

PUBLIC THINKING ABOUT

# The Energy Problem

## Choices for an Uncertain Future

Public Deliberations in 2007 National Issues Forums



### A PUBLIC AGENDA REPORT

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# Executive Summary

In National Issues Forums (NIF) in 42 states and the District of Columbia, diverse groups of Americans came together in 2007 to deliberate for up to three hours about one of the major challenges facing the country, the energy problem. This report on people's thinking in these forums is divided into the following sections: a description of what happened in these forums; key tensions in the deliberations, which became apparent as participants deliberated; answers to key questions about the forums; and excerpts from transcripts of the proceedings, which offer a sampling of what participants said in the forums.

## How the Public Names the Energy Problem

The energy problem is increasingly important as a public concern, an issue many people think must be addressed. Polls show that public awareness of the energy problem is rapidly growing. In a 2006 Gallup Poll, when asked how much they worry about the "availability and affordability of energy," 48 percent of Americans responded, "a great deal." That's up from 27 percent 3 years earlier.<sup>1</sup> Polls show that specific energy concerns are rising as well. A May 2007 AP/Ipsos Poll found 68 percent of

Americans expected that increases in the price of gasoline will cause financial hardships for them and their family, up 14 points in 3 years.<sup>2</sup> A 2006 poll found 56 percent of Americans labeling the nation's dependence on foreign oil a "very serious problem."<sup>3</sup> Global warming has also come to the forefront of Americans' concerns. A *Newsweek* poll in April 2000 found that only 12 percent of Americans said global warming is the world's most important environmental problem. However, in August 2007 when the same question was asked, 38 percent named global warming as the number one problem, making it the most-cited concern by 24 points over the next item.<sup>4</sup>

The deliberations about energy that took place in public forums convened under the auspices of National Issues Forums reflect that sense of growing urgency. They also shed a revealing light on what is on people's minds when they reflect on the energy situation and why they consider this an important matter. In addition, they reveal clear differences between the way leadership typically thinks about this issue and

<sup>2</sup> AP/Ipsos national random sample, 1,000 adults, May 2007.

<sup>3</sup> *Green Cars Survey for a New American Dream*, Widmeyer Communications, national random sample, 1,000 adults, June 2006.

<sup>4</sup> *Newsweek*, August 2007, Princeton Survey Research Associates International, national random sample, 1,000 adults, August 2007.

<sup>1</sup> Gallup, national random sample, 1,000 adults, March 2006.

the way the public names and frames the problem.

To the nation's leaders, energy is a single, overarching issue encompassing three interconnected national problems: high prices, energy dependence, and climate change caused by global warming along with other environmental threats. But these NIF forums show that people, at least in the early stages of forum deliberations, see three separate issues that are not necessarily connected or interrelated.

As many participants talked about the energy problem in the opening moments of these forums, they defined it in terms of its most prominent symptoms: high gasoline and home-heating prices. Complaining that prices have gone up sharply over the past several years, many said an ever-increasing share of their household income goes toward meeting energy needs. Many worry that energy prices will continue to rise, perhaps sharply.

Others said the crux of the country's energy problem is U.S. dependence on foreign oil and the way this makes us dependent on countries that are politically and economically unstable and often hostile to the United States. A fair number traced the war in Iraq to the U.S. thirst for oil. Others worried whether what Americans spend on imported oil goes to nations that sympathize with terrorists' goals or support terrorist groups.

A smaller but still noteworthy number of participants initially saw energy use as the principal cause of this country's—and the world's—main environmental challenge: climate change caused by global warming. While participants' understanding of the issue was often

fragmentary, some saw it as urgent, adding that unless humankind sharply curbs its use of fossil fuels, the results could be catastrophic.

By naming the problem initially in terms of one or another of these discrete symptoms, many participants did not see the tensions among various goals. For example, many saw energy independence as the top priority without realizing that some measures to reduce dependence might exacerbate global warming (e.g., using more domestically produced coal). Others who named high prices as the problem did not seem to realize that one preferred "solution"—using alternative forms of energy—would increase energy prices for the foreseeable future.

## Themes

**Assessment of the seriousness of the energy problem.** As deliberations continued, participants came increasingly to share a sense of the urgency on this issue, why it needs to be addressed as a priority, and what measures should be taken to deal with it, both in the short- and long-term. They came to understand that it affects the way we live in three ways: it affects our economic well-being, it undermines our national security, and it exacerbates the problem of global warming.

**The impact of the energy problem.** As people deliberated, many participants began to see interconnections among various aspects of the issue, as well as the trade-offs involved in dealing with it. While many initially focused on high energy prices, especially the price of gasoline, or the country's need

for foreign oil and how it drives foreign policy, they increasingly came to see the relationship between the two. Gradually, more participants understood how climate change caused by global warming relates to both prices and oil imports and became more aware of the trade-offs associated with each of several courses of action.

**A wasteful lifestyle.** Many forum participants lamented how wasteful and consumption-oriented the U.S. way of life has become. As they deliberated, participants talked about the fact that the United States uses far more energy per capita than other countries. While many said Americans have no choice but to be dependent on the automobile, others longed for alternative forms of transportation. By the end of these forums, many concluded that our energy use is too often wasteful and excessive and that Americans can and should reduce energy consumption.

**A global problem.** As they deliberated, participants more often discussed the energy issue in global rather than national terms. People increasingly took into account the complexity of the global supply network and the fact that the United States depends on oil from a variety of suppliers, including Canada and Mexico as well as Saudi Arabia and Venezuela. Others suggested that since the global economy is so interdependent, any abrupt action on our part to reduce U.S. consumption of imported oil could negatively affect the world economy or damage relations with strategically important countries like Saudi Arabia. A few added that the growing energy

demand in developing countries like China and India means that only an international approach holds out any hope of dealing with global warming and climate change.

**The future lies with alternatives.**

As these deliberations progressed, participants expressed increasing support for developing and using an array of alternative, renewable energy sources. Indeed, many saw alternatives as the only realistic way for the country to address its energy problem. Support for this view grew because participants saw alternatives as a solution to several aspects of the problem. Environmentally benign alternatives would free the country from the threat of rising energy prices. They would reduce our dependence on foreign suppliers. And they offer a more environmentally friendly way to meet growing energy needs.

In some forums, people zeroed in on particular alternatives. Solar energy and wind power were the most frequently mentioned. Other alternatives tended to vary by region. Midwesterners talked about ethanol. Forum participants in Washington State focused on hydroelectric power. People in Hawaii pointed to that state's untapped geothermal energy.

As the forums proceeded, some participants agreed with the view that the widespread use of alternatives would require a jump-start that only government could provide. Others remained convinced that the key to developing energy alternative lies in the private sector, which they said has been the source of most technological innovations.

**More positive views toward nuclear energy.** After the disasters at Three Mile Island and Chernobyl, there was a lack of public support for nuclear energy. In recent years, however, the public has been reconsidering the nuclear energy option. This rethinking of nuclear power was evident in many forums. As the forums progressed, participants were increasingly open to using nuclear power to generate electricity. Participants noted that certain European countries use nuclear energy on a large scale, adding that nuclear plants do not emit pollutants or climate-changing gases. While it is not an ideal solution to our energy problems, nuclear power is—as many seemed to agree—an increasingly acceptable alternative. At the same time, a sizable minority continued to oppose the widespread use of nuclear power, citing the risks of accidents and the problems associated with safe disposal of radioactive waste.

**Deep interest in conservation.**

Over the course of these deliberations, participants grew increasingly supportive of a concerted national effort to conserve energy. Many, acknowledging that in their own lives they are not mindful when it comes to conservation, said they support broad education efforts to underline the importance of conservation—campaigns they envision as similar to antismoking and recycling initiatives that have proved effective. While they favored the use of incentives for energy conservation, such as providing tax credits for solar panels and more efficient home heating, there was little support for government mandates or the use of price increases as a disincentive to energy use. Pointing out that their lifestyles

require them to drive—and for many, considerable distances every day—some vigorously opposed higher gasoline taxes on the grounds that such measures would impose a substantial burden on average Americans without substantially reducing overall energy use.

**Obstacles to Resolution**

The forums revealed three factors that, in the course of the deliberations, kept participants from moving toward a shared sense of direction about how to deal with the energy issue. In each of these respects, even at the end of the forums, sentiments were still strongly mixed, and there was little apparent common ground.

**Mixed view of domestic fossil**

**fuels.** Many forum participants considered reducing the country's reliance on imported oil a top priority. There was considerable concern about becoming increasingly dependent on oil-supplying nations that are hostile to the United States, and in some cases sympathetic to terrorist organizations. But even at the end of these forums, many participants remained opposed to meeting the nation's energy needs by increasing production of domestic oil, gas, and coal. Some people in a majority of forums were strongly opposed to using more coal. Others, voicing concern about environmental effects, opposed expanded offshore drilling or opening up the Arctic National Wildlife Refuge (ANWR). Some were ready to concede that in the short run the United States might have no choice but to use more domestic sources. But in general, deliberation on this point did not lead to any common ground about what role, if any, increased use of domestic sources

should play in a long-term solution to the nation's energy problems.

**Mistrust of institutions.** With regard to various proposed solutions to the energy problem, there was a repeated pattern in these conversations: many of the participants don't trust energy-producing companies to be concerned about anything other than bottom-line profits. They are equally wary of the federal government and the effect of close ties between elected officials and lobbyists for large corporations in the oil and auto industries. Many participants expressed a deep mistrust of corporations and their willingness to take measures to resolve the energy problem, in particular what some called "big oil" and the auto industry, saying that they have long opposed higher fuel-efficiency standards and have blocked efforts to shift to new, cleaner energy sources. Noting the record oil company profits that have accompanied the recent sharp rise in energy prices, many believe that shortages have been manipulated by energy companies to increase their profits. Others said the energy companies and the auto industry have dragged their feet when it comes to developing alternative energy sources that would undermine their profitability. Some added that both industries have opposed efforts to reduce climate-changing gases and combat global warming.

**Over optimism about new energy technology.** A third obstacle takes a different form: while many forum participants are optimistic about the potential of alternative energy sources, even after lively and sometimes lengthy forum discussions, on this point they

tend to overestimate the near-term potential of alternative energy sources and to underestimate the transition costs of moving to an economy that depends largely on non-fossil-fuel energy sources. As they look down the road, large numbers said that a combination of clean-burning renewable energy sources—including solar, wind, bio-fuels, hydro, geothermal, and hydrogen—will come online over the next 20 years. Moreover, most forum participants anticipate that these new technologies will provide safe, clean, renewable energy without requiring major sacrifices, trade-offs, or lifestyle changes on the part of most Americans. Many anticipate that the transition from fossil fuels to alternative energy sources will be seamless and virtually painless. In fact, some said such technologies are already cost-competitive and available for use on a large scale. While some participants in these conversations pointed out how costly it will be to develop these alternatives and rapidly expand their use, these voices were a distinct minority in most forums.

### Where Do We Go from Here?

As forum participants deliberated, they increasingly came to see the energy problem as both a short- and long-term threat to the nation's economic well-being, to its national security, and to the environment. By the end of the forums, many felt that a number of steps could and should be taken to provide a more secure energy future. In particular, participants favored greater investment in alternative energy sources. With some notable and forceful exceptions, there was also growing support for relying more on nuclear energy.

But first and foremost, people called for a national conservation effort, adding that people are willing to conserve energy, but only if leaders take the initiative and make this a concerted effort. But no such initiative is likely to happen, most forum participants

agreed, unless the nation's elected officials take a forceful and sustained leadership role. As a California man said in one of these forums, "Americans always respond when the country faces a challenge and, if called on, will do so again."

## About the Forums:

# A Framework for Public Deliberation

This report examines what took place in the course of public deliberations about the energy problem—the values, thoughts, insights, and struggles voiced by a diverse collection of more than 1,200 Americans in deliberative forums in 42 states and the District of Columbia from December 2006 to December 2007. Forum participants gathered in educational and faith-based institutions, clubs and community centers, and libraries to deliberate about an issue that is currently of central importance to this nation—the challenges surrounding the energy problem.

## Framework for Deliberation

In each forum, participants used an identical framework and considered three broad approaches to the problems facing the nation with regard to its energy future. Each approach was presented with explanations of its advantages, its trade-offs, and drawbacks. Forum participants considered the courses of action associated with each approach, and the risks, uncertainties, costs, and consequences associated with it.

Using an issue book and a starter video, participants considered these three perspectives:

- Reduce our dependence on foreign energy. Much of the oil we use comes from the Middle East and other politically volatile countries that cannot be relied upon to continue supplying our needs. This poses an

ongoing threat to our security. The United States has many untapped reserves of oil and natural gas. Our best course of action is to make all possible use of these domestic energy sources.

- Get out of the fossil-fuel predicament. The escalating use of fossil fuels is wreaking havoc on our environment. Most scientists agree that global warming has begun in earnest and, unless we slow down the burning of fossil fuels, we face catastrophic climate changes. We must get serious about developing alternative energy sources, such as wind farms and solar power, and rethink the use of another clean energy source, nuclear power.
- Reduce our demand for energy. We are missing the point when we go looking for new sources of energy. We need to find ways to use less energy in the first place or use it more efficiently. The United States is home to less than 5 percent of the world's population but uses more than 20 percent of the world's energy. Cutting back on consumption is the cleanest and most workable way to deal with impending shortages.

At the end of the forums, moderators and recorders asked the groups to consider what they had agreed on and what common ground for action, if any, they had identified.

## An Analysis of Public Thinking

When people meet in National Issues Forums, they deliberate for up to three hours with a trained, impartial moderator. The deliberations center on a framework crafted to present an array of approaches or broad strategies for dealing with the issue. National Issues Forums are designed to help people see that even the most complex issues can be approached, understood, deliberated about, and addressed by, ordinary Americans who have no public policy background.

Although the people who attend National Issues Forums forums comprise a geographically and demographically diverse group of Americans, they are not a random (or national probabili-

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<sup>5</sup> See “Postforum Questionnaire Results and Demographics” and “Methodology” at the end of this report for a description of the 1,148 who completed post-forum questionnaires, among the many who attended one of these forums. For purposes of comparison, we also conducted a series of research forums or focus groups in six cities.

ty) sample.<sup>5</sup> Rather than providing a statistically precise snapshot of public opinion at a particular moment, forum results offer a chance to understand how the public might think if people had an opportunity to work through their thoughts and feelings about specific issues. Forum results highlight people’s thinking—the movement from one idea, consideration, and approach to the next, including why they hold the views they do, and the types of actions they support and sacrifices they are willing to make. This movement involves a progression from a fragmentary initial understanding to a deeper, more holistic sense of the issue and the relationship of one aspect to another. The outcome of forum deliberations often suggests what Dan Yankelovich calls “the boundaries of political permission,” the kinds of actions people might take or support after deliberating about an issue as complex and multifaceted as the energy problem.

# Naming the Energy Problem

Whether you consult opinion polls or recent media coverage, there is little question that energy has become one of the lead items on the list of public worries. Story after story about the rising price of gas and home-heating fuel, the dilemmas that result from this nation's dependence on unstable and sometimes hostile countries for its oil supplies, and the impact of fossil fuels on global warming, as well as stories about innovative alternative energy technologies are all reminders that energy—and the nation's energy future—is now a pressing national issue.

As recent public opinion polls show, meeting the nation's ever-expanding appetite for energy of all kinds is very much on the mind of the American public. Polls show that nearly two-thirds of all Americans say that gas prices are causing them economic hardship.<sup>6</sup> More than half agree that "becoming less dependent on other countries for our supply of energy" would do a great deal to enhance our security.<sup>7</sup> Meanwhile, almost 4 in 10 Americans now regard global warming as the most important environmental

problem, a sharp increase over the past few years.<sup>8</sup>

Those indications of public concern about energy led the National Issues Forums Institute to convene the forums that this report describes. The forums shed a revealing light on what happens when Americans take time to deliberate together about this issue, consider alternative views, and try to identify common ground.

A first step in public deliberation consists of naming the problem, talking together about how people experience it, and what comes to mind when they voice their concerns. In the opening moments of many forums, there was a revealing pattern, which underlined a characteristic difference between the way experts and policymakers typically think about the energy situation and the way most Americans experience it and talk about it. This difference in understanding has significant implications for leaders who are trying to communicate with the American public about the tough choices facing the country on its energy future.

To many people in leadership positions, the energy problem is understood as a single, overarching issue that involves three national challenges: energy

<sup>6</sup> CNN/USA Today/Gallup, *Opinion Research Corporation, November 2007, national random sample, 1,024 adults, November 2007.*

<sup>7</sup> *Public Agenda Poll, fall 2007. ICR, national random sample, 1,024 adults, September 2007.*

<sup>8</sup> *Newsweek, August 2007. Princeton Survey Research Associates International, national random sample, 1,002 adults, August 2007.*

prices, independence from foreign producers, and climate change caused by global warming. But at least in the early stages of public deliberation, last year's National Issues Forums suggest that participants in the forum deliberations started from a different perspective, a uniquely public perspective. They tended to regard the energy problem not as a single issue, but rather as three separate sets of symptoms or concerns.

While most participants agreed that the energy problem is a significant concern, they did not necessarily start with a common sense of the problem. Some defined the problem in terms of the price of gas or fuel oil; others in terms of national security; and still others in terms of environmental degradation. Initially at least, many did not recognize the tensions among the trade-offs

involved in choosing one energy future or another. For example, many initially said that energy independence should be the nation's top priority. But only after talking about it did they start to grapple with the implications of the fact that using more domestically produced coal, for example, would accelerate climate change caused by global warming. Others who named high prices as the problem did not initially realize that one preferred solution—using alternative forms of energy—would almost certainly increase the cost of energy, at least in the short-run. The task for participants in these deliberations was to consider various factors and to reexamine their initial views in light of what others said, in favor of alternative, and sometimes opposed, views.

# The Impact of the Energy Problem

In the initial phase of these forums, participants talked about how they experienced the energy problem in their own lives and their own communities. To many the energy problem was defined initially in terms of high gasoline and home-heating prices. Complaining that prices have spiked recently, many said that an ever-increasing share of their income goes toward meeting their energy needs. A Charlotte, North Carolina, woman said, "When I retired, my husband and I were going to, in all seriousness, plan a trip across the country. Sorry, that's gone. There's no way. With the price of gas, we'll be lucky to get out of the state. It's just getting ridiculous." In a Whitehall, Pennsylvania, forum, some participants foresaw a 30 to 40 percent rise in consumer electricity bills by January 2010. And many saw no letup, saying gasoline and home-heating prices would continue to rise, perhaps sharply into the foreseeable future.

To many participants the crux of the energy problem involves the security of the United States and its dependence on foreign oil producers, many of which are regarded as unstable and unreliable, even hostile to the United States. In the postforum questionnaires, an overwhelming 75 percent of participants agreed that "dependence on oil from the Middle East poses a threat to our national security." A Long Island, New York, participant said, "When you think about how dependent we are on foreign oil, on foreign imports, it's a constraint

on our foreign policy. When you look at our relationship with the Saudis, especially in the war on terror, there's a limit to how far we can push [given our] dependence on oil imports."

Some worried that what Americans spend on oil goes directly to nations that support terrorism or are sympathetic to the terrorists' goals. A moderator from Farmington, Michigan, said the vast majority of participants there defined the country's oil dependence in terms of national security. A woman from Hempstead, New York, said, "The more our energy consumption increases [and] the more we have to import, the more vulnerable our foreign policy is going to be to what goes on with the countries that give us our oil."

A number of participants traced the war in Iraq directly to the country's need for oil. An El Paso, Texas, man summed up this idea when he said, "If we were totally energy independent, we would not be in Iraq for starters."

A smaller but still noteworthy number of participants saw energy use as the cause of the single greatest environmental challenge: climate change caused by global warming. A woman in a Miami, Florida, forum said, "Every year, it gets hotter and hotter and the winters aren't colder... We have more catastrophes. This is due to global warming." The moderator of a Rindge, New Hampshire, forum noted that many participants there saw global warming as the main component of

the energy problem and that many people felt threatened by environmental degradation. While participants' understanding of global warming was sometimes incomplete or even inaccurate, many said humans have no choice but to sharply curb their use of fossil fuels.

## A Wasteful Lifestyle

In many of these forums, there was general agreement that we use too much energy and that the American way of life is wasteful and excessive. A moderator from St. Cloud, Minnesota, reported that participants in that town's forums, mainly older adults, said the American people "need to admit we have a drinking problem—we drink too much oil." A man in a Miami forum echoed this theme: "The big problem is that we're a comfort- and a want-based society, rather than a need-driven society.... We want to drive a V-8.... It's the society we live in as much as anything." A woman there added, "Everybody's talking about cars and vehicles.... That's not the only problem with energy.... What about houses? Why does a family of three have to live in a huge house? I mean that's just a waste of energy!"

An important note, people did not spare their own behavior. For example, a participant in a Kent, Ohio, forum said:

*Maybe we're a little bit spoiled. Maybe the message we're getting is that "Hey, we're entitled to basically live this lifestyle and trot down to the mall or wherever whenever we want, crank up the air conditioning because we deserve it." I'm just as guilty as everybody else, I suppose.*

## Deep Interest in Conservation

Consistent with their concern over wasteful energy habits, as the deliberations continued participants voiced

support for measures they were willing to endorse, especially a national effort to encourage energy conservation. Acknowledging that small acts can make a difference when millions of people change their habits, participants started to envision how they and others could conserve energy, often by taking simple steps in their daily lives.

A man in Wayne, Nebraska, noted that "if everyone in America put a compact fluorescent light bulb in their home, it's like a nuclear power plant we don't need in our country. The real conservation impacts could really get a lot of mileage for us." Others examined lifestyle alterations they had already made. A man in Denver remembered that "when gas was over three dollars a gallon, I realized I can combine trips very easily. [After this forum] I'm going to have to make single trips for things.... The individual can make a difference in their decisions." A woman in Panama City, Florida, unplugs her cell phone charger when she is finished using it to save energy. A moderator from Rindge said students at a forum there discussed walking around campus instead of driving from one place to another. People at a forum in Columbus, Ohio, agreed that instead of waiting for someone else to come up with a big solution, they would identify ways to conserve on energy consumption and educate others in this respect.

At the same time, these deliberations prompted some to say that they need to know more about the energy implications of their daily routines, and the energy demands of their home appliances. At a forum in Panama City one woman remarked, "I care about this, but I don't know anything about it." In Lewes, Delaware, a man mentioned that if people are going to seriously conserve they "need the tools to get in the game."

The government could do far more in terms of conservation, some participants complained. As an El Paso man pointed out, “The average person will generally do the right thing given the opportunity. But ... they need the information, what has to be done.... I don’t think [the government is] providing us with what we need to make solid decisions.”

Many envisioned a two-pronged strategy. Pointing to successful public campaigns to promote recycling and seatbelt use and to reduce smoking and drunk driving, many favored a massive national advertising campaign. Participants in Panama City cited the high saturation level of anti-smoking efforts. A man in Kent recalled the “do-not-litter” effort of the 1970s saying, “There was the Indian on top of the mountain with a tear.... It wasn’t just the government; it was PR firms that got involved, and they used marketing techniques to change people’s habits.”

Many participants also discussed another component of a national conservation strategy, which would focus on the public schools. A Portland, Oregon, man said, “We have to start at an early age with children, K-12, for example. We need to teach [energy] consciousness ... across the curriculum and move to the community colleges and four-year colleges.”

Others added that educating young people about energy conservation would have long-term effects. In addition to encouraging young people to think about energy conservation, such efforts would, over time, change the priorities and values of the next generation of voters. Eventually, a more involved and engaged population would encourage elected officials to take energy consumption into consideration in every phase

of their work in public life. A woman in Phoenix said “You’ve got these kids who are being taught from an early age about the issues. They’re going to grow up to become voters.... The government is going to have to listen to that voting base, which now is far more educated about these issues than we can ever become.”

## How Do We Change Energy-Using Habits?

In many forums, participants talked about obstacles that keep people from changing their energy-using habits, especially with regard to their use of automobiles. Most Americans have no choice but to drive to work and run errands, they said. A woman in Kansas City, Missouri, put it this way:

*People are dependent on [fuel] to get to work. They drive back and forth and they are wasting energy and they see that. But right now they’re trapped and cannot do anything about [it] because they have to get to work.*

Others discussed difficulties involved with mass transit. Not only is it expensive, participants said, in many communities, the population is simply not dense enough to support mass transit. The U.S. population is more spread out than Europe, said a woman in Denver, adding, “With America, you have a different problem than in the rest of the world, because Europe consists of small countries and small spaces.”

In general, forum participants opposed—in some cases strongly—increasing the gas tax as a way to cut down on gas consumption. Since many Americans have no choice but to drive to work, many oppose higher gas taxes on the common sense grounds that they won’t reduce gas consumption in any case. A man in a Seattle forum said, “We can’t not have two cars. We both work. We both have completely different

schedules.... We're too far away from public transportation. We're way too far away to walk. Increasing the gas tax is going to hurt us a lot." In Raleigh, North Carolina, one participant suggested that if gas prices increased markedly, perhaps people would begin to change their driving habits. But another man responded by saying that only a few months previously he had vowed to drive less if gas prices ever reached \$3 a gallon. But when gas rose above \$3 a gallon, neither he nor anyone he knows actually changed their behavior.

Some noted that the burden of higher gas taxes would fall hardest on those who can least afford to pay more. A man in Portland said, "That's a really regressive tax, which punishes the people who are the poorest."

Some participants discussed higher gas taxes in a more positive light. In a Kent forum, one man said, "I like the gas tax possibility in terms of forcing, you know, conservation." In postforum questionnaires, a narrow majority favored higher gasoline taxes as a way of encouraging people to drive less. However, it was a mixed verdict. Moderators of many forums reported that participants generally opposed higher gasoline taxes, saying it would hurt people in middle- and lower-income groups without doing much to reduce overall energy consumption.

### **Incentives, not Taxes**

While there was great interest in energy conservation in these forums, participants sharply distinguished between tax incentives and restrictive taxes on energy consumption, favoring the former and often strongly rejecting the latter as a means to promote the conservation they called for.

Participants in Athens, Georgia, doubted whether Americans would

consume less energy without government incentives. A man in Portland added, "It would be beneficial if we had greater financial incentives to conserve, greater financial incentives to seek new and different, cleaner ways of providing the types of energies we need."

Forum participants made specific suggestions about what kinds of incentives the government should offer. Many focused on transportation. A Wayne man asked, "Could we somehow create incentives to get people to walk and ride more?" Greeley, Colorado, forum participants also wanted to provide tax breaks for people who used alternative forms of transportation. People in a Farmington Hills forum liked the idea of offering tax credits for zero-emission vehicles. Other participants displayed more outside-the-box thinking. A woman in El Paso said, "If you conserve this month and you didn't spend this much gas, hey, here's a two dollar credit. I mean, small changes will eventually encourage individuals, ordinary people, to make an effort." Participants in a Glen Ellyn, Illinois, forum suggested offering free parking to people who drive hybrids.

In many forums, people discussed how new incentives could change energy consumption at home. A man in El Paso pointed out that "we are the perfect city to start an initiative to give government incentives to put solar panels on our houses." Raleigh participants expressed a similar view. Others brought up how successful incentives have been in the past. A Portland man said, "The legislature passed the conservation law ... that said if you buy a high-efficiency furnace, you get a tax credit. Suddenly the sales of high-efficiency furnaces jumped."

Participants often contrasted their support for incentives with their opposition

to mandates or energy taxes to promote conservation. Some felt skeptical that new taxes could solve the problem. A Kent man voiced his concerns by stating, "I think the troubling thing about the tax scheme is that we all probably pay right now more taxes than we'd like to, yet we still have this problem." A Denver man said, "Incentives yes; taxes no. I think if you're really going to get people thinking about it, it's better to do it with a positive as opposed to a negative."

Some participants believed that incentives would not be sufficient to change behavior. A Hempstead man said, "Rather than incentives, you've got to start thinking about disincentives." Some voiced the belief that if our goal is to change deeply held views and behaviors, new taxes are the only realistic means of meeting that goal. A man in Wayne said, "Use tobacco as an example.... Look at how that change occurred. That happened ... through taxation, and other negative means.... You don't get a 50-cent bonus for putting your seatbelt on. You get a ticket." However, most participants felt that incentives would do far more to reduce energy usage, with greater success and less public resistance, than a combination of mandates and tax increases.

## Enthusiasm for Alternatives

If the proposal to reduce energy consumption by raising gas taxes met a mixed reception, there was broad enthusiasm among forum participants for using more renewable energy sources. Indeed, for many participants, alternatives are the way of the future, the only way for the country to solve its energy problem. A man in a Kent forum noted, "There's a lot of optimism and opportunity with this

approach." A Portland man said, "We're going to have wind farms. We're going to have solar. We're going to have hydro, geo-thermal, and thermal power. That's the way we've advanced and been able to keep the power system intact." A woman in a Hempstead forum echoed this line of thinking, saying, "Long term, what we need to do is find new technologies and invest in the ones we have."

Sometimes forum participants zeroed in on a particular alternative energy source. People in Cedar Falls, Iowa, talked extensively about the benefits of wind power. Participants in Delaware, many of whom had followed or actively engaged in recent efforts to increase the use of this alternative in the First State, shared this view, saying opposition to wind stemmed mainly from the local power company. A participant at a Wayne forum mentioned that "Nebraska is sixth in abundant wind resources in the nation."

At a Hingham, Massachusetts, forum, participants expressed strong support for solar energy, noting that advances in nanotechnology would enable solar to take on a much greater share of our energy consumption at economically competitive prices. A Phoenix woman said that because there is such an abundance of sunlight in the Southwest, "Every house should have solar."

Others said optimal alternative energy solutions might vary by location. An El Paso man said: "New Mexico State has just come online with a new building ... and they're going to generate solar power.... But ... where it's raining [a lot], solar [energy] ... wouldn't be very good." Their state's volcanic activity led high school

students in Kailua-Kona, Hawaii, to zero in on using more geothermal, while Seattle participants talked about the advantages of hydropower. In Miami the focus was on solar energy and in Panama City participants discussed Brazil's success using ethanol derived from sugar cane.

Forum participants found many aspects of alternative energy sources appealing. Beyond questions related to ever-increasing energy prices and dependence on unfriendly foreign governments for imported oil, some talked about finite supplies of fossil fuels. A Kansas City woman said "Whenever you're dealing with a finite material, at some point, there's going to [be] an end. [We] may not in our children's lifetime run out of gas or oil, but what about their children or grandchildren?" A woman in Kent noted, "Is the wind ever going to die? Is the sun never going to shine again if we start to tap these reserves?... They are infinite resources." A man in Charlotte shared this view, saying, "I think the key word is *renewable*."

Global warming, which was a concern to a number of participants was another reason some were attracted to alternatives. A Portland man said, "We have to consider sources that do not cause global warming, such as the available solar, available wind, and the available nuclear power."

The vast majority agreed that the country should start using as many forms of alternative energy as possible, as soon as possible. A Hempstead woman said, "This issue is so complex. We shouldn't look for this one thing. [Alternative energy use] should be diversified."

Moving toward the widespread use of alternatives would require a jump-start. In the postforum question-

naires, an overwhelming 93 percent agreed and 76 percent strongly agreed that "we should greatly increase government investment in alternative, renewable sources of energy." A woman in an El Paso forum expressed the views of many, saying, "We need a massive program.... We want a Manhattan Project on energy and we're tired of fooling around."

## A Global Problem

Participants increasingly came to support the view that the issue of energy involves the whole world, not just the United States. While U.S. reliance on hostile foreign suppliers was a concern throughout these forums, as the deliberations proceeded an increasing number of participants agreed that rising world demand means that measures to reduce this country's use of imported oil might have little impact since so many countries' energy needs are linked together. A Wayne participant said, "Energy consumption is a function of affluence of the society. When you have four billion people creating a middle class that certainly increases consumption of the energy." Participants in Hempstead pointed out that as China and India rapidly industrialize, these countries are exponentially increasing their energy consumption. Any solutions to the problem must therefore take into account the impact of these nations. Even if the United States reduces its dependence on OPEC countries, China, India, and other developing countries will buy foreign oil that all too often funds autocratic regimes, prevents democratic reform, and even bankrolls groups that are sympathetic to, or support, terrorist activity.

Finally, a few added that since the United States is so heavily dependent on

Mexico and Canada for imported oil, national energy independence is not the real issue.

Another global aspect that participants increasingly came to talk about involved economic interdependence, with some suggesting any significant moves to reduce this country's use of imported oil could negatively affect the world economy, damage relations, or even destabilize strategically important countries like Saudi Arabia. A man in a Cambridge, Massachusetts, forum said, "Making the U.S. less dependent doesn't necessarily make the U.S. more secure because energy is a global market." Participants in a Vacaville, California, forum were conscious of their global role in the energy problem, calling it a global issue instead of a problem that should be defined in terms of what's best for the United States. Some added that reliance on imported oil keeps the country engaged in international affairs and trade and fosters international communication.

### More Positive Views of Nuclear Energy

For years after the disasters at Chernobyl and Three Mile Island, many Americans opposed expanding the use of nuclear energy in the United States. In 1980, a year after the Three Mile Island incident, an ORC survey found that 65 percent of U.S. citizens were extremely concerned about the disposal of nuclear waste.<sup>9</sup> In 1979, orders for 14 new nuclear plants in the United States were cancelled.<sup>10</sup>

However, as both polls and these forum deliberations suggest, the pub-

lic's perceptions of nuclear energy seem to have changed. The Nuclear Energy Institute, which has tracked public perceptions of nuclear energy over the past two decades, reports that public approval for nuclear energy has rebounded. Opposition to nuclear energy as a major source of the nation's electrical power, which peaked at 50 percent in 1987, had declined to 31 percent by 2007. Meanwhile, the percentage of those who favor nuclear power has increased substantially, from 47 percent in 1987 to 64 percent in 2007.<sup>11</sup>

Forum results suggest that the more Americans deliberate about nuclear generators as a major source of the nation's electric power, the more receptive they become. In the postforum questionnaires, 52 percent of participants agreed that "the benefits of nuclear energy, which produces no harmful emissions, far outweigh the risks," compared to 39 percent who disagreed. As a student from State College, Pennsylvania, said, "I'm more open-minded toward the prospect of nuclear energy, which I had previously dismissed before." Others saw it as less objectionable than other alternatives. A moderator in Norwalk, Connecticut, said people in a forum there believed that while Americans will never love nuclear power, many see it as a way to enable Americans to reduce the country's reliance on fossil fuels.

Some noted that the increased price of oil has made nuclear power more financially viable. As a man in Kent said: "The cost of building a nuke plant and getting it online and the electricity produced from it with the overhead and so on was higher than

<sup>9</sup> Opinion Research Corporation, national random sample, 1,011 adults, December 1980.

<sup>10</sup> From documents produced for the 48th International Atomic Energy Agency General Conference, 21 September 2004. "50 Years of Nuclear Energy," 5. <[http://www.iaea.org/About/Policy/GC/GC48/Documents/gc48inf-4\\_fn3.pdf](http://www.iaea.org/About/Policy/GC/GC48/Documents/gc48inf-4_fn3.pdf).

<sup>11</sup> Nuclear Energy Institute Poll, Bisconti Research and GFK NOP, national random sample, 1,000 adults, April 2007.

what you could produce ... from cheap oil from the Middle East.... But right now with prices where they are and since we want cleaner air, nuke power should come back very strongly for a time." A Farmington Hills woman said that as a result of the forum she became convinced that "efficiently producing nuclear energy can be useful and somewhat safe."

Others noted that nuclear power is safer today than it was 25 years ago. Some cited the recent lack of accidents at nuclear generators. A Hempstead woman said "I'm personally willing to think very seriously about nuclear energy. I think that the word *nuclear* elicits sort of a knee-jerk fear reaction when, in fact, it's had a better track record ... for as long as we've been using it." Others talked about improved safety due to technology. A Portland man said that nearby reactors, which were recently built, "will not melt down even if all safety measures are turned off."

Worries about environmental degradation including global warming led some participants to seriously reconsider nuclear energy. A man in the Kent forum noted, "Where you might have a coal burning power plant, you can erect a nuclear power plant, and there's an even trade-off of how much power is generated."

Forum participants noted that issues involving the safe disposal of energy byproducts involve other forms of power generation too. A Portland man asked, "Would you like to have waste that comes from a nuclear power plant in volume the size of a refrigerator every year or would you rather have 20 train cars of chemical waste coming from a coal-fired power plant every day?" A man in Miami made a similar point, saying, "Everybody thinks of

Chernobyl when they think nuclear power. But there really hasn't been another accident like that. There have been so many spills with oil."

People in a Farmington Hills forum asked why this country has not followed Europe's lead when it comes to nuclear power, adding that we should take advantage of the knowledge and expertise that Europe has developed. In a forum in Lewes participants pointed to what they saw as the advanced reprocessing technology France has developed, asking why this is something the United States cannot emulate.

However, a fair number of participants remained opposed to nuclear plants, and some were strongly opposed. Some saw national security as a deal-breaking risk, saying nuclear plants are an attractive target for terrorists. A man in Hempstead said that if a nuclear power plant "were somehow hit [by terrorists it] would destroy vast areas. Therefore, I don't think it's a very good place to invest our future." A man from Seattle expressed a similar view, saying, "If you drop one nuclear power plant for whatever reason, whether ... by hostile attack or by a failure like Chernobyl, not only do you potentially condemn hundreds of thousands of people to death, but you also diminish the capacity to create any power."

Opponents of nuclear power in many forums noted both the potential for accidents and the difficulty of dealing with nuclear waste. A woman in Charlotte said, "I'm not as much concerned about terrorism as I am about a nuclear accident.... If we do have an accident, it'll cause so much devastation." Others, including participants in Whitehall, Pennsylvania, and Phoenix said the problem of nuclear waste

remains unsolved. One woman asked, "What are we going to do with all this radiation? Are we going to bury it?... You're developing all this waste product. You're going to have a problem down the line." A participant in a Kansas City forum observed that building nuclear plants "when we don't know how to dispose of the waste runs counter to the idea of moving away from fossil fuels to make a better world for our children and grandchildren."

The "not-in-my-backyard" syndrome also surfaced. While personally open to using more nuclear energy, people at a forum in Greeley did not want a plant anywhere near their community. A few participants had seen examples of communities getting together to thwart the development of nuclear power plants in their area. A woman in Hempstead said, "I'm not sure if nuclear energy is feasible just for the fact that you have to get it approved by local communities. Didn't they build one on Long Island and then it just wasn't turned on?... They couldn't get it approved simply because of community" opposition.

## Increasing Concern about Global Warming

Even though global warming was not discussed in every forum, when the subject arose most agreed that climate change caused by global warming is an increasingly urgent issue and that the country's energy use significantly adds to the problem. In the postforum questionnaires, 86 percent agreed that "Americans' excessive use of oil and other fossil fuels is a major cause of global warming," and 52 percent strongly agreed. In Miami and elsewhere, people talked about hotter summers and winters that are not as cool as

they used to be, while in a Seattle forum, a teacher talked about melting ice caps that threatened the extinction of polar bears. A Charlotte man said, "There is definitely something going on. The pattern of weather is different."

In some forums, participants felt that global warming is likely to accelerate due to the growing demand for energy in developing countries, such as China and India. Some added there was little the United States could do about the issue because only an international approach could significantly impact global warming and climate change.

A fair number of participants had an even more dire view. Some talked about catastrophic effects, including heavier rainfalls in certain parts of the country, drought in others, and hurricanes which are increasingly severe. A Miami woman said, "We have more catastrophes. This is due to global warming. One of the reasons that we are seeing more hurricanes than in the past is that the oceans are warmer." A Charlotte man added, "You're having the bad weather ... lakes running over, rivers running over. A lot of that's because of global warming. Every time you get a good rain, you have landslides." An El Paso participant said, "What if it's going to be a crisis of global warming? We could get to a point where it could just cascade on itself and it's going to be too late."

# Key Tensions, Conflicts, and Areas of Confusion

These forums shed a specific light on how a deliberative public deals with the energy issue and which aspects of this issue are particularly difficult to work through. They also shed light on aspects of the energy debate that are a source of confusion, or factors that seem to block further discussion or thinking, such as the lack of trust in government and the major energy companies. In this section, we describe some of the tensions, conflicts, and areas of confusion that became apparent in the course of these forums.

## Using More Fossil Fuel

One aspect of the forums on which there was little apparent common ground, even at the end of the forums, was whether the country should rely more on domestic sources, including coal, oil, and natural gas from the Arctic National Wildlife Refuge (ANWR) and offshore sources. Those in favor usually considered reducing the country's reliance on imported oil as a top priority. For example, a woman in a Phoenix forum said that drilling in ANWR would help make the United States "self-sufficient and independent. We won't depend on the Middle East for oil. We won't be their hostages." A Denver man wanted the United States to drill in Alaska and offshore, adding, "A lot of the tension going on in the world would stop if we said, 'Hey, we've got our own; we don't need yours.'" A woman there

added, "If we have all this oil here ... why the heck are we trying to go overseas and fight with these crazy people?" In the postforum questionnaires, a sizable minority (38 percent) agreed that "growing competition for oil from countries, such as China and India, makes it more important than ever to drill for more oil and natural gas in the U.S."

Others, however, opposed this approach, and some expressed strong opposition. Participants in Cedar Falls and East Lansing, Michigan, rejected domestic drilling as a band-aid solution that would lead to greater U.S. reliance on domestic fossil fuels, a course they saw as unsustainable. Some, including participants in Rindge talked about endangering or even destroying pristine areas and wildlife, which could never be replaced. Others talked about the risk of accidents, including a Miami man: "Look at what happened in Alaska, the Exxon Valdez.... How long did it take them to clean that up? The result of that is going to be felt for a long, long time." A Kent woman expressed a similar view, saying, "Looking to exploit our natural resources at home continues to keep us in the same vortex you're speaking of—our addiction." A moderator from Lewes said participants in his forum strongly opposed the idea and wanted to "throw this puppy out the door."

Participants were also split about whether to use more coal. Some, including a Denver man were in favor.

“We’ve got lots of coal,” he said. “We’d be dumb not to take advantage of that fact.” Others regard coal as safer than nuclear energy and preferable to importing oil from the Middle East. But many were conflicted about, or resisted, the idea, including a Denver man who said:

*With coal, you’re dealing with acid rain and stuff. You look at Rocky Mountain National Park. Those little creatures, the plant life that lives there, are very susceptible to nitrogen. You have large amounts of nitrogen that [are] coming from us ... that are messing up their life cycles and the ecology within their system.*

A Phoenix woman said, “By using coal, you actually produced something worse in our environment. It has to do with global warming.” In the postforum questionnaire, 41 percent

avored making much greater use of U.S. coal, while 53 percent opposed it.

Tensions about this idea surfaced in a Boston forum where participants wanted to take both a short- and long-term approach. For now, they said the country has no choice but to rely on fossil fuels, including more domestically produced oil, natural gas, and coal. But the United States should also develop alternative forms of energy as quickly as possible to reduce, and gradually end, its reliance on fossil fuels. In the postforum questionnaires, participants were nearly split about whether the United States should reduce its dependence on imported oil “if that means drilling for oil in off-shore sites and other environmentally sensitive areas in the U.S.”

## When Issues Are Unresolved

Deliberations in public forums involve a process of “working through,” as Public Agenda’s cofounder Dan Yankelovich puts it. The public’s starting point is often uninformed. Over time, as people hear different perspectives and have a chance to attend to their thoughts and feelings about an issue, they move to a more considered judgment about what actions should be taken. Not infrequently, deliberative forums end with a discernable common ground, agreement about what general direction public action should take, or what the nation’s priorities should be, and what some of the implications are for public action. Knowing what those areas of agreement are can be an important element in unlocking seemingly irreconcilable issues, and identifying areas of public permission.

But there is another outcome of public forums that is also valuable in quite a different way. Sometimes, instead of an individual sense of increasing clarity and resolution about an issue, participants leave forums still wrestling with the options and their costs and consequences. Sometimes forums as a whole end without having reached a discernible common ground on important aspects of an issue. Those areas are especially revealing because they indicate what is unresolved. They shed light on the aspects of public issues about which it is difficult to reach either a considered personal view or a mutually agreed-upon common ground for public action. As Yankelovich points out in his book *Coming to Public Judgment*, it is important to understand the characteristics of the current stage of the public’s thinking as they work through their understanding of issues and to note where additional efforts and next-stage conversations need to focus to move all the way to a resolved public judgment.

## Faith in Alternatives ... but What About Trade-Offs?

Some forum participants understood that real trade-offs—in the form of higher energy prices or large-scale governmental or private investments—will be required to develop and bring online the large-scale use of clean energy technologies over the next two decades. A participant in a Kent forum said, “Geothermal is just brilliant compared to what we do now. But the reason not all of us are rushing out and putting geothermal in our homes is that it costs a fortune.” A Wayne participant expressed a similar view, saying, “Solar is great. Some people say that it is the ultimate end game ... [solar] will save the planet. However, it will take thousands of acres, probably millions of acres of solar panels unless there is a breakthrough in efficiencies.” An El Paso man said, “We’re not going to adopt new [energy] technologies until, one, the market allows us to do it economically and, two, government says ‘now we have to make a change.’”

But most forum participants did not seem to fully weigh the significant barriers that may make it difficult to adopt alternative energy on a broad scale and make it economically viable, at least over the next decade or two. For example, a Miami woman said, “I don’t think we have to do offshore drilling and I don’t think we have to go to Alaska. Why does it have to be oil?... We have scientists that can think of ways to [solve the energy problem] ... there are plenty of alternatives that they can do.” In Farmington Hills where participants wanted the United States to invest in wind power, many added that it, along with other alternative technologies, will solve the energy

problem; however, they did not acknowledge that such investments may involve tax increases or spending cuts. Similarly, a Cedar Falls moderator said participants there resented that more technological solutions are not being employed, saying the United States should be doing far more with solar energy. But here too many did not acknowledge that using more solar may require either incentives for individuals to use it domestically or a significant investment in solar-energy research and development.

Many participants regard the development and rapid adoption of alternatives as a matter that will be quick and relatively easy. Some suggested that alternative energy sources can be adopted and used widely without imposing major costs or serious inconvenience to consumers or taxpayers.

An El Paso participant said:

*We have the technology... We should be able to find a way to extract some of our own energy sources without destroying the nature around it.... We have great scientists. We have great universities in this country. And there is no reason why we can't ... develop a strategy for today using some of that technology and a strategy for tomorrow to protect the environment.*

Others voiced the view that innovative solutions will come from the private sector, but they recognized few public costs involved in making the transition. Instead, they said or implied that business would pay for these innovations and the cost of bringing them to market. A man in a Phoenix forum said, “The only way we’re going to be able to be free of [oil] is if big business comes up with what’s necessary at a price the American public can afford to pay—not be forced to pay.” A man in a Kent forum added, “Independent businesses need to get involved. That’s where the investment needs to

come from. That's where the innovative people are."

Some had little confidence in the business sector, saying that the transition to alternative energy will be quick and painless if it isn't blocked or slowed down by large corporations that profit from a continued reliance on oil and coal. "We have to think about our future. But the money makers of today will not allow [the development of clean energy technologies] to happen," said a Miami woman. In a number of forums, participants pointed their finger at the oil companies and, to a lesser extent, the auto industry, saying these industries have impeded the development of alternative energy. To widespread agreement, a Hempstead participant said, "There are a lot of technical solutions to this problem. For example, if we tripled our gas mileage, which is technically feasible, we wouldn't have to import a drop of oil... Why doesn't the government undertake these things? Does it have something to do with the system of lobbying, the ability of oil companies and automobile companies to control what's going on?"

Some suggested that alternative energy technologies are available today. But the country doesn't make use of them. "Back in the 70s, they had [alternative energy] technology then, and we still aren't using it," said a Charlotte man. Many admitted being foggy about what form, exactly, alternative energy sources take. But most have heard about specific technologies that seem quite promising and ready for widespread use. The question is why they aren't coming to market more rapidly. However, others seemed unaware that energy generated from alternative sources is likely to be more expensive than using oil, even at a time when oil costs \$100 to \$125 a barrel.

There is little doubt that most people in these forums wanted the government to invest more in the research and development of alternative energy sources. In the postforum questionnaires, 93 percent favored this idea, with 76 percent strongly in favor. Yet strong support for increased public investment in alternative energy does not necessarily imply a willingness to pay higher taxes to cover the costs. In a Denver forum in which most participants strongly favored such investments, the moderator followed up by asking whether the group would pay higher taxes to support such investments. Most said they would be unwilling to do so.

In sum, these deliberations on energy indicated that while there is substantial support for moving quickly to renewable energy sources and considerable hopefulness that this is the most promising solution to the energy problem. Even at the end of the forums, many people seemed to minimize the substantial costs and dislocations that are likely to be associated with a changeover from fossil fuels and expressed unwillingness to pay higher taxes to help pay for that transition.

### **Confusion about Global Warming**

As noted earlier in this report, there was widespread concern about climate change caused by global warming. At the same time, many participants remain confused about the issue, and some confessed they know very little about it. Since these forums were about energy and not global warming, participants had only a limited opportunity to deliberate about this aspect of the problem. So it may not be surprising that there was some confusion that was not resolved over the course of the forums.

Some participants admitted to uncertainty about whether human activity contributes to global warming. A Denver man said, “I think science is still out on [the relationship between CO2 emissions and temperature increase] because you’ve got groups of scientists saying there’s not clearly enough information that demonstrates ... a direct relationship.” In a Miami forum, a woman said, “I don’t think global warming is changing the environment that much right now. But if we continue with the fossil fuels, if we continue the way we are, then it will become a problem.” A Kansas City woman said, “I know we are contributing to global warming. But I don’t know if maybe this isn’t cyclical. I just don’t know enough to say.”

Others either doubted or denied that human activity influences global warming. A Phoenix man said, “The temperature has risen so minutely over such a vast period of time that it’s really not [caused by human activity]. It’s just a natural thing that’s happening like it did a million years ago.” A Seattle man asked what humans did to create the Ice Age. “Do we really think, as human beings, we have anything more than even the slightest incremental impact on natural forces? Three or four major volcano eruptions could change the weather pattern for the entire Earth almost immediately,” he said.

Some were simply misinformed about global warming. For example, a Denver woman said, “The sun goes through cycles and it puts out more electromagnetic waves at other times, and when it puts out more electromagnetic waves, you have more miscarriages—you have more famine, you have more chaos. I think we’re currently in a high sun-cycle spot.” Participants in New Jersey and Kansas City mixed up the depletion

of the ozone layer with global warming, referring to these two factors interchangeably.

A handful of participants went so far as to suggest that concern about global warming is, in the words of a California woman “a hoax,” a phenomenon that has been blown out of proportion by the media. A Denver man said, “How much of this do you think is media-driven?... The sad part [is that] nowadays, it’s not Walter Cronkite. Back then ... when they reported the news, you believed what the man said.... Nowadays, the news is almost going toward the tabloid side.”

### Mistrust of Institutions

It is almost axiomatic that when a democratic citizenry does not trust its institutions, leadership will find it hard to rally the citizenry to take public action. As already noted, deliberations in these forums often returned to a familiar refrain that seems to stop people from moving forward in their deliberation: a palpable distrust of government and big business. Many people voiced the view that both automakers and oil companies have exacerbated the problem and repeatedly taken measures to slow down or stop the transition to new, cleaner-burning fuel sources. At a forum in Panama City participants said big business looks out for itself and will “squeeze” average Americans at every opportunity when it comes to supplying the nation’s energy needs and profiting from it.

While most exchanges on this topic were peppered with references to the large oil companies, participants also talked in the same way about utility companies and the auto industry. Some felt that since the energy companies profit from the nation’s use of fossil fuels, they have little incentive to seek or encourage the use of energy from

alternative sources. A Kansas City woman said, "The rich want to get richer. The big oil companies ... can do these things and [keep] getting away with it." Others pointed out the relationship between historically high profits for the major oil producers and increasingly high energy prices, arguing that oil companies are gouging their customers.

Some participants said big business has blocked and continues to block the development of alternative energy sources. In a forum in Columbus a participant singled out the automobile industry for preventing progress on alternatives. In a Lewes forum, participants who favored the development of a local wind farm talked about opposition from a local utility that relies on coal for most of its power. They added that the utility is more concerned with maintaining the status quo—and its high profit margin—than serving the needs of citizens.

While many focused on business, others identified government itself—and particularly the influence of special interests, lobbyists, and campaign contributions—as a major roadblock to clear progress in moving toward a new energy agenda. A Phoenix man said, "There is too much pressure in this country put on Congress by lobbyists backed by big money." Others pointed to the very nature of the system, including an El Paso man who said, "Our political leadership has failed the American people.... And it's because we have a corrupt political system that responds to money.... The energy industry steers energy policy in America." In a somewhat different vein, a man in Hempstead offered, "When someone is elected to Congress, they have to start off the following day planning for the next campaign which costs

such ridiculous amounts." And a few pointed to leaders' previous careers, with a woman in a Panama City forum noting, "Isn't our president an oil man?"

# Where Do We Go From Here?

As forum participants deliberated, they increasingly came to see that the energy problem is a short- and long-term threat to this nation's economic well-being, national security, and environment. By the end of the forums, many felt that a number of steps could be taken to deal with the issue.

## A Call for Leadership

Among other measures, there was strong support for a major effort aimed at persuading Americans to use less energy. People felt that conservation will be successful and the American people will do their part *if* public leaders actively initiate and coordinate such efforts. A man in the Hempstead forum asserted, "We need leadership.... That's the role of government. That is one of the things that government can do." Others echoed this point, including a Phoenix man who said, "The reality is government needs to take the lead. We need to be aware, so that at least we are making an effort." In Athens participants felt that government had to help people understand the need to conserve.

Americans will change their energy-consuming habits, participants said, only when they understand the issue more clearly, only when they're convinced their actions will be an effective part of a national strategy to deal with the issue, and only when a credible, authentic leadership voice asks them to. An El Paso woman summed up

this view, saying, "I love my car. I love taking road trips. I put 6,000 miles on my car last summer just driving for pleasure.... Am I willing to give that up? Yeah, if we band together and we're all willing to give it up." A man in Hempstead wanted "our legislatures [to] enact laws to help conservation energy policies and create efficient and fair energy laws."

The forums also suggest that the energy problem presents a unique challenge for the nation's leadership. As this report has suggested, the public tends to see this issue in a different way than experts or policymakers do. Leaders who propose to raise gas taxes to reduce foreign dependence and address global warming are swimming upstream. From the public's point of view, raising gasoline taxes exacerbates the problem instead of solving it.

## Making Energy a Number One Concern

Many forum participants were optimistic about the country's ability to solve the energy problem, excited about energy alternatives, and strongly supportive of a major national effort to conserve. At the same time, a large number of participants said the country is not likely to solve the energy problem until a national crisis focuses Americans' attention on the problem.

The initial challenge, as many in these forums noted, is to call attention to the energy problem and explain to most Americans why it is a pressing

issue. As things stand, most Americans are unaware of the urgency of the problem. In Panama City participants spoke about how energy should be the number one national concern but added that most Americans are too caught up in their day-to-day lives to focus on the issue. Athens participants said most people are so worried about feeding their families and other immediate needs that they aren't paying attention to long-term concerns. A woman in Hempstead said, "People need to see the energy crisis in the same way we now see terrorism, as big and frightening a specter."

In the words of a Miami man, "This country is [in] more of a 'if it's not broken don't fix it [mind-set].' It seems like we kind of react to problems rather than attack problems." In Norwalk, Connecticut, participants agreed that Americans will continue to consume energy until there is a major breakdown in the system. Noting that Americans' take on the issue is hardly unique to energy, a Wayne man said, "That seems to be the American way ... [we need a] social, military or economic crisis—that's what will ultimately shake the status quo loose and allow change to occur."

Some pointed to the oil shortages of the 1970s as evidence that a crisis will be necessary. At that time, Americans briefly came together to conserve energy. But when prices came down and supplies returned to normal, Americans reverted to their old habits. A man in Portland said that during the energy crisis of the 1970s, "After that crisis, I saw the emphasis on conservation decrease. It's hard to keep the public's attention on that type of thing." An El Paso man expressed frustration about the country's missed opportunity, "I remember the even-odd days in the

1970s when we did talk about conservation. We talked about alternative fuels.... [But] once the crisis was gone, we went back to normalcy."

Many added that the American people resist sacrifice until they feel it is absolute necessary. A Kansas City man said "We don't want to have our vehicle taken away from us. We don't want to be inconvenienced.... Nothing's going to change until we have a real crisis." Comparing energy usage to his health habits, a Kent man said, "I used to smoke. Then I had a heart attack. And I quit smoking, you know. And that happened like that.... Maybe we need something really bad to happen and then we'll [say] ... 'Hey, we can do this ourselves.'"

### Taking a Holistic View of the Problem

Beyond the general consensus about the need for a sharp stimulus to public action on energy, a subtle but important shift had taken place in the way forum participants talked about the energy problem as the forums came to a close. Participants increasingly saw the interrelatedness of the problem, made connections and began to see things more holistically. As a Hempstead man noted, "I think the word we like to use here is *multifaceted* because we need to focus short-term [and] long-term ... [and] get at it from every direction."

In contrast to the tone and substance of the early phases of the discussion, many came to understand that each of the energy options will impose real costs and require some hard-to-accept trade-offs. A Kailua-Kona woman said, "We need to think in a practical manner to solve this problem. There are trade-offs that will be involved."

While some were confounded by the issue's complexity, most were optimistic

about their ability to understand it and also about the likelihood of identifying broad areas of agreement about how to develop new, less polluting forms of energy while also meeting the energy needs of a growing nation. As a Charlotte

man said, "I'm optimistic that change will come for the better. A lot of people care about this topic." A Kent woman agreed with this sentiment, saying, "I'm optimistic. I think we can do it."

# Questions and Answers About the Forums

## 1. Does the public connect to the issue as the conventional wisdom suggests?

Yes and no. Both the nation's leaders and National Issues Forums participants realize the country has an energy problem and that it stems from the way Americans live. Again and again, participants characterized their fellow citizens'—and their own—energy usage as selfish, wasteful, and excessive.

But there are substantial differences between the way leadership and participants see the issue. A great many national leaders approach the energy problem as a three-pronged challenge, encompassing high prices that threaten our short- and long-term economic well-being, energy dependence on unfriendly and unstable suppliers, and global warming due to the use of fossil fuels that generate climate-changing gases. For many in leadership positions, any long-term strategy must address all three challenges simultaneously.

Many ordinary citizens regard the energy problem as one or the other of several discrete issues or symptoms, rather than as different aspects of a large and complex problem. Especially at the outset of these forums, what might be regarded as compartmentalized thinking was commonplace. For example, participants were concerned about high prices, and a great many also said the country must reduce its reliance on OPEC. Even though there was some confusion about global warming, participants

frequently said it too must be addressed. One of the notable effects of deliberating about this issue is that, to a significant extent, people started to think about the problem in more complex ways.

Some experts and elected officials have repeatedly called for an increase in the gasoline tax as a way to reduce energy use, U.S. reliance on foreign suppliers, and climate-changing emissions. This idea, however, was rejected by most forum participants. Why? Dan Yankelovich writes that while a gas tax increase makes sense from a technical or policy perspective, it's "like telling people to jump into the water to keep from getting wet." His point is that, from the public's perspective, the high price of gas is an immediate problem in itself.

## 2. How does the public frame the energy issue?

Participants are increasingly concerned about the various aspects of the energy issue, if not about "the energy issue" as leaders name and frame it. Participants said rising gasoline prices have either changed their driving habits, causing them to car-pool or use mass transit, or led them to buy—or consider buying—more fuel-efficient vehicles. Many also said that U.S. dependence on Middle Eastern and other foreign oil suppliers is driving this country's foreign policy, with some attributing the war in Iraq directly to the need for oil. Global warming

alarmed a number of participants, with some saying urgent action to reduce climate-changing gases is needed. To participants these aspects represent an increasingly important national concern.

### 3. Are there other dimensions of the issue that people in the forums see?

Yes. As they deliberated about the energy problem, people identified a number of aspects of this issue that they may not initially have recognized.

First, many clearly see that energy is an international issue. Beyond U.S. reliance on OPEC and the impact of oil on foreign policy, participants talked about trade and the global economic system, with some saying any serious U.S. effort to become energy independent could have unforeseen consequences. Others focused on the international environmental aspects of the issue. Even though only a handful were familiar enough with the Kyoto Protocol to talk knowledgeably about it, many felt that any serious effort to deal with global warming must be international in nature.

Second, participants saw that energy represents both a long- and short-term challenge to this country's economic well-being and national security. While most focused on the immediate impact of high gasoline prices, they also realized that high prices, dependence on foreign suppliers, and global warming in particular are unlikely to go away.

Third, participants recognize that any solution and especially any short-term solution to ease the energy problem will require massive public involvement and a major public commitment. Important to note as the forums progressed, participants said both they themselves and the American people will face up to the challenge if leadership points the way.

### 4. How do the public's assumptions about this issue compare to assumptions held by the nation's leaders?

Leaders think about the issue in *conceptual* terms; when thinking about the energy problem, leaders focus on policy solutions derived from an overall conceptualization of the issue. Second, leaders tend to think *deductively*, drawing conclusions from a generalization. Third, many leaders view the issue through an *ideological* prism, ardently favoring certain policy proposals while opposing others. Finally, many in leadership positions misunderstand the public's starting point, assuming that the public will support technocratic ideas that make public policy sense. Many leaders seem to believe Americans would go along if only they understood things more thoroughly.

Instead of focusing on the energy issue in conceptual terms, Americans, as represented by people in these forums, see the issue in *personal* terms: the impact of rising prices, the inconvenience of carpooling and downsizing the cars they drive, the personal impact of the war in Iraq. Even their concerns about global warming center on where they live.

Second, instead of deducing their conclusions from generalizations, people's thinking is *inductive*, their ideas about what to do drawn from daily experience.

Third, people approach the issue *nonideologically*, assessing each aspect pragmatically, in terms of its impact on themselves and communities like their own. Additionally, they find it confusing, frustrating, or even paralyzing when leaders are at polar opposites ideologically about how to deal with the issue.

Finally, people find it *hard to relate to*, or understand, some policy proposals that to them seem at odds with their own needs, understanding, and beliefs about how to address the issue. They cannot comprehend why leaders don't work together and why leadership does not understand their own starting points, needs, and perspectives. They don't understand why leaders have failed to launch major initiatives to deal with the energy problem.

## 5. What values were at play in the discussion?

In the deliberations about the energy problem, participants identified three overarching values:

- *Security*, including both national security and the nation's economic well-being
- *The future*, including the well-being of future generations and the health of the environment
- *A sense of democratic politics* that involves the active involvement of people like themselves

## 6. What mattered to people as they deliberated?

As the forums progressed, participants increasingly expressed a need to have their voice legitimized by having increased accountability from, and greater access to, leadership. In short, they want their concerns to be taken into consideration.

While recognizing the need to care and provide for themselves and their families, people increasingly expressed a sense of "we're all in this together." They recognized that things are seriously off track and were greatly reassured to learn that others share their view.

## 7. Was any common ground for action revealed?

Yes. The more participants deliberated, the more they came to share these understandings:

- Energy is a serious national problem. Both the country as a whole and individual Americans should take immediate steps to deal with it.
- Energy impacts how Americans live in three ways: it affects economic well-being, national security, and the environment, especially in terms of global warming.
- Something is fundamentally wrong with the way we live. The country's energy usage is wasteful and excessive, and Americans need to reduce the amount of energy they use.
- The long-term solution to the problem lies with alternative energy technologies and the government should increase—perhaps even dramatically increase—what it invests in research and development.
- Nuclear power can help alleviate the nation's energy problem.
- There is no single solution. Instead, only multiple solutions or a multifaceted approach will deal with the energy problem.
- The problem involves three threats, not just one. Tensions exist when taking action to deal with one aspect of the issue and will likely affect the other two.

## 8. At what stage is public thinking on this issue? Has the public's thinking evolved?

British novelist E.M. Forster wrote the immortal lines: "Only connect."

While the words have many meanings, to social analysts in a policy context they can mean the public's ability to make connections among various aspects of an issue.

Many people came into these forums preoccupied with a specific aspect of the energy issue, be it gasoline prices, dependence, or global warming. But as they deliberated, participants increasingly saw that energy involves all three aspects, and more than that, the nation's economic well-being. Additionally, they increasingly saw that measures to deal with one aspect of the issue may conflict with their preferences about another.

Participants, by the end of these forums, began to see the energy issue more holistically. At the same time, people came away with an increased sense that the issue is urgent, that measures should be taken to deal with it in both the short- and long-term, and that the public can, and will, play a major role in dealing with the issue.

## 9. What needs to happen next in the national dialogue?

Officials are often perplexed by public opinion about the energy issue. On the one hand, concern about gas prices is at an all-time high, and concerns about dependence on foreign oil and global warming would seem to be approaching a tipping point. Yet the public's sense of how to address the issue may have seemed inchoate, lacking in clear direction.

These forums suggest the need for leaders to lead, with a clear awareness of how the public approaches the issue and with a sense of what the public will and will not support. These forums suggest some answers to these

questions. Participants said they themselves—and the American people—will support a massive, national conservation effort *if* they are convinced it will be part of a comprehensive strategy to address the issue. More important, the forums demonstrate a great deal of potential or latent political will that could be marshaled in a national effort to deal with the issue.

The forums suggest that people are waiting to be asked to the dance and that officials might benefit by initiating a new kind of dialogue—a dialogue that helps people connect the dots, a dialogue that helps elected officials hear what people mean at a deeper level—that is, listen not just to the words of the public's song but to the music as well.

## Examples of Deliberation:

# Forum Transcript Excerpts

## Deliberation about Government Investment in Alternatives

From Kent, Ohio, September 9, 2007

*Participant 1:* "I think we're being rather limited when we talk about alternative energy sources. It just doesn't have to be a wind turbine or solar panels. There are so many other options.... I don't think there's been significant investment in this opportunity. ... I think, in terms of innovation, we need more investment and the government should do something about it before it's too late."

*Participant 2:* "You may have struck a nerve with me on that because I don't think the government needs to get that much more involved. I believe the government has been too much involved in a lot of things, and that's causing some of our problems. Independent businesses need to get involved. That's where the investments need to come from. That's where ... innovative people are—in the community and in business, not in the government."

*Participant 3:* "But the government could offer things like tax credits, right?"

*Participant 2:* "That's fine, but don't expect your government official [to do that]—I can't just give it to you and expect you to do it. It's got to be done by independent business."

*Participant 4:* "I think that you bring up a point, as well ... that the Department of Energy has maintained a lot more of their investment dollars in our traditional fossil-fuel extraction rather than ... [investing] in a ... broader portfolio of different alternative energies. So I would say, keep the investment where we are but be a little more further reaching and not into the standard fossil fuel extraction."

*Participant 5:* "But even when you get to the fossil fuel stuff—and I know you don't want the government to step in, but you spoke about ... ethanol.... I bought a Ford Sport Track and it was one of those flex-fuel vehicles. I'm driving home ... and I can't find a gas station that sells [ethanol] around here. Maybe it's [sold] in the Midwest. But if the government would step in, in some fashion, and say, 'let's distribute this a little bit more so it's all over the place,' maybe then I could get it. I have a truck that I can't use. I mean, I just pour regular gas into the thing."

*Participant 2:* "If it's an issue with the gas, you can't get the right gas, then you take it up to the gas company. You don't take it up to the government."

*Participant 6:* "If these products aren't being used widely enough ... I don't think [oil companies] are ready to go out on that limb because it's just not profitable enough. I would wonder how many other people are in your predicament. I'm sure it's very frustrating, but I don't think they are that numerous, at least to the extent that the energy providers are going to spend more money to get ethanol to that site, or to get more ethanol sites so people can fill up."

### **Deliberation about the Nature of the Problem**

From Hempstead, New York, February 19, 2007

*Participant 1:* "If we continue growing at the rather modest pace in our consumption of oil, about three and one-half percent per year that will mean in 20 years we'll double our consumption. In 40 years, we'll quadruple it. In 60 years, 8 times. In the course of a lifetime, 80 years, 16 times as much as we're consuming. Clearly that is not possible."

*Participant 2:* "China and India ... are expanding quickly, and I think the competition for oil has started already and it's started taking effect. In Sudan ... there have already been trades between the Sudanese and Chinese for arms for oil.... We can't think of this as our dependence on oil—we've got to think about how it's going to affect everyone because, in the end, we are one world."

*Participant 3:* "We're in for a big problem unless we do something to cut our reliance on oil entirely, but also on foreign oil because demand is going to keep increasing especially as China and India are coming in [and] third-world countries start modernizing.... And the oil reserves aren't getting any bigger.... If we drill in ANWR, we'll only get two years of oil out of that. That's a short-term solution.... When we get to that critical moment when there's suddenly not enough [oil] for everyone, we need to be able to back off. And we need to start doing things now or we won't be able to back down in 20 or 40 years."

*Participant 4:* "This whole issue of national independence is so short-sighted—the energy issue is a worldwide issue. And if we only think about our ability to get enough energy for our own needs ... if we don't begin to address this as an international, as a global crisis, then we're not seeing the forest for the trees."

*Participant 5:* "Even though it's very important to think long-term ... I'm personally willing to think very seriously about nuclear energy. I think that the word *nuclear* elicits sort of a knee-jerk fear reaction when, in fact, it's had a better track record ... for as long as we've been using it."

*Participant 6:* "It's a matter of priorities. Some people have this international view or global view about the environment, which they see as the number one priority. And then you have people in the government that are not responsible for the entire world. They're the ones we elected into office [and] they're responsible for our security.... So I can understand why they're concerned with the more immediate aspects and short-term effects of getting us off foreign dependence, and I think you still have to focus on that. ... A lot of you here are focusing on international aspects and this whole idea of 'well, in the future' and [the shortage of] potential resources. Well, the problem is ... the technology is still not coming, so you need to find minor, temporary solutions. And they're not perfect.... But if they can help ... in terms of our personal security, I think they need to be looked into just for a temporary basis."

## Deliberation about the Effects of Reducing Energy Consumption

From Kent, Ohio, January 9, 2007

*Participant 1:* "If we reduce our energy consumption, obviously that's good in one way, but will our economy function as vibrantly as it does now? Will we be able to produce as much? Will people in the energy sector lose jobs? I mean, obviously we would gain a lot environmentally in terms of independence, but what kind of America would we be left with?"

*Participant 2:* "Our entire economy, our entire way of life has been built upon cheap energy. So if we make the shift, there's going to be sacrifice, there's going to be more sacrifice than ... most people in this country would ever want to put up with. And that's going to be the problem.... Mass transportation? It doesn't work. Why doesn't it work? Because the [population] density is not there. So if you want to ... create a gas tax, we can put it toward mass transit, but it's not going to be instantaneous. It's going to take lot of time.... It's a huge shift. Our whole entire lifestyle is predicated on cheap energy."

*Participant 3:* "If you take your people that are in the energy market, if you cut back energy consumption, there are going to have to be some people that have to be retrained to obtain some new skills. It's just like anybody who worked in manufacturing. We are not a manufacturing nation, per se, anymore. We are technology based, service based. People had to get retrained. That's just going to be the same way with what would happen if we did cut back on energy consumption."

*Participant 4:* "I think it can be done. Look at when we had the recycling movement that started how many years ago. And before that, who would have thought to save your pop bottles in one bin and your newspapers in another. We just threw it away. It had its snags at first, but it's been fairly successful. But if we take a look at how we can educate people and inform people and mainly get away from all these media messages that urge us to overconsume, I'm optimistic. I think we can do it."

## Appendix A:

# Postforum Questionnaire Results and Demographics

N=787

**Table 1: Do you agree or disagree with the statements below?**

	Total Percent "Agree"	Total Percent "Disagree"	Total Percent "Not Sure"/NA
Americans' excessive use of oil and other fossil fuels is a major cause of global warming.	86%	9%	5%
Dependence on oil from the Middle East poses a threat to our national security.	75%	21%	4%
There is one, and only one, way to solve the U.S. energy problem—conservation.	32%	64%	5%
Growing competition for oil from countries like China and India makes it more important than ever to drill for more oil and natural gas in the United States.	38%	55%	7%
The benefits of nuclear energy, which produces no harmful emissions, far outweigh the risks.	52%	39%	9%
The world is getting dangerously close to running out of oil.	55%	32%	13%

**Table 2: Do you favor or oppose each of these actions?**

	Total Percent "Favor"	Total Percent "Oppose"	Total Percent "Not Sure"/NA
The government should set much stricter gas mileage standards for cars and trucks.	84%	14%	2%
America should make much more use of coal, which we have in great abundance.	41%	53%	7%
We should establish substantial tax credits for zero-emission vehicles.	88%	7%	5%
We should drill for the large deposits of oil and natural gas that exist in many parts of the United States.	39%	55%	6%
We should greatly increase government investment in alternative, renewable sources of energy.	93%	5%	2%
We should significantly raise gasoline taxes to encourage people to drive less.	51%	45%	4%

Percentages may not add up due to rounding.

**Table 3: Do you favor or oppose the statements listed below?**

	Total Percent "Favor"	Total Percent "Oppose"	Total Percent "Not Sure"/NA
We must reduce our dependence on oil from unfriendly or unstable countries, EVEN IF that means drilling for oil in offshore sites and other environmentally sensitive areas in the United States.	41%	49%	10%
We must develop alternative energy sources and mandate their use, EVEN IF that means higher prices for new cars and homes.	81%	13%	6%
We must use less energy, EVEN IF this means a less comfortable way of life, which includes driving less, turning down our thermostats, and using less water.	84%	10%	6%

**Table 4: Thinking about the Issue**

	Yes	No
Are you thinking differently about this issue now that you have participated in the forum?	47%	46%
In your forum, did you talk about aspects of the issue you hadn't considered before?	70%	23%

**Table 5: How many NIF forums have you attended, including this one?**

	Percent
1-3	76%
4-6	7%
7 or more	6%
Not sure	4%
No answer	7%

**Table 6: Are you male or female?**

	Percent
Female	41%
Male	53%
No answer	7%

*Percentages may not add up due to rounding.*

**Table 7: Age**

	Percent
17 or younger	14%
18-30	30%
31-45	16%
46-64	21%
65 or older	13%
No answer	6%

**Table 8: Ethnicity**

	Percent
African American	8%
Asian American	3%
Hispanic	3%
Native American	2%
White/Caucasian	71%
Other	6%
No Answer	8%

**Table 9: Where do you live?**

	Percent
Rural	10%
Small Town	33%
Large City	22%
Suburb	29%
No answer	6%

*Percentages may not add up due to rounding.*



11. Meredith College, Raleigh, North Carolina
12. Michigan State University, East Lansing, Michigan
13. Norwalk Community College, Norwalk, Connecticut
14. The Ohio State University, Columbus, Ohio
15. Portland Community College, Portland, Oregon
16. Schlow Centre Region Library, State College, Pennsylvania
17. University of Georgia, Athens, Georgia
18. University of Northern Iowa, Cedar Falls, Iowa
19. Wayne State University, Farmington Hills, Michigan
20. Whitehall High School, Whitehall, Pennsylvania
21. Whitney Center, St. Cloud, Minnesota

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## Forum Observations

Public Agenda observed three National Issues Forums, listening to initial concerns and learning how deliberation influenced people’s thinking. In addition, we interviewed participants and moderators after each forum. These forums were held at:

1. Albany State University, Albany, Georgia
  2. Gulf Coast Community College, Panama City, Florida
  3. The Jimmy Carter Library and Museum, Atlanta, Georgia
- Forums Videotaped for *A Public Voice*
1. El Paso, Texas
  2. Hempstead, New York
  3. Kent, Ohio
  4. Portland, Oregon
  5. Wayne, Nebraska

## Postforum Questionnaire Results

After a forum, participants were asked to fill out a questionnaire, which frames the issue and identifies key trade-offs for different choices. Public Agenda analyzed a total of 1,148 postforum questionnaires.

## Research Forums

Public Agenda conducted six research forums/focus groups, each with a demographically representative cross-section of up to a dozen people. The sessions paralleled National Issues Forums in that participants viewed the starter video, deliberated together about the three choices for three hours, and filled out the postforum questionnaires. Findings were similar to those in the National Issues Forums. The research forums were held in:

1. Denver, Colorado - March 29, 2007
2. Kansas City, Missouri - May 2, 2007
3. Charlotte, North Carolina - May 3, 2007
4. Phoenix, Arizona - July 11, 2007
5. Miami, Florida - July 19, 2007
6. Seattle, Washington - September 26, 2007

## Appendix C:

# Issue Map

### Approach One Reduce Our Dependence on Foreign Energy

The crux of this nation's energy problem is that we're dependent on energy resources from unstable, unreliable, and often hostile nations and regions. This is a threat to our national security, our way of life, and our independence. The energy crises in the 1970s, the 1990s, and today resulted from hostile actions, of one kind or another, by nations who supply us. Meanwhile, there are tens of billions of barrels of oil here in the United States. It's time for us to reduce our dependence on foreign energy by relying more on domestic resources.



#### What Should Be Done?

- Explore and exploit domestic sources of petroleum, including some wilderness and offshore areas where there are known reserves.
- Explore and exploit domestic sources of other fossil fuels, such as natural gas and coal.
- Use more coal and natural gas in electric power generation.
- Produce more flexible-fuel vehicles that can run on ethanol and natural gas.
- Invest in liquefied coal.
- Build more domestic refining facilities.
- Standardize clean-air restrictions so all parts of the country have one set of standards.

#### Some Likely Trade-Offs

- Natural habitats may be affected, as may be the pristine views some beachfront property owners enjoy.
- If we expand our use of the nation's abundant coal reserves, the results of coal mining will be unsightly and damaging to the landscape.
- To the extent that we retreat from these environmental gains, we set an environmental policy precedent that will be hard to change in later years.

#### In Opposition

- The environmental risks represented by large-scale oil and natural-gas exploration are too extreme.
- Most of our oil does not come from unstable nations. In fact, it comes from our neighbors Canada and Mexico—hardly regimes of oppression or terrorist states.
- Overreliance on fossil fuels is already producing severe and lasting consequences. More domestic sources of oil and natural gas are the last thing we need.

### Approach Two Get Out of the Fossil-Fuel Predicament

According to this view, the real, and increasingly threatening, problem we have to face is that our long-term reliance on fossil fuels will result in severe damage to the environment. Only recently have we begun to understand how widespread and damaging the effects of carbon emissions are—and how serious a threat global warming poses. A new generation of alternative energy sources can lead to a real, long-term solution. But this nation has only taken baby steps in that direction. Until we develop clean energy sources to the point where they provide most of our needs, we'll never solve the problem.



#### What Should Be Done?

- Substantially increase direct government investment in alternative, renewable sources of energy.
- Sign and abide by the Kyoto Protocol.
- Build and use more nuclear power plants.
- Provide government support to encourage sales of alternative energy technology (such as wind power) by agreeing to purchase a certain amount.
- Seek out zero-emission alternatives in our personal lives, such as using an electric mower to cut grass, taking public transportation, or walking instead of driving.

#### Some Likely Trade-Offs

- People will need to buy different products, some of which may be more expensive or less convenient than present choices.
- Certain new technologies, such as hydrogen fuel cells or high-efficiency solar power, will have to be supported by large amounts of government funding until they are thriving on their own and can give true competition to fossil fuels.
- We will need to find a place to dispose of nuclear waste safely.

#### In Opposition

- Renewable technologies, while promising, are not yet fully viable and ready for widespread use. Our energy appetite is so large that a few "alternatives" will not make a dent.
- There is still no adequate answer to what to do about nuclear waste and we should simply stop generating it.
- This approach ignores that there are real-world, simple, and effective steps such as increasing energy efficiency that can be taken right now and that have been proven to work.

## Approach Three Reduce Our Demand for Energy

Until we start cutting back on our use of energy, finding ways to get along with less of it, we'll never solve this problem. Using less energy, either by improving energy efficiency or through other means, is a sensible and prudent response that involves neither wishing the problem away nor destroying the countryside. But as a nation, we remain unwilling to accept restrictions on our freedom to continue our "big energy" lifestyle. Even though it will require major changes in how we live, we've got to curb our appetite and learn to live on less energy.



### What Should Be Done?

- Create (and enhance) tax incentives for conservation and reduced use of fossil fuels.
- Significantly increase gasoline taxes to reduce demand.
- Give government agencies more enforcement powers to ensure certain levels of energy efficiency and conservation.
- Enhance and increase industry initiatives, such as the Energy Star program, and boost the CAFE standards for the auto industry.
- Pour much more money and effort into public awareness campaigns similar to the ones that have been mounted in opposition to smoking or drunk driving. Make energy consumption a moral issue.

### Some Likely Trade-Offs

- We would be obliged to live with new rules and regulations that require people to moderate their energy use— it can't be voluntary.
- Daily life would change as homes are cooled less in the summer, we make fewer trips to the store, and public places reduce their use of energy-intensive amenities.
- Some costs may go up, as new taxes designed to encourage lower consumption go into effect.

### In Opposition

- Americans will not stand for the huge price increases that would be necessary to alter energy consumption.
- Any savings we may be able to eke out by turning down our thermostats will be far overshadowed by population growth.
- It is overly optimistic to think that such gains in energy efficiency as were experienced in the 1970s and 1980s are still possible. The easiest and lowest cost efficiency gains have already been achieved.

## About National Issues Forums



National Issues Forums (NIF) is a nonpartisan, nationwide network of locally sponsored public forums for the consideration of public policy issues. It is rooted in the simple notion that people need to come together to reason and talk—to deliberate about common problems. Indeed, democracy requires an ongoing deliberative public dialogue.

These forums, organized by a variety of organizations, groups, and individuals, bring people together to talk about public issues. They range from small or large group gatherings similar to town hall meetings, to study circles held in public places or in people's homes on an ongoing basis.

Forums focus on an issue like health care, immigration, American democracy, Social Security, or ethnic and racial tensions. The forums provide a way for people of diverse views and experiences to seek a shared understanding of the problem and to search for common ground for action. Forums are led by trained, neutral moderators, and use an issue discussion guide that frames the issue by presenting the overall problem and then three or four broad approaches to the problem. Forum participants work through the issue by considering each approach, examining what appeals to them or concerns them, and also what the costs, consequences, and trade-offs may be that would be incurred in taking actions suggested by each.

## About Public Agenda



Founded in 1975 by social scientist and author Daniel Yankelovich and former U.S.

Secretary of State Cyrus Vance, Public

Agenda works to help the nation's leaders better understand the public's point of view and to help average citizens better understand critical policy issues. Our in-depth research on how citizens think about policy has won

praise for its credibility and fairness from elected officials from both political parties and from experts and decision makers across the political spectrum. Our citizen education materials and award-winning Web site [www.publicagenda.org](http://www.publicagenda.org) offer unbiased information about the challenges the country faces. Twice nominated for the prestigious Webby award for best political site, Public Agenda Online provides comprehensive information on a wide range of policy issues.

## About the Authors

JOHN DOBLE is senior vice president and director of research at Public Agenda. Doble graduated cum laude and with a master's degree from the University of Delaware. His articles about public opinion have appeared in *Judicature*, *Technology Review*, *Public Understanding of Science*, *Public Opinion Quarterly*, and *Foreign Affairs* (coauthored with Daniel Yankelovich), among many other publications. He has presented results to professional audiences at the White House, on Capitol Hill, at the National Press Club, and to numerous national and international associations, including the American Association of Public Opinion Research, the American Association for the Advancement of Science and The Institute of American Studies in Beijing.

JARED BOSK is a research associate at Public Agenda. His research at Public Agenda has included qualitative and quantitative approaches to issues like foreign policy, education, and urban policy. Before coming to Public Agenda, Bosk served as a researcher at Harris Interactive, where he focused on health-care issues and produced a biweekly health-care poll published in the *Wall Street Journal*. His research also appeared in journal articles and national press campaigns. Bosk graduated from Wesleyan University with a degree from the College of Social Studies, an integrated program of political science, economics, history, and social theory. He received honors on his undergraduate thesis, which focused on the rationales American policymakers put forth for drug prohibition.

STELLA LEE is a research associate at Public Agenda where she has done extensive research on education policy in the Midwest. Lee graduated from Columbia University with a degree in philosophy. Her focus was on continental and analytic philosophy, and she wrote senior seminar papers on David Hume's conception of free will and the philosophical ramifications of relativism and vagueness. She has also completed coursework at UC Berkeley, Stanford University, and Diablo Valley College in pursuit of varied interests including gender studies, American studies, and Latin, French, and Chinese language. Prior to joining Public Agenda, Lee worked as a Columbia student liaison for the FDR Group's Campus Tolerance study and was the head of the American Music Department and on-air DJ at WKCR 89.9 FM NY.

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