2017 ReThink Energy NJ Annual Survey

"Attitudes on Energy in New Jersey"



September 2017

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I. Executive Summary

About this study

Fairleigh Dickinson University's PublicMind $^{\text{m}}$ conducted a telephone survey of randomly selected registered voters in New Jersey on behalf of and commissioned by ReThink Energy NJ. The study's main objective was to measure the awareness of, and attitudes toward, various energy sources. In addition, the study measured awareness and perceptions of natural gas pipelines proposed to run within the state.

PublicMind utilized a Random Digit Dialing (RDD) telephone method based on a registered voter sample list to complete a total of 705 telephone surveys with New Jersey registered voters. The RDD sampling was employed to ensure a valid random sampling of registered voters across the state. To approximate the current make-up of cell phones in the state, PublicMind completed 45% of the surveys with cell phone participants, and 55% via landline phones. Once all surveys were completed, the data were mathematically weighted to match the known demographics of age, gender and race of New Jersey's registered voters.

With a randomly selected sample of 705 registered voters in New Jersey, one can be 95 percent confident that the margin of error (MoE) is +/- 3.7 percentage points. The margin of error for subgroups is larger and varies by the size of that subgroup.

All surveys were completed between August 25th and September 8th, 2017 and averaged just under 10 minutes in length. The results are summarized below.

In general, registered voters in this study are very supportive of renewable energy initiatives, and support the state moving forward more rapidly than it is currently. As a general statement, across the issues, women, younger respondents, as well as self-identified Democrats are more supportive than their respective cohorts, although support for renewable energy was strong among all demographic groups. These demographic differences are consistent with the general trend in public opinion on environmental issues.

Overall, more believe solar (50%) is the most important energy source to New Jersey's future. This was true across all demographics. Natural gas was the second most frequently cited source at 27%.

Overall 89% believe renewable energy is very or somewhat important to the overall health of New Jersey.

Most (73%) are willing to pay more (\$5 or \$10 per month) on their energy bills if their energy is generated from solar or wind.



Residents understand that solar and wind (86%) and (79%) are clean. However, less than half of voters consider natural gas (41%) and nuclear energy (23%) to be clean energy sources.

More than half (54%) say a candidate's support for moving to renewable energy would make them more likely to vote for that candidate, including 69% of Democrats and 49% of Independents. Thirty-five percent say it would have no impact on how they voted.

The vast majority (76%) believes the state should invest more in developing clean energy sources rather than fossil fuels and pipelines (22%). The remaining 1 percent are unsure. Most (58%) say the state is moving too slowly on developing and adopting clean energy sources, while nineteen percent say the pace is just right.

Overall, 4 in 5 (80%) favor New Jersey moving to a goal of having 80% of its energy coming from renewable sources by 2050.

The majority (76%) is very or somewhat concerned with climate change. Most (64%) believe climate change is driven by human activity, while thirty-six percent say it is mostly due to natural patterns.

Most (73%) would favor the development of off-shore wind energy off the coast of New Jersey.

More (55%) believe businesses and homes waste energy and that emissions can be reduced through more energy efficiency measures, than those (39%) who say our use of energy will only grow and that we need to expand our energy resources to meet this growing demand.

Although most have heard just a little or nothing about the development of pipelines in the state (64%), a majority (58%) expressed some concern with proposed pipelines in general.

When asked about a variety of potential risks linked to pipeline development in the state, respondents said they would be "very" or "somewhat concerned" with each of the following:

The seizure of private property for private companies	87%
The impact to natural areas and wildlife habitats	86%
The risks to air and water quality	80%
The safety risks associated with ruptures, leaks, or explosions	79%
The use of preserved open space for the construction of pipelines	79%
Greenhouse gas emissions that contribute to climate change	77%



Finally, more (67%) say the number of jobs created through pipelines are not worth the environmental and health risks, and that we should instead create jobs through clean, renewable energy projects, while 29 percent say building pipelines will create many much-needed construction jobs that will benefit New Jersey workers and families.

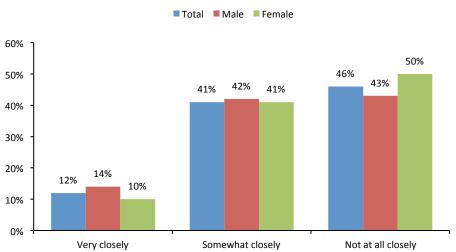


II. Detailed Results -

1. First, how closely do you follow news about the various ways that people in NJ power their homes and businesses?

Overall, about half (53%) report they have at least somewhat closely followed the news about energy sources. Women (50%) are more likely than men (43%) to say they have not followed it closely at all. Those aged 60+ (35%) are less likely than their younger cohorts to not follow closely.

Chart 1



	Region ¹							Age	
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+
Very closely	14%	7%	13%	5%	12%	16%	2%	14%	16%
Somewhat closely	34%	44%	37%	53%	42%	47%	30%	42%	48%
Not at all closely	51%	48%	50%	42%	46%	35%	66%	43%	35%

	Party ID						
	Dem Ind Rep						
Very closely	11%	12%	15%				
Somewhat closely	43%	40%	41%				
Not at all closely	46%	48%	43%				

¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



2. Which source do you think is most important to New Jersey's energy future?

A majority (50%) say solar is the most important source of New Jersey's energy future. This holds true across all demographics. Despite this, significant gender, age, and party ID differences exist. Natural gas (27%) ranks second, and wind (8%) is the third most cited source. More men (10%) than women (1%) selected nuclear as most important. Those from the Coast (39%) are less likely than their cohorts to say solar.

■Total ■Male ■Female 60% 55% 50% 50% 40% 27%27%27% 30% 20% 10% 8% 9% 10% 2% 2% 3% 2% 3% 0% 0% Solar Natural gas Wind Nuclear Oil Coal

Chart 2

	Region							Age	
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+
Solar	52%	53%	54%	66%	42%	39%	62%	50%	42%
Natural gas	26%	26%	22%	19%	28%	37%	13%	28%	35%
Nuclear	9%	1%	7%	0%	6%	6%	7%	5%	5%
Oil	3%	4%	1%	3%	1%	3%	1%	2%	3%
Wind	5%	7%	8%	8%	11%	7%	10%	7%	7%
Coal	2%	1%	1%	0%	3%	2%	2%	1%	1%

		Party ID	
	Dem	Ind	Rep
Solar	63%	42%	34%
Natural gas	20%	30%	37%
Nuclear	5%	4%	12%
Oil	1%	3%	4%
Wind	7%	10%	6%
Coal	0%	2%	2%
Unsure	63%	42%	34%



3. Which of the following do you believe are considered clean energy sources?

The majority believe solar (86%) and wind (79%) are clean energy sources. About 2 in 5 (41%) say natural gas is, while nearly a quarter (23%) believe nuclear is. Fewer say oil (9%) or coal (9%) is clean.

Chart 3 ■ Total ■ Male ■ Female 100% 79% 84% 86% 86% 86% 90% 80% 70% 60% 41% 45% 50% 36% 34% 40% 23% 30% 20% 9% 10% 8% 9% 11% 10% 0% Solar Wind Natural Gas Oil Nuclear Coal

Region¹ Age Northwest Northeast Urban **PennEast** South Coast 18-34 35-59 60+ Core 90% 90% 90% Solar 85% 86% 90% 83% 87% 88% Wind 80% 78% 83% 84% 75% 77% 83% 81% 82% Natural gas 40% 42% 37% 32% 42% 47% 38% 28% 41% 22% Nuclear 28% 12% 31% 26% 24% 18% 31% 18% 7% Oil 9% 7% 9% 5% 12% 11% 8% 8% 8% 13% 5% 11% 7% Coal 5% 12% 8% 11%

		Party ID							
	Dem	Ind	Rep						
Solar	90%	87%	79%						
Wind	79%	83%	78%						
Natural gas	32%	44%	54%						
Nuclear	16%	27%	30%						
Oil	5%	9%	18%						
Coal	4%	10%	16%						

¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

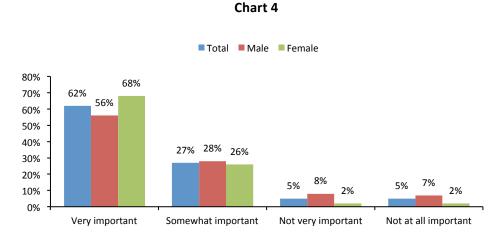
PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



4. How important, if at all, do you believe investing in renewable energy sources, like wind and solar, is to the overall health of the state of New Jersey?

Overall, 89 percent believe investing in renewable energy is very or somewhat important. More women than men (94% vs. 84%) and more in the 18-34 (97%) age cohort than in the 60+ (84%) believe it is at least somewhat important. More living in the PennEast (97%) and the Northeast (93%) regions than from the South (85%) or Coast (82%), and more Democrats (97%) than Republicans (78%) or Independents (87%) believe it to be important. Those from the Coast (54%) are less likely than those from the Northeast (69%) to say it is very important.



	Region ¹							Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
Very important	60%	69%	62%	71%	61%	54%	68%	65%	55%	
Somewhat important	26%	24%	31%	26%	25%	28%	28%	25%	29%	
Not very important	6%	3%	3%	3%	10%	7%	3%	6%	5%	
Not at all important	8%	4%	3%	0%	4%	9%	2%	3%	9%	

	Party ID						
	Dem	Ind	Rep				
Very important	80%	57%	36%				
Somewhat important	17%	30%	42%				
Not very important	2%	7%	10%				
Not at all important	1%	6%	10%				

¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

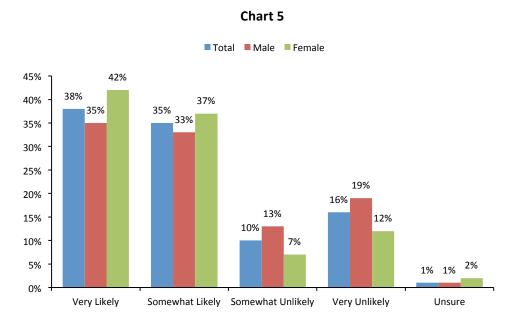
PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



5. How willing would you be to pay \$5 per month/\$10 per month more (SPLIT SAMPLE) over the next five years on your energy bills to have your energy generated from solar or wind energy, if you knew that doing so would help to reduce harmful emissions?

Overall, 3 in 4 (74%) say they would be at least somewhat likely to pay more each month for their energy bills if it helped reduce emissions. Those from the Northeast (50%) are more likely than their cohorts to say they are very likely to pay more. Democrats (53%) are more likely than Republicans (19%) or Independents (34%) to be very likely to pay more. In a split sample, no differences exist across those who were presented with paying \$5 more per month versus those who were presented with \$10 per month – 73 percent of each indicated they would be very or somewhat likely to pay the increase.





	Region ¹							Age	
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+
Very likely	39%	50%	41%	40%	29%	32%	41%	41%	35%
Somewhat likely	33%	30%	43%	41%	26%	32%	35%	38%	31%
Somewhat unlikely	9%	8%	7%	11%	14%	12%	14%	8%	8%
Very unlikely	19%	11%	7%	6%	29%	22%	9%	13%	22%
Unsure	1%	1%	2%	0%	1%	1%	1%	1%	2%

	Party ID							
	Dem	Ind	Rep					
Very likely	53%	34%	19%					
Somewhat likely	37%	34%	32%					
Somewhat unlikely	4%	13%	15%					
Very unlikely	5%	18%	32%					
Unsure	1%	0%	2%					

Northwest: Morris, Somerset, Sussex, and Warren Counties
Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

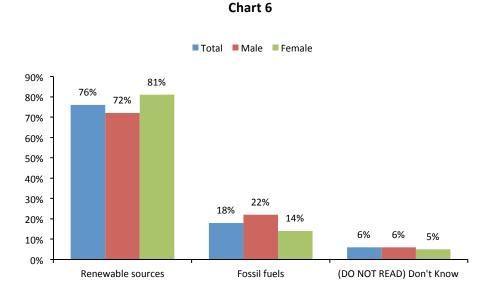
South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties

Coast: Atlantic, Cape May, Monmouth, and Ocean Counties



6. In order to meet New Jersey's energy needs, do you believe the state should invest more in renewable energy sources, like wind and solar, or more in fossil fuels, like oil and natural gas, through the construction of additional pipelines?

Overall, 3 in 4 (76%) believe the state should invest more in renewable energy sources than in fossil fuels. While differences are seen across all measured demographics, in all cases renewable energy is the overwhelmingly favored choice.



	Region ¹							Age	
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+
Renewable sources	74%	81%	83%	83%	67%	71%	86%	76%	71%
Fossil fuels	21%	15%	12%	3%	29%	22%	9%	18%	22%
Unsure	5%	4%	6%	14%	4%	8%	1%	4%	5%

	Party ID				
	Dem	Ind	Rep		
Renewable sources	92%	74%	52%		
Fossil fuels	6%	18%	38%		
Unsure	2%	4%	5%		

Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

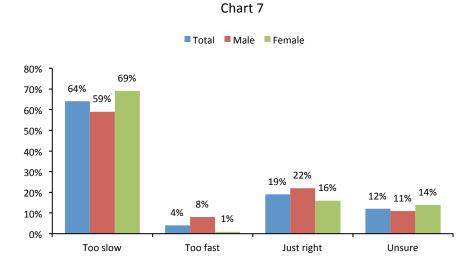
PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



7. How do you rate the pace at which our state is developing and adopting renewable energy alternatives?

About 3 in 5 (64%) say New Jersey is moving too slowly in its efforts toward developing clean energy alternatives. A fifth (19%) believe the state is moving at the correct pace. More Democrats (73%) than Republicans (49%) or Independents (63%) say NJ is moving too slowly. More from the PennEast region (15%) say things are moving too fast.



		Region ¹						Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
Too slow	59%	66%	69%	68%	59%	61%	63%	64%	65%	
Too fast	4%	1%	4%	9%	4%	8%	3%	5%	4%	
Just right	21%	22%	13%	12%	23%	23%	23%	19%	16%	
Unsure	15%	11%	14%	11%	14%	9%	10%	12%	14%	

		Party ID	
	Dem	Ind	Rep
Too slow	73%	63%	49%
Too fast	1%	6%	7%
Just right	16%	17%	30%
Unsure	10%	14%	14%

¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

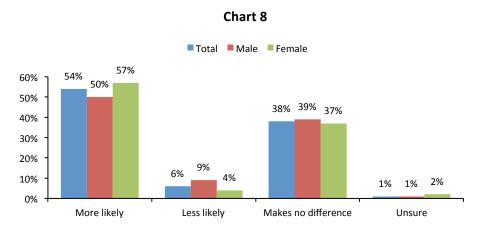
PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



8. When thinking about November's election to replace the governor, does a candidate's support for moving from fossil fuels to renewable energy like solar or wind make you [Rotate more or less likely] more likely or less likely to vote for them, or does their support for renewable energy make no difference?

About half (54%) say they would be more likely to vote for a Gubernatorial candidate who supported moving from fossil fuels to renewable energy. Thirty-eight percent say it would have no impact, while 6 percent say it would make them less likely to vote for a candidate. More Democrats (69%) than Republicans (33%) or Independents (49%) say they would be more likely to vote for a candidate. Those from the PennEast region (73%) are more likely than most of their cohorts to say a candidate's support would increase their likelihood of voting for them.



		Region ¹						Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
More likely	54%	53%	56%	73%	53%	45%	65%	51%	50%	
Less likely	8%	3%	5%	4%	5%	12%	4%	6%	9%	
Makes no difference	37%	41%	37%	24%	41%	40%	30%	41%	39%	
Unsure	1%	1%	1%	0%	1%	3%	0%	1%	3%	

		Party ID	
	Dem	Ind	Rep
More likely	69%	49%	33%
Less likely	3%	7%	13%
Makes no difference	27%	41%	52%
Unsure	1%	1%	2%

Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

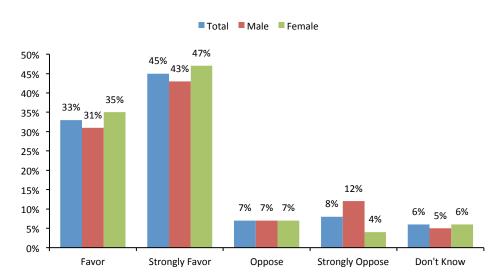
South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



9. Would you favor or oppose New Jersey's setting a goal of generating 80% of its energy from renewable energy sources by 2050?

Most (78%) favor New Jersey setting a target of having 80 percent of its energy come from renewable energy sources by 2050. Those from the Urban Core (89%) and Democrats (88%) are the most likely to favor this goal. Those from the Coast (36%) are less likely than those from the Northeast (55%) or PennEast (55%) to strongly favor this goal.

Chart 9



		Region ¹						Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
Strongly Favor	42%	55%	45%	55%	46%	36%	54%	48%	37%	
Favor	35%	25%	43%	26%	26%	33%	28%	35%	35%	
Oppose	5%	7%	5%	14%	8%	10%	9%	6%	7%	
Strongly Oppose	10%	7%	4%	1%	14%	11%	8%	8%	7%	
Unsure	8%	6%	3%	5%	5%	9%	0%	4%	12%	

		Party ID	
	Dem	Ind	Rep
Strongly Favor	55%	47%	27%
Favor	33%	28%	40%
Oppose	5%	5%	15%
Strongly Oppose	2%	13%	11%
Unsure	4%	6%	6%

Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

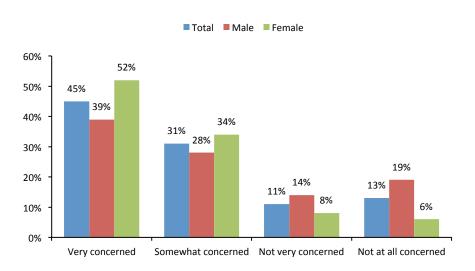
South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



10. How would you describe your feelings toward the effects of climate change in New Jersey?

Overall, three quarters (76%) are very or somewhat concerned with climate change in New Jersey. While the concerns are high across all demographic groups, the differences remain consistent between men (67%) and women (86%), Democrats (96%) versus Independents (72%) and Republicans (44%). Those in the PennEast region (4%) are more likely than their cohorts to be not at all concerned.

Chart 10



		Region ¹						Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
Very concerned	45%	40%	53%	47%	50%	31%	52%	40%	48%	
Somewhat concerned	25%	38%	29%	35%	22%	38%	28%	35%	27%	
Not very concerned	12%	13%	9%	11%	10%	14%	12%	11%	10%	
Not at all concerned	18%	8%	9%	4%	18%	16%	8%	14%	14%	

	Party ID					
	Dem	Ind	Rep			
Very concerned	67%	39%	15%			
Somewhat concerned	29%	33%	29%			
Not very concerned	3%	12%	25%			
Not at all concerned	1%	16%	30%			

Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

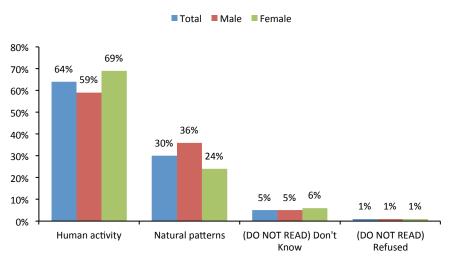
South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



11. Some people say the Earth is getting warmer because of human activity, while others say it's mostly due to natural patterns in the earth's environment. Which is closer to your view?

Overall, sixty-four percent believe the earth is getting warmer due to human activity. Greater than fifty percent of all demographic categories measured except Republicans (31%) believe human activity is the cause of the earth getting warmer. Those from the South (38%) and Coast (36%) are more likely than those from the Northeast (23%), Urban Core (25%) and PennEast (20%) to say it is caused by natural patterns.

Chart 11



		Region ¹						Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60 +	
Human activity	62%	71%	68%	70%	56%	56%	74%	65%	57%	
Natural patterns	34%	23%	25%	20%	38%	36%	22%	29%	35%	
Don't Know	4%	5%	5%	10%	5%	7%	4%	5%	7%	

	Party ID					
	Dem	Ind	Rep			
Human activity	84%	60%	31%			
Natural patterns	12%	31%	63%			
Don't Know	3%	8%	6%			

Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

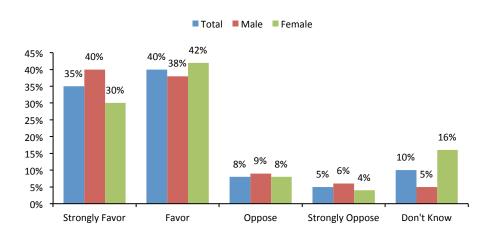
South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



12. Do you favor or oppose the development of off-shore wind energy off the coast of New Jersey?

Overall, seventy-five percent favor the development of off-shore wind energy stations off the coast of New Jersey. More from the Northeast (79%) than the South (68%) favor it. Once again Democrats (80%) are more supportive than are Republicans (69%) or Independents (74%).

Chart 12



		Region ¹						Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
Strongly Favor	37%	46%	31%	34%	33%	34%	35%	36%	36%	
Favor	36%	33%	47%	50%	35%	39%	48%	40%	36%	
Oppose	9%	6%	4%	6%	14%	10%	9%	8%	8%	
Strongly Oppose	8%	5%	2%	1%	7%	8%	1%	6%	7%	
Don't Know	6%	9%	16%	9%	10%	6%	7%	9%	12%	

		Party ID	
	Dem	Ind	Rep
Strongly Favor	41%	35%	27%
Favor	39%	39%	42%
Oppose	9%	7%	9%
Strongly Oppose	2%	8%	8%
Don't Know	10%	10%	10%

Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



13. Which of following comes closer to your view?

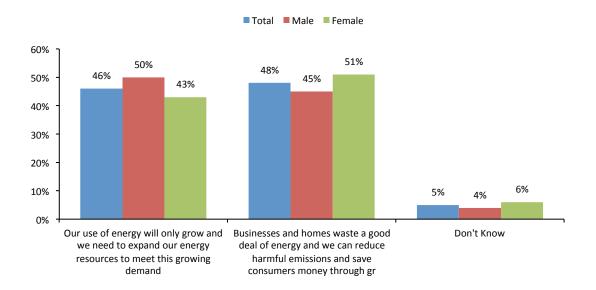
Our use of energy will only grow and we need to expand our energy resources to meet this growing demand.

or

Businesses and homes waste a good deal of energy and we can reduce harmful emissions and save consumers money through greater energy efficiency measures?

New Jerseyans are equally split in their belief that energy demand will continue to grow requiring a need to expand energy resources, and businesses and harmful emissions can be reduced through greater energy efficiency measures. Republicans (59%) are more likely than Democrats (37%) or Independents (50%) to say we need to expand our energy resources. Those in the Northwest (36%) are less likely than those from the Northeast (51%), South (56%) or Coast (50%) to say we need to expand energy sources.

Chart 13





	Region ¹							Age		
	Northwest	Northeast	Urban	PennEast	South	Coast	18-	35-59	60+	
			Core				34			
Need to expand	36%	51%	41%	50%	56%	50%	56%	45%	41%	
resources	30%	31/6	41/0	30%	30%	3076	30%	4370	41/0	
Business & homes	56%	44%	55%	45%	38%	43%	43%	49%	50%	
waste energy	30%	4470	33%	43/0	36/0	43/0	43/0	49%	30%	
Don't know	7%	5%	4%	2%	5%	5%	2%	4%	7%	

	Party ID					
	Dem	Ind	Rep			
Need to expand resources	37%	50%	59%			
Business & homes waste energy	59%	42%	36%			
Don't know	4%	6%	4%			

 1 Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties
Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties

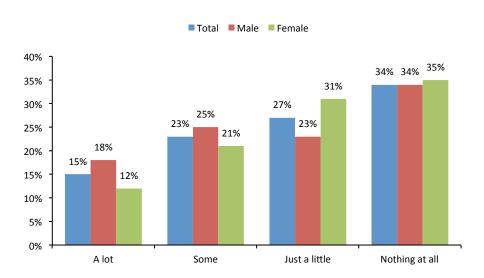
Coast: Atlantic, Cape May, Monmouth, and Ocean Counties



14. How much have you read or heard about the construction of new gas pipelines in the state?

Most have heard just a little or nothing about the pipelines (61%). Those from the proposed PennEast pipeline counties (53%), those 60+ (51%), and Republicans (44%) are more likely than their cohorts to have heard at least some. Those from the Urban core (42%) and Northeast (40%), those aged 18-34 (49%) and Democrats (41%) are the most likely to have heard nothing at all.

Chart 14



	Region ¹							Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
A lot	18%	11%	10%	29%	17%	21%	5%	19%	19%	
Some	23%	23%	18%	24%	25%	29%	11%	22%	32%	
Just a little	26%	27%	30%	25%	27%	24%	33%	25%	25%	
Nothing at all	34%	40%	42%	22%	31%	24%	49%	34%	25%	

		Party ID					
	Dem	Ind	Rep				
A lot	13%	18%	17%				
Some	20%	25%	28%				
Just a little	26%	26%	30%				
Nothing at all	41%	30%	25%				

¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



15. How concerned are you, if at all, about the potential impacts of these pipelines to New Jersey?

When asked a general question regarding concern about pipeline impact in New Jersey, 7 in 10 (67%) say they were somewhat or very concerned. Women (77%) are more concerned than men (55%), those 18-34 (74%) are more concerned than those 60+ (64%) or 34-59 (65%). Democrats (81%) are more concerned than Republicans (41%) or Independents (64%). Those from the Northwest (21%) are more likely than those from the Northeast (8%), Urban Core (12%) and PennEast (3%) to be not at all concerned.

■Total ■ Male ■ Female 45% 39% 38% 40% 35% 32% 35% 31% 30% 22% 21% 25% 20% 14% 12% 15% 10% 2% 1% 5% 0% Very concerned Somewhat Don't Know Not very Not at all concerned concerned concerned

Chart 15

		Region ¹						Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
Very concerned	32%	28%	33%	32%	37%	27%	29%	33%	33%	
Somewhat concerned	28%	38%	37%	53%	29%	34%	45%	32%	31%	
Not very concerned	16%	23%	15%	10%	15%	20%	16%	19%	16%	
Not at all concerned	21%	8%	12%	3%	17%	18%	9%	13%	17%	
Not sure	2%	1%	3%	3%	2%	1%	1%	2%	3%	



	Party ID						
	Dem	Ind	Rep				
Very concerned	41%	32%	11%				
Somewhat concerned	40%	32%	30%				
Not very concerned	10%	19%	28%				
Not at all concerned	5%	15%	28%				
Not sure	3%	1%	2%				

¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

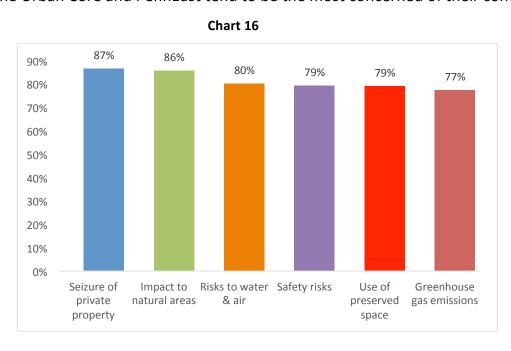
Northeast: Bergen and Passaic Counties
Urban Core: Essex, Hudson, Middlesex, and Union Counties
PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



16. Concern about the pipeline development.

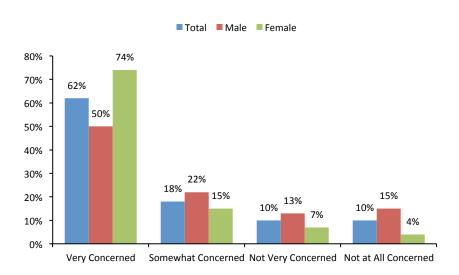
When asked how concerned New Jerseyans are regarding seven specific potential issues with the proposed pipelines, data can be separated into two groups. First, the seizure of private property for big energy companies (87%), and the impact to natural areas and wildlife habitats (86%), each had higher concerns than the others. Risks to air and water quality (80%), risks associated with ruptures or leaks (79%), the use of preserved open space (79%) and greenhouse gas emissions (77%) all rated slightly lower. Once again, this year more women than men expressed similar concern on all items. Similarly, Democrats continue to be more concerned than Republicans or Independents across all items, while those from the Urban Core and PennEast tend to be the most concerned of their cohorts.





16a. Concern about the pipeline development to: The risks to air and water quality

Chart 17



		Region ¹							Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+		
Very Concerned	58%	67%	69%	62%	58%	53%	72%	59%	60%		
Somewhat Concerned	18%	17%	19%	17%	19%	18%	16%	19%	19%		
Not Very Concerned	6%	7%	5%	19%	13%	18%	8%	11%	9%		
Not at all Concerned	17%	9%	6%	3%	10%	11%	4%	11%	11%		

	Party ID						
	Dem	Ind	Rep				
Very Concerned	81%	54%	37%				
Somewhat Concerned	13%	21%	25%				
Not Very Concerned	3%	14%	16%				
Not at all Concerned	2%	11%	21%				

 1 Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

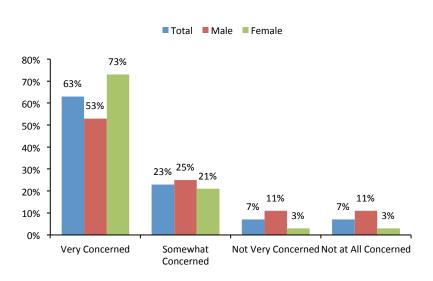
PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties Coast: Atlantic, Cape May, Monmouth, and Ocean Counties



16b. Concern about the pipeline development to: The impact to natural areas and wildlife habitats?

Chart 18



		Region ¹							Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+		
Very Concerned	59%	66%	71%	72%	63%	49%	80%	60%	56%		
Somewhat Concerned	24%	22%	21%	20%	20%	30%	13%	26%	25%		
Not Very Concerned	7%	5%	4%	5%	11%	11%	3%	8%	8%		
Not at all Concerned	11%	7%	4%	2%	6%	10%	4%	6%	10%		

	Party ID					
	Dem	Ind	Rep			
Very Concerned	78%	61%	43%			
Somewhat Concerned	18%	23%	29%			
Not Very Concerned	3%	10%	11%			
Not at all Concerned	1%	6%	17%			

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

16c. Concern about the pipeline development to: The safety risks associated with ruptures, leaks, or explosions?

Chart 19 ■ Total ■ Male ■ Female 80% 69% 70% 57% 60% 45% 50% 40% 30% 22% 23% 21% 16% 15% 20% 11% 9% 10% 3%

		Region ¹							Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+		
Very Concerned	56%	58%	65%	64%	49%	51%	63%	52%	59%		
Somewhat Concerned	18%	25%	22%	13%	24%	23%	22%	24%	21%		
Not Very Concerned	10%	7%	7%	21%	16%	16%	9%	13%	9%		
Not at all Concerned	16%	9%	6%	0%	10%	10%	5%	10%	10%		

Somewhat Concerned Not Very Concerned Not at All Concerned

	Party ID				
	Dem	Ind	Rep		
Very Concerned	72%	54%	33%		
Somewhat Concerned	21%	21%	28%		
Not Very Concerned	4%	13%	21%		
Not at all Concerned	3%	12%	18%		

Northeast: Bergen and Passaic Counties

0%

Very Concerned

Urban Core: Essex, Hudson, Middlesex, and Union Counties

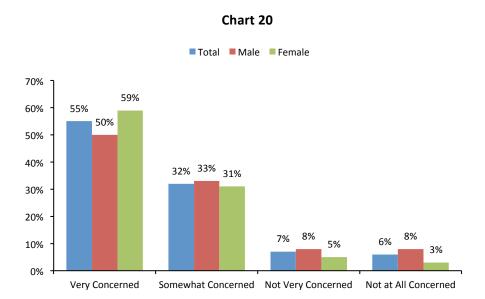
PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

16d. Concern about the pipeline development to: The seizure of private property for big energy companies?



		Region ¹					Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+
Very Concerned	62%	43%	56%	47%	56%	57%	41%	53%	66%
Somewhat Concerned	22%	41%	33%	47%	27%	30%	46%	34%	21%
Not Very Concerned	7%	9%	6%	2%	5%	8%	7%	7%	5%
Not at all Concerned	7%	6%	5%	4%	9%	3%	6%	6%	5%

	Party ID				
	Dem	Ind	Rep		
Very Concerned	60%	54%	47%		
Somewhat Concerned	33%	31%	31%		
Not Very Concerned	4%	7%	10%		
Not at all Concerned	2%	6%	11%		
Unsure	60%	54%	47%		

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

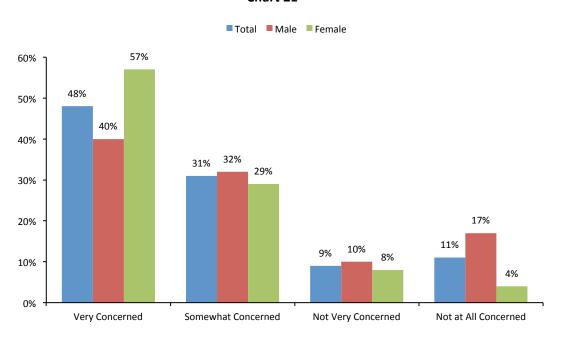
South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

16e. Concern about the pipeline development to: The use of preserved open space for construction of pipelines?

Chart 21



		Region ¹						Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+	
Very Concerned	53%	45%	47%	58%	51%	44%	46%	49%	50%	
Somewhat Concerned	22%	32%	39%	34%	23%	29%	44%	27%	26%	
Not Very Concerned	11%	12%	6%	4%	11%	10%	5%	11%	9%	
Not at all Concerned	14%	11%	7%	5%	13%	14%	5%	12%	13%	

	Party ID				
	Dem	Ind	Rep		
Very Concerned	61%	47%	26%		
Somewhat Concerned	31%	33%	29%		
Not Very Concerned	5%	9%	17%		
Not at all Concerned	3%	10%	25%		

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

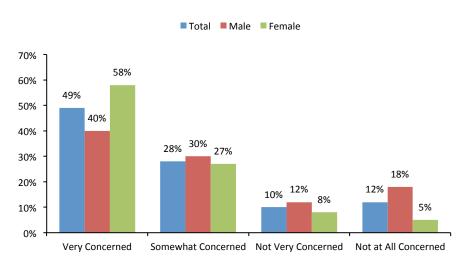
South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



¹ Northwest: Morris, Somerset, Sussex, and Warren Counties

16f. Concern about the pipeline development to: Greenhouse gas emissions that contribute to climate change?

Chart 22



		Region ¹					Age		
	Northwest	Northeast	Urban Core	PennEast	South	Coast	18-34	35-59	60+
Very Concerned	44%	51%	57%	54%	50%	35%	54%	47%	48%
Somewhat Concerned	28%	31%	28%	29%	22%	33%	28%	30%	27%
Not Very Concerned	9%	8%	7%	14%	11%	13%	11%	10%	8%
Not at all Concerned	15%	9%	8%	4%	17%	17%	7%	12%	14%

	Party ID				
	Dem	Ind	Rep		
Very Concerned	73%	39%	18%		
Somewhat Concerned	22%	35%	32%		
Not Very Concerned	3%	8%	22%		
Not at all Concerned	1%	16%	26%		

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



 $^{^{1}}$ Northwest: Morris, Somerset, Sussex, and Warren Counties

17. If you had to choose from the following statements, which comes closest to your view?

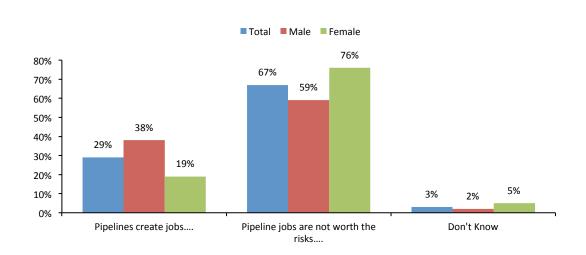
Building pipelines will create many much-needed construction jobs that New Jersey workers and families will benefit from.

or

The number of jobs created through pipelines are not worth the environmental and health risks, and we should instead create jobs through clean, renewable energy projects.

By more than a two to one margin, New Jerseyans believe the number of potential jobs pipelines may create do not outweigh their potential risks. Sixty-seven percent chose that statement, while only twenty-nine percent chose pipelines will create much-needed jobs. In all demographics measured other than Republicans, more than half said the potential jobs created were not worth the associated risks. Republicans and Democrats were opposite in their selections, with more Republicans (58%) saying pipelines create much-needed jobs, while more Democrats (84%) said the jobs are not worth the risks. PennEast residents (11%) are less likely than their cohorts to say pipelines create much-needed jobs.

Chart 23



rethink energy nj

		Region ¹					Age		
	Northwest	Northeast	Urban	PennEast	South	Coast	18-	35-	60+
			Core				34	59	
Pipelines create jobs	30%	30%	24%	11%	30%	39%	21%	29%	32%
Pipeline jobs are not worth	67%	68%	74%	89%	64%	54%	78%	67%	63%
the risks							76%	0/%	05%
Unsure	3%	2%	1%	0%	6%	4%	0%	3%	4%

	Party ID			
	Dem	Ind	Rep	
Pipelines create jobs	13%	30%	58%	
Pipeline jobs are not worth the	84%	66%	37%	
risks				
Unsure	2%	3%	4%	

 $^{^{1}}$ Northwest: Morris, Somerset, Sussex, and Warren Counties

Northeast: Bergen and Passaic Counties
Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties Coast: Atlantic, Cape May, Monmouth, and Ocean Counties



III. Sample Characteristics

Gender

Male	51%
Female	49%

Age

18-34	24%
35-59	42%
60+	34%
Refused	1%

Party ID

Democrat	40%
Republican	23%
Independent	34%
Other/Refused	3%

Region¹

Northwest	15%
Northeast	16%
Urban Core	29%
PennEast	5%
South	17%
Coast	18%

 $^{^{1}}$ Northwest: Morris, Somerset, Sussex, and Warren Counties $^{-}$

Northeast: Bergen and Passaic Counties

Urban Core: Essex, Hudson, Middlesex, and Union Counties

PennEast: Hunterdon, and Mercer Counties

South: Burlington, Camden, Cumberland, Gloucester, and Salem Counties



Education

Some HS	1%
High school	13%
Some college or Community college	22%
Graduated from a 4 year college	34%
Graduate school	30%

Employment

Full-time	56%
Part-time	11%
Retired	22%
Not employed outside the home	11%

Ethnicity

White	69%
African American	14%
Hispanic/Latino	13%
Asian	3%
Other	0%
Ref	1%

Anyone in Household part of the Public Employee Pension System

No	68%
Yes - Myself	18%
Yes – Someone else	13%

Interview Completed Via:

Land-line phone	55%
Cell phone	45%



APPENDIX A

Questionnaire



2017 ReThink Energy NJ Survey

- CPS2. For your safety, are you currently driving?
- 1 Yes SET TIME TO CALL BACK
- 2 No (Skip to SCR1)
- 3 Don't Know THANK AND TERMINATE
- 4 Refused THANK AND TERMINATE
- SCR1. To begin, do you reside in New Jersey?
- 1 Yes
- 2 No/DK (THANK AND TERMINATE)
- SCR2. Are you over 18?
- 1 Yes
- 2 No/DK (THANK AND TERMINATE)
- SCR3. ...and currently registered to vote at this address?
- 1 Yes
- 2 No/DK (THANK AND TERMINATE)
- Q1. How closely do you follow news about the various ways that people in New Jersey power their homes and businesses?
- 1 Very closely
- 2 Somewhat closely
- 3 Not at all closely
- 8 DK (vol)
- 9 Refused (vol)
- Q2. Which source do you think is most important to New Jersey's energy future? (Rotate, Read List, stop when respondent indicates a choice)
- 1 Solar
- 2 Wind
- 3 Natural gas
- 4 Oil
- 5 Nuclear
- 6 Coal
- 7 Other (vol) [specify]
- 8 DK (vol)
- 9 Refused (vol)



- Q3. Which of the following do you believe are clean energy sources? (Read List and rotate order) [Check all that apply]
- 1 Solar
- 2 Wind
- 3 Natural gas
- 4 Oil
- 5 Nuclear
- 6 Coal
- Q4. How important, if at all, do you believe investing in renewable energy sources, like wind and solar, is to the overall health of New Jersey?
- 1 Very important
- 2 Somewhat important
- 3 Not very important
- 4 Not at all important
- 8 DK (vol)
- 9 Refused (vol)
- Q5. How willing would you be to pay \$5 per month/\$10 per month more (SPLIT SAMPLE) over the next five years on your energy bills to have your energy generated from solar or wind energy, if you knew that doing so would help to reduce harmful emissions?

Very willing

Somewhat willing

Not very willing

Not willing at all

- Q6. In order to meet New Jersey's energy needs, do you believe the state should invest more in renewable energy sources, like wind and solar, or more in fossil fuels, like oil and natural gas, through the construction of additional pipelines? (**Rotate**)
- 1 Renewable sources
- 2 Fossil fuels
- 8 DK (vol)
- 9 Refused (vol)
- Q7. How do you rate the pace at which our state is developing and adopting renewable energy alternatives? Would you say it is...(**Rotate**)
- 1 Too slow
- 2 Too fast
- 3 Just right
- 8 DK (vol)
- 9 Refused (vol)



- Q8. When thinking about November's election to replace the governor, does a candidate's support for moving from fossil fuels to renewable energy like solar or wind make you [Rotate more or less likely] more likely or less likely to vote for them, or does their support for renewable energy make no difference?
- 1 More likely
- 2 Less likely
- 3 Makes no difference
- 8 DK (vol)
- 9 Refused (vol)
- Q9. Would you favor or oppose [rotate] New Jersey setting a goal of generating 80% of its energy from renewable energy sources by 2050?
- 1. Favor
- 2. Strongly Favor
- 3. Oppose
- 4. Strongly Oppose
- 8. DK (vol)
- 9. Refused (vol)
- Q10. How would you describe your feelings toward the effects of climate change in New Jersey? Are you...
- 1 Very concerned
- 2 Somewhat concerned
- 3 Not very concerned
- 4 Not at all concerned
- 8 DK (vol)
- 9 Refused (vol)
- Q11. Some people say the Earth is getting warmer because of human activity, while others say it's mostly due to natural patterns in the earth's environment. Which is closer to your view? [rotate]
- 1 Human activity
- 2 Natural patterns
- 8 DK (vol)
- 9 Ref (vol)
- Q12. Do you favor or oppose the development of off-shore wind energy off the coast of New Jersey?
 - 1. Favor
 - 2. Strongly Favor
 - 3. Oppose
 - 4. Strongly Oppose
 - 8. DK (vol)



- 9. Refused (vol)
- 13. Which of following comes closer to your view....
 - -Our use of energy will only grow and we need to expand our energy resources to meet this growing demand
 - -Businesses and homes waste a good deal of energy and we can reduce harmful emissions and save consumers money through greater energy efficiency measures
- Q14. How much have you read or heard about the construction of new gas & oil pipelines in the state?
- 1 A lot
- 2 Some
- 3 Just a little
- 4 Nothing at all
- 8 DK (vol)
- 9 Refused (vol)
- Q15. How concerned are you, if at all, about the potential effect of these pipelines to New Jersey? Are you...
- 1 Very concerned
- 2 Somewhat concerned
- 3 Not very concerned
- 4 Not at all concerned
- 8 DK (vol)
- 9 Refused (vol)
- Q16. And, in general, how would you describe your feelings toward each of the following potential consequences of pipeline development in New Jersey? [Rotate Q14A through Q14F]
- Q16A The risks to air and water quality
- Q16B The impact to natural areas and wildlife habitats
- Q16C The safety risks associated with ruptures, leaks, or explosions
- Q16D The seizure of private property for big energy companies
- Q16E The use of preserved open space for construction of pipelines
- Q16 F Greenhouse gas emissions that contribute to climate change
- 1 Very concerned
- 2 Somewhat concerned
- 3 Not very concerned
- 4 Not at all concerned
- 8 DK (vol)
- 9 Refused (vol)

Q17 If you had to choose from the following statements, which comes closest to your view? [rotate]:



Building pipelines will create many much-needed construction jobs that New Jersey workers and families will benefit from.

Or

The number of jobs created through pipelines are not worth the environmental and health risks, and we should instead create jobs through clean, renewable energy projects.

Finally, just some questions about yourself...

- D1 Regardless of who you might vote for, do you consider yourself a....ROTATE...
- Democrat, a Republican, or an Independent?
- 1 Democrat
- 2 Republican
- 3 Independent [If Independent, ask D1b]
- 4 Other [DON'T READ]
- 8 Don't Know [DON'T READ]
- 9 Ref [DON'T READ]
- D1b Which way do you lean?
- 1 Democrat
- 2 Republican
- 3 Neither
- 8 DK (Vol)
- D2. And what's the highest level of education you've completed so far...PROMPT UNTIL ANSWERED?
- 1 Some high school
- 2 High school
- 3 Some college or graduated from a community college
- 4 Graduated from a four year college
- 5 Graduate school
- 8 DK (vol)
- 9 Ref (vol)
- D3. Are you currently employed full time, part time, or are you retired or not employed? outside the home?
- 1 FT Ask D4A
- 2 PT Ask D4A
- 3 Retired
- 4 Not employed outside the home
- 8 DK (vol)
- 9 Ref (vol)
- D4. Gender (from observation)
- 1 Male
- 2 Female



- D5. Is anyone in your household a member of a union? [If "yes," ASK: "Is that person yourself or someone else?"]
- 1 Yes, respondent
- 2 Yes, household
- 3 No
- 8 DK (vol)
- 9 Ref (vol)
- D6. County code [break by region]
- D7. What year were you born?

IF REF, ASK "which age group do you fall into... 18-34, 35-59, 60+?

- D8. In addition to being American, would you say you're...? [Prompt as necessary]
- 1 White [INTERVIEWER INCLUDE: Irish, German, Polish, Italian, and all Europeans]
- 2 African-American/black
- 3 Asian-American [INCLUDES: Indian, Pakistani, Indian, Arab, Chinese, Japanese, etc.]
- 4 Hispanic/Latin American
- 5 Other [vol]
- 9 Ref.

PROMPT: THANKS SO MUCH FOR YOUR TIME...

