RECOMMENDATIONS FOR A BALANCED ENERGY POLICY

A Briefing Book Presented to the Administration and the 111th Congress

CONSUMER ENERGY ALLIANCE
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Introduction

Consumer Energy Alliance (CEA) is a nonprofit, nonpartisan organization with tens of thousands of grassroots supporters and more than 110 affiliated organizations that span the spectrum of the U.S. economy — from airlines to trucking to manufacturers and restaurants to retirees and small businesses to a broad array of energy providers.

CEA's mission is to expand the dialogue between the energy and consuming sectors to improve overall understanding of energy security, initiate the thoughtful development and utilization of energy resources, and to help create sound energy policy and maintain stable energy prices for consumers.

Increasing energy costs and destabilizing price volatility are at the core of some of the country's most pressing security and economic issues. The United States imported 4.8 billion barrels of total energy-related petroleum products in 2007, valued at $319 billion.[1]

Current U.S. oil consumption is more than 20 million barrels per day, while current U.S. production is 5 million barrels per day. Therefore, the U.S. must import 15 million barrels of oil per day to meet demand. Spread over 365 days at a price of $75/barrel means our annual deficit for oil imports is $411 billion. In 2008, the cost of U.S. imports of energy related petroleum products exceeded $53 billion per month, up from only $17 billion per month in early 2007. The average price of imported oil in July 2008 was up 90 percent from the average price in June 2007, reflecting the continued run-up in imported oil prices in 2007 and 2008.[2]

While oil prices have recently fallen due to forecast reductions in economic demand, the severity and unpredictability of recent energy price swings underscores the fact that the United States is forced to compete with ever-growing global demand for resources that are becoming less accessible.

In short, despite the recent price declines caused in part by a global recession, today's energy problems remain a critical issue for America's consumers and businesses. The impacts on the public are real, tangible and likely to continue.

CEA looks forward to working with the new administration and 111th Congress as well as consumers, producers, small businesses, agriculture and manufacturing groups, among others, to improve the dialogue and maintain an honest and open discussion about the direction of our national energy policy.

CEA recently released, "The Impact of High Energy Prices on Key Consumer Sectors of the U.S. Economy," which provided summary information from important sectors of the U.S. economy on the negative impact high energy prices in 2008 had on their respective industries — industries that employ millions of Americans (visit www.consumerenergyalliance.org for a copy of the report).

1. United States, Census Bureau, Department of Commerce, Report FT900, U.S. International Trade in Goods and Services (Washington: 2008).2.
2. James K. Jackson, "U.S. Trade Deficit and the Impact of Rising Oil Prices", Congressional Research Service, Sept. 2008.

The Consumer Energy Alliance Report supports a national energy policy that provides a comprehensive, long-term solution to help the United States meet ongoing and future global energy challenges by ensuring proper development of all available energy resources, long-term price stability for consumers, enhanced national energy and economic security, and a consistent regulatory structure for industry.

To do this, CEA seeks a reasonable and more robust approach that ensures a proper balance between the use of traditional sources of energy and the development of alternatives, as well as improved energy efficiency, conservation and increased energy research and education. This includes regulatory policy changes necessary to facilitate the development of wind, oil shale, advanced biofuels and solar technologies, expansion of nuclear power and offshore development, carbon capture and sequestration, as well as incentives to spur further energy efficiency.

Executive Summary

Energy remains a primary issue for America's consumers, businesses and industries. Global supplies are failing more and more to meet escalating demand while energy markets are increasingly constricted and subject to price swings.

As the new Administration takes office and the 111th Congress convenes next year, they face the challenge of formulating a national energy policy able to effectively address the need for a greater, more diverse and environmentally responsible energy supply that provides stable prices for consumers, stable regulatory regimes for industry and ensures our long-term national energy and economic security.

This is no easy task.

The energy problems facing our country did not emerge overnight. They will not be corrected overnight, either. Too often we hear rhetoric that argues against developing one energy resource because it will be "years before it can help reduce our energy prices." In truth, any single energy resource — oil and gas, alternative energy, nuclear — will take several years, if not decades, to develop. It is exactly this long-term approach to comprehensive energy policy that the nation needs.

CEA has created this Briefing Book for the new Administration and 111th Congress in an effort to highlight the best possible policy options for stabilizing energy prices and securing our energy and economic future.

We urge the new Administration and the 111th Congress to work together in a nonpartisan fashion to help American consumers cope with crippling energy prices and a struggling economy by implementing a balanced and comprehensive national energy policy that includes access to domestic oil and gas resources, as well as alternative energy resources and enhanced energy efficiency and conservation.

As the following pages will more fully illustrate: We Need it All — And We Need to Start Now!

Stable Energy Prices and Enhanced Energy & Economic Security for Consumers

Recently, there has been significant debate about future energy policy for the nation in response to price spikes and market instability that saw a barrel of petroleum reach a historical high of $USD 145.16 this past July.[3] While we applaud the debate, CEA calls upon the Administration and Congress to enact thoughtful and balanced energy policy that provides stable prices for consumers, stable regulatory regimes for industry, and ensures our national energy and economic security.

Higher energy costs have had a significant, negative impact on key sectors in the U.S. economy. Since 2000, when energy prices began to climb, the U.S. has lost more than 3.7 million high-wage manufacturing jobs, according to the National Association of Manufacturers.[4]

Additionally, farming production expenses have risen more than 20 percent over the past two years, which is reflected in the dramatic increase in food prices.[5] Over the past five years, household energy expenditures have nearly doubled and are now 50 percent more than health care expenditures and 23 percent more than expenditures on food, according to a November 2007 Report from the Consumer Federation of America.[6] American truckers and distributors spent $97 billion more on fuel costs in 2008 than they did in 2004, according to the American Trucking Associations.[7]

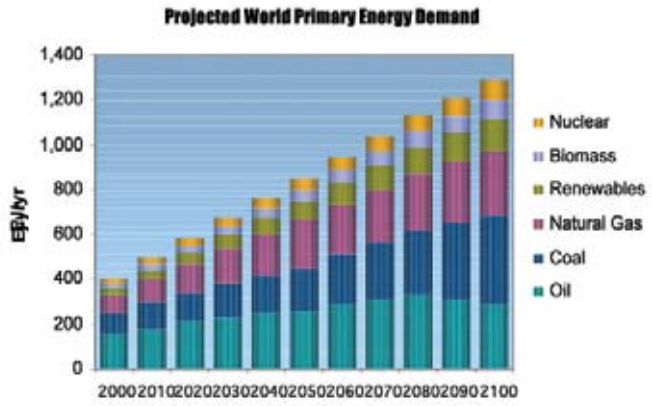
The world has seen a fundamental shift in the basic energy consumption and supply patterns that underlie the global economy — a shift that has concentrated conventional oil and gas supplies in politically motivated national energy companies and has produced the unstable price swings we have seen in energy prices over the past two decades.

This shift will continue as new energy consumers are created by the rising economies of China and India and conventional energy resources become more difficult to access. Failure of the U.S. to enact a sensible, comprehensive energy policy will only serve to exacerbate price instability for U.S. consumers and businesses.

In June 2008, the U.S. Department of Energy's Energy Information Administration (EIA) released its International Energy Outlook for 2008, which forecasts that world energy consumption is projected to expand by 50 percent from 2005 to 2030, with a corresponding increase in the demand for all forms of energy.[8]

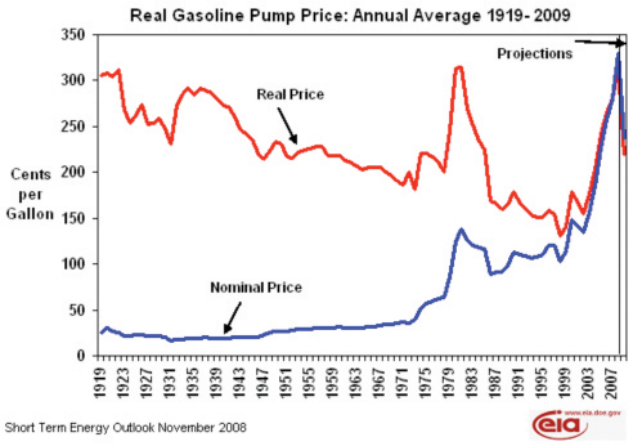
3. United States, U.S. Energy Information Administration, Daily Cushing, OK WTI Spot Price, July 14, 2008.
4. National Association of Manufacturers.
5. U.S. Department of Agriculture.
6. Consumer Federation of America.
7. American Trucking Associations.
8. United States, U.S. Energy Information Administration, EIA International Energy Outlook 2008 (Washington: 2008).

While alternative energy use is increasing, it is merely keeping pace with demand.[9] (See Chart). Currently, alternative energy represents about 7 percent of demand. According to the International Energy Agency (IEA) and others, this is expected to increase to only 9 to 10 percent by 2030.[10]



Source: Battelle Global Energy Technology Strategy Project; Climate Change Science Program. 2007, *Scenarios of Greenhouse Gas Emissions and Atmospheric Concentrations* (MINICAM Results).

With global energy demand on the rise and alternative energy still decades away from making an appreciable difference on U.S. supply, finding and accessing increasingly hard-to-extract conventional resources while developing alternative energy for the future is now an immediate challenge for the U.S. government. Furthermore, increasingly unstable energy prices are likely to continue to rise as supplies tighten and long-term speculators impact the market as they face troubling global energy realities. As we have seen the past two years, the instability of gasoline prices has had a major and very negative impact on consumers (See Chart).



Therefore, we must do everything we can now to maintain **affordable, reliable and stable** energy supplies upon which the consuming public and key industries of the United States depend.

Consumer Energy Alliance recommends the following policy options to help increase domestic energy security and stabilize energy costs for the American public and its key industries:

- Increase development of the Outer Continental Shelf for oil and gas production by removing moratoriums on production in restricted areas;
- Improve car and light-truck fuel economy standards at the maximum rate possible by applying economic and available technology;
- Accelerate development and voluntary use of alternative energy and renewable resources;
- Support research into second-generation biofuel crops that have lower input requirements or are suited to more marginal lands;
- Increase development of unconventional fuels and access for oil and gas production in inland areas, such as Colorado, Utah and Wyoming, that are now under moratorium or restricted access;
- Improve energy efficiency and conservation initiatives;
- Increase government funding for energy education and additional research and development related to both conventional and alternative energy resources to complement private-sector investment; and
- Develop a comprehensive U.S. program aimed at maintaining U.S. intellectual competitiveness through education of skilled scientists, engineers and trade professionals needed to ensure a vibrant and progressive energy industry.

9. U.S. Energy Information Administration, "Renewable Energy Consumption and Electricity Preliminary 2007 Statistics", 2007, 19 Nov. 2008 <http://www.eia.doe.gov/cneaf/alternate/page/renew_energy_consump/rea_prereport.html>
10. International Energy Agency, "Key Graphs", 2008, 25 Nov. 2008 <http://www.worldenergyoutlook.org/key_graphs_08/WEO_2008_Key_Graphs.pdf>

Access to Conventional Oil & Natural Gas Resources

Outer Continental Shelf (OCS) Access:

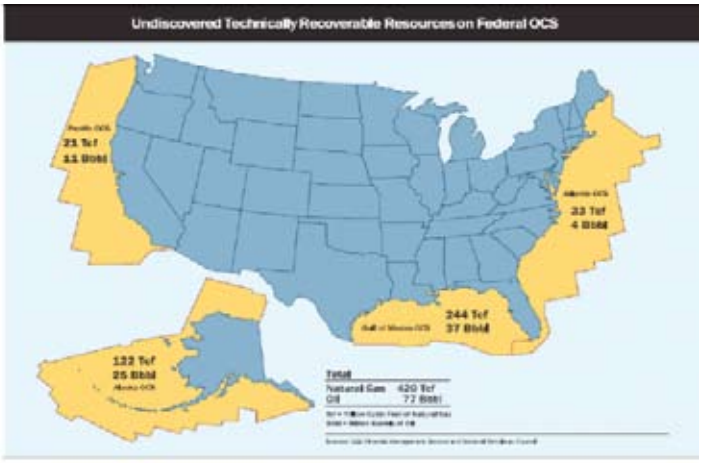
In July 2008, the presidential moratorium on offshore development was lifted. In October 2008, Congress allowed its ban on offshore development to expire.

These actions meant that for the first time in 26 years, offshore oil and gas exploration and production will be allowed off the nation's East and West coasts — opening up an estimated 40 billion barrels of oil and 250 trillion cubic feet of natural gas.[11] It does not, however, extend to the Gulf coast of Florida — where a ban on drilling was placed until 2022 as part of the Gulf of Mexico Energy Security Act of 2006.

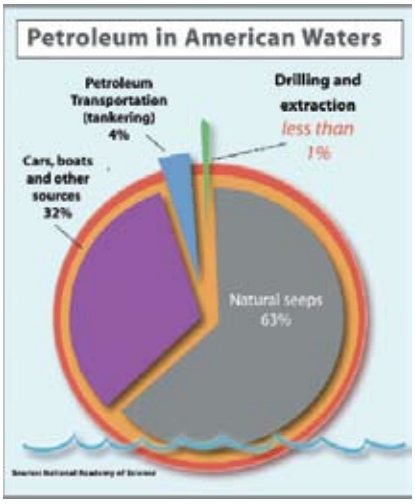
The government estimates that all the offshore waters around the United States contain an estimated **86 billion barrels of undiscovered oil** and **420 trillion cubic feet of undiscovered natural gas**.

Consumer Energy Alliance supports the environmentally responsible development of oil and natural gas resources in the U.S. Outer Continental Shelf and encourages the Administration and Congress to move thoughtfully and expeditiously to allow development of these abundant resources.

Since offshore oil and gas development began in 1954, the OCS has produced 51 billion barrels of oil, making it one of the most productive oil and gas regions in the world. Today, the approximately 43 million leased OCS acres account for about 15 percent of America's domestic natural gas production and about 27 percent of America's domestic oil production.



Yet, despite modern technology, equipment and an unmatched record of safety and efficiency, many continue to argue that offshore development poses unacceptable risks. This rhetoric simply ignores the facts underscored by more than 12,000 annual safety and environmental inspections, the record of resilience following numerous Gulf hurricanes, and the fact that, according to the National Academy of Science, less than 1 percent of petroleum found in the oceans is due to exploration and development (See Chart).



In 2006, the Gulf of Mexico Energy Security Act, for the first time, rightfully granted select states and local governments

11. Minerals Management Service.

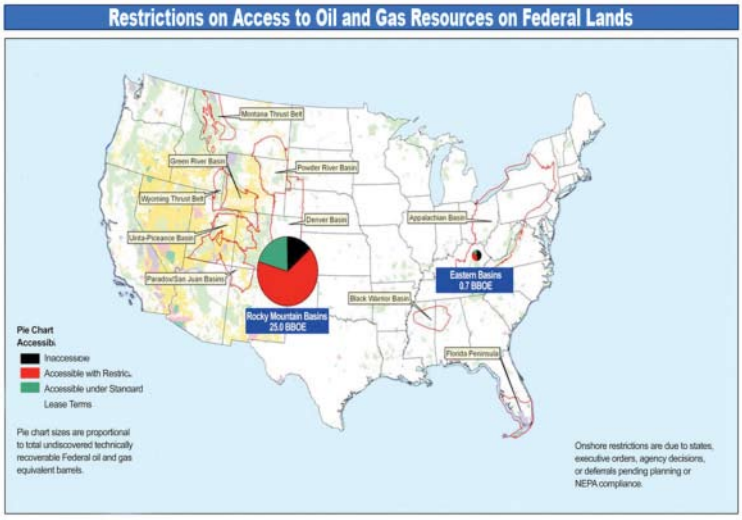
a portion of federal bonus and royalty income as a means to more equitably distribute oil and gas revenues. It specifically provided the states of Texas, Louisiana, Mississippi and Alabama with 37.5 percent of all royalties from oil and natural gas development in federal waters adjacent to the respective state.

In CEA's view, it is critical that coastal states share in revenues derived from oil and gas production off of their coasts in the same manner as the Gulf of Mexico states.

Onshore Access:

According to a new Bureau of Land Management (BLM) report, U.S. public lands contain an estimated **31 billion barrels of oil** and **231 trillion cubic feet of natural gas** that are presently closed to energy production.[12] According to the Domestic Petroleum and Exploration Council, this is enough natural gas to power 70 million homes for more than 60 years.

The May 2008 BLM report found 62 percent of the onshore oil and 41 percent of the natural gas are off-limits for development. An additional 30 percent of onshore federal oil and 49 percent of onshore federal gas may only be developed subject to additional restrictions, such as seasonal restrictions. The study found that just 8 percent of onshore federal oil and 10 percent of onshore federal gas are accessible under standard lease terms.[13]



Consumer Energy Alliance supports the thoughtful development of oil and natural gas resources on federal lands and encourages the Administration and Congress to move thoughtfully and expeditiously to allow development of these abundant resources.

Taxes on Energy Companies:

For some time, many political leaders have called for increased taxes on energy companies as a means to accelerate development of alternative energy resources, or as a way to help citizens cope with rising energy prices.

While this approach may be paved with good intentions and is based on the fact that America must have a balanced, comprehensive energy policy that includes all alternative energy, it fails to recognize several significant market conditions.

First, the EIA projects that oil and natural gas will represent 91 percent of U.S. energy demand through 2030. Therefore, in order to meet demand, maintain stable energy prices and ensure energy and economic security, U.S. policymakers must recognize the role conventional oil and gas resources will play for years to come. As such, new taxes — or so-called Windfall Profits Taxes — could have the unintended effect of taking away the investment dollars that are needed to ensure reliable supplies of energy in the future.

Second, according to the Institute for Energy Research and the Center for Energy Economics, oil and gas companies spent $12.2 billion from 2000 to 2005 on wind, solar, geothermal power, end-use technologies, efficient heat and power co-generation and fuel-cell vehicle technology. For comparison, the federal government spent only $2.4 billion on such projects.[14]

In 2007, BP spent $700 million on domestic wind power, while BP, Chevron, ConocoPhillips and Shell invested more than $3.5 billion collectively on solar, wind and biodiesel projects.[15]

12. Inventory of Onshore Federal Oil and Natural Gas Resources and Restrictions to Their Development, Bureau of Land Management, May 2008.
13. Id.
14. Institute for Energy Research.
15. Deroy Murdock, Scripps Howard News Service, June 30, 2008.

Energy companies have made significant strides in developing less intrusive and environmentally safe operating practices and technology that can be utilized to develop these critical national energy resources. Without access to offshore and onshore oil and gas resources, it is very likely energy prices could rapidly destabilize due to a return to tight long-term supplies and the market impact long-term speculators have when U.S. policies show little regard for global energy realities. National energy policy should also recognize that the process of exploration and development is complicated and provide energy companies the time and latitude to properly evaluate and develop leases. Allowing access to these resources as part of a comprehensive energy strategy would significantly reduce U.S. reliance on imports, improve domestic energy security, diversify supply, increase economic development and generate local, state and federal revenue.

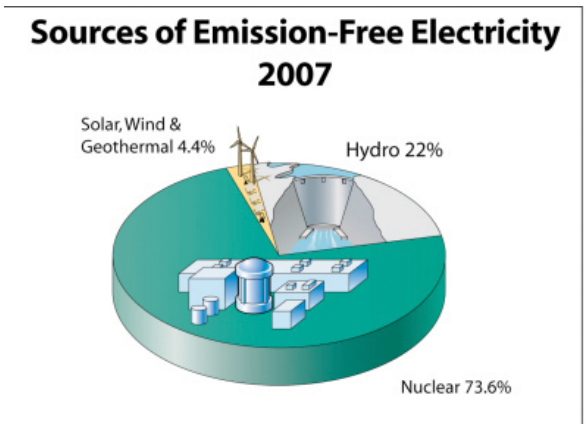
Consumer Energy Alliance recommends the following policy options to ensure thoughtful access to our nation's oil and gas resources:

- Do not reinstate any limitations or moratoria on offshore oil and natural gas development;
- Lift moratoria on onshore oil and natural gas development;
- Conduct regional basin-oriented resource and market assessments to identify opportunities for increasing offshore oil and natural gas supplies;
- Ensure adequate resources are provided to the federal land management agencies to carry out their permitting responsibilities on federal lands;
- Enact federal legislation allowing states and coastal communities to receive an appropriate share of the royalty revenues generated by production in their adjacent waters;
- Promote technological advances in exploration and production of traditional energy resources to ensure further gains in environmental stewardship; and
- Streamline the permitting processes to encourage the creation and expansion of petroleum refineries.

Nuclear Power

There are 104 commercial nuclear plants in the U.S. that currently generate about 20 percent of the country's electricity with little or no greenhouse gas emissions.[16] However, no new nuclear plants have been built in the U.S. since 1978.

In a future carbon constrained environment, nuclear power generation needs to play an increasingly important part of the energy mix of the United States by providing baseload capacity and an affordable supply of electricity to power our homes, our businesses and our industries.



Source: Nuclear Energy Institute

Non-carbon emitting sources, including nuclear, hydropower, wind, solar and geothermal, currently generate 30 percent of the electricity in the United States.[17] In order to maintain that percentage (given the projected increases in electricity demand), the U.S. will need to substantially increase its nuclear baseload capacity.

The nuclear industry is currently working on developing the next generation of nuclear plants to ensure that they are ready to meet this increased demand. Federal safety regulators have certified new designs that employ advanced technologies and working with industry to test new and improved licensing processes.

In 2005, Congress enacted comprehensive energy legislation that provides limited incentives to jump-start new reactor construction including loan guarantees for clean energy technologies, production tax credits, federal insurance to protect companies engaged in new plant construction in the event of regulatory delays and almost $3 billion for nuclear energy research.[18]

16. Nuclear power contributes nearly 70 percent of non-carbon emitting U.S. electricity generation. Nuclear Energy Institute, "Resources and Stats", 25 Nov. 2008
17. Nuclear Energy Institute, "Policy Brief", 18 Nov. 2008
18. U.S. Department of Energy, "Energy Policy Act of 2005", 18 Nov. 2008

Consumer Energy Alliance strongly supports the development of new nuclear generation in the United States and calls on the Administration and Congress to support policies that will allow the nuclear industry to meet increasing demands for electricity in a carbon constrained economy.

Consumer Energy Alliance recommends the following policy options to promote expanded use of carbon-free nuclear power:

- Carry out federal commitments to establish a national repository for nuclear waste;
- Fully fund the nuclear energy research programs established in the Energy Policy Act of 2005;
- Provide $2 billion over 10 years from federal energy research, development, demonstration and deployment budgets for demonstration of one to two new advanced nuclear facilities; and
- Expand tax incentives for construction of new nuclear plants and nuclear electricity generation.

Wind

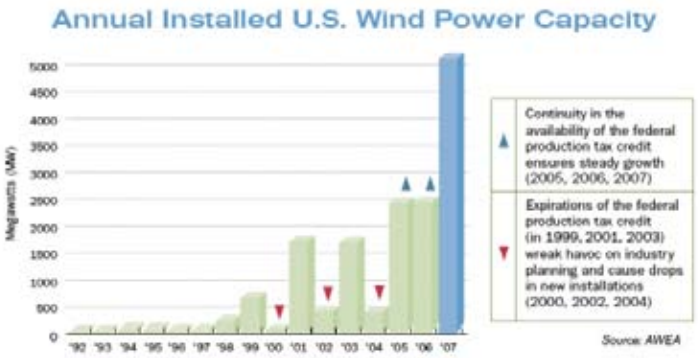
With its federal incentive, "large" wind is now in a competitive range (7-9 cents per kilowatt-hour, depending on the project size and average wind speed at the site) with any other type of power plant built today. The U.S. wind power industry shattered all previous records in 2007, with 45 percent growth and more than 5,200 megawatts installed. Wind projects accounted for about 30 percent of all new power generating capacity added in the U.S. in 2007.[19]

While the economic, policy and technological outlook for increased wind development in the United States looks promising, there are real and significant challenges toward realizing the full potential for growth in wind power including transmission issues, continued evolution of commercial wind technology and project siting concerns.[20]

Consumer Energy Alliance strongly supports the development of wind power generation in the United States and calls on the Administration and Congress to support policies that will allow the wind energy industry to meet increasing energy demands in a carbon constrained economy.

Consumer Energy Alliance recommends the following policy options to spur further growth and development of wind energy resources:

- Provide a longer-term wind energy legislative and regulatory structure, which will give industry the sufficient stability, certainty and support to ensure market stability;



- Enact a robust Transmission Policy including: 1) develop upgrades and reduce bottlenecks in existing transmission system; 2) reform electricity market rules to allow non-discriminatory access for wind-generated electricity; and 3) develop major investments in new transmission — electricity "superhighways" — to tap the immense resources of the Great Plains and the West;[21]
- Create a singular federal lands wind permitting process, which can be used on any federal site regardless of agency with oversight;
- Expand development of a robust wind turbine manufacturing base and worker training programs;
- Prioritize wind development and renewable electricity requirements in regions of the nation that make economic sense, with focus on midwestern and western states; and
- Enhance research and development in wind energy technologies.

19. Wind Power Outlook 2008 (American Wind Energy Association, 2008).
20. American Wind Energy Association.
21. American Wind Energy Association, "Wind Energy Basics", Mar. 2008, 18 Nov. 2008 <http://www.awea.org/newsroom/pdf/Wind_Energy_Basics.pdf>

Solar

Though solar energy currently provides less than 0.1 percent of the electricity produced in the United States, the U.S. Department of Energy (DOE) cites a report projecting that solar power could contribute up to 10 percent of the nation's power generation by 2025.[22]

In fact, production of solar power has rapidly increased in the past eight years, growing at a rate of 40 percent per year.[23] Concurrently, the cost per kilowatt-hour of solar photo voltaic systems has been steadily dropping, and projections estimate that solar power will reach cost parity with more traditional power sources in select U.S. markets by 2015.[24]

While the economic, policy and technological outlook for increased solar power development in the United States looks promising, there are real and significant challenges toward realizing the full potential for growth in solar power including transmission issues, continued evolution of commercial solar technology and project siting concerns.

Consumer Energy Alliance strongly supports the development of solar power generation in the United States and calls on the Administration and Congress to support policies that will allow the solar energy industry to meet increasing energy demands in a carbon constrained economy.

Consumer Energy Alliance recommends the following policy options to promote further growth and development of solar energy resources:

- Create longer-term solar energy legislative and regulatory structure to stabilize market and help generate additional financial support and structure;
- Develop models for building and enhancing solar power capacity, advancing "smart grid" technologies, streamlining installations and creating more user friendly technologies, as outlined by the DOE;[25]
- Facilitate additional industry and regulatory cooperation to ensure the adequate development of solar power transmission lines to meet the expanding energy needs of all regions and to streamline the permitting processes to encourage the creation of new and improved solar energy production facilities; and
- Enhance research and development in solar energy technologies.

22. Report prepared by research and publishing firm Clean Edge and the nonprofit Co-op America projects nearly 2% of the nation's electricity coming from concentrating solar power systems, while solar photo voltaic systems will provide more than 8% of the nation's electricity. U.S. Department of Energy, Energy Efficiency and Renewable Energy Network News, "Study: Solar Power Could Provide 10% of U.S. Electricity by 2025", 2008, 11 Nov. 2008 <http://apps1.eere.energy.gov/news/news_detail.cfm/news_id=11835>
23. U.S. Department of Energy.
24. U.S. Department of Energy.
25. U.S. Department of Energy.

Biofuels

Nationally, ethanol and biodiesel production have exploded over the past two decades — going from less than 1 billion gallons in 1990 to more than 7.5 billion gallons today.[26] This increased production reduces U.S. oil consumption by as much as 80,000 barrels per day.[27]

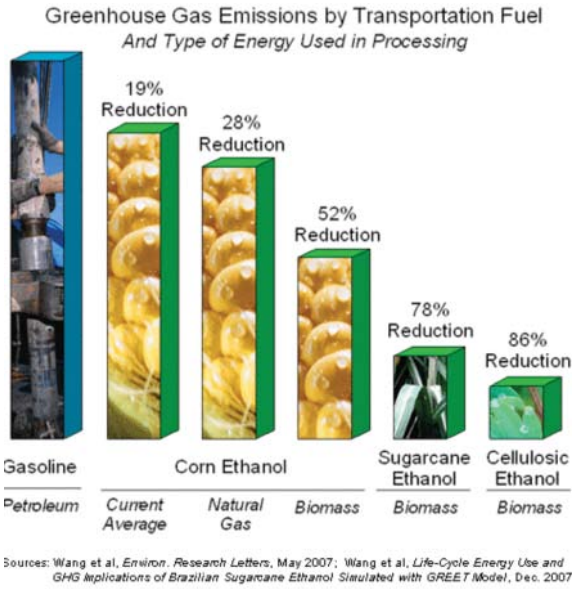
The growth of the biofuels industry has had a tremendous impact on the rural economy — adding $47.6 billion to the nation's GDP and supporting the creation of 238,541 jobs in all sectors of the economy in 2007.[28]

In December 2007, Congress enacted the Energy Independence and Security Act (EISA), which will require the use of at least 36 billion gallons of renewable fuel by 2022.[29] In order to ensure that this level of renewable fuels can be incorporated into the U.S. domestic fuel supply without raising logistical or pricing issues will require major regulatory changes, as well as an expanded renewable infrastructure. In light of the federal requirement to use renewable fuels, state boutique fuel mandates are unnecessary, will artificially raise prices for consumers and should be pre-empted.

The EISA also mandates increasing levels of advanced biofuels — such as renewable diesel and cellulosic ethanol — which have not yet been commercially proven.

Government programs that help spur rapid development of these advanced biofuels technologies will be needed to avoid price and supply complications. U.S. energy policies that provide research and development grants, loan guarantees and tax incentives will be increasingly important if these technologies are going to be brought online in compliance with the EISA timeline.

It is noteworthy that advanced biofuels also provide significant greenhouse gas emission reductions. (See Chart)



Consumer Energy Alliance supports the goal of increasing the production of advanced biofuels and urges the Administration and Congress to adopt policies to help meet the EISA legal requirements in a cost-effective manner by fostering the development of advanced biofuels, such as renewable diesel and cellulosic ethanol, including research and development funding, expanded tax incentives for advanced biofuels production and loan guarantees for advanced biorefineries.

26. American Coalition for Ethanol.
27. American Coalition for Ethanol.
28. American Coalition for Ethanol.
29. U.S. Department of Energy, Energy Efficiency and Renewable Energy, "Energy Independence and Security Act (EISA)", 18 Nov. 2008 <http://www1.eere.energy.gov/femp/pdfs/eisa_femp.pdf>

Unconventionals

In September 2007, the Report of the Federal Task Force on Strategic Unconventional Fuels found that **2 trillion barrels of oil** are likely located in the oil shale resources in the United States. This is eight times the current reserves of Saudi Arabia and enough to satisfy 266 years of current U.S. consumption.[30] The report notes that most of these resources are located on federal lands, and concludes that "access to the oil shale resources located on public lands is therefore a critical step in the future commercial development of this resource… ."

Furthermore, the Canadian province of Alberta has proven oil sands reserves of **173 billion barrels of oil,** ranking second to Saudi Arabia in terms of global proven oil reserves. The United States is estimated to have another 21 billion barrels of total proven oil sands reserves. In fact, the Canadian oil sands are the only non-OPEC entity capable of significantly increasing oil production to address global and U.S. demand.[32]

In addition to the implications to U.S. energy security, the current economic urgency of the United States' petroleum imports is obvious. Current U.S. consumption is 20 million barrels per day; current U.S. production is 5 million barrels per day — over 365 days, imports of 15 million barrels per day at a price of $75/barrel amount to an annual deficit of $411 billion. This is 50 percent of the current U.S. trade deficit and more than the bailout recently passed by Congress. Clearly, decisive action is needed immediately.

Consumer Energy Alliance strongly supports the continued development of heavy oil, oil shale and oil sands as essential and secure hydrocarbon sources for the United States.

Consumer Energy Alliance recommends the following policy options with respect to continued development of a robust U.S. Unconventional Fuels industry:

- Oppose legislative or regulatory efforts designed to discriminate against "unconventional fuels";
- Oppose any attempts to re-impose a ban on federal oil shale leasing;
- Establish robust and workable federal oil shale leasing regulations; and
- Implement a workable federal Low Carbon Fuels Standard that pre-empts state standards.

30. "Development of America's Strategic Unconventional Fuels Resources," Initial Report to the President and Congress of the United States, Task Force on Strategic Unconventional Fuels, Sept. 2006.
31. Task Force on Strategic Unconventional Fuels.
32. Alberta, "Alberta's Oil Sands", 18 Nov. 2008 <http://oilsands.alberta.ca/>

Energy Efficiency & Conservation

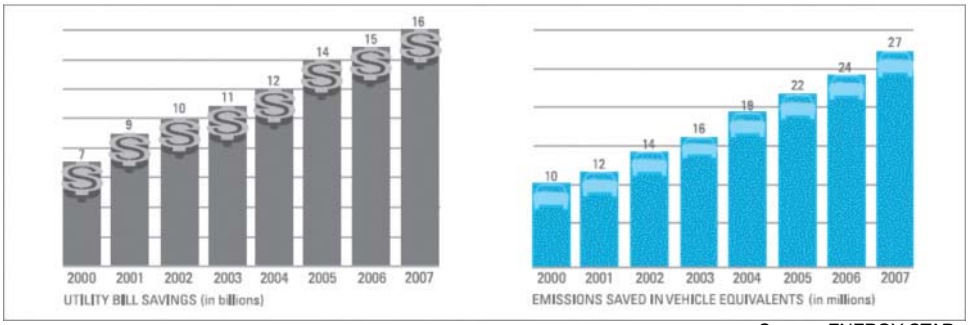
Today, concerns regarding the state of the environment, increased U.S. dependence on foreign oil imports and the need to diversify the country's energy resources have led to increased research in developing more energy-efficient ways to produce power. Encouraging both energy efficiency and conservation will not only protect the environment, but promote national energy security, save consumers money and strengthen the economy.

Although awareness about energy efficiency and conservation has increased, the average American household still expends a startling amount on energy each year. The U.S. currently accounts for approximately 45 percent of daily global gasoline demand by consuming more than 20 million barrels of oil every day.[33] According to the U.S. Energy Information Administration, U.S. energy consumption will increase by approximately 40 percent in the next two decades, which equals the combined current energy consumption in California, Texas, New York, Ohio, Pennsylvania and Illinois.[34] Residential energy use alone is expected to be nearly 15 percent higher in 2015 than it is today.[35]

To date, efforts by the government, consumers and various organizations have increased the utilization of energy-efficient products and conservation practices both at work and home. Several programs, including Zero Energy Homes, ENERGY STAR Homes and Weatherization Assistance Program, encourage the use of energy-efficient appliances and improvements to buildings, including windows and insulation. The utilization of the most efficient and technologically advanced building components available can reduce heating requirements in an average new home by more than 60 percent.[36] Last year, ENERGY STAR helped Americans save enough energy to avoid greenhouse gas emissions equal to those from 27 million cars, while saving them $16 billion on their utility bills.[37]

Similarly, the Environmental Protection Agency's SmartWaysm Transport Partnership has proven to be an effective voluntary program designed to increase the energy efficiency for freight transportation. The program, patterned after the highly successful ENERGY STAR program,

ENERGY STAR Benefits 2000-



Source: ENERGY STAR

33. Alliance to Save Energy, "Did you know?", 2008, 11 Nov. 2008 <http://www.ase.org/content/article/detail/1141>
34. Alliance to Save Energy.
35. Alliance to Save Energy.
36. U.S. Energy Information Administration, "Annual Energy Outlook 2008 with Projections to 2030", 18 Nov. 2008 <http://www.eia.doe.gov/oiaf/aeo/demand.html EIA>
37. ENERGY STAR, "About", 18 Nov. 2008 <http://www.energystar.gov/index.cfm?c=about.ab_index>

uses market-based incentives that challenge companies to improve their environmental performance and fuel efficiency. By 2012, the SmartWaysm program aims to save between 3.3 and 6.6 billion gallons of diesel fuel per year and will reduce annual greenhouse gas emissions by 48 million tons of CO^2 equivalents. Congress should increase the investment in this program to facilitate its expansion.

Corporate Average Fuel Economy (CAFE) standard increases have saved American consumers money and helped reduce gasoline consumption. Current fuel economy standards save approximately 55 billion barrels of fuel annually. By raising current CAFE standards by 5 percent annually until 2012 and 3 percent annually thereafter, 1.5 billion barrels of oil could be saved annually by 2010 with a total of 4.5 billion barrels of oil saved by 2020. At that rate, approximately 67 billion barrels of oil could be saved during the next 40 years.[38] While such public and private efforts have made great strides in achieving a cleaner environment, greater energy security and a healthier economy through job creation, they must be continued in the long-term to achieve lasting results.

Consumer Energy Alliance strongly supports the development of enhanced energy efficiency and conservation initiatives, including further increases to fuel economy standards, to reduce overall energy consumption and save consumers money while also promoting economic growth.

Consumer Energy Alliance recommends the following policy options to enhance energy efficiency and conservation:

- Create public-private partnerships to make energy efficiency and conservation measures more accessible and affordable for the consuming public;
- Facilitate dialogue among energy industry and consumers groups about how they can work together to increase energy efficiency and conservation; and
- Increase education outreach to consumers on how to improve energy efficiency and conservation at home and at work.

38. American Council for an Energy-Efficient Economy, “Fuel Economy”, 18 Nov. 2008 <http://www.aceee.org/transportation/fueleco.htm>

Carbon Capture and Storage

With global energy demand projected to rise by more than 60 percent by 2030, policymakers around the world are increasingly viewing carbon capture and storage (CCS) as an important technology to mitigate greenhouse gas (GHG) emissions from the combustion of fossil fuels.

Carbon capture and storage requires capturing carbon dioxide from power plants and other industrial facilities, transporting it to suitable locations, injecting it into deep underground geological formations and monitoring its behavior. Although this technology has not been commercially deployed in the United States, it does have great potential as a method of reducing carbon emissions while ensuring that coal remains a viable component of our electric fuel mix.

There are numerous national and international players driving CCS issues, including governmental entities, environmental groups, oil and gas production companies, utilities and thinktanks.

Although the long-term goal of these players is to use the lessons learned from existing international CCS projects (such as the Statoil Slipner facility in the North Sea, the BP-Algeria natural gas project and announced projects such as the Shell/Statoil gas-fired power plant/methanol production facility at Tjeldbergodden, Norway) to develop a cohesive CCS program for the United States, the individual efforts are scattered among purely academic exercises, technical R&D and forums, and specific legislative initiatives.

Further, while environmental groups and industry stakeholders hold similar beliefs that CCS needs to be a part of any major climate change policy, there is no consensus regarding the specifics of a comprehensive CCS policy or appropriate regulatory framework for such.

Consumer Energy Alliance strongly supports the development of a carbon capture and storage policy that will meet the increasing demands for electricity in a carbon constrained economy.

Consumer Energy Alliance recommends the following policy options to resolve the policy and regulatory issues necessary to overcome barriers to the deployment of CCS:

- Adopt of technical standards for siting and monitoring of CCS projects, including fit-for-purpose designs;
- Establish a legal and regulatory environment conducive to establishing a business case scenario for carbon capture and storage; and
- Establish standards and methods to govern the accounting of greenhouse gases stored in CCS projects.

Energy Workforce Education

Over the past 50 years, the United States has led the world in science, engineering and technology, particularly in the field of energy. Current trends show a weakening in U.S. energy, petroleum, mining and mineral engineering education and research, putting the future of our energy workforce at risk.

There are only 30 energy education programs in the country today — down from almost 60 in 1983.[39] The United States has seen a 90 percent drop in the number of petroleum engineering and geosciences graduates since 1982.[40] Almost half of our mining and petroleum faculty are age 50 or older, while only 12.5 percent are under 35.[41] A decline in graduates and the aging of the faculty could result in a serious shortage of teaching and research staff, as well as a lack of new talent to replace the active engineers and geologists who plan to retire in the next 10 years.[42]

The potential loss of institutional knowledge and a lack of qualified students, faculty and energy professionals hinders our ability to develop new energy resources and technologies and to maintain the human capital necessary for economic, energy and mineral security. With the demand for energy on the rise, it is vital that we act to rebuild the nation's educational and research infrastructure.

Consumer Energy Alliance strongly supports the development of a robust energy workforce and calls on the Administration and Congress to implement policies that will create educational programs designed to effectively teach and train energy engineering and technical students.

Consumer Energy Alliance recommends the following policy options to boost energy education and workforce in the United States:

- Provide assistance for energy-related science and technology programs and educational institutions to ensure the continued existence of graduates and research in energy, petroleum, mining and mineral engineering;
- Establish programs with specified research goals and eligibility requirements, and encourage programs in minority serving institutions;
- Provide aid for new programs and establish scholarship programs;
- Direct aid to community, tribal colleges and secondary schools for non-degree programs, technical training and apprentice training for oil field, mine, alternative energy and carbon storage training; and
- Establish a scholarship and fellowship program.

39. Lloyd R. Heinze, Texas Tech University, "Education & the Big Crew Change", Presentation to SPE ATC&E, Denver, Jan. 2004.
40. "The Talent Crisis in Upstream Oil & Gas: Strategies to Attract and Engage Generation Y", A Deloitte Research Study, 2005.
41. Marco Einaudi, Department of Geological and Environmental Sciences, Stanford University, "Future of Economic Geology in Academia", Presentation to Geol. Soc. America Ann. Meeting, Seattle, Oct. 1994.
42. Lloyd R. Heinze.

Conclusion

To meet the energy challenges facing the nation and its consumers, Consumer Energy Alliance seeks a reasonable, more robust energy policy that ensures a proper balance between the use of traditional sources, the development of alternatives and improved energy efficiency and conservation.

It is time that our national energy policy allows for the responsible development of all available energy resources in order to provide long-term price stability for consumers, enhanced national energy and economic security and a consistent regulatory structure for industry.

CEA is dedicated to working with the new Administration and 111th Congress, as well as consumers, small businesses, manufacturers and agricultural groups among others to improve the national dialogue and maintain an open and honest discussion about the direction of our energy policy and the implications of legislation that does not include all available resources from both traditional and non-traditional energy sectors.