



THE JAMES A. BAKER III
INSTITUTE FOR PUBLIC POLICY
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STRATEGIC ENERGY POLICY UPDATE

*UPDATE BY THE CHAIR AND PROJECT DIRECTOR
OF AN
INDEPENDENT TASK FORCE ON*

STRATEGIC ENERGY POLICY:
CHALLENGES FOR THE 21ST CENTURY

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Introduction

When President George W. Bush took office last January, energy matters were a high-priority issue of public policy. Heating-oil and gasoline prices were reaching historic levels and consumers throughout the industrial world were concerned about what their governments were doing to relieve their burden. Natural gas prices in the United States had risen 400 percent over the previous 18 months, forcing many industrial users of gas to shut operations rather than make uneconomic fuel purchases. Electric power shortages disrupted daily life as well as economic growth in California and other U.S. states, as well as in Brazil, India, and other areas of rapid economic expansion. Members of the Organization of Petroleum Exporting Countries (OPEC) were producing at capacity and a supply interruption of significant international dimensions loomed on the horizon, whether because of internal conflict in an oil-producing country, political manipulation by Iraq or another oil-producing government, or surging energy demand. At the same time, concerns about clean fuels ranked high on public agendas around the world, facing policymakers with hard choices. How could high energy costs be squared with continued economic growth? How could the public's preference for clean air and promoting environmental integrity be squared with continued reliance on fossil fuels?

One of the first acts of the new U.S. administration was to convene an energy policy task force, chaired by Vice President Dick Cheney. The task force was given high political importance and charged with formulating a coherent approach toward energy policy that would aim to provide long-term solutions to the critical shortages looming along the energy supply chain. The vice president's chairmanship gave the administration an opportunity to consolidate and assess the inevitably contradictory interests of different government departments, which themselves reflected contradictory interests among the American public. This review created a process that for the first time allowed international strategic concerns to be balanced against domestic energy interests—hence the participation of both the State and Energy Departments. Similarly, land-management issues could be debated in a group that brought together industry's desire for access to resources, the public's concern with environmental integrity and clean air, and the automotive industry's concerns about its international competitive position—hence the participation of the

Environmental Protection Agency (EPA), and the Departments of Interior, Energy, and Transportation.

Even before the presidential election occurred, the James A. Baker III Institute for Public Policy of Rice University and the Council on Foreign Relations had decided to convene their own task force on strategic energy policy. The aim was to bring together individuals representing various public and private energy constituencies in order to map out for the new administration and for the public at large the main issues at stake. Our task force report was issued before the administration was able to produce its own study.

Our report warned that years of negligence by policymakers had brought the U.S. energy sector to critical condition. “In the past, energy crises have appeared simply to fade away over time. Sometimes, as in the late 1970s and early 1980s, recession solved the problem by radically reducing global energy demand . . . Government attention to energy issues has tended to fade as prices fall . . .” We warned that this past complacency had dangerous consequences. It led us to the energy shortages and volatile energy markets of late-1999 through 2000, and it could do so again. To avoid future crises, we must respond to the strategic challenge of merging a concrete plan for sustainable energy supply with environmental protection and national security.

Over the past three months, the energy crunch has been in a remission of sorts. The energy sector is no longer as critical as it was last year. The shortages of last winter and spring seem to have vanished overnight. Markets have adjusted. The poorest consumers have had to make due with less. Businesses have closed or switched away from clean fuels to save money. Certain U.S. states have eased environmental standards temporarily to increase the available energy supply alternatives and thereby lower energy costs for consumers. Finally, our economy and many economies in the developing world have slowed, easing the rise in demand for energy. OPEC, which was producing at peak capacity last winter, has actually had to rein in production to put a floor under prices. Financial crises loom again in Argentina, Turkey, and Asia. World oil demand has risen only 1 percent this year, instead of the 2–3 percent earlier anticipated. Oil demand by countries outside of the Organisation for Economic Co-operation and Development

(OECD) is up less than 2 percent so far, compared to the growth rates of 4–5 percent per year seen in the 1990s.

Nevertheless, it is incorrect for the public or for policymakers to assume that the oil situation is “solved” or was simply fabricated all along. The summer’s easing in prices has come at a huge cost. That cost is real, and it can repeat itself over and over again until the United States makes a commitment to a long-term strategic comprehensive energy policy.

Although it is hard to predict economic trends at this critical juncture, it is certain that without an energy policy, energy shortages and temporary dislocations can easily reemerge once economic growth resumes its earlier accelerated path, or if international political events, extreme weather, or accident tilts demand back above available supply in certain locations. It would be unwise to assume—barring intervention—that the world has seen its last California-style blackout.

In the short term, the energy situation has improved due to seasonal downturns in demand as well as economic slowdown in the United States. But from a longer-term perspective, the difficult situation in energy markets may get worse before it gets better. Across much of the developing world, energy infrastructure is being severely tested by the expanding material needs of a growing middle class, especially in the high-growth, high-population economies of Asia. The world appears to have entered a new energy era, one that is no longer concerned with working off and managing surplus capacities. The new era, instead, is focused on marshaling capital to develop adequate resources and infrastructure to meet rising demand for energy, in a manner that is consistent with environmental goals. In order to satisfy that demand, reliance on volatile Middle East oil resources could increase dramatically over the next two decades unless policies are put in place to promote oil development in other regions, to shift to alternative sources, or to rein in unbridle or wasteful consumption.

It is in this context that the administration and Congress, together, have a new opportunity to forge a coherent energy policy. But the challenge is even greater than it was last winter, due to growing complacency that the worst is over. If the government fails to respond now, feeling comfortable that lower energy costs are here to stay, and instead gives the public a no-cost

solution, it is in danger of perpetuating a cycle of energy feast and famine. Failure to respond would, in turn, leave the country vulnerable to the unacceptable future costs, as well as to the leverage that foreign adversaries could exert over our economy, if we were unnecessarily exposed to the possibility of recurrent dislocations stemming from a fresh round of volatile energy prices.

The Bush Policy at Mid-Year

The Bush administration deserves mixed grades for its energy policy to date. But it has an opportunity to improve its record substantially when Congress reconvenes this fall.

On the positive side, the White House made tangible progress in its admirable efforts to forge a national energy plan. It produced a program that, at least on paper, outlines a coherent path toward the removal of obstacles to energy infrastructure-development and supply-growth. That program also emerged from a new interagency process that was long overdue. It brought together under a senior White House official (the vice president) all of the vested interests in government that need to be taken into account in forging an energy policy and in dealing with the difficult, substantive issues involved. In many of these substantive areas, especially in the international arena, the administration is adopting new initiatives or enhancing past efforts to improve multilateral relations and the international architecture for energy-security cooperation with key allies and other major consuming countries. Congress is also debating important energy legislation that has vital elements for a sensible U.S. energy policy. It is important for the government not to abandon this effort because of the recent easing in gasoline and natural-gas prices and home fuel costs. An energy policy is important precisely to guarantee that the easing of prices can be sustained when economic growth recovers and that environmental goals can be met together with rising world energy requirements.

On the negative side, the administration took some wrong turns at the start. Four decisions, in particular, leave a legacy of suspicion and create obstacles that need to be overcome for a coherent policy to be put together.

1. The decision to abandon the Kyoto clean air protocols left the administration politically vulnerable, both at home and abroad. As our own task force report argued, environmental policy and energy policy need to be integrated with one another, and any trade-off between the two needs to be articulated and explained to the public. But the abandonment of Kyoto—whatever its merits on substantive grounds—made it difficult to forge the consensus on environmental issues required domestically and among key allies on environmental issues and made it appear that the government was the spokesman for the fossil fuel industry.
2. The administration was blind-sided by special interest groups working for economic sanctions. Thus, despite the prominence of its election campaign position opposing unilateral sanctions that involve oil trade and investments, the administration has been forced to accept a renewal of the Iran-Libya Sanctions Act, without ever engaging in a debate over the relative merits of sanctions policy versus energy policy.
3. The administration has allowed itself to be too firmly identified with supply-side solutions to the nation's energy problems, creating the view that it neither cares about nor is open to discussion of demand management. Its eagerness to foster oil drilling in the Arctic National Wildlife Refuge (ANWR), as opposed to in other land areas at home or abroad, is seen in this context. To repair the image that the administration cares about the oil industry but not other goals, the White House is correctly trying to communicate an increasingly balanced message. But the administration also needs to embrace concrete demand-management concepts, despite some inevitable political heat from special interests, in order to gain public confidence in its leadership and to forge an atmosphere for bipartisan compromise. In particular, the administration needs to take a stronger stance endorsing improved, mandatory mileage-efficiency standards for automobiles.
4. The administration has adopted a policy approach and process that leave the impression that Americans can “have their cake and eat it too.” Neither in the president's May 17, 2001 speech on national energy policy nor in the administration's approach to legislation is there sufficient acknowledgment of the difficult trade-offs that are now necessary.

There is no acknowledgment of costs to the public that will need to be borne if our energy infrastructure is to be rebuilt, and if the nation is to reduce its vulnerabilities to supply disruptions and undertake efforts to enhance the integrity of the land and air in which we live. Nor has there been much in the way of a forceful and overt acknowledgement that federal guidelines must prevail over state and local authorities when it comes to key aspects of energy policy. As a former governor, the president has been reluctant to engage in any open debate of federal authority versus states' rights when it comes to energy policy.

Nonetheless, it is our view that there are numerous areas in which policy developments appear to be on course. Certain recent decisions by the government have moved energy policy forward in significant ways, including:

1. Recognition that new approaches are needed to solve some of the country's infrastructure problems. As demand rebounds, deficits in power generation and distribution, oil-refining capacity, and natural gas development and distribution infrastructure could make themselves felt once again. The administration has used its federal authority to encourage regional solutions to these problems, through the development of policies by the Federal Energy Regulatory Commission and through other initiatives.
2. Acknowledgement that many of the problems affecting the gasoline market in the United States stem from overlapping and conflicting jurisdictional authorities of the federal, state, and local government. Thus the oil industry has had to create boutique fuels for local markets, reducing the overall availability of gasoline supplies in summer, which has caused supply problems and price spikes. The EPA is moving rapidly to preempt local authorities and to streamline the number of boutique fuels required in U.S. markets during the summer. This should substantially alleviate fuel shortages in future summer driving seasons without sacrificing clean air objectives.
3. Taking a positive position on the expansion and improvement of the international architecture for multilateral cooperation on joint stockpiling of oil in case of supply

disruptions and on developing technologies to enhance efficiency and reduce reliance on fossil fuels. In particular, initiatives undertaken with the International Energy Agency (IEA) are moving to foster cooperation with China and other large emerging markets in the structure of energy cooperation already under way among the IEA member states.

4. Taking tangible steps to promote hemispheric energy trade and investment, including the especially noteworthy initiatives with Mexico and Canada. Hemispheric natural-gas trade is being promoted through the Summit of the Americas Hemisphere Energy Initiative, which focuses on developing stable and consistent regulatory frameworks that foster reliable fuel sources throughout the region. These initiatives can help to overcome fundamental infrastructure bottlenecks that impede citizens' access to reasonable energy supplies at reasonable costs.
5. The use of federal authorities, including "new source review," to signal to investors that it will expedite reviews of investments to enhance U.S. refining capacity, enabling the industry to meet increased demand for cleaner petroleum products.
6. Signaling that the White House will use its powers to expedite industry investment in pipeline infrastructure to bring the huge natural gas resources in Alaska and northern Canada to markets in the United States.
7. Making progress in fostering the reopening of key oil-producing countries such as Saudi Arabia to foreign investment in their hydrocarbons sector. The administration has done so despite the difficulties created by the deterioration of the Middle East peace process and the exacerbation of tensions between Israel and the Palestinian Authority.
8. Putting together more-realistic strategies in the Caspian Basin, which appear to be easing both decision-making on resource projects in the region and the speed with which new resources will be brought to market.

In addition, we see five major areas under current discussion where existing administration proposals should be refined to create a more effective and politically courageous national program. These include:

1. Developing a stronger lead for U.S. diplomacy in the international environmental arena, offering as a trade-off to enhanced exploration and production of hydrocarbons in the short term, a serious longer-term commitment to the development, deployment, and promotion of cleaner energy sources. These should include nuclear energy and also new alternative energy technologies and energy-efficiency technologies.
2. Implementing, together with Congress, a more-effective and broader use of demand-management strategies and technologies.
3. Implementing, also with Congress, a more-effective program to open a broader area of federal lands for exploration and production of hydrocarbons, especially in the lower forty-eight states.
4. Integrating into energy policy substantial efforts to foster the development, deployment, and promotion of cleaner energy sources, including renewable energy, but also covering new alternative energy technologies, nuclear energy, and clean coal technologies.
5. Reviewing the adequacy of current levels of strategic stockpiles, mechanisms for financing their expansion, definitions of an emergency that would justify the use of strategic reserves, and arrangements for coordinating stock draws on an equitable international basis.

Recommendations

Leadership on Environmental Issues

Among the key findings of our energy task force is the conclusion that environmental issues affecting energy policy require new approaches at home and abroad. Much of the negative

reaction to the Bush energy plan both in the United States and internationally has focused on perceptions (fair or otherwise) that the administration lacks a commitment to environmental issues. In the early days of his presidency, Bush repudiated the 1997 Kyoto accord, calling it “fatally flawed.” Bush noted that the accord, which was unanimously voted down in the U.S. Senate, placed too much burden on industrial countries and would be too costly to the American economy. Still, the decision upset U.S. allies in Europe and Japan, and key groups at home, including in Congress, and it created new challenges for U.S. foreign policy.

No one disputes the record of the United States in reducing greenhouse gas emissions by promoting energy efficiency and the broader use of renewable energy. The government and non-governmental organizations are also sequestering carbon at home and abroad. Vice President Cheney’s task force calls on the EPA and the White House to work with Congress to establish a market-based program to significantly reduce and cap emissions of sulfur dioxide, nitrogen oxides, and mercury from electric power generators by phasing in reduction targets. Although such targets are important, we believe that it is also important to clearly define externalities and environmental objectives. Cleaner fuels should face a lower fiscal burden than those that create higher environmental damage.

Some 178 countries came together in Bonn, Germany earlier this summer to sign an accord to limit emissions without regard to any U.S. position. Washington must now take more of a lead on environmental solutions in the international arena. This lead should include major public addresses on the subject as well as U.S.-led initiatives, especially in the technology area.

Energy-efficient technologies and alternative energy sources have helped the U.S. lower the growth in its own emissions. This success can serve as a starting point for external initiatives. The country should now investigate new ways to enhance the international energy and environmental architecture to focus on the promotion of efficiency and clean energy technologies, including clean coal, expanded natural-gas use, renewable energy and alternative fuel, and improved emission standards in automotive design. Such programs can serve as a more-concrete manner to reduce greenhouse gases and global environmental protection than do vague, unenforceable international accords.

Wisely, the Bush administration is already supporting an expansion in the IEA's program on energy-efficiency education and technology transfer. This success should receive more public attention to demonstrate the administration's concrete commitment to international environmental issues. Other multilateral forums can also be tapped to promote the use of cleaner, emerging energy technologies in the United States and internationally. In particular, the administration and Congress should reconsider the level of federal support for research and development of clean coal technologies, carbon sequestration technologies, and fuel cell and other transportation technologies with an eye to fostering international cooperation on their development and deployment.

Demand Management

The United States has trailed other industrialized societies when it comes to oil-demand management. Most other industrialized countries have used fiscal policy to curb the growth in oil demand by heavily taxing petroleum products. As a result, gasoline consumption in Europe has been falling for years. Although those efforts can be criticized on numerous grounds—and they have been by oil-producing countries—tangible evidence shows their effectiveness in promoting energy efficiency and conservation. Demand-management strategies can increase the “elasticity” of demand in the face of sudden, unexpected changes in energy prices, thereby minimizing the macroeconomic impact of supply disruptions on the national economy and on the spending of individual citizens.

Our task force recognized the difficulties in the United States of enacting legislation that would radically increase the price of gasoline through the imposition of excise taxes similar to the taxes in place in most other OECD countries. However, the task force pointed out that other demand-management strategies should be seriously considered. The most significant of these strategies would be the adoption of Corporate Average Fuel Economy (CAFE) standards, which are currently imposed more leniently on sports utility vehicles (SUVs) than on cars, partially exempting SUVs because they are defined as trucks. We pointed out that imposing a 27-mile per gallon standard on light trucks would result in a savings of more than 900,000 barrels a day of

gasoline use in the United States—more than 10 percent of current consumption—within 7 to 10 years. Tightening of overall automobile standards would contribute even more savings. That is a greater and more certain supply response in a briefer period of time than can reasonably come from opening the ANWR to exploration and exploitation. Over the past decade, U.S. sales of new vehicles have reflected an increasing popularity of SUVs. They represented less than 25 percent of total vehicular sales in 1980 and nearly 50 percent of such sales in 2000.

Unfortunately, when the House of Representatives passed its energy bill before its August recess, it rejected these proposals. The administration had postponed any proposal on reforming CAFE requirements until the publication of a report by the U.S. National Academy of Sciences (NAS) to review such standards. The NAS issued its report just before the House rejected adoption of new CAFE standards. With the energy bill in the Senate still pending, the administration should push hard for adoption of substantially stricter CAFE standards. It should do so for three reasons. First, the inclusion of these standards makes sense in terms of energy saving: the NAS report says that gasoline consumption could have been 14 percent **lower** (2.8-million b/d) had those standards been applied from the outset. Second, as the NAS reported, in terms of environmental policy, carbon emissions could have been 7 percent lower than at present. And thirdly, it is our political judgment that by taking a strong position on demand management, the administration could enhance and ensure passage of its key position to open more federal lands—including the ANWR—to resource exploitation. Acceding to the increasingly popular position that more-assertive demand-management is good for the country, the administration could gain support for its land-use proposals.

Land Management

The administration has taken an aggressive approach to land management. It has promoted the enhanced use of lands for resource exploitation at the expensive of environmental priorities, bucking the trend of the past 20 years, where each successive administration has fostered a land-use policy that has placed resource exploitation in the background and placed an emphasis on environmental priorities. Our task force felt that the United States requires a better-balanced and more-integrated approach to maintenance and enhancement of the environment and energy-

supply objectives. Twenty years ago, nearly 75 percent of federal lands were available for private lease to oil and gas exploration companies. Since then, the share has fallen to 17 percent, and complicated permitting procedures, especially in the Rocky Mountains region, have for all practical purposes limited even that small remaining share.

Public debate has focused on the Administration's priority of opening some 2,000 acres of the Alaska wildlife refuge to resource exploitation. We believe that this focus is diverting attention from other highly prospective areas that could potentially be opened for fruitful exploration and drilling activities.

There is a danger that when the energy debate reopens in the Senate this autumn, land-management issues will be ignored in favor of the argument that in the case of supply, markets work. Proponents of this position will argue that high prices in 1999 and 2000 have already resulted in a surge of efficient drilling activity, increasing natural-gas well completions by about 50 percent in 2000 and another 30 percent or more in 2001. But actual increases in production have clearly resulted more from increased land use than from higher prices. Most of the increase in production of natural gas has come from deep-water acreage only recently made available to industry leasing, not from higher drilling in the lower forty-eight states.

The administration would do well to shift the emphasis on its policy from the ANWR—where it has a victory in the House energy bill—to land management in general, as it approaches the Senate debate and an eventual compromise bill. And debate of the Alaskan issue should be expanded to include development of plentiful gas resources in the North Slope and elsewhere. Known gas reserves in Alaska total 35 trillion cubic feet (tcf), with an additional 100 tcf possible from new exploration of areas already open to drilling. The government should work closely with Canada, the state of Alaska, and private entities to expedite the construction of a natural-gas pipeline from Alaska to the lower forty-eight states.

Other Energy Supplies

The administration has correctly shifted debate away from discussion of the need for U.S. energy independence. Such independence is not attainable at a reasonable cost. Policy must therefore focus on increasing the number of energy suppliers, the kinds of energy consumed, and the efficiency with which energy is used.

Congress is proposing \$2.8 billion in tax credits for fuel production from non-traditional sources, \$2.1 billion in credits for people who buy energy-efficient cars utilizing non-traditional technologies, and \$1.7 billion in oil royalties from new leasing in Alaska for research in renewable energy. These proposals are good but do not go far enough. Support for research in renewable energy should be broadened and separated from developments in Alaskan exploration. A strong commitment to renewable energy is vital to building national consensus on energy policy. The administration should also move beyond limited tax-credit programs and use federal procurement authority to enhance use of alternative fuels and develop programs to introduce new efficiency technologies into federal buildings and nascent transportation technologies into government vehicle fleets.

Congress has proposed encouraging natural-gas exploration and production through a series of technology-targeted tax incentives. These should be expanded to include counter-cyclical support for exploration and production.

The administration has also proposed beefing up research on clean coal technologies. Given the nation's abundance of coal resources and the widespread use of coal in industry and power-generation in the developing world, it is critical to foster the development and export of clean coal technologies such as gasification. The government also needs to find ways to foster entirely new technologies, such as those for carbon sequestration, which could increase the international attractiveness of coal as a fuel the use of which would not generate large greenhouse gas emissions.

Finally, the administration has correctly acknowledged that nuclear energy remains an important fuel source in the U.S. electricity industry, representing 20 percent of electricity generated in the country. The White House is supporting the expeditious re-licensing of plants whose licenses will soon expire in order to extend plant life where possible. But nuclear energy cannot have a viable future without a solution to the thorny problem of nuclear waste. The administration needs to work constructively with stakeholders to resolve the disposal of nuclear power-plant spent fuel. In addition, the administration needs to collaborate with western European allies and Japan to shape a future nuclear fuel cycle that would garner shared support and satisfy nonproliferation concerns while minimizing waste and enhancing safety.

Emergency Stock Management

There is no doubt that the most important mechanisms for dealing with supply shortfalls are the inventories of crude oil and petroleum products held by the government and by commercial enterprises. That is why it is so surprising that neither the White House nor Congress has initiated a review of the size and operation of the U.S. Strategic Petroleum Reserve (SPR). The SPR represents the best means of replacing lost barrels of crude oil. Yet its ideal size relative to the size of imports has not been officially reviewed in two decades. In fact, the SPR has declined both as a share of imports and in absolute size since the 1990s. At its peak, the SPR covered more than eighty days of imports. Today it covers less than fifty days.

The administration should initiate a review of the size of the SPR. Creative measures should be put in place to fill the reserve during times of temporary market weakness. One option would be to make such purchases through a bilateral arrangement with a key oil supplier, again at a time when markets soften. The purchases could be designed to help an oil-producing ally maintain oil sales during a time of market weakness. Another would entail buying oil that an OPEC country might otherwise have held back from the market as part of its market-maintenance, production quota agreement. Such arrangements would have the benefit of demonstrating U.S. support for positive importer-exporter relations, perhaps improving relations between the United States and important foreign oil suppliers.

Conclusions

We face a clear analytical dilemma about how to evaluate the current energy situation. Do the downturn in prices for energy commodities and the lowered prospects of immediate, major disruptions of energy supply reflect a pause in the midst of a pending crisis? Or does the downturn represent the view that markets work? The former view would imply that the government has a renewed responsibility to increase its efforts to enact a comprehensive energy policy; the latter view would imply that since markets work, the government could complacently ignore energy now and turn its attention to other, perhaps higher priorities.

Markets have certainly played some role in the radical reduction in natural-gas prices and the ebbing of other energy costs. But the main factor in the re-balancing of markets over the past few months has been demand rather than supply. The decline in economic activity in the United States and major emerging markets has been stunning in its impact on energy markets. At the start of 2001, the IEA had projected an increase in oil demand for 2001 of more than 2 million barrels a day. Its latest estimates are barely above 25 percent of that level. A resurgence of demand, accompanying a resurgence of economic growth, will almost certainly create once again the same problems as we confronted last winter. Now is the time for government to act.

We believe the government has a major role to play in the energy sector. It has an essential function in energy supply—both through land management policy and fiscal policy. It has a special province in balancing environmental goals and consumer access to reasonably priced energy. It has a unique role in dealing with emergency situations and in thinking through scenarios that impact the size of strategic reserves and the conditions surrounding their use.

Pending legislation affords the administration an opportunity to correct some of the mistakes it made on energy policy during its first 180 days. The current economic downturn provides a rare occasion to mobilize support for an even-handed and balanced policy. The proposals put forward by the task force of the Baker Institute and the Council on Foreign Relations remain as instructive now as they were four months ago in forging a comprehensive policy.

Energy Policy Scorecard: Benefits and Tradeoffs

<i>Policy</i>	<i>Benefits</i>	<i>Time Line</i>	<i>Political Tradeoffs</i>	<i>Status</i>
PROPOSALS				
DEMAND MANAGEMENT: CAFE Standards and New Automobile Technology				
Raising the entire car fleet mileage standards by several miles per gallon by law	A 250,000-300,000 b/d decrease in oil consumption for every one mile per gallon change	7-10 years	Cost to U.S. automobile industry could threaten jobs; lighter cars are considered less safe	Not currently proposed
Raising SUV, light truck mileage standards of 20.7 mpg to car levels of 27.5 mpg	A 950,000 b/d decrease in oil consumption	7-10 years	Cost to U.S. automobile industry could threaten jobs, lighter SUVs considered unsafe	Amendment to House Energy Bill defeated on August 2
Raising SUV, light truck mileage standards to less than 27.5 mpg	A savings of 5 billion gallons of oil from 2004-2010	7-10 years	Only adds 2 miles per gallon for SUVs by 2005; Environmentalists complain too little, too late	Amendment to House Energy Bill that was adopted on August 2
\$2.1 billion in tax credits for consumers who buy alternative technology energy efficient cars	Will help accelerate introduction of hybrids, electric and fuel cell cars into the market; such cars are currently expected to lower U.S. gasoline demand by 300,000 b/d by 2010, even without government intervention	10-20 years	Environmentalists complain too limited a program; competition on the Hill with other tax credit programs	Included in House Energy Bill that was adopted on August 2
Enhance federal procurement authority to promote nascent transportation technologies and new efficiency technologies in federal buildings	Federal government purchases can encourage development of alternative energy infrastructure; lower gasoline use by federal vehicles; (during the 1990s energy use in federal buildings fell 30%, saving 0.5 trillion BTUs of energy use)	1-10 years	Puts government in the position to pick winners in technology trends	Some ongoing programs exist; Cheney Task Force proposes review and continuation
LAND MANAGEMENT				
Alaska National Wildlife Refuge Opening	Reduces U.S. reliance on oil imports; could increase domestic output by 600,000 b/d; only 2,000 of 1.5 million acres will be open to exploration	7-10 years	Drilling could harm Alaskan and Canadian wildlife and environment; recovered volumes could be more marginal than projected	Amendment to House Energy Bill that was adopted on August 2
Alaska Natural Gas Pipeline	Alaska's North Slope (ANS) gas could feed lower 48 states with 3 billion cubic feet daily, with another 3 billion cubic feet daily going to LNG plant in southern Alaska; helps Alaskan economy; provides for clean disposal of gas surplus to avoid flaring	7-10 years	Problems with Canada on routing; environmentalists oppose new pipeline and infrastructure construction	Amendment to House Energy Bill that was adopted on August 2

<i>Policy</i>	<i>Benefits</i>	<i>Time Line</i>	<i>Political Tradeoffs</i>	<i>Status</i>
Opening more federal lands in lower 48 states to exploration	Increases domestic oil and gas production, particularly in gas-rich Rocky Mountains region	1-3 years	Environmentalists oppose, believing such drilling will harm wildlife and eco systems of area. NIMBY problem for local residents.	Bush administration supports and Interior is investigating but opposition on Capitol Hill and from local states
Drilling in Eastern Gulf of Mexico	"Lease Sale 181" acreage could produce 1.9 billion barrels of oil and 7.8 trillion cubic feet of gas; increases domestic output while reducing foreign imports	3-5 years	Gulf States, in particular Florida, object to environmental hazards to coastlines from close offshore drilling	Faced with pressure from Florida government and environmentalists, Bush administration scales back "Lease Sale 181" on July 3 to offer up only 1.5 million acres; giant gas field, estimated at 2-3 trillion cubic feet, excluded from lease sale

DIVERSIFIED ENERGY SUPPLY AND RENEWABLES

Funding for DOE programs including solar, wind, biomass, and other renewable energies	Diversifies U.S. energy production slate away from oil and gas and imports; reduces air pollution, global warming concerns related to fossil-fuel burning	10-15 years	Economic risks; budget constraints could raise criticism of wasteful spending if technologies don't pan out; past failures to pick winners	After promoting a 30% reduction in DOE renewable energy program spending for FY2002 in Cheney's energy plan, Bush reversed policy in late June to add another \$100 million for renewable energy programs in House spending bill which brought it to \$376.8 million, same total as previous year
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STRATEGIC STOCKS

Review adequacy of strategic stockpiles and mechanisms for financing expansion	Provide enhanced energy security; Purchases could be designed to help an oil producing ally during a time of market weakness; U.S. purchases would support prices during market weakness helps U.S. oil producing states	1-3 years	Expensive to maintain and expand stocks	Not currently proposed by the administration
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ORDERLY MARKETS AND TRANSPARENCY

Facilitate market transparency through the provision of more timely and accurate market data	Enhances market efficiency; ensures orderly markets and sends appropriate signals so that needed infrastructure investments are made; reduces dangers of market manipulation by foreign powers, non-government entities and private sector participants	1-3 years	Some foreign governments and private entities remain opposed to providing public data; costly to maintain accurate and timely data	Bush administration budget cuts at the US Department of Energy are adversely affecting timely and accurate reporting on key energy data such as US natural gas inventory data
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<i>Policy</i>	<i>Benefits</i>	<i>Time Line</i>	<i>Political Tradeoffs</i>	<i>Status</i>
ENVIRONMENTAL POLICY				
Take leadership role on environmental issues	Gain prestige and leadership on important global issue, alleviate tension with allies; increase credibility of the Administration at home and abroad to promote energy and environmental agenda; reduce the long term negative environmental impact of continued economic expansion worldwide	1-10 years	Environmental restrictions can inhibit economic goals; multinational accords restrict national sovereignty	President has repudiated Kyoto accords; U.S. Senate also rejected accords; U.S. abstained from recent Bonn accord on voluntary emissions limitations; Bush administration supporting expansion of IEA program on energy efficiency education and technology transfer
Augment research on clean coal technology and international cooperation on cleaner coal use	Given the abundance of coal supplies and the widespread use of coal in industry and power generation in the developing world, clean coal technologies can be instrumental in lowering worldwide carbon emissions; assists U.S. coal industry	5-20 years	Environmental groups believe natural gas is a far cleaner fuel than even clean coal	Cheney Task Force plan calls for \$2 billion in funding over 10 years for clean coal research
UNDERWAY				
New energy efficiency standards for clothes washers and water heaters	Standards will require new washing machines to use 35% less energy starting with 2007 model year and water heaters to use 5%-9% less energy beginning in 2004; expected savings of billions of dollars, including cutting water usage nationwide by 10.5 trillion gallons by 2030 and a \$15.3 billion savings in electricity costs	3-5 years	Will significantly increase cost of new clothes washers and water heaters to consumers	Bush administration announced new standards in mid-April
New energy efficiency standards for air conditioners	Bush administration has recommended requiring new central air conditioners to be 20% more efficient instead of the 30% ruling put in place by Clinton Administration; DOE claims improvement would eliminate need for 27 power plants of 400 MW each by 2030	5-10 years	Slightly higher costs to consumers but lower operating costs could save about \$2 billion over 30 years; manufacturers against tougher standard	Final decision pending. Opponents claim Bush decision to lessen requirement is illegal, saying 1987 standards law forbids weakening efficiency standards; several states may seek permission to enforce 30% standard within their borders

<i>Policy</i>	<i>Benefits</i>	<i>Time Line</i>	<i>Political Tradeoffs</i>	<i>Status</i>
Federal push for regulation to prevent balkanization of U.S. power grid	Combining transmission systems into large regional transmission organizations (RTOs) that are operated independently of participants in electric power markets to boost competition, reduce transmission congestion in the grid, and allow for more efficient planning for transmission or generation needed to increase capacity	1-5 years	Individual states oppose losing control over their own power supply; states rights advocates oppose; governors oppose	FERC commissioners on June 19 argued that RTOs are necessary to bring nation's transmission assets under common rules, standardizing regulations to allow utilities to trade power across the borders of their transmission grids; rejected applications for state-based solutions and pressed parties to create regional systems
U.S. support for increased global stockpiling	Supplements oil inventories available in a crisis; reduces need for U.S. and other IEA countries to increase their own stocks to cover rise in world demand; eliminates dangerous strategic rivalry for oil supplies in a crisis and reduces oil producer monopoly power	Immediate	Costs to emerging economies of holding stocks could be a burden; U.S. conservatives may oppose such cooperation with China	IEA already implementing dialogue, China has begun such stockpiling program; India is considering it.
U.S. pushes hemispheric energy supply grid	By relying on Mexican and Canadian supplies, U.S. can avoid price spikes from domestic shortfalls and ease bottlenecks in key regions. Development of Mexican gas industry to increase U.S. supplies would enable Mexico to maximize its crude exports. Mexico has already demonstrated closer ties with U.S. by supplying limited volumes of electricity to California and the Bush administration has been in talks with Mexico to increase electricity imports and approve several cross-border electricity expansions between Mexico and California.	3-10 years	Mexico must pursue radical changes in energy sector, and this can cause political opposition and instability; U.S. domestic producers may resent any U.S. aid or assistance to Mexico that could have gone to U.S. domestic industry	Bush has sought to strengthen already strong ties with Mexico; U.S. participating in Hemispheric Energy Initiative and U.S.-Canada-Mexico Energy dialogue
U.S. encourages reopening of international investment in foreign oil fields	Provides U.S. firms long-term presence in important oil producing countries such as Saudi Arabia and Kuwait; encourages capacity expansion; strengthens U.S. ties to oil producers and open investment opportunities for U.S. firms.	3-15 years	Strong U.S. involvement in the opening of Saudi oil fields to international investment antagonizes existing nationalistic concerns over U.S. presence and influence in the kingdom, further inflaming anti-American sentiment within the country and elsewhere in the Gulf	Making progress in Saudi Arabia; Kuwaiti efforts stalled

<i>Policy</i>	<i>Benefits</i>	<i>Time Line</i>	<i>Political Tradeoffs</i>	<i>Status</i>
Use international trade architecture to facilitate clear, open and transparent rules for energy investment and reduce barriers to energy trade and investment	Helps eliminate existing barriers to investment in prolific oil and gas regions for investment, thereby raising potential availability of oil supplies from outside the Middle East; strengthens institutions such as APEC, WTO, FTAA, European Energy Charter, NAFTA, etc., creates a more level playing field for U.S. companies overseas	5-10 years	Labor and some other domestic groups oppose U.S. participation in multilateral organizations and trade pacts; participation in such forums may run counter to U.S. unilateral policy on oil sanctions; conservative groups oppose greater integration of Russian energy into EU	U.S. Department of State actively engaging some aspects; DOE Oil and Gas Forum program working in this direction
Federal push to streamline fuel specifications for gasoline	Fewer gasoline grades will limit effects of regional dislocations as uniform products can be shifted from one local market to another to ease temporary supply problems; consumers should enjoy lower costs at the pump	3-7 years	Some refiners oppose this change as they have yet to recoup costs associated with wide variety of existing gasoline grades; refining costs are sure to increase as firms adjust to producing product to new standards; environmentalists will oppose any easing of restrictions	EPA has informed Congress that the agency will have draft recommendations in September to streamline the various fuel specifications for U.S. gasoline
Federal support for expeditious re-licensing of nuclear plants where extension is possible	Nuclear power represents fuel source for 20% of electricity generated in U.S.; no ready substitute is available at present; operating permits for all but two U.S. nuclear reactors are due to expire by 2030	1-10 years	Anti-nuclear groups and others raise concerns about safety issues; thorny problem of nuclear waste disposal has been politically difficult to solve; environmental groups oppose; local communities/states oppose being site for nuclear repository	NRC has granted 20-year renewals for seven nuclear reactors over the past year

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