

*Preliminary Results – November 4, 2011*

**California/Oregon/Washington Energy Policy Survey**



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**Introduction**

The following are results for a mail survey of California, Oregon, and Washington households conducted between June and September 2011. The survey was administered to a total of 4,363 households over the three state study area. The survey asked recipients to respond to a variety of questions associated with the environment, politics, and energy; interest, activities, knowledge, and attitudes.

We present preliminary results for several questions below. Percentages were rounded to the appropriate decimal place. The response rate for the survey is as follows:

	<b>Sample Size</b>	<b>Responses</b>	<b>Response Rate</b>
<b>CA</b>	1,433	693	48.3%
<b>OR</b>	1,468	756	51.5%
<b>WA</b>	1,462	715	48.9%
<b>Total</b>	4,363	2,164	49.6%

## SECTION 1

In this first section of the survey we would like to ask you some general questions about your interest, activities, and knowledge about energy and environmental policy issues. Please circle the number that most closely represents your view.

**Q-1** In general, how well informed would you consider yourself to be concerning renewable energy policy issues in (state)—such as wind, solar, wave, and biomass energy?

		CA	OR	WA	Total
1.	Not informed	18.5%	17.6%	19.7%	18.6%
2.	Somewhat informed	54.6%	55.9%	57.1%	55.9%
3.	Informed	19.9%	19.6%	18.8%	19.4%
4.	Very well informed	6.9%	6.9%	4.3%	6.1%

**Q-2** How often do you talk about issues related to renewable energy with your family, friends, or other acquaintances?

		CA	OR	WA	Total
1.	Never	11.1%	8.7%	9.5%	9.8%
2.	Hardly ever	29.7%	28.8%	29.3%	29.3%
3.	Sometimes	44.2%	47.2%	49.0%	46.8%
4.	Often	15.0%	15.2%	12.2%	14.1%

**Q-3** Overall, how much impact do you think PEOPLE LIKE YOU can have in making (state's) energy policy?

		CA	OR	WA	Total
1.	No impact at all	17.8%	16.0%	14.5%	16.1%
2.	A small impact	47.4%	45.9%	48.2%	47.1%
3.	A moderate impact	25.6%	26.7%	27.0%	26.4%
4.	A big impact	9.2%	11.4%	10.4%	10.4%

Q-4 How familiar are you with specific renewable energy technologies including biofuel, wind, solar, geothermal and wave energy? Please circle the number of your response.

		Not Familiar	Somewhat Familiar	Familiar	Very Familiar
a. Biofuels (e.g. ethanol, etc.)	<b>CA</b>	20.8%	44.7%	26.3%	8.2%
	<b>OR</b>	19.7%	46.1%	26.0%	8.2%
	<b>WA</b>	17.4%	46.3%	31.3%	27.8%
	<b>Tot.</b>	19.3%	45.7%	27.8%	7.1%
b. Wind energy	<b>CA</b>	7.8%	35.5%	43.8%	12.9%
	<b>OR</b>	4.6%	41.1%	41.7%	12.6%
	<b>WA</b>	5.3%	40.8%	42.5%	11.4%
	<b>Tot.</b>	5.9%	39.2%	42.6%	12.3%
c. Geothermal energy	<b>CA</b>	34.6%	37.5%	22.1%	5.8%
	<b>OR</b>	32.5%	42.0%	21.5%	4.1%
	<b>WA</b>	37.0%	36.5%	20.0%	6.5%
	<b>Tot.</b>	34.6%	38.7%	21.2%	5.4%
d. Solar energy	<b>CA</b>	5.5%	27.6%	42.5%	24.3%
	<b>OR</b>	4.0%	30.7%	47.8%	17.6%
	<b>WA</b>	4.1%	31.1%	48.8%	16.0%
	<b>Tot.</b>	4.5%	29.8%	46.4%	19.2%
e. Wave energy	<b>CA</b>	43.9%	38.9%	13.6%	3.6%
	<b>OR</b>	42.1%	37.5%	16.3%	4.1%
	<b>WA</b>	44.6%	36.6%	15.5%	3.2%
	<b>Tot.</b>	43.5%	37.6%	15.2%	3.7%
f. Hydroelectric energy	<b>CA</b>	17.8%	27.3%	30.5%	24.4%
	<b>OR</b>	15.1%	25.0%	34.6%	25.3%
	<b>WA</b>	10.3%	24.2%	40.6%	24.9%
	<b>Tot.</b>	14.4%	25.5%	35.3%	24.9%

**Q-5** How much do you agree or disagree with the following statements concerning energy policy?

		<b>Strongly Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Strongly Agree</b>	
<b>a.</b>	Decreasing our dependence on foreign oil and gas is important to our national security.	<b>CA</b>	1.4%	3.8%	6.1%	27.1%	61.6%
		<b>OR</b>	1.7%	3.8%	8.1%	25.0%	61.3%
		<b>WA</b>	1.8%	1.8%	6.4%	28.3%	61.6%
		<b>Tot.</b>	1.7%	3.1%	6.9%	26.8%	61.5%
<b>b.</b>	I am concerned about foreign ownership of our energy resources.	<b>CA</b>	1.2%	2.0%	9.6%	32.0%	55.2%
		<b>OR</b>	2.3%	1.5%	10.7%	29.5%	56.0%
		<b>WA</b>	1.5%	3.1%	7.8%	31.1%	56.4%
		<b>Tot.</b>	1.7%	2.2%	9.4%	30.8%	55.9%
<b>c.</b>	I am concerned that our country doesn't have enough energy resources.	<b>CA</b>	11.9%	16.4%	12.9%	27.3%	31.4%
		<b>OR</b>	9.9%	16.3%	14.5%	29.6%	29.7%
		<b>WA</b>	10.1%	18.0%	16.3%	27.0%	28.6%
		<b>Tot.</b>	10.6%	16.9%	14.6%	28.0%	29.9%
<b>d.</b>	I am concerned about being personally affected by shortage of electricity in the next five years.	<b>CA</b>	11.0%	20.7%	24.8%	25.7%	17.8%
		<b>OR</b>	11.8%	21.1%	29.4%	24.5%	13.2%
		<b>WA</b>	11.1%	27.7%	27.9%	22.0%	11.3%
		<b>Tot.</b>	11.3%	23.2%	27.4%	24.0%	14.1%
<b>e.</b>	Not enough money is being spent on research and development of alternative fuels.	<b>CA</b>	3.8%	11.1%	22.7%	29.0%	33.5%
		<b>OR</b>	5.9%	10.1%	20.2%	30.7%	33.1%
		<b>WA</b>	5.1%	12.9%	25.5%	28.1%	28.4%
		<b>Tot.</b>	4.9%	11.3%	22.7%	29.3%	31.7%
<b>f.</b>	It is possible to increase energy supplies while protecting the environment at the same time.	<b>CA</b>	0.9%	3.4%	11.2%	36.9%	47.7%
		<b>OR</b>	2.1%	4.2%	12.5%	37.8%	43.4%
		<b>WA</b>	1.5%	3.9%	9.7%	39.0%	45.8%
		<b>Tot.</b>	1.5%	3.9%	11.2%	37.9%	45.5%
<b>g.</b>	New technologies will make it possible to have enough electricity for all of us in the future.	<b>CA</b>	1.0%	4.7%	18.3%	39.4%	36.6%
		<b>OR</b>	2.5%	7.3%	19.7%	35.8%	34.7%
		<b>WA</b>	2.7%	6.9%	18.7%	38.7%	33.1%
		<b>Tot.</b>	2.1%	6.3%	18.9%	37.9%	34.8%

**Q-6** Here are a few specific questions about energy. Many people don't know the answers to these questions, so if there are some you don't know just leave them blank and continue.

**a.** The largest source of energy for electricity in your state is:

	CA	OR	WA	Tot.
1. Coal	11.8%	10.1	5.2%	9.0%
2. Hydroelectric	45.2%	59.0%	72.2%	58.9%
3. Natural Gas	17.6%	9.4%	4.2%	10.3%
4. Nuclear	4.0%	1.3%	0.6%	1.9%
Did not respond:	21.4%	20.2%	17.9%	19.8%

**b.** Most electricity in your state is used by the:

1. Residential Sector (e.g., households)	33.2%	31.9%	35.8%	33.6%
2. Commercial Sector (e.g., retail stores)	13.3%	9.3%	10.3%	10.9%
3. Industrial Sector (e.g., factories and mills)	21.6%	24.7%	20.8%	22.5%
4. Transportation Sector	2.9%	2.4%	2.5%	2.6%
Did not respond:	29.0%	31.7%	30.5%	30.5%

**c.** Being “off-grid” means:

1. Producing one’s own electricity	65.1%	62.4%	60.8%	62.8%
2. Getting electricity from another state	5.9%	6.7%	6.2%	6.3%
3. Having no electricity	6.1%	7.4%	9.4%	7.6%
4. Being energy efficient	4.0%	2.4%	3.2%	3.2%
Did not respond:	18.9%	21.0%	20.4%	20.1%

**Q-7** Wave energy refers to the extraction of electricity from the up-and-down motion of ocean waves using buoys or devices in the form of “wave energy farms.” What is your general attitude toward the development of wave energy off of the California/Oregon/Washington coast?

1. Very positive	21.9%	20.0%	15.4%	19.1%
2. Positive	23.3%	31.0%	29.1%	27.9%
3. Neutral	15.9%	15.3%	17.0%	16.0%
4. Negative	4.4%	4.7%	3.8%	4.3%
5. Very negative	1.5%	2.7%	1.0%	1.7%
6. Do not have enough information to form an opinion.	33.0%	26.2%	33.8%	30.9%

**Q-8** In recent years there has been considerable attention and development of what many call *alternative energy technologies*, such as **solar power**, **wind power**, **wave and tidal energy** and **biofuels**. Sometimes, though, alternative energy technologies have impacts that some people find undesirable. We are interested in **your views** of what should be done in cases where those impacts are likely to occur. Please circle the number in each case that best represents your opinion

← [1=Strongly Agree; 2=Agree; 3=Neutral; 4=Disagree; 5=Strongly Disagree] →

**a.** Develop high potential windmill energy “farm” in windy rare “tall grass prairie” area.

Preserve rare “tall grass prairie” ecology even if this prevents windmill farm energy production.

	<b>1</b>	<b>2</b>	<b>3 (neutral)</b>	<b>4</b>	<b>5</b>
<b>CA</b>	17.8%	24.3%	34.8%	13.8%	9.3%
<b>OR</b>	13.8%	28.2%	31.8%	16.2%	10.0%
<b>WA</b>	14.1%	27.4%	33.8%	19.0%	5.6%
<b>Tot.</b>	15.2%	26.7%	33.4%	16.4%	8.3%

**b.** Leave undisturbed desert floor ecology that supports endangered turtle species even if it prevents solar power installation.

Install solar power farm in desert even if it disrupts ecology of endangered turtle.

	<b>1</b>	<b>2</b>	<b>3 (neutral)</b>	<b>4</b>	<b>5</b>
<b>CA</b>	7.7%	14.9%	38.8%	25.8%	12.7%
<b>OR</b>	9.4%	15.4%	41.7%	23.8%	9.7%
<b>WA</b>	8.2%	19.8%	34.5%	26.4%	11.1%
<b>Tot.</b>	8.5%	16.7%	38.4%	25.3%	11.1%

**c.** Install off-shore wave turbines on the sea floor to produce electricity even if it impedes whale migration.

Protect whale migratory routes even if it means prohibiting installation of off-shore wave energy turbines.

	<b>1</b>	<b>2</b>	<b>3 (neutral)</b>	<b>4</b>	<b>5</b>
<b>CA</b>	3.7%	11.3%	36.3%	27.2%	21.5%
<b>OR</b>	4.8%	16.6%	37.0%	22.5%	19.1%
<b>WA</b>	3.6%	12.8%	35.3%	26.9%	21.4%
<b>Tot.</b>	4.1%	13.6%	36.2%	25.4%	20.7%

(cont.)

d. Protect traditional native/tribal cultural sites even if it would prevent building transmission lines or roads for alternative energy (solar, wind, biofuel) supplies.

Build alternative energy transmission lines even if it would disturb traditional tribal/native cultural sites.

	1	2	3 (neutral)	4	5
CA	11.4%	17.3%	36.1%	22.4%	12.7%
OR	13.5%	22.1%	34.2%	20.5%	9.7%
WA	11.0%	16.9%	33.5%	26.3%	12.3%
Tot.	12.0%	18.9%	34.6%	23.0%	11.5%

e. Continue to operate hydroelectric dams for power even if it harms salmon runs.

Remove dams where they cause harm to salmon runs.

	1	2	3 (neutral)	4	5
CA	10.5%	25.3%	36.0%	18.8%	9.3%
OR	12.1%	21.6%	39.2%	17.7%	9.3%
WA	13.7%	24.9%	29.2%	23.0%	9.2%
Tot.	12.1%	23.9%	34.9%	19.8%	9.3%

Q-9 We would like to know which of the following information sources you currently use or would use to learn more about California's/Oregon's/Washington's energy situation and policy. Please circle the number of the frequency of your use.

Very  
Never    Infrequently    Frequently    Frequently

a. Television news programs and specials

CA	8.9%	25.7%	43.3%	22.2%
OR	5.7%	25.5%	43.4%	25.5%
WA	4.6%	27.5%	46.5%	21.3%
Tot.	6.4%	26.2%	44.4%	23.1%

b. Public Broadcasting

CA	13.3%	37.9%	33.2%	15.6%
OR	13.3%	34.9%	32.8%	19.0%
WA	13.2%	37.9%	33.0%	15.9%
Tot.	13.3%	36.8%	33.0%	16.9%

c. Radio programs

CA	24.9%	33.6%	31.7%	9.7%
OR	22.7%	37.1%	28.7%	11.4%
WA	20.4%	36.9%	30.7%	12.0%
Tot.	22.7%	35.9%	30.3%	11.1%

(cont.)		Never	Infrequently	Frequently	Very Frequently
d. Major newspaper	CA	17.4%	36.5%	27.1%	19.0%
	OR	13.6%	30.3%	33.1%	23.0%
	WA	14.8%	33.4%	34.6%	17.2%
	Tot.	15.2%	33.3%	31.7%	19.8%
e. Other local newspapers	CA	25.3%	37.4%	25.3%	12.1%
	OR	21.2%	39.0%	26.0%	13.7%
	WA	21.6%	38.6%	28.1%	11.7%
	Tot.	22.7%	38.4%	26.5%	12.5%
f. Local community leaders	CA	38.8%	49.2%	10.9%	1.0%
	OR	35.6%	50.9%	12.4%	1.2%
	WA	34.2%	48.6%	16.1%	1.1%
	Tot.	36.2%	49.6%	13.1%	1.1%
g. State elected officials	CA	37.8%	47.8%	12.7%	1.7%
	OR	34.7%	47.1%	16.6%	1.6%
	WA	30.5%	51.6%	16.2%	1.7%
	Tot.	34.3%	48.8%	15.2%	1.7%
h. State Department of Energy	CA	32.0%	43.5%	20.6%	3.9%
	OR	33.4%	46.7%	17.6%	2.4%
	WA	25.7%	52.0%	19.3%	3.0%
	Tot.	30.4%	47.4%	19.1%	3.1%
i. Universities and colleges	CA	33.9%	39.2%	20.6%	6.3%
	OR	32.1%	45.0%	19.4%	3.5%
	WA	28.5%	46.5%	20.9%	4.1%
	Tot.	31.5%	43.6%	20.3%	4.6%
j. Utilities	CA	13.9%	45.3%	32.4%	8.4%
	OR	17.0%	39.8%	36.7%	6.5%
	WA	11.8%	42.5%	37.6%	8.2%
	Tot.	14.3%	42.4%	35.6%	7.7%
k. Environmental groups	CA	29.8%	42.3%	22.4%	5.5%
	OR	29.8%	41.3%	20.8%	8.1%
	WA	30.6%	42.9%	21.0%	5.5%
	Tot.	30.1%	42.1%	21.4%	6.4%



(cont.)			<b>Strongly Disagree</b>	<b>Mildly Disagree</b>	<b>Neutral</b>	<b>Mildly Agree</b>	<b>Strongly Agree</b>
<b>d.</b>	The so-called "ecological crisis" facing humankind has been greatly exaggerated.	<b>CA</b>	28.0%	24.9%	17.3%	21.7%	8.1%
		<b>OR</b>	29.5%	24.6%	15.3%	19.5%	11.2%
		<b>WA</b>	28.9%	21.7%	20.6%	19.5%	9.3%
		<b>Tot.</b>	28.8%	23.7%	17.7%	20.2%	9.5%
<b>e.</b>	Plants and animals have as much right as humans to exist.	<b>CA</b>	6.8%	13.7%	16.8%	29.6%	33.1%
		<b>OR</b>	8.2%	11.9%	16.7%	25.7%	37.4%
		<b>WA</b>	8.0%	13.7%	20.1%	25.9%	32.3%
		<b>Tot.</b>	7.7%	13.1%	17.8%	27.0%	34.3%
<b>f.</b>	Humans were meant to rule over the rest of nature	<b>CA</b>	32.3%	20.5%	17.8%	18.4%	11.0%
		<b>OR</b>	29.2%	27.5%	17.8%	13.5%	12.1%
		<b>WA</b>	30.8%	20.8%	20.3%	16.0%	12.1%
		<b>Tot.</b>	30.7%	23.1%	18.6%	15.9%	11.7%

**Q-11** From what you've read and heard, is there solid evidence that the average temperature on earth has been getting warmer over the past few decades, or not?

	<b>CA</b>	<b>OR</b>	<b>WA</b>	<b>Tot.</b>
1. Yes (go to Q-12)	68.5%	70.6%	71.6%	70.2%
2. No (go to Q-13)	17.1%	16.6%	19.1%	17.6%
3. Don't know (go to Q-13)	14.5%	12.8%	9.3%	12.2%

**Q-12** Do you believe that the earth is getting warmer...?

	<b>CA</b>	<b>OR</b>	<b>WA</b>	<b>Tot.</b>
1. Mostly because of human activity such as burning fossil fuels.	59.9%	57.1%	56.5%	57.8%
2. Mostly because of natural patterns in the earth's environment.	23.1%	24.1%	26.1%	24.5%
3. Don't know	17.0%	18.8%	17.4%	17.8%

**Q-13** On domestic policy issues, would you consider yourself to be?

**1. Very Liberal    2. Liberal    3. Moderate    4. Conservative    5. Very Conservative**

	1. Very Liberal	2. Liberal	3. Moderate	4. Conservative	5. Very Conservative
<b>CA</b>	9.0%	20.3%	43.8%	23.2%	3.6%
<b>OR</b>	6.6%	22.5%	44.1%	22.3%	4.5%
<b>WA</b>	5.8%	24.0%	45.0%	19.9%	5.4%
<b>Tot.</b>	7.1%	22.3%	44.3%	21.8%	4.5%

**Q-14** There is a lot of talk these days about what our country's goals should be for the next ten or fifteen years. Listed below are some goals that different people say should be given top priority. Please mark the one you consider the most important in the long run. What would be your second choice? Please mark that second choice as well.

		<b>1<sup>st</sup> Choice</b> (circle one)	<b>2<sup>nd</sup> Choice</b> (circle one)
<b>a.</b> Maintaining order in the nation.	<b>CA</b>	29.7%	18.6%
	<b>OR</b>	27.3%	19.3%
	<b>WA</b>	24.7%	15.6%
	<b>Tot.</b>	27.2%	17.9%
<b>b.</b> Giving people more say in important governmental decisions.	<b>CA</b>	36.1%	28.6%
	<b>OR</b>	38.9%	31.5%
	<b>WA</b>	41.0%	30.5%
	<b>Tot.</b>	38.7%	30.2%
<b>c.</b> Fighting rising prices.	<b>CA</b>	13.3%	26.5%
	<b>OR</b>	13.9%	25.3%
	<b>WA</b>	15.6%	25.5%
	<b>Tot.</b>	14.3%	25.7%
<b>d.</b> Protecting freedom of speech.	<b>CA</b>	21.0%	26.3%
	<b>OR</b>	19.9%	23.9%
	<b>WA</b>	18.6%	28.3%
	<b>Tot.</b>	19.8%	26.1%

### SECTION 3

We now have a few concluding questions to check if our survey is representative of all types of people. Please remember that all answers are completely confidential to the extent permitted by law.

**Q-15** What is your current age in years

	Mean	Range
<b>CA</b>	47.99 years	18-90 years
<b>OR</b>	49.86 years	18-91 years
<b>WA</b>	48.80 years	18-93 years
<b>Total</b>	48.91 years	18-93 years

**Q-16** Please indicate your gender?    1. Female    2. Male

<b>CA</b>	51.0%	49.0%
<b>OR</b>	50.1%	49.9%
<b>WA</b>	54.1%	45.9%
<b>Total</b>	51.7%	48.3%

**Q-17** What level of education have you completed?

	CA	OR	WA	Total
1. Grade School	0.1%	.5%	0.0%	0.2%
2. Middle or junior high school	0.7%	.9%	0.7%	0.8%
3. High school	12.6%	17.4%	15.4%	15.2%
4. Vocational school	1.5%	3.3%	2.4%	2.4%
5. Some college	35.9%	39.4%	34.3%	36.6%
6. College graduate	37.1%	27.8%	34.4%	32.9%
7. Graduate school	11.9%	10.3%	12.4%	11.5%
8. Other	0.1%	0.4%	0.4%	0.3%

**Q-18** How long have you lived in CA/OR/WA? \_\_\_\_\_(in years)

	Mean	Range
<b>CA</b>	32.75 years	1-90 years
<b>OR</b>	31.37 years	1-85 years
<b>WA</b>	31.81 years	1-88 years
<b>Tot.</b>	31.95 years	1-90 years

**Q-19** Which of the following best describes your current work situation?

	<b>CA</b>	<b>OR</b>	<b>WA</b>	<b>Total</b>
1. Employed full time	53.0%	40.2%	51.7%	48.1%
2. Employed part time	8.9%	9.5%	9.2%	9.2%
3. Not employed outside the home	3.2%	3.1%	2.3%	2.9%
4. Unemployed	5.3%	3.4%	4.2%	4.3%
5. Retired	24.2%	39.3%	27.7%	30.6%
6. Student	5.3%	4.5%	4.9%	4.9%

**Q-20** Which category best describes your household income (before taxes) in 2011?

	<b>CA</b>	<b>OR</b>	<b>WA</b>	<b>Total</b>
1. Less than \$10,000	4.1%	4.3%	4.4%	4.3%
2. \$10,000 - \$ 14,999	3.0%	4.1%	3.1%	3.4%
3. \$15,000 - \$24,999	9.3%	9.8%	8.9%	9.3%
4. \$25,000 - \$34,999	8.1%	10.7%	9.8%	9.6%
5. \$35,000 - \$49,999	17.8%	19.8%	17.0%	18.2%
6. \$50,000 - \$74,999	19.5%	20.5%	20.5%	20.1%
7. \$75,000 – \$99,999	11.4%	11.7%	15.4%	12.8%
8. \$100,000 – \$149,999	15.7%	12.1%	14.6%	14.1%
9. \$150,000 – \$199,999	7.1%	4.0%	2.8%	4.6%
10. \$200,000 or more	4.1%	3.2%	3.7%	3.6%