Order Code RL31720

Report for Congress

Received through the CRS Web

Energy Policy: Historical Overview, Conceptual Framework, and Continuing Issues

January 30, 2003

Robert Bamberger
Specialist in Energy Policy
Resources, Science, and Industry Division

Energy Policy: Historical Overview, Conceptual Framework, and Continuing Issues

Summary

The persistent attention being given to energy policy has its roots in an unexpected jump in oil prices that began in the late spring of 1999, following a production cut by the Organization of Petroleum Exporting Countries (OPEC). This supply change affecting fuel prices was the fourth significant episode since 1973 to jog American awareness of the extent to which the U.S. economy and lifestyle depends on inexpensive and plentiful energy. When the United States experiences a period marked by sharp increases in the price for energy and concern about the adequacy of essential supplies, there is widespread concern that the nation has no energy policy. The nation has, in fact, adopted several distinct policy approaches over the years, many of the debates turning around the question of the appropriate extent of the federal government's role in energy.

The fashioning of national energy policy is complicated by the fact that a review of the years since the time of the Arab oil embargo and first oil price shock in 1973 reveals that it is more accurate to see this 30-year period as one of general price and supply stability that is periodically broken by shorter episodes of supply disruption and price volatility. It isn't so much that energy policy has failed to be responsive to crises; rather, during lengthy periods of stability and declining prices for conventional fuels, it has proven difficult to sustain certain policy courses that might help shield the nation from the occasional episodes of instability. Awareness has also grown about the complexity of constructing a balanced energy policy that will not undermine other competing and equally legitimate policy goals.

Traditionally, the energy debate has been the most vigorous over the balance to be struck between increasing supply and encouraging conservation. However, when markets are unstable, debate turns on another axis as well, that of short-term versus long-term policies. There are other alternatives. For example, tax policy can affect energy price directly to the extent that excise taxes on fuel products can be raised or lowered. Programs such as the Low Income Home Energy Assistance Program (LIHEAP) can provide direct assistance to families whose quality of life is especially burdened by high energy prices. Lastly, Congress always has the option to require study and analysis of a problem before settling on a policy course.

Energy policy issues of continuing interest include whether or not to open up the Arctic National Wildlife Refuge (ANWR) for leasing; settlement upon a pipeline route to allow production of Alaskan natural gas; access to public lands for energy exploration and development; restructuring of the electric utility industry to encourage competition and consumer choice; raising corporate average fuel economy (CAFE) standards for motor vehicles; seeking effective means to promote energy conservation using currently available technologies; and development of new technologies and alternative fuels.

This report has been prepared at the outset of the 108th Congress to provide background context, and will not be updated.

Contents

List of Tables

Energy Policy: Historical Overview, Conceptual Framework, and Continuing Issues

Introduction

The persistent attention currently being given to energy policy has its roots in an unexpected jump in oil prices that began in the late spring of 1999, following a production cut by the Organization of Petroleum Exporting Countries (OPEC). Expecting that oil prices would soon drop again, refiners drew down existing, lower-cost inventories of refined products and crude oil rather than purchase higher-priced new supplies. But instead of declining, prices rose even higher as OPEC demonstrated a sustained level of discipline that had not been seen since the 1970s.

With inventories down during the winter of 1999-2000, severe weather disrupted waterborne transport of home heating oil to New England, leading to sharp price increases that spread to diesel fuel as well. Then, in the summer of 2000, inadequate supplies of blending components used in the manufacture of reformulated gasoline to meet clean-air objectives, among other problems, led to shortages of gasoline in the Midwest with some prices exceeding, for a time, $2.00/gallon. In the winter of 2000-2001, natural gas prices spiked because of low inventories and strong demand, which exacerbated a crisis in Western electricity supplies. In early 2003, oil prices were reaching into the mid-$30's, and appeared poised to possibly go higher as a result of events in Venezuela and possible disruptions in oil supply from the Middle East.

This current period of prolonged volatility in fuel supplies and prices has been the fourth significant episode since 1973 to jog American awareness of the extent to which the U.S. economy and lifestyle depends on inexpensive and plentiful energy. When the United States experiences a period marked by sharp increases in the price for energy and concern about the adequacy of essential supplies, there is widespread concern that the nation has no energy policy. However, not only does the nation have an energy policy, it has adopted several distinct policy approaches over the years. This report discusses those major policy approaches, provides a conceptual framework for categorizing energy policy proposals, and briefly describes issues that remain current in the debates over energy policy.

Energy Policy Since the Arab Embargo

In the nearly thirty years since the Arab oil embargo, the United States has pursued a number of different energy policy courses. In the course of several episodes during this period when oil price and supply became unstable, the U.S. moved from a set of policies more reliant on the federal government, to policies more dependent upon markets. This history is briefly summarized in the section to follow.

The Final Years of Price Controls

In the aftermath of the Arab oil embargo in 1973, many looked to government to solve the problem, for both the short- and long-term. By 1975, refiner acquisition costs for imported crude oil had roughly tripled, rising from an average cost of $4/barrel (bbl) in 1973 to $12.50/barrel in 1974. However, refiner acquisition costs for domestic crude did not even double – from $4/bbl to $7/bbl – owing to a system of federal price controls that kept the price of domestic production below the market price. This insulated consumers from some of the price increase, but had the companion effect of discouraging domestic production and encouraging imports. Automobile fuel economy standards were enacted to reduce gasoline consumption in the transportation sector. At the same time, hopes were invested in government-funded research and development of conservation technologies and alternative fuels.

A second oil interruption and shortage was triggered in1979 by the fall of the Shah of Iran and the loss of Iranian oil to world markets for several months. However, by this time, a phased deregulation of oil prices, enacted in 1975 (Energy Policy and Conservation Act, P.L. 94-163), enabled prices to be more responsive to market conditions. Letting the market set prices, supporters of deregulation had argued in the 1975 debate, would encourage the development of additional domestic supplies of oil as well as the development of alternative energy sources.

The Early Effects of a Market-Oriented Energy Policy

Shortly after assuming office in 1981, President Reagan accelerated the schedule for price decontrol. Energy policy, in general, became more market-oriented, and the government role was lessened.

Sustained high crude oil prices contributed to a reduction in U.S. petroleum consumption from 18.8 to 15.2 million barrels per day (mbd) from 1978 to 1982; there was more fuel substitution, more efficient consumption of oil, and price-induced conservation. Higher prices drew new oil production from outside the OPEC nations, allowing the United States and other consuming nations to diversify their sources of supply. Faced with a loss of market share and revenue, OPEC sharply increased its own production in the mid-1980s, thereby lowering the price for crude oil. In the course of the year from 1985 to 1986, refiner acquisition cost for imported oil fell from $27/barrel to $14/barrel.

Prices remained depressed until a fresh round of sharp spikes in oil prices occurred in 1990-91 following Iraq's invasion of Kuwait in early August 1990, cutting off 4.3 million barrels per day (mbd) from world markets. The price of oil, which had averaged $16/bbl at the end of July 1990, exceeded $28 by late August and reached $36/bbl in September 1990.

Responding to the Iraqi threat, Western and Middle Eastern nations found common ground that would have been unimaginable a decade earlier. By the late 1980s, recognition had grown of the interdependence of oil-producing and oil-consuming nations; the OPEC nations had come to recognize that long-term demand for their oil was jeopardized by any prolonged period of high oil prices. Most did not wish to repeat the cycle of the early- to mid-1980s and boosted their production to make up for some of the lost supply. Consuming nations also coordinated the release of strategic stocks of crude and products. Prices began to fall in mid-October 1990 when the United Nations approved the use of force against Iraq. Prices fell more sharply after the United States and a consortium of nations began conducting air strikes on Iraq in mid-January 1991.

Other Responses to the Disruptions of the 1970s and 1980s

During all of these episodes, importance was placed on conservation, more efficient use of energy, and development of alternative energy sources. The oil shocks of the mid- and late-1970s spurred considerable spending on alternative fuels – including solar, geothermal, wind, clean coal, synthetic fuels, alcohol-based fuels – and technologies to improve the efficiency of energy use. Regulations were developed to improve the efficiency of home appliances and to incorporate more energy-efficient designs in buildings. In the early 1980s, states and utilities promoted energy efficiency as one form of "demand-side management" to reduce the need for construction of new power plants. Many industries re-engineered their processes to save energy. Conservation and efficiency were championed by some as a lower-cost and more environmentally appealing way to achieve greater energy security than policies to boost supply. However, largely because of the generally lower prices over time for fossil fuels – as is noted below – these energy programs have shown mixed results.

The Challenge Faced by Policymakers

As suggested earlier, each episode of short supply and higher prices spurs concern that the nation lacks an energy policy and has ignored past lessons. However, it is apparent from a review of the years since the time of the Arab oil embargo and first oil price shock in 1973 that it is more accurate to see this 30-year period as one of general price and supply stability that is periodically broken by shorter episodes of supply disruption and price volatility. It isn't so much that energy policy has failed to be responsive to crises; rather, during lengthy periods of stability and declining prices for conventional fuels, it has proven difficult to sustain certain policy courses that might help shield the nation from the occasional episodes of instability.

An energy policy that would most effectively shield the nation and the economy from the worst effects of supply shortages would be a policy that might well deny the nation the full benefits of cheap and plentiful energy when markets are stable. The periods of relative calm and stability result in a markedly uncertain environment for investment in alternative fuels, energy efficiency technologies, and boosting the production of conventional fuels in regions where production costs are significantly higher than in the Middle East. State and local regulations and codes further cloud the climate for investment. Local opposition to new power plants, electric transmission lines, refineries, and pipelines is often most effective during periods of price and supply stability, but sometimes eases only after shortages have actually occurred.

An Energy Policy Schematic

Constructing a balanced energy policy that will not undermine other competing and equally legitimate policy goals is a complex problem. How to boost energy supply without exacting an unacceptable toll on the environment? How, then, to reduce gasoline consumption, a commodity central to the nation's economy and lifestyle, when raising its price to achieve a meaningful reduction in demand could be economically disruptive and politically unappealing? Should federal policy encourage the use of more expensive alternative fuels and technologies that heighten efficiency, when OPEC has the capacity to adjust the price of oil to keep it far cheaper than its substitutes?

Debate over energy policy has produced an enormous range of proposals, many of which have been adopted at one point or another over the years. In general, however, it is helpful to recognize the broad categories into which most proposals fall: Most energy policies are designed to affect either the supply of or the demand for energy products, and they are, at the same time, designed to have an effect either in the near term or the longer term.

Traditionally, the energy debate has been the most vigorous over the balance to be struck between increasing supply and encouraging conservation. However, energy policy turns on the additional axis of short- and long-term policies. In the midst of high prices during the spring of 2001, policymakers were pressed to come up with immediate policy responses that would afford consumers price relief. However, President Bush was advising Congress and Americans that the Administration's energy policy plan (shortly to be released) would focus on long-term remedies for the nation's energy problems and that there would be no immediate relief for consumers paying higher prices for gasoline, electricity, and other fuels. The President and his supporters suggested that by setting out an action-oriented and actionable comprehensive policy, markets and consumers should feel some short-term reassurance. This did not quell all the demands for more immediate action to reduce energy prices. The various reactions to the Bush energy proposals underscored the difficulty of developing comprehensive energy policy during a period of tight supply and high prices.[1]

It is useful to clarify the differences between short-term and long-term policy initiatives. For example, a drawdown of oil from the Strategic Petroleum Reserve (SPR) affects crude oil supply in the near term. However, enactment of tax incentives for investment in new oil drilling technologies might add to domestic crude supply further in the future. Proponents of drilling in the Arctic National Wildlife Refuge (ANWR) argue it might add anywhere from 300,000 b/d (barrels per

---

[1] For details of the Administration energy policy, see CRS Report RL31096, *Bush Energy Policy: Overview of Major Proposals and Legislative Action*, August 22, 2001.

day) to 1.4 mbd to U.S. domestic supply, but this, too, is a longer-term policy initiative.

Turning to the consumption side of the ledger, boosting the federal gasoline tax by $1.00/gallon might be expected to reduce gasoline consumption in the short term, but increasing the corporate average fuel economy (CAFE) standards on new motor vehicles would not take full effect until older vehicles were largely replaced, a process that could take more than a decade.

The table below suggests a way in which many energy policies may be visualized along these lines:

Table 1
A Schematic of Energy Policies

	Affecting Supply	**Affecting Demand**
Short-term to Mid-term	Strategic Petroleum Reserve (SPR) Allowing high prices to allocate and price scarce energy	High energy prices due to unfettered market forces or taxation Policies promoting conservation and more energy-efficient choices
Mid- to Long-term	Tax incentives to promote production Open new areas to leasing and exploration Research and development Market pricing of energy	Corporate Average Fuel Economy Standards (CAFE) Tax incentives to encourage less, or more-efficient consumption Efficiency standards Efficiency labeling Research and development in efficiency technologies

The axis of long-term/short-term, supply/demand does not capture all policy options. For example, one of the major issues in energy policy is the price for fuels. Energy policy generally is designed to affect price indirectly – by having price follow, or reflect, current demand or supply for energy. There are a few exceptions. Tax policy may address energy price directly to the extent that excise taxes on fuel products can be raised or lowered (recognizing that these tax boosts or cuts may not be reflected penny-for-penny in the "pump" price for fuels).

Short-term policies to affect supply, such as potential use of strategic reserves, have been sometimes very controversial because, in the absence of a very clear-cut and widely acknowledged physical shortage, such initiatives are perceived to be thinly disguised efforts to grant price relief.[2] Some suggest at times that high prices – left uninterfered with – are the best policy of all, encouraging markets to provide more supply in due course, and that federal policy should address only those most adversely affected by sharply higher prices. The Low Income Home Energy Assistance Program (LIHEAP) is one such effort to provide direct assistance to families whose quality of life is especially burdened by high energy prices. LIHEAP is a short-term policy for addressing the impact of high prices for energy.

Supply and demand may also be affected by external events, including political and diplomatic dynamics between or among the producing nations. Weather, seasonal or otherwise, will affect supply and demand; policy cannot affect the weather, only its consequences. Lastly, Congress always has the option to require study and analysis of a problem before settling on a policy course. Requirements for such studies are regularly included in appropriations bills and other legislation.

The Current Context: What's Now Different?

In every energy debate, one question is a constant: How extensive a federal role is appropriate in energy policy? But even prior to the terrorist attacks upon the nation on September 11, 2001, the context for the current energy debate was distinctly different from previous episodes.

- U.S. energy policy has been primarily market-based for nearly 20 years, but policy makers have been weighing whether problems in some sectors and with some fuels are attributable to distribution or regulatory inefficiencies interfering with markets, or whether government intervention may be necessary to protect consumers and the economy from problems to which markets cannot flexibly respond.

- Strong economic growth during the mid- and late 1990s at a time of declining real energy prices resulted in growth in consumption even though efficiency of energy use is dramatically better than during the 1970s and 1980s. Growth in petroleum consumption in the United States as domestic production declines has meant a commensurate increase in oil imports.

- There is recognition of the interdependence of producing and consuming nations; however, the political balance among the OPEC nations is delicate

[2] The Energy Policy and Conservation Act (P.L. 94-163, EPCA) authorizes drawdown of the Strategic Petroleum Reserve upon a finding by the President that there is a "severe energy supply interruption," or in the event of a circumstance that "constitutes, or is likely to become, a domestic or international energy supply shortage of significant scope or duration" and where "action taken ... would assist directly and significantly in preventing or reducing the adverse impact of such shortage."

and can influence oil production decisions and whether OPEC is able to exert market control at all.

- There is growing recognition that the recent shortages and price spikes in some regions of the country have been largely caused or compounded by insufficiencies in the nation's energy infrastructure – refining capacity, gas and oil pipelines, transmission lines, and electric generating facilities.

- Problems with gasoline supply and home heating oil stocks during 2000-2001 imply some need to develop additional refining capacity and transport systems that will add both capacity and flexibility to distribution. However, national and local environmental regulation and requirements, and local community sentiment, affect the speed and ease of siting and building such facilities. Concerns about greenhouse gas emissions add an additional measure of uncertainty, as has the depth of the economic slowdown.

- The experience with deregulation of electricity in California has added uncertainty to the policy debate over national restructuring of the industry.

Major Unresolved Energy Issues

The shift to a more market-oriented energy policy, additional lessons some have taken from experiences during the 1980s and 1990s, geopolitical developments, and developments such as those outlined above, are likely to play a part in any resolution of energy issues still pending and of interest to many policymakers. Some of these issues are broadly reviewed below.

Petroleum and Natural Gas

Demand for petroleum products in the United States ranges between 19-20 mbd. Increases in demand, as well as declining domestic production, have been offset by increased crude and product imports, which now approach an average of 10 mbd. Cuts in world crude production in March 1999 by OPEC sent domestic refiner acquisition costs for crude oil on a sharp ascent from less than $11/bbl in February 1999 to $24.50/bbl by December of the same year. These costs peaked at over $31/bbl in the latter part of 2000.

Subsequently, after intense lobbying by the United States, the OPEC oil ministers boosted crude production and settled upon $22-$28 per barrel (bbl) as a desirable "price band." In the wake of the terrorist attacks in September 2001, OPEC chose not to defend crude prices too aggressively lest OPEC appear to be tipping the global economy into recession. By late November 2001, prices had fallen below $20/bbl, and OPEC was seeking production cuts from outside the cartel to bolster price. Crude oil prices reached the mid-$30s/bbl in January 2003 as concern about war with Iraq grew and as Venezuela, a major exporter, was paralyzed by a general strike.

The ability of the OPEC cartel to exert influence upon oil prices at critical times underscores that – with respect to petroleum – the problem is less that the world supply of oil is tight than that so much of it is concentrated in other parts of the globe, principally the Middle East. U.S. dependence upon imported oil exceeds 50% of total consumption. Absent some elusive technical "fix," there are limited prospects for significantly reducing that figure without incurring economic hardship and lifestyle compromises. However, relatively modest increases in worldwide production or reductions in demand by consuming nations can substantially reduce the magnitude of oil price spikes.

Clean Air Standards. Attention has focused on the Clean Air Act standards that regulate the oxygen content, volatility, benzene and the sulfur content of gasoline. Refineries face state and local standards on how to achieve compliance with federal requirements. The result is a multiplicity of gasoline formulations, some using methyl tertiary butyl ether (MTBE) as an oxygenate and octane booster, while other regions require ethanol.

One consequence of these regional variations is that gasoline supply has lost some of its fungibility; one region experiencing a shortage may no longer be able to secure additional supply from a refiner servicing a nearby locality with a different blend of gasoline. Distribution becomes more complicated because different blends sharing the same pipeline must be carefully batched to avoid contamination. Additionally, most foreign refineries have not made the investment to supply any but the most general U.S. gasoline market.

Some have urged a relaxation of Clean Air Act standards that would permit a "harmonization" of U.S. gasoline standards. This would introduce flexibility into the gasoline manufacture and distribution system that might bring prices down. It would mean, however, temporarily compromising clean air objectives and, depending upon where the harmonized standard was set, might actually raise prices for fuel in regions that did not require the more exacting formulations.

Drilling in ANWR and on Other Federal Lands. The greater the nation's ability to produce its own fuels, the less vulnerable it is to unanticipated international developments that can reduce or threaten supply. But the policy options on the supply side, such as opening up the Arctic National Wildlife Refuge (ANWR) for exploration, are mostly long-term. Alaskan oil production, which once touched 2 mbd, has now fallen below 1 mbd and, without new production, will continue to decline until production levels can no longer support the costs of transporting it through the Trans-Alaska Pipeline.

Proponents of exploring ANWR point to advances in exploration and drilling technology and methods that have significantly reduced the extent of surface disturbance. While opponents concede this may be so, they argue that these advances are limited to exploration and extraction, and that considerable risk to the environment remains during the production and transportation phases. Opponents also suggest that the risks are not worth bearing, especially if the resources in ANWR turn out to be at the lower range of estimates, providing only an additional 300,000 b/d of supply. Some respond to this argument by noting that the nation has experienced periods of tight supply when even an additional few hundred thousand barrels of crude oil per day would have significantly reduced gasoline and heating oil prices. For some opponents, any weighing of risks and benefits are pointless because, citing the area's pristine character, they argue that its ecology and habitat should not be disturbed under any circumstances. (For additional information and background, see CRS Report RL31278, *Arctic National Wildlife Refuge: Background and Issues*.)

The broader issue raised by ANWR – that of access to public lands for energy exploration and development – is a significant component of the national energy debate. There is considerable disagreement about the potential resources on federal lands – particularly the amount of oil and gas that may be "locked up" by land-use restrictions and other regulatory factors. The Bush Administration's energy policy report recommended an examination of "land status and lease stipulation impediments" and that policymakers "consider modifications where appropriate." (For additional information and background, see CRS Report RS20902, *National Monument Issues*.) A report by the Department of Interior, on the other hand, indicates this may not be the problem some have alleged.[3]

Natural Gas Supply. For the past decade in the United States, natural gas consumption was encouraged, particularly for gas-fired combined-cycle power plants that could provide incremental electric supply to the nation's power grid at highly competitive prices and with few environmental constraints. Plentiful supplies, and relatively low prices for several years, discouraged additions to natural gas reserves during the 1990s.[4] With surges in demand for electricity and a colder winter in 2000-2001, residential and other consumers of natural gas suddenly faced sharply higher prices as competition grew for gas supplies. At the wellhead, gas prices rose from $2.60 per thousand cubic feet (mcf) in January 2000 to $8.06 per mcf in January 2001, after which prices declined steadily.[5]

After that winter, prices declined, as did reserve additions, which fell from 152% of production in 2000 to 131% during 2001.[6] Drilling activity also declined through 2002, falling from a high of 1,058 active rigs in mid-2001 to an average of 690 during 2002.[7] This suggests that 2002 reserve additions – when tabulated – are likely to be less than those of 2001. Supporting this assessment is the fact that natural gas prices declined sharply during the fall of 2001 to the range of $2.00. However, during the winter of 2002-2003, prices rose sharply once more – to roughly the $5.50/mcf range – underscoring the difficulty of crafting policy when sharp fluctuations in demand, price, and supply can occur suddenly between, or even during, seasons.

---

[3] Scientific Inventory of Onshore Federal Lands' Oil and Gas Resources and Reserves and the Extent and Nature of Restrictions or Impediments to the Development. January 2003. http://momentum.doi.gov/epca/ExecSum.pdf

[4]See http://www.eia.doe.gov/emeu/aer/txt/ptb0410.html.

[5] EIA, *Monthly Energy Review*, Table 9.11.

[6] EIA, *U.S. Crude Oil, Natural Gas and Natural Gas liquids Reserves 2001 Annual Report*. Page 29.

[7] EIA, *Monthly Energy Review*, Table 5.1.

A major potential source of additional gas is tanker-borne imports in the form of liquefied natural gas (LNG). Expansion and refurbishment of facilities to accommodate LNG imports continues. Additionally, there are a number of proposals for new facilities – some, offshore in Mexico and the Bahamas – that would receive LNG produced abroad for consumption in the United States. The Alaska North Slope holds large proven reserves of natural gas, but supporters of constructing a pipeline have argued that it may require loan guarantees and price supports.

Electricity Regulation and Supply

The Enron debacle raised new questions about restructuring of the electricity industry and has slowed the momentum of federal restructuring legislation. However, it was the electric utility crisis in California in early 2001 that shifted the focus of electricity restructuring legislation away from comprehensive bills that previously dominated the electric utility restructuring debate toward issues related to electric system reliability. Regulatory functions are currently divided between the states and the federal government, and there has been considerable argument not only about which controls need to be retained, but how to redraw the respective roles of the federal government and the states to assure reliability.

A reliable electric system depends on adequate transmission capacity. The regulatory regime has shifted in the electricity industry to encourage competition in the generation sector, but investment in transmission infrastructure has not kept up with increases in bulk power transfers and electricity demand. Additionally, transmission lines are congested in several regions of the United States. Difficulty in siting the lines and regulatory uncertainty have dampened interest in investing in the transmission system. FERC has approved three Regional Transmission Organizations (RTOs) and is in the process of evaluating others.[8]

Some have argued that transmission and wholesale power markets cannot be competitive without additional market transparency, or access to market information. Proposals have been made to require FERC to issue rules establishing an electronic information system to provide information about the availability and price of wholesale electric energy and transmission services to FERC, state commissions, buyers and sellers of wholesale electric energy, users of transmission services, and the public. However, concerns have been raised that such a system would take away too much authority from the states.

Comprehensive energy legislation debated in the Senate, but not enacted during the 107th Congress, included language to establish a renewable portfolio standard requiring that 10% of electricity generation come from non-hydro renewable energy resources by 2020. Proposals such as this one introduce dimensions that were not part of restructuring when it was first raised, but may be a part of any continuing debate.

Concern over electricity supply has also led to some reassessment of the relative roles that natural gas, coal, renewables, and nuclear energy may have in future

---

[8]For details, see: http://www.ferc.gov/Electric/RTO/post_rto.htm.

electricity generation. In its energy policy report, the Bush Administration indicated its objectives to remove barriers to the use of coal in electric power generation, with a renewed emphasis on cleaner-burning coal technologies.

Supporters of renewable energy have urged the establishment of a national "renewable portfolio standard," which would require that a certain percentage of electricity generation come from non-hydro renewable energy sources. Nuclear energy supporters have long proposed that new nuclear generating capacity receive incentives for helping to reduce air emissions.

(For additional information, see CRS Electronic Briefing Book: Electric Utility Restructuring [http://www.congress.gov/brbk/html/ebele1.shtml].

Conservation and Energy Efficiency

As has been noted, the energy policy debate has turned partly on perceptions of the balance between supply-oriented and conservation-oriented policies that make up an appropriate energy policy to address the current matrix of energy problems. For example, environmental groups often ask why ANWR should be opened to leasing if a comparable amount of oil could be saved by raising motor vehicle fuel economy.

The Energy Policy and Conservation Act (P.L. 94-163) established new car corporate average fuel economy (CAFE) standards, beginning with model year 1978. Currently, the standards are 27.5 miles per gallon (mpg) for cars and 20.7 mpg for light-duty trucks, including sport utility vehicles (SUVs). Proposals to raise the CAFE standards have been controversial. Beginning with enactment of the FY1996 Department of Transportation Appropriations Act, Congress forbade the expenditure of appropriated funds to make any change in the current CAFE requirements.

However, a study by the National Academy of Sciences (NAS), requested by the 106th Congress, to recommend "appropriate" CAFE standards, was released at the end of July 2001.[9] While the report did not recommend a specific level for CAFE, it did conclude that "significant" reductions in fuel consumption could be achieved within 15 years utilizing existing technologies. Were increases in new car fuel economy achieved by reducing vehicle weight or disproportionately encouraging the sale of small vehicles, the study allowed that additional fatalities could result. However, some members of the NAS panel dissented, suggesting that the analysis of the relationship between fuel economy and vehicle safety is extremely complex. Before the 107th Congress ended without enactment of comprehensive energy legislation, the conferees had agreed to language in the House version of the bill that would have required a savings of 5 billion gallons in gasoline consumption by SUVs between model years 2006 and 2012.

On December 16, 2002, the National Highway Traffic Safety Administration (NHTSA) issued a notice of proposed rulemaking to boost the CAFE of light-duty

[9] http://www.nap.edu/books/0309076013/html/.

trucks by 1.5 mpg by 2007. This may not satisfy some policymakers who may seek more aggressive CAFE improvements in future energy legislation.

There is little question that the price hikes during past episodes of tight energy supply spurred many improvements in energy efficiency. Some argue, however, that the easiest and lowest-cost efficiency gains have been achieved, and that expectations should be lowered about the additional efficiency gains that can be captured in the present price framework for energy. When the Reagan Administration redirected energy policy to a more market-oriented framework, it was argued that R&D needed to be carefully focused on areas that were promising, but unlikely to be explored by the private sector.

The current Bush Administration energy policy recommended a review of the funding and performance of energy efficiency research and development for the purpose of determining appropriate funding for performance-based research in public-private partnerships.

The Uncertain Future

As apparent as it seems to many that the nation should do "something" about energy, the preceding pages have outlined the layers of complexity that augur against easy agreement to many of the policy options that have been proposed and debated since the mid-1970s. A review of the history shows that every episode of instability has had its own set of contributing factors – and that these may be geopolitical, based in energy infrastructure, or triggered by extremes of heat or cold beyond anyone's control. Making policy decisions that will anticipate unpredictable future developments, or settling on policies to mitigate the consequences when these events are before us, will remain a challenge for policymakers as the energy debate continues.

Start studying Conceptual Framework and IFRS. Learn vocabulary, terms and more with flashcards, games and other study tools.Â Conceptual Framework & IFRS. 1. Objectives of Financial Reporting - provides users with useful information. 2. Qualitative Characteristics - ingredients to meet the objectives of financial reporting.Â Emerging Issues Task Force - account for new and unusual financial transactions that have the potential for creating differing financial reporting practices. (short term emerging issues). Notes to the Financial Statements. 1. Summary of Significant Accounting Policies a. describes selection of accounting principals used. 2. Summary of Significant Assumptions a. describes assumptions used for prospective statements. energy issues to develop an interpretative framework of policy-making in these. sectors, has not of yet been created. Therefore, the goal is to contribute to fill this. gap and to underline the central role of policy variables in the evolution of energy. policies during a period in which the debate around these themes is once again. topical. 2. Definitions and Characteristics of Energy Policies.Â The strategic weight of energy issues has had â€“ and still has â€“ at least two. important implications. The first is that national governments are very jealous of. their competences in the field. While energy issues have an important. international component, states have limited to a minimum the devolution of. competences to supranational institutions and find it difficult to cooperate and to. By acknowledging neutrality and prudence, the Framework includes all conceptual underpinnings for the development of IFRSs. The Board concluded that substance over form was not a separate component of faithful representation.Â Fair value continues to be defined as the price in an orderly transaction between market participants. Value in use (or fulfilment value) is defined as an entity-specific value, and remains as the present value of the cash flows that an entity expects to derive from the continuing use of an asset and its ultimate disposal.Â Relevance is a key issue. The Framework says that historical cost may not provide relevant information about assets held for a long period of time, and are certainly unlikely to provide relevant information about derivatives. The Conceptual Framework (or â€œConcepts Statementsâ€) is a body of interrelated objectives and fundamentals. The objectives identify the goals and purposes of financial reporting and the fundamentals are the underlying concepts that help achieve those objectives. Those concepts provide guidance in selecting transactions, events and circumstances to be accounted for, how they should be recognized and measured, and how they should be summarized and reported. Continue to Full Project Information. How Does the Framework Affect the Application of Accounting Standards? Concepts Statements do not affec We urge policy-makers to identify which priorities are most important to them, and which priorities they are prepared to compromise on.Â Energy and Climate Policyâ€"An Evaluation of Global Climate Change Expenditure 2011â€“2018. by. CoilÃn Ã“hAiseadha.Â Note that from the first issue of 2016, MDPI journals use article numbers instead of page numbers.