

*The Richard Stockton College of New Jersey*  
**WILLIAM J. HUGHES CENTER**  

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**FOR PUBLIC POLICY**

**Survey of Residents & Visitors  
in Four Communities Along the  
Southern New Jersey Shore**

Submitted to:  
Fishermen's Energy, LLC

Submitted by:  
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THE RICHARD STOCKTON COLLEGE OF NEW JERSEY

In preparation for a proposed wind turbine project approximately three miles off the Atlantic City, New Jersey shoreline, Fishermen's Energy, LLC, approached the William J. Hughes Center for Public Policy at The Richard Stockton College of New Jersey and asked that we undertake a statistically significant polling project that would measure attitudes and issues of both residents and visitors to the area. The intent was to:

1. submit a specific project plan to the respondents;
2. observe if there would be any substantial positive or negative impact on the area's tourism industry and/or the quality of life for residents;
3. contrast where applicable the attitudes measured in a 2006 survey undertaken by the State of New Jersey Department of Commerce and note any changes.

Following is a brief summary of the findings:

- 90% of the respondents were aware that electricity could be produced by using offshore wind turbines.
- Support for a wind turbine project three miles off the Atlantic City shore is strong among all subgroups and almost 30 percentage points higher than a similar question asked in 2006.
- Most respondents do not feel that this project would have a negative impact on Atlantic City and the local environment. In fact, 66% thought it would have a positive impact.
- More than three-quarters of the visitors said it would have no effect on whether or not they would visit the Atlantic City area and another 19% said that they would be a little or a lot more likely to visit the area.

The following pages contain findings, analysis, cross tabulations and the survey instrument.

## Table Of Contents

<b>Subject</b>	<b>Page</b>
I. Methodology and Sample Characteristics	4
II. Narrative Summary	6

<b>Tables</b>	
Table 1. Familiarity with Offshore Wind Mills	7
Table 2. Familiarity with 5-Turbine Wind Farm	7
Table 3. Support/Opposition	8
Table 4. Benefits from Offshore Windmills	9
Table 5. Effect of Wind Turbine/Windmills on Local Environment	10

### **Appendix A: PowerPoint**

### **Appendix B: Cross Tabulations**

### **Appendix C: Survey Instrument**

## I. Methodology and Sample Characteristics

### Methodology

Zogby International was commissioned by the William J. Hughes Center for Public Policy to conduct 1003 intercept interviews in three communities along New Jersey's Atlantic shore. The three communities chosen were Atlantic City/Ventnor, Margate, and Brigantine. Ventnor did not give permission to conduct interviews on their beach, so as a consequence, a lesser amount of interviews were conducted along the Atlantic City/Ventnor border.

The interviews were conducted from July 9 through July 12, 2009. Nine interviewers conducted the interviews over those four days. Interviews were conducted one day along Atlantic City's Boardwalk, while the rest of the interviews were conducted on the beaches in those communities.

The interviews included a 34-question questionnaire and six (6) photographic depictions of what it may look like with windmills off shore. Respondents were asked some basic questions, shown the photographic depictions, then asked specific questions about the depictions.

### Sample Characteristics

Sample Characteristics	Frequency	Valid Percent*
Sample size	1003	100
Atlantic City/Ventnor	491	49
Brigantine	260	26
Margate	252	25
Seasonal resident	218	22
Full time resident	241	24
Visitor	544	54
Previously visited shore	506	91
First time visitor	49	9
18-40	299	30
41-60	427	43
Over 60	276	28
Did not answer age	1	--
Less than high school	16	2
High school graduate	201	20
Some college	228	23
College graduate+	546	55
Did not answer education	12	--

White	874	88
<b>Sample Characteristics</b>	<b>Frequency</b>	<b>Valid Percent*</b>
Hispanic	23	2
African American	75	8
Asian/Pacific	17	2
Other/mixed	6	1
Did not answer race	8	--
Married	612	61
Single, never married	221	22
Divorced/widowed/separated	144	14
Civil union/domestic partnership	20	2
Less than \$25,000	77	9
\$25,000-\$34,999	66	8
\$35,000-\$49,999	104	13
\$50,000-\$74,999	153	18
\$75,000-\$99,999	142	17
\$100,000 or more	291	35
Did not answer income	170	--
Male	506	51
Female	494	49

\* Numbers have been rounded to the nearest percent and might not total 100.

## II. Narrative Summary

**Note:** A survey asking about windmills offshore in the Atlantic City area was conducted in 2006 by Lieberman Research. This report will contrast 2009 findings with 2006 data where appropriate.\*

*1. Have you ever heard about producing electricity through the use of Offshore Wind Turbines or Wind Mills? You may have also heard these referred to as Offshore Wind Mills or Wind Farms. Wind Turbines, or Wind Mills are structures that capture wind to produce electricity.*

Yes	90%
No	10

Nine in ten respondents say they have heard about producing electricity through the use of offshore wind turbines or windmills, while 10 percent say they have not heard about this.

Vast majorities in all sub-groups have heard about producing electricity using windmills. Those living in Brigantine (95%), respondents over 60 (96%), those who own property along the southern New Jersey shore (93%), and those earning more than \$75,000 a year (94%) are the most likely to have heard of this concept.

*2. What have you heard about electricity production through the use of Offshore Wind Turbines/Wind Mills?*

• Aware of technology (172)	18%
• Good/better for the environment (136)	14
• Clean source of energy (132)	14
• Knowledge of project in Atlantic City (90)	10
• Low cost/cheaper electricity (69)	7
• Alternative source of energy (58)	6
• Good source of energy (57)	6
• Efficient (50)	5
• Cost of construction (33)	3
• Nothing/don't know/no answer (146)	15

Most respondents gave an answer when asked what they have heard about electricity production using windmills or wind turbines. Most of the responses were positive or neutral with a simple awareness of the technology topping the list (18%). The next two most mentioned ideas were “good for the environment” and “a clean source of energy” (both 14%).

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\*It is difficult to compare the data for the following reasons: question wording is different; photographic depictions are different; and the sample is different.

The only possible negative response was the “cost of construction” cited by 3%.

3. On a scale of 1 to 5 where 1 is “not at all familiar” with producing electricity through Offshore Wind Mills and 5 is “extremely familiar”, how familiar are you with the idea of producing electricity through Offshore Wind Mills?

**Table 1. Familiarity with Offshore Wind Mills**

	%
<b>Overall Familiar (5+4)</b>	<b>27</b>
5	11
4	16
3	33
<b>Overall Not familiar (2+1)</b>	<b>40</b>
2	25
1	14
<b>Not sure</b>	<b>&lt;0</b>

A plurality of respondents (40%) say they are not familiar with offshore windmills, while just over one in four (27%) express at least some familiarity, including about one in nine (11%) who are extremely familiar.

Familiarity decreases with age as a majority of those under 40 (50%) are familiar with the concept compared to 31% of those over 60 who are aware and men are more aware than are women (45% vs. 34%)

4. Are you familiar with the 5-turbine wind farm near the Borgata Casino on the way into Atlantic City?

**Table 2. Familiarity with 5-Turbine Wind Farm**

	%
<b>Overall Familiar (5+4)</b>	<b>41</b>
5	31
4	10
3	16
<b>Overall Not familiar (2+1)</b>	<b>43</b>
2	22
1	21
<b>Not sure</b>	<b>&lt;0</b>

Respondents are closely divided in their familiarity with the Atlantic County Utilities Authority’s (ACUA) wind farm near the Borgata Casino – 41% are familiar while 43% are not familiar.

Those in Brigantine (45%) are the most familiar while those surveyed in Atlantic City/Ventnor (37%) are the least familiar. Familiarity increases with age and women are slightly more likely than men to say they are familiar with the wind farm.

*5. Are you more likely or less likely to visit Atlantic City because of these five windmills?*

More likely	8%
Less likely	2
No difference	89
Not sure	2

Nearly nine in ten (89%) say it will make no difference in their plans whether or not to visit Atlantic City because of the ACUA 5-windmill farm near the Borgata. Eight percent say it will make them more likely to visit Atlantic City and just 2% say it will make them less likely to visit.

Eighty-five percent or more in most sub-groups say it would make no difference in their likelihood of visiting Atlantic City because of the wind farm.

*Consideration is being given to building a nine windmill farm three miles off Atlantic City as part of a program designed to provide electricity through clean, renewable and locally generated sources. I’m going to show you some pictures of what the proposed nine Offshore Wind Mills or Wind Farm off Atlantic City might look like from the area and ask you some questions based on the pictures.*

*6. On a scale of 1 to 5, where 1 is “completely opposed” to this idea and 5 is “completely in favor” of this idea, how do you feel about the idea of the proposed nine windmills three miles off the Atlantic City shore?*

**Table 3. Support/Opposition\***

	<b>2009</b>	<b>2006</b>
<b>Overall In favor (5+4)</b>	<b>76</b>	<b>47</b>
<b>5</b>	55	--
<b>4</b>	20	--
<b>3</b>	15	31
<b>Overall Oppose (2+1)</b>	<b>7</b>	<b>21</b>
<b>2</b>	3	--
<b>1</b>	4	--
<b>Not sure**</b>	<b>3</b>	<b>1</b>

**\*Question in 2006: Based on this information, please rate your favorability toward the Wind Turbine project using a scale from 1 to 5 where 1 means you are “completely opposed” to this idea and 5 means you are “completely in favor of this idea? Use any number from 1 to 5.**

**\*\*Not sure was “no answer” in 2006**

After looking at six photos of what nine windmills three miles out to sea might look like, three in four (76%) support the idea while just 7% are opposed. A majority (55%) are strongly in support. Three percent are not sure. In 2006, 47% of respondents were in favor of wind turbines offshore, however, it should be noted that the question was worded differently in 2006, and the photographic depictions were different.

Sub-group responses generally mirror the response overall with a majority in most sub-groups saying the strongly support having windmills offshore.

*7. What benefits, if any, do you think there might be with what you just looked at?*

**Table 4. Benefits from Offshore Windmills**

<b>2009</b>		<b>2006</b>	
<b>Environmental Issues (Net)</b>	<b>38%</b>	<b>Environmental Issues (Net)</b>	<b>40%</b>
Clean source of energy	18	Clean source of energy	15
Less pollution/clean air	--	Less pollution/clean air	12
Good/better for the environment	15	Good/better for the environment	10
Conserves energy	5	Conserves energy	4
<b>Energy Source (Net)</b>	<b>18%</b>	<b>Energy Source (Net)</b>	<b>33%*</b>
Good source of energy	7	Good source of energy	10
Renewable source of energy	6	Renewable source of energy	6
Alternative source of energy	5	Alternative source of energy	4
<b>Cost (Net)</b>	<b>23%</b>	<b>Cost (Net)</b>	<b>28%</b>
Low cost/cheaper electricity	18	Low cost/cheaper electricity	24
Saves Money	5	Saves Money	4
<b>Not Fossil Fuel (Net)</b>	<b>11%</b>	<b>Not Fossil Fuel (Net)</b>	<b>7%*</b>
Reduced dependence	6	Reduced dependence	6
Not fossil fuel	5	Not fossil fuel	2
<b>Nothing/don't know/no answer</b>	<b>9</b>	<b>Nothing/don't know/no answer</b>	<b>13</b>

\*Totals from previous study.

When asked top-of-mind what benefits, if any, might be associated with the windmills, there are minor changes. Photographic depictions are different between the two studies which may account for the differences. Environmental issues still top the list of benefits – 38% in 2009, 40% in 2006.

8. What disadvantages, if any, do you think there might be with what you just looked at?

- Ugly/eye sore (169) 17%
- Obstructs ocean view (107) 11
- Harmful to marine life/other wildlife (78) 8
- Cost of construction (59) 6
- Interferes with boats/water traffic (48) 5
- Inefficient (19) 2
- Durability (18) 2
- Noise (17) 2
- No difference (165) 16
- Nothing/don't know/no answer (326) 32

Thinking of disadvantages to having windmills three miles offshore, 17% say they are “ugly” and 11% believe they will obstruct the view of the ocean.

9. Do you think the nine windmills three miles off the Atlantic City shore will have a positive or negative effect on the city of Atlantic City and the local environment?

**Table 5. Affect of Wind Turbine/Windmills on Local Environment\***

	2009	2006
<b>Positive</b>	66	48
<b>Negative</b>	7	16
<b>No effect</b>	22	32
<b>Not sure**</b>	6	4

\*Question in 2006: How do you think Wind Turbines would affect the New Jersey Shore environment? What do you think their overall affect on the environment would be?

\*\*Not sure was “no answer” in 2006

Positive	66%
Negative	7
No effect	22
Not sure	6

By three to one (66% vs. 22%), respondents think the windmills will have a positive effect on the city and the local environment rather than having no effect, while 7% believe the overall effect will be negative. Six percent are not sure. By contrast, in 2006, 48% thought the wind turbines would have an overall positive effect, but again, the questions are different.

A majority in every sub-group, but two, say the effect would be positive, including nearly three in four (74%) of those under 40 who think the windmills will have a positive effect, while 56% of seniors over 60 feel that way. Those who have lived on the southern New Jersey shore for three years or more are more likely than those living there less than three years to say the overall effect would be positive.

10. Please tell me why you feel that way?

• Low cost/cheaper electricity (95)	11%
• Good/better for the environment (94)	11
• Clean source of energy (93)	11
• Good source of energy (74)	9
• Atlantic City serves as role model (64)	8
• Looks good (43)	5
• Saves money (37)	4
• Renewable source of energy (36)	4
• No difference (114)	14
• Nothing/don't know/no answer (173)	21

Eleven percent each say the reason they believe the windmills will have a positive effect is because of “cheaper electricity,” it’s “better for the environment,” and it is a “clean source of energy.”

**(11 and 12 visitors only)**

11. If nine windmills were located off the Atlantic City shore, please tell me how likely you would be to visit the Atlantic City area in the future? Would you be...?

A lot more likely	11%
A little more likely	8
Neither more likely nor less likely	77
A little less likely	3
A lot less likely	1
Not sure	<0

Just over three in four (77%) say it would not make a difference to them if nine windmills were located off the Atlantic City shore, while just about one in five (19%) say it would make them more likely to visit the Atlantic City area in the future. Only 4% would be less likely to visit.

Sub-group results reflect overall with results with a significant majority in each sub-group saying they are neither more nor less likely to visit in the future.

12. Do you think you would go elsewhere on the New Jersey Shore or go somewhere other than the Atlantic City area?

Elsewhere on the New Jersey Shore	6%
Somewhere other than the New Jersey Shore	1
Not sure	94

Nearly all of those who said it makes no difference or were less likely to visit the Atlantic City area said they are not sure if they would go, while 6% said they would go

elsewhere on the southern New Jersey shore. Just 1% would go somewhere other than the southern New Jersey shore to vacation.

Ninety percent or more in all sub-groups except one say they are not sure.

**(13-15 residents only)**

*13. If nine windmills were located off the Atlantic City shore, please tell me what effect it would have on people who live in the Atlantic City area?*

- No difference (140) 30%
- Low cost/cheaper electricity (57) 12
- Obstructs ocean view (22) 5
- Saves money (16) 3
- Ugly/eye sore (15) 3
- Good/better for the environment (14) 3
- More jobs (13) 3
- Good source of energy (11) 2
- Clean source of energy (8) 2
- Nothing/don't know/no answer (177) 37

About one in three respondents say locating the windmills off the Atlantic City shore would have no effect. Twelve percent say the windmills would lower the cost of electricity.

*14. Do you own any rental properties in the Atlantic City area?*

Yes	10%
No	89
Not sure	1

Nine in ten (89%) say they do not own any rental properties in the Atlantic City area while 10% do.

Results among sub-groups echo overall results.

*15. If nine windmills were located off the Atlantic City shore, do you think it would it make it easier or more difficult to rent your properties or would it have no impact?*

Easier	10%
More difficult	13
No impact	76
Not sure	2

Of the 10% who own rental property in the Atlantic City area, three in four (76%) think there would be no impact on their ability to rent their properties if the windmills

were located offshore. Thirteen percent believe it would be more difficult to rent their properties and 10% think it would be easier. Two percent are just not sure.

Totals are too small for sub-group analysis.

**(ASK EVERYONE)**

*16. Would you say the development of renewable energy resources as compared to other issues facing the nation is...*

Much more important	24%
Somewhat more important	22
Equally as important	40
Somewhat less important	9
A lot less important	4
Not sure	1

Nearly half (46%) say that the development of renewable energy resources as compared to other issues facing the nation is important, while another 40% say it is equally as important as other issues. Thirteen percent feel that renewable energy is less important than other issues facing the nation.

Younger respondents are more likely than those over 60 to say developing renewable energy resources is equally as important as other issues and men are slightly more likely than women to feel that way.

Those living on the southern New Jersey shore seasonally are more likely than full time residents and visitors to say developing renewable energy resources is equally important as other issues.

*17. Would you say that global warming and the reduction of greenhouse gases compared to other issues facing the nation is...*

Much more important	27%
Somewhat more important	22
Equally as important	33
Somewhat less important	9
A lot less important	8
Not sure	2

Half (49%) of respondents think global warming and the reduction of greenhouse gases compare to other issues facing the country are more important. One in three (33%) think global warming and reduction of greenhouse gases is equally important and just 17% think these issues are less important than other issues facing the nation. Two percent are not sure.

Generally, sub-group responses mirror responses overall with most of the sub-groups closely divided between saying global warming and the reduction of greenhouse gases is much more important or equally important as other issues facing the country.