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Public Opinion on Energy Policy, 1974-2006

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Abstract

In recent years, energy policy has become an increasingly salient political issue in the United States. Rising gas prices, coupled with regional energy shortages and a growing recognition of the connection between U.S. energy supplies and national security, have led to calls for legislative action. Part of developing a national energy policy lies in understanding public opinion about existing energy sources, public support for various energy strategies, and what the public might be willing to do in order to conserve energy and reduce U.S. reliance on foreign oil. In this review, we report trends in public opinion from 1974 through 2006 on traditional energy sources, alternative energy sources, and citizens' priorities on energy alternatives. The polls show that concern about the U.S. energy situation is as high now as it was during the nation's energy *crises* of the 1970s. While attitudes about traditional sources of energy are strongly influenced by current economic conditions, citizens are increasingly receptive to alternative sources of energy (e.g., nuclear energy). Citizens also support policy changes that involve the government encouraging conservation through energy efficient appliances, vehicles, and homes and offices. The public voices a growing frustration with President Bush's, and the Congress's, handling of the nation's energy problems, and they express a desire for leadership in finding long-term solutions to the nation's energy dilemmas.

As gas prices across the United States soar to record levels, instability rocks the Middle East, and fears about global warming reach beyond the scientific community, citizens express increasing concern about U.S. energy alternatives. A recent poll showed Americans citing “gas prices and energy costs” as the “most important economic issue facing the country.”¹ Despite an abundance of rhetoric on *energy policy* from both political parties, critics maintain that the U.S. lacks a national strategy (*New York Times*, June 26, 2006).² Part of developing a national energy policy lies in understanding public opinion about existing energy sources, public support for various energy strategies, and what the public might be willing to do in order to conserve energy and reduce U.S. reliance on foreign oil. In this review, we report trends in public opinion from 1974 through 2006 on *traditional* energy sources, *alternative* energy sources, and citizens’ *priorities* on energy alternatives.³

Figure 1 shows the number of survey questions in Roper’s *IPoll* database including the word “energy” for each year between 1970 and 2006. The wide variation in questions over time appears to stem from pollsters asking more questions when the energy situation is salient in the media – e.g. when energy supplies are tight and prices relatively high. Prior to the first energy crisis, in 1973, public opinion questions about energy were virtually non-existent; however, as oil prices rose, and citizens became increasingly worried about U.S. energy supplies, so too did the number of poll questions about energy. Survey questions about energy peaked in 1979 following the second

¹ July 21-24, 2006 *NBC/Wall Street Journal*

² Energy policy appears to be high on the Congressional agenda, however. According to the *New York Times* (2006), over 477 different “energy-related” bills had been introduced in the House and Senate in the first 5½ months of 2006 alone.

³ The most recent review of public opinion trends on energy appearing in *POQ* focused on the period between 1975 and 1990 (Farhar, 1994). Initially we planned to limit our analysis to the years following the most recent published review on energy; however, in a few cases we chose to include data from the 1970s and 1980s in order to compare opinions over a longer period.

energy crisis and the partial-meltdown of the Three-Mile Island nuclear plant outside Harrisburg, Pennsylvania. Through the early years of the Reagan presidency, as energy costs declined, fewer poll questions were asked about energy. Notwithstanding the temporary rise in questions about energy following Iraq's invasion of Kuwait in 1990 and the ensuing Persian Gulf War in 1991, the downward trend in the number of survey questions about energy continued unabated throughout the remainder of the decade. Some gaps in the trend data we report stem from this paucity of questions as well as from a lack of identically worded questions about energy. By 2001 concerns about U.S. energy prices and supplies led to a renewed interest in measuring public opinion about energy - an interest that has continued to the present.⁴

[Insert Figure 1 here]

Defining the Energy Situation

Responses to three questions asked by pollsters since the 1970s help to describe how the public sees the energy situation in the United States. They have to do with how serious members of the public think the energy situation is, whether they think the U.S. is likely to face a critical energy shortage during the next five years, and the extent to which they blame various groups (Congress, oil companies, oil exporting nations, etc.) for energy problems. A large proportion of Americans recognize the seriousness of the energy situation facing the United States, as can be seen in the data presented in Table 1.

⁴ We hypothesized that the huge increase in the number of questions about energy in 2001 was related to the terrorist attacks of 9-11; however, a month-by-month inspection of Roper's *Ipoll* database revealed a decline in the number of question about energy following the September 11th attacks. The sharp upturn in energy questions began in the Spring of 2001 and early summer months, when crude oil prices were on the rise and residents of California began experiencing energy shortages and rolling blackouts.

Although majorities of the public have long held “very” or “fairly serious” concerns about the U.S. energy situation, since 2001 the percent defining the energy situation as “not too serious at all” has declined. Following the nation’s second energy crisis, in June of 1979, 24% of Americans still believed the energy situation was “not too serious”; however, by March of 2006, the percent of the public offering that opinion had fallen to 7%. Thus, somewhat more citizens define the U.S. energy situation as serious today than did during the energy shortages of the 1970s.

Prospective evaluations of the likelihood of facing a “critical energy shortage” in the near future seem to be heavily influenced by economic conditions. The data in Table 2 indicate that during the energy shortages of the 1970s, the public was extremely pessimistic about future energy supplies; however, amidst the steady decline in crude oil prices in the early 1980s, Americans’ attitudes changed. Cheap and abundant energy erased memories of long lines at the gas pump and fears of an impending energy crisis dissipated. This optimism would fade by the end of the decade following the meltdown of a nuclear reactor at Chernobyl, the *Exxon Valdez* spilling 11 million gallons of oil off the coast of Alaska, and the U.S.’s leadership in the Persian Gulf War. By 1990 concern about critical energy shortages had risen back to the high levels of 1975. In most years from 2001 to 2006, with prices for crude oil setting record highs annually, a majority of the public were concerned about critical energy shortages.

Beginning in the mid-1970s, pollsters began to ask respondents how much blame various groups deserve for the “country’s current energy problems” (or for “high energy costs” or “the current energy crisis”). As can be seen in Table 3, depending on the year, from a quarter to more than a third of the public blames the Administration, the Congress,

electric companies, and oil exporting nations, and about a fourth blame American consumers themselves. However, by a wide margin, citizens view oil companies as the main culprit for energy problems. Barbara Farhar (1994) suggests that resentment toward oil companies may stem from “seeds of mistrust” which were “planted during the mid to late seventies when the oil embargo strained the adaptive capacity of the nation’s oil production and delivery infrastructure” (p. 605). While this may still be true, it seems likely that blaming oil companies for current energy problems stems from resentment over high gasoline prices. While this is understandable given the financial squeeze many Americans feel at the gas pump, it may also suggest that the public doesn’t understand the market forces underlying rising energy costs. Furthermore, if the public believes energy problems arise largely from profiteering by oil companies, they may be less willing to curb consumption. In October of 2005, only 37% of citizens blamed “growing international demand” for “high energy costs,” and even fewer assigned responsibility directly to American consumers (22%). Conversely, 62% of the public attributed a “great deal of blame” for energy costs to oil companies.⁵

Attitudes Towards Traditional Sources of Energy

In *Energy, the Environment, and Public Opinion* (2002), Eric R. A. N. Smith defines *traditional* energy sources as oil, coal, and natural gas. Utilizing data from California samples, Smith finds that attitudes about traditional energy sources are influenced by current economic conditions. In the 1970s, when the energy crisis was at its peak, attitudes on energy development and production were relatively favorable;

⁵ Note that these percentages for October 2005 do not add to 100% because the questions reported in Table 3 ask the respondents about each possible source of blame *separately* and do not ask respondents to choose only one culprit from a list.

however, as world petroleum prices stabilized and gasoline prices declined so too did the public's willingness to support the development of these resources (Smith 1995; 1998).

Moving from regional to national samples yields fewer trends on opinion towards traditional sources of energy. In fact, the only frequently asked question that we were able to find about traditional sources of energy has to do with public support for opening the Artic National Wildlife Refuge (ANWR) in Alaska for oil and gas exploration. The data are presented in Table 4. Similar to Smith's findings from regional polls in California, the public's attitudes seem to be at least partially influenced by current economic conditions. From the early 1990s through 2004, the public voiced mixed opposition to drilling for oil in ANWR - the single exception coming in November of 2001 following the terrorist attacks of 9/11; however, shortly after crude oil prices topped \$60 per barrel in July of 2005, the public's views on drilling in ANWR shifted to narrow majorities supporting such action. Record high crude oil prices appear to have shifted public support on whether or not to open ANWR to oil and gas exploration.

Although the data on traditional energy sources suggests that attitudes may be strongly influenced by economic conditions, more research must be done to determine exactly what the public knows about traditional energy sources and how attitudes change as citizens are exposed to accurate information. For example, the U.S. gets a majority of its electricity from burning coal, and although the amount of domestic coal reserves is large enough to power the country for hundreds of years, we know virtually nothing about public opinion on coal as an energy resource. Are citizens aware of the abundance of domestic coal reserves? Would the public be supportive of burning coal if it could be done in an environmentally friendly manner? Unfortunately, answers to such questions

are elusive. Smith's (2002) book is the most recent and comprehensive treatment of knowledge and attitudes toward traditional energy sources; yet, the vast majority of his data are from regional samples. In many ways this is a remarkable research gap.

Alternative Energy Sources

With the exception of attitudes toward nuclear energy, very little has been asked by polling organizations about alternative energy sources. This situation has not changed much since 1994 when Farhar (1994b) pointed out in a briefing to the Department of Energy: "almost no data were available on alternative fuels. Most people appear not to know much about them. No conclusions are possible on alternative fuels and policy; this is a research gap" (p. 227). Although more work must be done to determine public knowledge and support of other energy sources, we find a fairly large number of questions about nuclear energy.

Following the partial meltdown of Three-Mile Island nuclear plant outside of Harrisburg, Pennsylvania in on March 28, 1979, public opinion shifted dramatically against the use of nuclear power (Rosa and Dunlap, 1994; Rosa and Freudenburg, 1984). However, trends beginning in the early 1990s reveal a public with mixed attitudes about nuclear energy – possibly reflecting the "devil's bargain" frame of stories about nuclear energy prevalent in the news media (Gamsen and Modigliani, 1989).⁶ Table 5 reports favorability ratings for "the nuclear power industry." On the whole, citizens are nearly evenly split toward the nuclear power industry, with about half reporting "very" or

⁶ Gamsen and Modigliani (1989) find that the *devil's bargain* frame emerged following the disaster at Three Mile Island. The authors describe the Faustian bargain as follows: "So nuclear power turns out to be a bargain with the devil. There are clear benefits such as inexhaustible electricity and an energy supply that does not depend on the whims of OPEC. But sooner or later, there will be a terrible price to pay. We are damned if we do and damned if we don't. And the deeper we get in, the harder it is to get out" (p. 25).

“somewhat favorable” attitudes and another half reporting “somewhat” or “very unfavorable” opinions.

Over the past fifteen years, majorities have opposed the construction of “more nuclear power plants.” As Table 6 details, two-thirds of the public reported opposition in 2005. However, when the public is provided with a rationale for building such plants – e.g. to “solve America’s energy problems” or “to use nuclear power to generate electricity” – opposition declines (tables 7 & 8). The trend detailed in Table 8 is striking. Immediately following the disaster at Chernobyl Nuclear Power Plant on April 26, 1986, public support for constructing nuclear plants to generate electricity stood at 34%. However, since 1999, polls show a majority now favoring the construction of nuclear plants when the question includes the purpose “to generate electricity.” Similarly, the percentage of citizens expressing support for the “government promoting the increased use of nuclear power” (table 9) and support for constructing a nuclear plant “in your area” (table 10) are on the rise, although there remains more opposition than support. Table 11 shows that fears about the dangers associated with global warming may lead to support for public policies that increase the nation’s reliance on nuclear power. In 2006, 61% of the public said they would support the “increased use of nuclear power as a source of energy in order to prevent global warming.”

Citizens’ Priorities on Energy Options

In recent years, survey organizations have begun to examine citizens’ priorities on energy options. The trends appearing in this section are from data collected between 2000 and 2006, a period when energy supplies were tight and gas prices high. Despite the high costs of energy, a majority of the public value *conservation* by citizens of

existing energy over efforts to expand production of more oil, gas, and coal (tables 12 & 13). Support for conservation versus production is remarkably stable in the face of increasing energy costs, and the third column of Table 13 shows that only a small minority of the public believes that conservation and production are of equal importance.

Although the public values conserving energy, they place less emphasis on protecting the environment as energy costs rise (table 14). With crude oil prices escalating to over \$70 dollars per barrel in the summer of 2005, a growing majority of citizens expressed a desire to develop new energy sources as opposed to protecting the environment. Unfortunately, this question may pose a false dichotomy (“protecting the environment or developing new sources of energy”) and mask support for both expanding production and protecting the environment.

Facing record high gasoline prices, the public nonetheless places a higher priority on finding a long-term solution to the nation’s energy dilemmas as compared to focusing on temporary solutions that might lower gas prices (table 15). Concomitantly, when asked if they favor or oppose possible government policies to address America’s energy supply, large majorities favor “requiring better fuel efficiency standards for cars, trucks, and SUV’s,” offering tax cuts and federal money for R & D to “develop wind, solar, and hydrogen technology,” and “spending more on subway, rail, and bus systems.” Table 16 shows that support for the “increased use of nuclear power” or “giving tax cuts to energy companies to do more oil exploration” pales in comparison to priorities associated with conservation or the promotion of alternative fuels. Although citizens clearly do not favor rationing gas as a way to “reduce the country’s dependence on imports of Middle East

oil” (table 17), a large majority of the public (79%) does support consumers switching to more fuel-efficient vehicles (table 18).

Between January of 2001 and August of 2005, the price for crude oil skyrocketed from about \$30 dollars per barrel to over \$70 dollars. In order to cope with the associated increase in gas prices, a growing majority of citizens’ report “driving less to save money on gas” (table 19). Table 19 also shows that many Americans have begun to shop around for lower gasoline prices, adjust the temperature in their houses so as to save money on utility bills, and change their travel plans to avoid driving longer distances. On the other hand, only a minority of the public reports purchasing “a car that gets better gas mileage” or “car pooling or ride sharing more often” as a result of increased transportation costs.

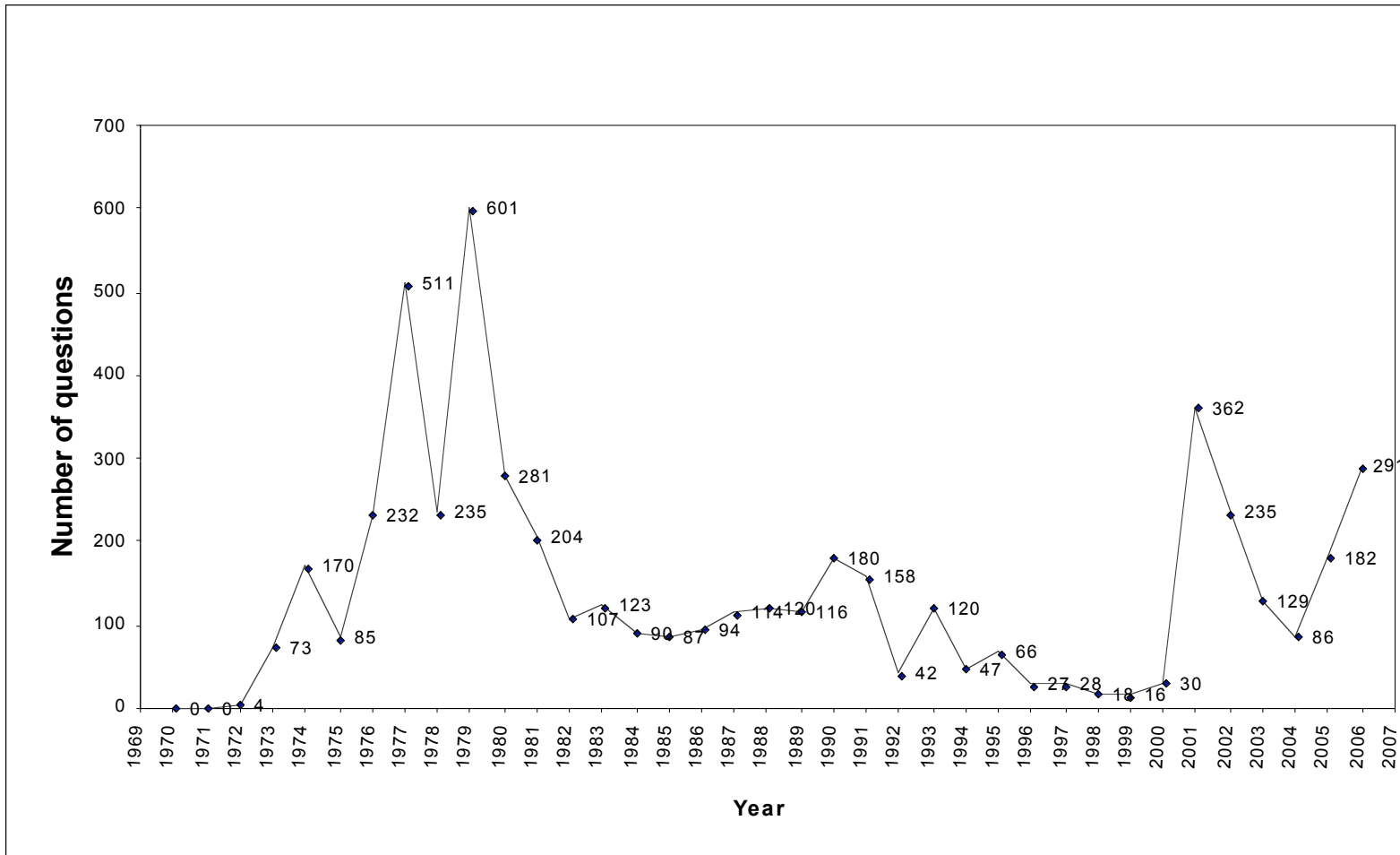
Looking to the Future

When the newly elected 110th Congress took office on January 4, 2007, one of the top items on its agenda was to provide leadership in developing and implementing a comprehensive energy bill. Over the past six years, Americans have expressed a growing frustration with both the Bush administration and Congress’s handling of the energy situation (tables 20 & 21). By February of 2006, disapproval of the Bush administration’s handling of energy policy reached a peak of 60% disapproving and only 27% approving. Disapproval of the incumbent President’s handling of the energy situation may have contributed to the perception that the Democratic Party can better be trusted to handle “dealing with the nation’s energy problems” rather than Republicans (table 21).

As we move toward the future, what energy policies might we expect to be promoted by the newly elected Democratic majority in Congress? Will public opinion

influence the direction of energy legislation? Unfortunately, very little data have been collected on policies the public desires. Two recent polls offer a snapshot of citizens' attitudes on several potential alternatives (tables 22 & 23). Table 22 shows strong support for tax incentives for the development of alternative fuels and drilling for oil in ANWR and the Gulf of Mexico. The public remains skeptical of short-term solutions to energy problems such as giving \$100 rebate checks to citizens as a way to "cushion the effects of higher gas prices" or "relaxing environmental standards for gasoline and automobiles." Citizens are also opposed to mandating higher gas prices as a way to encourage conservation. Policy changes that involve the government encouraging conservation through energy efficient appliances, vehicles, and homes and offices enjoy broad appeal (table 23). Future research must determine what citizens are willing to do insofar as making behavioral adaptations necessary to curb energy consumption if we hope to move beyond political rhetoric and toward solutions to our national and world energy dilemmas.

Figure 1. Survey Questions Asked About Energy, 1970 - 2006



Source: Collected by the authors using the Roper Center for Public Opinion Research's online Public Opinion Location Library, popularly known as *IPoll*. This database can be accessed from the Internet at: <http://www.ropercenter.uconn.edu>.

Appendix

SOURCES

The data presented in this article were collected from the Roper Center for Public Opinion Research's online Public Opinion Location Library (<http://www.ropercenter.uconn.edu>).

ABBREVIATIONS

AARP/ICR	American Association of Retired Persons/ ICR Survey Research Group
ABC	ABC News
ABC/WP	ABC News/ <i>Washington Post</i>
ABC/TIME/SU	ABC News/Time Magazine/Stanford University
AP	The Associated Press
CBS	CBS News
CBS/NYT	CBS News/ <i>New York Times</i>
CNN/YK	Cable News Network/Yankelovich
CRN	Cambridge Reports National
FOX/OD	Fox News/Opinion Dynamics Corporation
GAL	Gallup Organization
GAL/CNN/USA	Gallup Organization/Cable News Network/ <i>USA Today</i>
LAT	<i>Los Angeles Times</i>
NBC/WJ	NBC News/ <i>Wall Street Journal</i>
PSRA/PEW	Princeton Survey Research Associates/ Pew Research Center for the People and the Press
ROPER	Roper Center for Public Opinion Research

Defining the Energy Situation

1. *Seriousness of the Energy Situation*

GAL: “How serious would you say the energy situation is in the United States--very serious, fairly serious, or not at all serious?”

Date	Very Serious (%)	Fairly Serious (%)	Not Serious at All (%)	Don't Know/ No Opinion (%)	N
2/79 (GAL)	43	42	13	2	1534
4 -5/79 (GAL)	44	36	16	4	511
6/1/79 (GAL)	37	36	24	3	1511
8/79 (GAL)	47	35	16	2	1562
8/90 (GAL)	28	45	23	4	1227
9/10/90 (GAL)	28	48	21	2	1031
9/27/90 (GAL)	32	46	19	5	1000
2/91 (GAL)	40	44	14	2	1013
3/5-3/7/01 (GAL)	31	59	9	1	1060
5/7-5/9/01 (GAL)	58	36	4	2	1005
6/28-7/1/01 (GAL)	47	43	8	2	1014
3/3-3/5/03 (GAL)	28	59	11	2	1003
3/8-3/11/04 (GAL)	29	57	12	2	1005
3/7-3/10/05 (GAL)	31	56	10	3	1004
3/13-3/16/06 (GAL)	41	51	7	1	1000

2. Likelihood of Facing a Critical Energy Shortage

GAL: “Do you think that the United States is or is not likely to face a critical energy shortage during the next five years?”

ROPER^a: “A few years ago there was an energy shortage in this country, with gasoline, oil, and electricity in short supply. What do you think the chances are that in the next year this county will have another severe energy shortage like the one a few years ago – very likely, somewhat likely, somewhat unlikely, or very unlikely?”

Date	Yes/Likely (%)	No/Unlikely (%)	Already facing shortage (%)	No opinion (%)	N
7/75 (Roper)	70	29	*	7	2000
7/76 (Roper)	59	31	*	9	2000
7/77 (Roper)	71	23	*	6	2000
7/78 (Roper)	53	40	*	7	2000
7/79 (Roper)	79	17	*	4	2000
3-4/80 (Roper)	72	24	*	4	2000
3/81 (Roper)	51	43	*	6	2000
3/82 (Roper)	45	50	*	5	2000
3/83 (Roper)	39	57	*	4	2000
3/84 (Roper)	47	46	*	7	2000
3/85 (Roper)	39	55	*	6	2000
3/87 (Roper)	51	42	*	6	2000
3/89 ^b (Roper)	51	41	*	8	2000
9/90 (Roper)	68	26	*	6	2000
3/5-3/7/01 (GAL)	60	36	1	3	1060
3/3-3/5/03 (GAL)	56	40	1	3	1003
3/8-3/11/04 (GAL)	49	47	1	3	1005
3/7-3/10/05 (GAL)	52	45	*	3	1004
3/13-3/16/06 (GAL)	56	39	1	4	1000

^aresponse categories collapsed to 2-point measure; sample sizes approximate

^bAsked to half sample

* indicates < .5% or choice not offered

3. Attribution of Responsibility for Rising Energy Costs

GAL/CNN/USA: “Please tell me whether you think each of the following deserves a great deal of blame, some blame, not much blame, or no blame at all for the country’s current energy problems. How about...”

AARP/ICR: “(Would you say each of the following is greatly to blame, somewhat to blame, or not at all to blame for high energy costs?)...”

Roper^a: “Here is a list of groups who have been mentioned in one way or another as being to blame for the current energy crisis in the United States. [Card shown to respondent.] Would you go down that list and for each one tell me whether you think they deserve major blame for the energy crisis, some blame, or no blame at all?”

Date	Great Deal of Blame (%)	Some Blame (%)	Not much Blame (%)	No Blame (%)	Don't Know (%)	N
Oil Companies						
1/74 (Roper)	56	31	*	7	6	2000
2/75 (Roper)	57	32	*	5	6	2000
1/76 (Roper)	57	33	*	5	5	2000
6/77 (Roper)	55	35	*	5	5	2000
6/79 (Roper)	72	21	*	4	3	2000
9/90 (Roper)	49	38	*	7	5	2000
5/18-5/20/01 (GAL/CNN/USA) ^d	52	35	6	5	2	1010
10/26-10/31/05 (AARP/ICR)	62	27	*	9	3	1000
3/10-3/12/06 (GAL/CNN/USA) ^d	49	40	5	4	2	1001#
Oil Exporting Nations^e						
1/74 (Roper)	22	45	*	21	12	2000
2/75 (Roper)	38	38	*	12	12	2000
1/76 (Roper)	37	40	*	13	10	2000
6/77 (Roper)	32	43	*	16	9	2000
6/79 (Roper)	51	37	*	6	6	2000
9/90 (Roper)	31	47	*	13	9	2000
5/18-5/20/01 (GAL/CNN/USA)	44	37	9	8	2	1010
10/26-10/31/05 (AARP/ICR)	44	37	*	15	4	1000
3/10-3/12/06 (GAL/CNN/USA)	31	46	12	9	2	1001#

The Administration

1/74 (Roper)	39	47	*	7	7	2000
2/75 (Roper)	28	55	*	9	8	2000
1/76 (Roper)	28	58	*	8	7	2000
6/77 (Roper)	24	59	*	10	7	2000
6/79 (Roper)	36	51	*	7	6	2000
9/90 (Roper)	27	55	*	11	7	2000
5/18-5/20/01 (GAL/CNN/USA) ^b	28	40	14	15	3	1010
5/18-5/20/01 (GAL/CNN/USA) ^c	20	34	18	26	2	1010
10/26-10/31/05 (AARP/ICR)	44	34	*	17	5	1000
3/10-3/12/06 (GAL/CNN/USA) ^c	38	43	10	8	1	1001#

The Congress

1/74 (Roper)	26	57	*	10	8	2000
2/75 (Roper)	26	56	*	9	9	2000
1/76 (Roper)	26	59	*	7	8	2000
6/77 (Roper)	28	58	*	7	7	2000
6/79 (Roper)	34	52	*	7	7	2000
9/90 (Roper)	30	53	*	9	8	2000
5/18-5/20/01 (GAL/CNN/USA)	31	51	9	6	3	1010
10/26-10/31/05 (AARP/ICR)	44	35	*	15	5	1000

Electric Companies

1/74 (Roper)	15	44	*	32	10	2000
2/75 (Roper)	26	48	*	17	9	2000
1/76 (Roper)	29	50	*	14	7	2000
6/77 (Roper)	31	48	*	13	8	2000
6/79 (Roper)	25	47	*	20	8	2000
9/90 (Roper)	20	51	*	21	8	2000
5/18-5/20/01 (GAL/CNN/USA)	42	43	8	5	2	1010

Auto Companies

10/26-10/31/05 (AARP/ICR)	20	38	*	38	5	1000
3/10-3/12/06 (GAL/CNN/USA)	27	52	10	10	1	1001#

American Consumers

1/74 (Roper)	18	47	*	28	7	2000
2/75 (Roper)	20	51	*	21	8	2000
1/76 (Roper)	18	53	*	23	6	2000
6/77 (Roper)	31	46	*	17	6	2000

6/79 (Roper)	23	52	*	19	5	2000
9/90 (Roper)	26	48	*	20	6	2000
5/18-5/20/01 (GAL/CNN/USA)	22	47	13	17	1	1010
3/10-3/12/06 (GAL/CNN/USA)	25	54	10	10	1	1001#
Environmental Regulations						
5/18-5/20/01 (GAL/CNN/USA)	23	47	14	12	4	1010
10/26-10/31/05 (AARP/ICR)	21	42	*	32	5	1000
3/10-3/12/06 (GAL/CNN/USA)	19	49	14	15	4	1001#
Growing International Demand						
10/26-10/31/05 (AARP/ICR)	37	44	*	14	4	1000
Katrina/Hurricane/Natural Disaster						
10/26-10/31/05 (AARP/ICR)	35	43	*	21	1	1000
Individuals who drive gas guzzlers						
10/26-10/31/05 (AARP/ICR)	21	40	*	36	2	1000

^a sample sizes are approximate; response option worded “major blame” rather than “great deal of blame”

^b question worded “... the *Clinton* Administration”

^c question worded “... the current *Bush* Administration”

^d response choice worded “...US oil companies”

^e for Roper choice worded “Other Arab countries”; until 1990, wording was “the Arab Countries;” For AARP/ICR, choice worded “Oil exporting countries/Middle East.” For GAL/CNN/USA, choice worded “foreign countries that produce oil.”

* indicates response option not offered

question asked to Form A half of sample

Attitudes Towards Traditional Sources of Energy

4. Support for drilling in ANWR, 1990-2006

CRN: “The Arctic National Wildlife Refuge in northern Alaska is a publicly owned wilderness area that may be one of the country's largest untapped sources of oil and gas. Some people say development of this area should begin right away to help reduce our dependence on foreign oil. They say this development can be controlled in a way that protects the wildlife and wilderness character of the area. Other people say it is not yet clear how much oil and gas exist in the Arctic National Wildlife Refuge, and they say any development would cause irreparable harm to one of the nation's great wilderness areas. In general, do you favor or oppose development of the Arctic National Wildlife Refuge?

CBS: “Currently, drilling for oil and natural gas is prohibited in Alaska's Arctic National Wildlife Refuge. Do you approve or disapprove of the proposal to open up the Arctic National Wildlife Refuge in Alaska for oil and natural gas drilling?”

GAL¹: “(Next I am going to read some specific environmental proposals. For each one, please say whether you generally favor or oppose it.) How about...opening up the Arctic Wildlife Refuge in Alaska for oil exploration?”

GAL²: “Do you think the Arctic National Wildlife Refuge in Alaska should or should not be opened up for oil exploration?”

GAL³: “(Here are some things that can be done to deal with the energy situation. For each one, please say whether you generally favor or oppose it.) How about...opening up the Alaskan Arctic Wildlife Refuge for oil exploration?”

GAL⁴: “Do you favor or oppose opening up the Arctic National Wildlife Refuge in Alaska for oil exploration?”

PSRA/PEW: Would you favor or oppose allowing oil and gas drilling in the Alaskan Arctic National Wildlife Refuge?

Date	Favor/ Approve (%)	Oppose/ Disapprove (%)	Don't Know (%)	N
03/90 (CRN)	36	55	9	1250
09/90 (CRN)	40	51	10	1250
03/91 (CRN)	45	45	10	1250
03/92 (CRN)	38	54	8	1250
03/93 (CRN)	45	46	9	1250
03/94 (CRN)	43	50	7	1250
2/10-2/12/01 (CBS)	42	50	8	1214
3/8-3/12/01 (CBS)	36	57	7	1105
4/23-4/25/01 (CBS)	37	54	9	921
5/7-5/9/01 (GAL ¹)	38	57	5	1005
11/2-11/4/01 (GAL ⁴)	48	42	9	1012
11/8-11/11/01 (GAL ³)	44	51	5	1005
1/25-1/27/02 (GAL ⁴)	42	50	8	1011

3/18-3/20/02 (GAL ²)	35	56	9	1009
10/20-10/24/02 (CBS)	39	55	6	996 ^a
3/3-3/5/03 (GAL ¹)	41	55	4	1003
3/7-3/10/05 (GAL ²)	42	53	5	1004
3/17-3/21/05 (PSRA/PEW)	42	46	12	1505 ^b
9/8-9/11/2005 (PSRA/PEW)	50	42	8	1523
3/13-3/16/06 (GAL ¹)	49	47	4	1000
5/4-5/8/06 (CBS)	48	45	7	1241

^a Asked on Form D half of sample; ^b Asked on Form A half of sample

Opinions Toward Alternative Sources of Energy

5. Attitudes toward the Nuclear Power Industry

CRN: “(Now, I'm going to read you a list of various institutions or types of industries. After each one, I'd like you to tell me whether you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable opinion of each.)... The nuclear power industry”

Date	Very Favorable (%)	Somewhat Favorable (%)	Somewhat Unfavorable (%)	Very Unfavorable (%)	Don't Know (%)	N
01/1990 (CRN)	14	34	22	25	6	1250
01/1991 (CRN)	13	33	25	22	7	1250
01/1992 (CRN)	12	31	24	23	10	1250
01/1993 (CRN)	12	32	24	25	8	1250
01/1994 (CRN)	12	36	24	19	8	1250
01/1995 (CRN)	12	30	25	23	9	1250

*Note: Sample sizes are approximate

6. *General Support for Constructing Nuclear Power Plants*

ABC/WP: “In general, would you favor or oppose building more nuclear power plants at this time? (If favor/oppose, ask: Do you favor/oppose this strongly or somewhat?”

Time/CNN/YK: “Do you favor or oppose building more nuclear power plants in this country? (If favor/oppose, ask:) Do you strongly or just somewhat favor/oppose building more nuclear power plants?”

Date	Favor (%)	Oppose (%)	Don't Know (%)	N
4/10-4/11/91 (Time/CNN/YK*)	40	52	8	1000
3/11-3/12/92 (Time/CNN/YK*)	28	64	8	1400
4/19-4/22/01 (ABC/WP)	37	60	4	1350
6/1-6/3/01 (ABC/ WP)	41	52	6	689
6/2-6/5/05 (ABC/WP)	34	64	2	1002

* Response options collapsed

7. *Support for Constructing Nuclear Power Plants to “solve America’s energy problems”*
 NBC/WSJ: “(Now I would like to mention several proposals that have been made to help solve America's energy problems. For each one, please tell me whether you favor or oppose the proposal.)...Build additional nuclear power plants...(If Favor/Oppose, ask:) Would you strongly favor/oppose or just somewhat favor/oppose that proposal?”

Date	Favor (%)	Oppose (%)	Don’t Know (%)	N
6/23-6/25/01 (NBC/WJ)	48	46	6	806
6/8-6/11/05 (NBC/WJ)	44	48	8	1009

8. *Support for Nuclear PowerPlants to Generate Electricity*

CBS/NYT: “Would you approve or disapprove of building more nuclear power plants to generate electricity?”

AP: “Do you support or oppose using nuclear power to generate electricity?”

Fox/OD: “Do you favor or oppose the building of more nuclear power plants as a way of meeting the need for electrical power?”

GAL: “Overall, do you strongly favor, somewhat favor, somewhat oppose, or strongly oppose the use of nuclear energy as one of the ways to provide electricity for the US (United States)?”

GAL /NW: “Do you personally favor or oppose nuclear generation of electricity?”

Date	Approve/ Support/Favor (%)	Disapprove/ Oppose (%)	Don't Know (%)	N
4/30-5/1/86 (GAL /NW)	34	49	17	762
6/3-6/6/91(CBS/NYT)	41	48	11	1424
3/12-3/17/99 (AP)	45	31	23	1015
1/24-1/25/01 (Fox/OD)	44	41	15	902
3/5-3/7/01 (GAL)	46	48	6	1060*
4/18-4/23/01 (AP)	50	30	20	1002
5/9-5/10/01 (Fox/OD)	49	40	11	1063
5/10-5/12/01 (CBS)	49	43	8	1063
6/14-6/18/01 (CBS/NYT)	51	42	7	1050
3/7-3/10/05 (GAL)	54	43	3	1004*
3/13-3/16/06 (GAL)	56	38	7	1000*

9. Support for the Government “promoting the increased use of nuclear power”

PSRA/PEW: “As I read some possible government policies to address America’s energy supply, tell me whether you would favor or oppose each. Would you favor or oppose the government... promoting the increased use of nuclear power?”

Date	Favor (%)	Oppose (%)	Don’t Know (%)	N
9/8-9/11/05 (PSRA/PEW)	39	53	8	1523*
2/1-2/5/06 (PSRA/PEW)	44	49	7	1502

10. *Support for Construction of a Nuclear Plant “in Your Area”*

GAL: “Overall, would you favor, somewhat favor, somewhat oppose, or strongly oppose the construction of a nuclear energy plant in your area as one of the ways to provide electricity for the US (United States)?”

Date	Favor (%)	Oppose (%)	Don’t Know (%)	N
3/5-3/7/01# (GAL)	34	63	3	1060*
3/7-3/10/05# (GAL)	35	63	2	1004*
3/13-3/16/06# (GAL)	42	55	3	1000*

*Asked to Form B half sample; # Response options collapsed

11. *Support for Nuclear Energy to prevent Global Warming*

LAT: “One suggestion for reducing the problem of global warming is to increase the use of nuclear power as a source of energy and to decrease the use of fossil fuels, such as oil and gas. Would you, personally, support or oppose the increased use of nuclear power as a source of energy in order to prevent global warming?”

GAL: “Another suggestion for reducing the problem of global warming is to increase the use of nuclear power as a source of energy and to decrease the use of fossil fuels, such as oil and gas. Would you, personally, favor or oppose the increased use of nuclear power as a source of energy in order to prevent global warming?”

Date	Favor (%)	Oppose (%)	Don't believe in Global Warming (%)	Don't Know (%)	N
10/31-11/4/97 (GAL)	39	49	1	11	1004
4/21-4/26/01 (LAT)	52	33	*	15	813
7/28-8/1/06 (LAT)	61	30	*	9	1478

Citizens' Priorities on Energy Options

12. Energy Priorities: Exploration versus Conservation

PSRA/PEW: "Right now, which ONE of the following do you think should be the more important priority for U.S. energy policy ... (Read and Rotate) Expanding exploration, mining and drilling, and the construction of new power plants OR more energy conservation and regulation on energy use and prices?"

Date	Expand Exploration, Mining, and Drilling (%)	Focus on Energy Conservation (%)	Don't Know (%)	N
5/15-20/01(PSRA/PEW)	45	48	7	1202**
2/12-18/02(PSRA/PEW)	37	54	9	1199**
9/8-11/05 (PSRA/PEW)	43	48	9	1523*
2/1-2/5/06 (PSRA/PEW)	41	52	7	1502
6/14-19/06(PSRA/PEW)	35	57	8	1501*

* asked to Form 1 half of sample; ** asked to Form 2 half of sample

13. *Energy Priorities: Production versus Conservation*

GAL: “Which of the following approaches to solving the nation’s energy problems do you think the US (United States) should follow right now – emphasize production of more oil, gas, and coal supplies or emphasize more conservation by consumers of existing energy?”

Date	More Production (%)	More Conservation (%)	Both/ Equally (%)	Neither/ Other (%)	No Opinion (%)	N
3/5-3/7/01 (GAL)	33	56	8	1	2	1060
5/7-5/9/01 (GAL)	35	47	14	2	2	1005
3/3-3/5/03 (GAL)	29	60	7	2	2	1003
3/8-3/11/04 (GAL)	31	59	6	2	2	1005
3/7-3/10/05 (GAL)	28	61	7	2	2	1004
3/13-3/16/06 (GAL)	35	55	6	1	2	1000

14. *Potential Tradeoffs: Protecting the Environment versus Developing New Energy Sources*

PSRA/NW/PEW: “Right now, which one of the following do you think should be a more important priority for this country...protecting the environment or developing new sources of energy?”

Date	Protect the Environment (%)	Develop New Energy Sources (%)	Don't Know (%)	N
5/3-5/4/01 (PSRA)	41	52	7	1002
5/15-5/20/01 (PSRA/PEW)*	42	48	10	1202
2/12-2/18/02 (PSRA/PEW)*	45	48	7	1199
3/17-21/05 (PSRA/PEW)**	45	48	7	1505
9/8-9/11/05 (PSRA/PEW)	36	57	7	1523
6/14-19/06 (PSRA/PEW)**	35	60	5	1501

*question asked to Form 1 half of sample

** question asked to Form 2 half of sample

15. *Tradeoffs: Short-term versus Long-Term Solutions*

PSRA/PEW: “Which should be a higher priority for the president and Congress now...controlling rising gasoline prices and dealing with current energy shortages or trying to find new energy supplies that will deal with our long term problems?”

Date	Control Rising Gas Prices (%)	Deal with Long-term Problems (%)	Both equally important (%)	Don't Know (%)	N
5/15-20/01(PSRA/PEW)	32	55	10	3	1202*
9/8-9/11/05 (PSRA/PEW)	36	52	9	3	1523*
5/2-5/14/06 (PSRA/PEW)	24	61	12	3	1001

* Asked to Form B half of sample

16. *Citizens' priorities on Energy Policy Alternatives*

PSRA/PEW: “(As I read some possible government policies to address America's energy supply, tell me whether you would favor or oppose each.) Would you favor or oppose the government...?”

Date	Favor (%)	Oppose (%)	Don't Know (%)	N
Requiring better fuel efficiency for cars, trucks, and SUV's				
9/8-9/11/05 (PSRA/PEW)	86	12	2	1523**
2/1-2/5/06 (PSRA/PEW)	86	12	2	1502
Increase federal funding for research on wind, solar, and hydrogen technology				
2/1-2/5/06 (PSRA/PEW)	82	14	4	1502**
Tax cuts to energy companies to develop wind, solar and hydrogen technology				
9/8-9/11/05 (PSRA/PEW)	73	22	5	1523**
2/1-2/5/06 (PSRA/PEW)	78	18	4	1502*
Establishing price controls on fuel and energy				
9/8-9/11/05 (PSRA/PEW)	69	26	5	1523**
Spending more on subway, rail, and bus systems				
9/8-9/11/05 (PSRA/PEW)	68	27	5	1523**
2/1-2/5/06 (PSRA/PEW)	68	26	6	1502
Increasing federal funding for research on ethanol				
2/1-2/5/06 (PSRA/PEW)	67	22	11	1502**
Giving tax cuts to energy companies to do more oil exploration				
9/8-9/11/05 (PSRA/PEW)	52	44	4	1523**
2/1-2/5/06 (PSRA/PEW)	44	52	4	1502*
Promoting the increased use of nuclear power				
9/8-9/11/05 (PSRA/PEW)	39	53	8	1523**
2/1-2/5/06 (PSRA/PEW)	44	49	7	1502

*asked to form 1 half of sample; ** asked to form 2 half of sample

17. *Support for Rationing Gasoline to Reduce Oil Imports*

Fox/OD: Do you favor or oppose the following ways to reduce the country's dependence on imports of Middle East oil?...Rationing gasoline and oil

Date	Favor (%)	Oppose (%)	Don't Know (%)	N
11/28-11/29/01 (Fox/OD ²)	39	51	10	900*
2/26-2/27/02 (Fox/OD ²)	34	55	11	900*
4/16-4/17/02 (Fox/OD ²)	25	65	10	900*
2/28-3/1/06 (Fox/OD ¹)	27	67	5	900*

* Sample of registered voters

18. *Importance of Switching to Fuel Efficient Vehicles*

PSRA/PEW: “If the U.S. (United States) is to become less dependent on oil as an energy source, how important do you think it is that Americans now driving SUVs (Sport Utility Vehicles) switch to more fuel efficient vehicles? Is it...very important, somewhat important, not too important, or not at all important?”

Date	Very Important (%)	Somewhat Important (%)	Not too Important (%)	Not at all Important (%)	Don't Know (%)	N
11/8-11/9/01	42	37	11	8	2	1001
9/8-9/11/05	48	31	10	8	3	1523

19. *Steps Taken to Deal with Increased Energy Costs*

PSRA/PEW: “Now I’m going to list a few steps some people may be taking lately to deal with increasing energy costs. Not everyone will have done these. Have you...”

NBC/WSJ: “Let me read you a list of ways people conserve energy. For each one, please tell me if you are likely or unlikely to try to conserve in this way if there is an energy shortage...”

Date	Yes/ Likely (%)	No/ Unlikely (%)	Don't Know/ Unsure (%)	N
Been driving less to save money on gas				
9/15-9/18/90 (NBC/WSJ)	66	31	3	1508
5/15-5/20/01 (PSRA/PEW)	52	43	5	1202
9/8-9/11/05 (PSRA/PEW)	70	25	5	1523
Been shopping around for gasoline at the best price lately				
5/15-5/20/01 (PSRA/PEW)	66	31	3	1202
9/8-9/11/05 (PSRA/PEW)	69	28	3	1523
Been adjusting the temperature in your house to lower your utility bills				
5/15-5/20/01 (PSRA/PEW)	69	27	4	1202
9/8-9/11/05 (PSRA/PEW)	64	33	3	1523
Changed your travel to avoid driving long distances				
5/15-5/20/01 (PSRA/PEW)	31	60	9	1202
9/8-9/11/05 (PSRA/PEW)	57	37	6	1523
Bought a car that gets better gas mileage lately, or not				
5/15-5/20/01 (PSRA/PEW)	36	55	9	1202
9/8-9/11/05 (PSRA/PEW)	27	69	4	1523
Started car pooling or ride sharing more often				
5/15-20/01 (PSRA/PEW)	16	68	16	1202
9/8-9/11/05 (PSRA/PEW)	20	67	13	1523
6/20-7/16/06 (PSRA/PEW)	21	78	1	1182

Looking Towards the Future

20. *Approval of Bush's Handling of the Energy Situation*

ABC/WP: "Do you approve or disapprove of the way Bush is handling...the energy situation?"

CBS/NYT: "Do you approve or disapprove of the way George W. Bush is handling the energy situation?"

LAT: "Do you approve or disapprove of the way George W. Bush is handling the energy situation in the United States?"

PSRA/PEW: "Do you approve or disapprove of the way George W. Bush is handling...energy policy?"

Date	Approve (%)	Disapprove (%)	Don't Know/ No opinion (%)	N
5/9-5/13/01 (ABC/WP)	39	43	18	1022
5/31-6/3/01 (ABC/WP)	37	58	5	1004
6/14-6/18/01(CBS/NYT)	33	55	12	1050
7/26-7/30/01 (ABC/WP)	43	53	2	1352
8/28-8/31/01 (CBS)	43	42	15	850
9/6-9/9/01 (ABC/WP)	42	51	7	1009
6/19-6/23/02 (PSRA/PEW)	41	39	20	1212
1/30-2/2/03 (LAT)	45	32	23	1385
4/1-4/4/04 (PSRA/PEW)	29	48	23	790
5/11-5/15/05 (PSRA/PEW)	31	49	20	1502
2/1-2/5/06 (PSRA/PEW)	30	55	15	1502
2/22-2/26/06 (CBS/NYT)	27	60	13	1018
6/14 – 6/19/06 (PSRA/PEW)	26	56	18	1501

21. *Trust Handling the Energy Situation*

Fox/OD¹: (Who do you trust more to provide leadership on each of the following issues the Republicans in Congress, or the Democrats in Congress)? ... Energy.

Fox/OD²: “(Which political party – the Democrats or the Republicans – do you think would do a better job on each of the following issues?) ... Energy and gas prices.

PSRA/PEW: “(Next, please tell me if you think the Republican Party or the Democratic Party could do a better job in each of the following areas.) Which party could do a better job of...dealing with the nation's energy problems?”

Date	GOP (%)	Democrats (%)	Both (%)	Neither (%)	Don't Know (%)	N
5/15-5/20/01 (PSRA/PEW)	36	34	10	7	13	1202
7/11-7/12/01 (Fox/OD ¹)	33	37	12	8	10	900
1/9-1/10/02 (Fox/OD ¹)	35	35	8	4	18	900
2/26-2/27/02 (Fox/OD ²)	38	37	9	*	16	900
8/6-8/7/02 (Fox/OD ²)	32	42	10	*	16	900
9/8-9/11/05 (PSRA/PEW)	31	44	6	8	11	1523
2/7-2/8/06 (Fox/OD ²)	30	46	11	*	14	900
7/11-7/12/06 (Fox/OD ²)	19	53	12	*	16	900
9/6-9/10/06 (PSRA/PEW)	27	47	4	7	15	1507
10/24-10/25/06 (Fox/OD ²)	26	55	10	*	9	900
10/17-10/22/06 (PSRA/PEW)	28	44	5	6	17	2006

* Indicates choice option not offered

22. *Policy options that Would Help or Hurt the “Long-term Energy Situation in the United States.”*

Fox/OD: “I’m going to read you a list of items, for each one please tell me if you think it will help or hurt the long-term energy situation in the United States...”

Policy Option:	Help Situation (%)	Hurt Situation (%)	Mixed/ Depends (%)	Don’t Know (%)	<i>N</i>
Giving tax incentives to companies to encourage development of alternative fuels	79	14	4	3	900*
Drilling for oil in the Alaskan Wildlife Refuge and the Gulf of Mexico	68	24	4	5	900*
Relaxing environmental standards for gasoline and automobiles	46	44	4	6	900*
Giving \$100 rebate checks to taxpayers to cushion the effects of higher gas prices	40	42	10	9	900*
Raising gas prices above \$5 a gallon to encourage conservation	30	65	2	3	900*

* Sample of 900 registered voters conducted 5/2-5/3/2006

* Response options collapsed

23. *Support for Actions to Regulate Energy Production/Consumption*

ABC/Time/ SU: “For the next items, please tell me for each one whether it’s something government should require by law, encourage with tax breaks but not require, or stay out of entirely...”

Policy Options:	Require by Law (%)	Encourage with Tax Breaks (%)	Stay out Entirely (%)	No opinion (%)	<i>N</i>
Lowering the amount of greenhouse gases that power plants are allowed to release into the air	61	26	11	2	1002
Building cars that use less gasoline	45	40	15	0	1002
Building air conditioners, refrigerators and other appliances that use less electricity	42	41	17	4	1002
Building new homes and offices that use less energy for heating and cooling	33	51	15	1	1002

* Conducted by ABC, 3/9-3/14/2006

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