Colorado State University

CENTER FOR PUBLIC DELIBERATION

The Energy Problem: Choices for an Uncertain Future
Discussion Report from forum held on April 21, 2008 during the Spring 2008 Community Issues Forum

Introduction:

Though Americans make up just 4.5 percent of the world's population, we consume more than 20 percent of the energy produced globally. Our use of transportation related energy has increased 21 percent between 1990 and 2003, while commercial energy use increased 31 percent. Given our large energy profile and the rapid growth in energy usage in recent years, we must begin to make difficult choices in order to continue to support our lifestyles. Alongside this concern is growing anxiety over the impact our consumption has on the environment, and the stability of our foreign sources of energy in the Middle East. The scope of the energy problem is great, and involves political, environmental, and economical interests and concerns.

Addressing our nation's current and impending energy problems is a difficult process, but one whose results will touch each of our lives. Given that our current patterns of energy consumption in the United States are unsustainable in the long term, we must develop a strategy in order to meet the growing demands of consumers as well as the environmental emergency that we face if change does not happen soon. To frame the discussion for our forum on the energy crisis and its impact on the environment, we chose to use the NIF book *The Energy Problem: Choices for an Uncertain Future*. The book details three approaches to fixing the problem for participants to discuss: moving toward alternative fuels as a replacement for oil, tapping into domestic sources of petroleum, or working toward an overall reduction in our energy usage.

Participants:

Our group drew approximately fifteen participants, slightly more than half of whom were students from the capstone class. Our community members varied in background and reasons for attending. A couple of community participants had backgrounds in the engineering and science behind alternative fueled vehicles and green energy production. Several were community members who were concerned at the environmental impact our fossil fuel dependency was having on local resources. The student participants ranged from being unconcerned with environmental and sustainability issues to actively engaged environmentalists. Overall, our group sympathized more with environmental and national security interests than business interests. Future forums on this topic would be well served by greater participation from those associated with large energy footprint companies and representatives from the fossil fuel based energy industry.

The Process:

This report examines what took place during a public deliberation about the energy crisis in America. In this forum, the National Issues Forums (NIF) booklet titled, "The Energy Problem: Choices for an uncertain future" was used to framework the issue. Three broad approaches were used in order address issues concerning our national energy crisis. Using the template from the NIF booklet, participants considered these three aspects: 1) Unreliable Sources- Reducing our dependence on foreign oil, 2) Emissions Warning- Getting out of this fossil-fuel predicament, and 3) Curb our appitite- reducing our demand for energy.

The moderator gave a brief introduction, informing participants that they did not need to pick one approach; rather solutions were grouped into different categories to encourage people to think about this issue from multiple angles. Twenty minutes were dedicated to each of the three sections, in which participants were encouraged to consider trade-offs and differing perspectives of the situation. Throughout the deliberation, two impartial, trained students recorded the conversation's key points, writing them on large paper in clear view for the participants. At the end of the forum, participants were asked to think about some tensions that exist within this issue, such as the economic effects of a new energy policy. Participants were also asked to identify their number one concern regarding the issue of energy sources and what they were personally willing to do to combat the problem. Finally, participants were given three dots and were instructed to place those on the paper on which the key points were recorded. The purpose of the dots was to give the participants a chance to indicate what matters the most to them, after hearing multiple perspectives and opinions about the three approaches. All three dots could be placed on one point, or they could spread them out between three points.

Summary of the Discussion:

The participants seemed to be in unison with the idea that the nation's energy system is not the best, and it is time for change. The vast majority of the participants agreed with the statement: "The world is getting dangerously close to running out of foreign oil", with only one participant disagreeing. This coincides with the overall theme- we must address this issue now. Though, there were many different opinions as to what the first step of action should be.

Common ground was achieved in the idea that the solution involves a collective action, with everyone doing their part to make a change. There was a clear distinction between short-term solutions, such as drilling in the Arctic National Wildlife Refugee (ANWR) or changing building codes; to long-term solutions such as a change in our culture to make sustainable living a popular and lasting fad, to a major change in national policy that funds the infrastructure for renewable energy. Although the participants did not clearly identify which type of solution was better, they did express that this issue would take numerous installations of solutions, not just one or the other.

There were also several tensions involving this idea, such as what we should do to solve the problem and what we are actually able to do. Struggles between the "haves" and the "have nots" demonstrates this tension, in which the group displayed concern for rising prices and changing lifestyles that may isolate and harm certain members of the community more than others. Another tension arose; concerning who should deal with the issue- is it the individual's responsibility, or the government's? Though agreed that it

is everyone's problem, and the solution should therefore involve everyone, tension existed in terms of regulation and innovation. Participants disagreed over whether carbon monoxide should be classified as an air pollutant, thus subjecting it to stricter regulations. Overall, participants were divided on questions involving government regulation and spending. Regulations and government spending could also affect one's freedom to create a new approach in dealing with this problem. While at the same time, without the government's support, we may not be able to achieve a paradigm shift in energy consumption. However, overall, participants agreed that this is a very complex and very real problem; one that affects each and every one of us. A solution must be equally complex, as it will impact individuals differently.

Notes from the Discussion:

Approach 1

Appreciations:
A. If you follow up with the last two goals—this becomes easier; the three approaches are related.
B. Taps into our reserves is good only as a short-term fix.
C. Would mean that we would not lose as much money overseas.
D. Expands the light rail/alternative options for transportation. (4 dots)
E. This demands that we invest in systemic change. We need it now.
F. Creates awareness for our resource consumption. (2 dots)
G. Creates jobs and stimulates the economy; wide-reaching approach. (2 dots)
H. Helps prevent oil spills; decreases environmental impact.
I. Saves tax money; requires changes in foreign policy; we do not need to be defending other countries.
J. Less expensive than infrastructure changes.
K. US has/needs better environmental standards.
L. Using our own resources changes our perspectives on energy use. (1 dot)
M. Long term benefits must be a focus for businesses while switching environmental codes.
N. In relation to (M); requires proper regulation of environmental standards.

Concerns:
A. We cannot eliminate our foreign oil dependence (1 dot)
B. Can be myopic – short-sighted
C. This is not a long-term solution
D. Transportation alternatives can be difficult in some areas
E. However, oil is a finite resource
F. Need a long term solution to the energy problem
G. Oil peak: serious, rapidly approaching problem
H. ANWR is a 'band-aid' solution
I. Caribou affected by oil pipeline. High environmental impact (2 dots)
J. Don't want to wipe out sustenance cultures
K. Coal eradicates the environment

L. Damages incurred with oil processing / resource excavation
M. There is a division on this issue in the political community
N. Lack of change is due to a focus on profit
O. How do you align the profit motive with ethics? (1 dot)
P. Switching to alternatives is costly (1 dot)
Q. Corporations need to look at long term benefits (outweigh costs)
R. Mining companies do not internalize the costs
S. Creates more consumerism. May make dependence worse in short term

Approach 2

Appreciations:
A. Need to address the Federal Budget (National Institutes of Health) for energy research and development, which is currently too low.
B. Do not want oil infrastructures to continue building up. (1 dot)
C. We use so much oil as is, we need a shift.
D. Need to invest in the alternative lifestyle—increase the amount of available bussing and mass transportation systems. (1 dot)
E. Gas taxes in other countries fund infrastructure changes.
F. Requires more education, which will result in increased research and development. (4 dots)
G. Broomfield as an example: get people to take mass transit and increase acceptability.
H. Change design standards in building codes.
I. Solar power is not the only avenue for alternative energy; there are many avenues. (2 dots)
J. Increase awareness and education to help public accept new changes.

Concerns:
A. Alternatives may segregate people. This is a class struggle.
B. There is still lack of (monetary) incentive to switch to alternatives (i.e. decreasing gas prices – when would it go up enough?)
C. We don't have alternative infrastructure
D. Culturally, we are an individualistic society. Want to commute alone
E. Need value shift towards alternative energy
F. We're not changing our habits – not shifting away from solo commuting
G. Expensive to switch to alternatives
H. Amount of time to establish new technologies. Commercialization programs
I. Safety concerns about hydrogen
J. Oil companies buy patents on alternative sources – issues with competition
K. Need alternative subsidies
L. Educating the public on alternative energy sources. Make transition easier

Approach 3

Appreciations:

A. Create increased incentives for conservation and help people to make changes with financial support. (5 dots)
B. Encourage decreased commuting.
C. Increase material sufficiency in buildings and start to demand "green" building codes.
D. People must change their actions in many facets (not just commuting).
E. Localization needs fostering.
F. Create more local networks.
G. Food transportation requires lots of fuel. (4 dots)
H. Power in numbers; must change overall values.

Concerns:
A. People are scared of some of the alternatives and changes
B. Difficult
C. Infrastructure to be consumers is in place (2 dots)
D. Potential civil unrest; especially if no alternative energy sources are sufficient
E. Biofuels are not sustainable
F. People do not like change. Many will protest the change
G. May need to sacrifice freedom of travel
H. Difficult to quantify "sacrifice" and the changes' impact
I. Meat needs to be a lower percentage of our diet
J. Individual thinkers need to shift to group and community focus
K. Can we do this in time? Slow process
L. Isolation in America. Some more vulnerable to changes that are made (i.e. the elderly)
M. Residential location (far from town)

Reflections

Question- What needs to be done to move toward action?
A. Use the light rail. (7 dots)
B. Recycle. (5 dots)
C. Create more incentives for people to be "green". (3 dots)
D. Scare people into caring about the environment. (1 dot)
E. Foster value changes. (1 dot)
F. Make energy consideration "cool".

Question-How much change are you willing to make to decrease your carbon footprint?
A. It is better for us anyway—more healthy. (2 dots)
B. Increase taxes and increase mass transportation. (3 dots)
C. Buy electronic versions of books. (3 dots)
D. Set an example for the world; act nationally.
E. Small changes in lifestyle are important; do not drive around town to run errands daily.
F. Would have driven an electric car if they went into production. (1 dot)
Rethink exorbitant lifestyles. (3 dots)

Question- how can we combine our American values with alternative energy solutions?

A. Japan as example – good transportation even though they are more spread out

Question: *economic considerations?*
A. Dump money into fuel economy – big waste
B. Already an extreme challenge
C. Environment: geological, infrastructure, political constraints to energy access
D. Need to work hard and together to make a positive shift

Biggest Concern (full-round):
A. If we do not have enough work done in this direction in time; anticipate large shocks, economic effects, and failures in infrastructure (i.e. transportation).
B. People are losing touch with nature and kids need opportunities to support the environment.
C. There is not enough awareness and our culture supports the problem (i.e. Nascar culture).
D. Youth generations are too self-oriented to make these changes.
E. Transition in all aspects of life.
F. Youth are not communicating with the politicians because they are not voting or are uneducated in the policies.
G. We are already in a bad position economically now and it will be tougher to foster change as the population increases.
H. People will not come together but rather destroy each other for their basic needs.
I. Gap between "haves" and "have nots"
J. Ideal of U.S. may be gone; may become a third world country – fleeing
K. Time to make transition
L. Apathy. People can make change. There's fear (1 dot)
M. Used to taking everything for granted
N. Health concern: environmental pollution
O. Many concerns in the world to fix. Need to find solutions

Survey Results:

Total

Are you a current CSU student?
Yes: 8 No: 7

The world is getting dangerously close to running out of oil
SA: 7 A: 7 NS: 0 D: 1 SD: 0

We should drill for the large deposits of oil and natural gas that are believe to exist in parts of the United States?
SA: 2 A: 2 NS: 2 D: 4 SD: 5

Carbon dioxide should be classified as an air pollutant, thus subjecting it to strict regulations?
SA: 3 A: 4 NS: 2 D: 3 SD: 3

Emissions testing should be required for all cars, even if the owner is responsible for the cost?
SA: 4 A: 6 NS: 0 D: 5 SD: 1

The government should set much stricter gas mileage standards for motor vehicles?
SA: 7 A: 6 NS: 0 D: 2 SD: 0

Increasing use of oil and other fossil fuels is a major cause of global warming?
SA: 9 A: 2 NS: 1 D: 3 SD: 0

It is the government's responsibility to invest in alternative, renewable sources of energy- as opposed to individuals and businesses?
SA: 5 A: 3 NS: 1 D: 4 SD: 2

Our government should invest in lesser developed countries to help them develop cleaner energy sources?
SA: 1 A: 4 NS: 0 D: 6 SD: 4

The benefits of nuclear energy, which produces no greenhouse gas emissions, far outweigh the risks?
SA: 7 A: 3 NS: 3 D: 1 SD: 1

We must develop alternative energy sources and mandate their use, even if this means higher prices for cars and homes?
SA: 4 A: 4 NS: 2 D: 3 SD: 2

We must consume less energy, even if taking that action initially hurts our economy?
SA: 9 A: 4 NS: 0 D: 1 SD: 1

How satisfied are you with the conversations you had today?
VS: 2 S: 4 SS: 2 N: 0 SD: 0 D: 0 VD: 0

Do you feel you now have a clearer or deeper understanding of the issue than you did before the forum?
C: 2 S: 4 N: 2 NS: 2

Did you hear ideas or see new possibilities for deal with the issue that you had not considered before the forum?
C: 2 S: 3 N: 3 NS: 0