. Have you heard of a proposal to build a wind farm in the Cooranga North area between Dalby and Kingaroy called the Coopers Gap wind farm?
  - 1 Haven't heard anything about it
  - 2 Have heard a little about it
  - 3 Have heard a lot about it
  - 9 Unsure (Don't Offer)

Note for Interviewers, for those who answer '1' above say,

"The proposal is to build 115 wind turbines on 10 properties near Cooranga North between Dalby and Kingaroy."

Q4. Based on what you know do you think the development of the Coopers Gap Wind Farm <u>will be</u> Very Good, Good, Bad or Very Bad for ... (*read from list below*) ... – if you think it won't make any difference either way just say so:

	ROTATE	Very Good	Good	Made no difference either way	Bad	Very Bad	Don't Know (don't offer)
2.1	the local community overall	5	4	3	2	1	9
2.2	local businesses	5	4	3	2	1	9
2.3	ask participants "do you have a business operating in the area?", if yes then ask 'your' business	5	4	3	2	1	9
2.4	local jobs	5	4	3	2	1	9
2.5	the local farmers involved in the wind farm	5	4	3	2	1	9
2.6	the local environment	5	4	3	2	1	9
2.7	the environment globally	5	4	3	2	1	9
2.8	visual appearance and general amenity in the local area	5	4	3	2	1	9
2.9	noise from the wind farm	5	4	3	2	1	9
2.10	the health of local people						
2.11	property values	5	4	3	2	1	9
2.12	live stock	5	4	3	2	1	9

- Q5. Have you or do you personally know anyone who you think will benefit directly from the proposed Coopers Gap Wind Farm?
  - 1. Yes myself, a friend or family member
  - 2. Yes someone in the community or a business person I know
  - 3. No no-one I know
  - 4. The interviewee
- Q6. Do you support or oppose the proposed Coopers Gap Wind Farm?
  - 1 Strongly oppose
  - 2 Oppose
  - 3 Neutral
  - 4 Support
  - 5 Strongly support
  - 9 Unsure (Don't Offer)

Q7. Modern wind turbines have been operating globally in close proximity to populated areas and dwellings for over 20 years.

Some people say that wind farms can cause illnesses to people living nearby. Other people say that wind farms don't cause illness to people living nearby.

Which sounds more likely to be correct to you?

- 1 People can get sick from wind farms
- 2 People can't get sick from wind farms
- 9 Unsure
- Q8. How would you like to receive information about the proposed wind farm going forward?

Note for Interviewers, for the Qld wide control sample of 100 SKIP Q8

- 1. Advertisements in the local paper
- 2. One-to-one discussions with AGL representative
- 3. Letter box drop
- 4. Website
- 5. Attending the Community Consultative Committee or speaking to a CCC representative
- 6. Other public places (such as local library)
- 7. Other.... (please advise)

#### Thank you and close ...

Thank you for helping me with this survey. As I said earlier my name is ... (...name...)... from Qdos Research. If you have any questions about the survey please call Qdos on 03 xxxx xxxx.

IF they ask the survey is being done by Qdos Research for AGL (the developer of the Wind Farm).