Energy Security
A Selective Webliography

July 2008

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CRS Documents

ADVANCED RESEARCH PROJECTS AGENCY - ENERGY (ARPA-E): BACKGROUND, STATUS, AND SELECTED ISSUES FOR CONGRESS
Author(s): Deborah D. Stine, Resources, Science, and Industry Division
Abstract: In August 2007, Congress authorized the establishment of the Advanced Research Projects Agency - Energy (ARPA-E). Modeled on the Defense Advanced Research Projects Agency (DARPA) in the Department of Defense (DOD), ARPA-E would be a new organization within the Department of Energy (DOE). It would support transformational energy technology research projects with the goal of enhancing the nation's economic and energy security. Congress authorized $300 million for ARPA-E in FY2008 and "such sums as are necessary" for FY2009 and FY2010. Ultimately, Congress appropriated no funds for FY2008. The Administration requested no funds in FY2009. Congress is currently debating whether to fund ARPA-E in FY2009.
http://assets.opencrs.com/rpts/RL34497_20080520.pdf

BIOFUELS INCENTIVES: A SUMMARY OF FEDERAL PROGRAMS.
Congressional Research Service, RL33572, Library of Congress. Brent D. Yacobucci. Web posted May 18, 2008.
With recent high energy prices and the passage of major energy legislation in 2005 (P.L. 109-58) and 2007 (P.L. 110-140), there is ongoing Congressional interest in promoting alternatives to petroleum fuels. Biofuels, transportation fuels produced from plants and other organic materials, are of particular interest. Ethanol and biodiesel, the two most widely used biofuels, receive significant government support under these laws in the form of mandated fuel use, tax incentives, loans and grant programs, and certain regulatory requirements. This report outlines federal programs that provide direct or indirect incentives for biofuels.
http://assets.opencrs.com/rpts/RL33572_20080318.pdf [PDF format, 14 pages].

CENTRAL ASIA: REGIONAL DEVELOPMENTS AND IMPLICATIONS FOR U.S. INTERESTS
CRS Publication Date: 05/07/2008
Author(s): Jim Nichol, Foreign Affairs and National Defense Division
Abstract: forefront in advocating increased U.S. ties with Central Asia, and in providing backing for use of the region as a staging area for supporting U.S.-led stabilization efforts in Afghanistan. Congress is likely to pursue these goals through hearings and legislation on humanitarian assistance, economic development, security issues, human rights, and democratization. The July 2006 U.S.-Kyrgyzstan agreement on the continued U.S. use of airbase facilities in Kyrgyzstan included U.S. pledges of boosted foreign assistance and other compensation, which are subject to regular congressional appropriations and oversight. Assistance for border and customs controls and other safeguards to prevent the proliferation of weapons of mass destruction (WMD) will likely be ongoing congressional concerns. Congress will continue to consider whether and how to balance its concerns about human rights abuses and lagging democratization against other U.S. interests in continued engagement with the region to advance energy security and prosecute the Global War on Terror.
http://opencrs.com/document/RL33458

OIL INDUSTRY PROFIT REVIEW 2007.
Congressional Research Service, RL34437, Library of Congress. Robert Pirog.
Web posted April 28, 2008.
Increases in the price of crude oil pushed the spot price of West Texas Intermediate (WTI), to nearly $100 per barrel in the third quarter of 2007. It remained high as the demand growth in China, India, and other parts of the developing world continued. The political unrest in Nigeria, Venezuela, Iraq, and other suppliers continued to threaten the market. The decline of the value of the U.S. dollar on world currency markets has also been identified by some as a factor in the high price of oil. The profits of the five major integrated oil companies remained high in 2007, as they generally accounted for approximately 75% of both revenues and net incomes. At the same time, independent refiners and marketers experienced a difficult year that was reflected in profits in 2007. The potential volatility of the world oil and financial markets, coupled with the weakness of the U.S. and other economies, makes any profit forecast for 2008 highly speculative.
http://assets.opencrs.com/rpts/RL34437_20080404.pdf [PDF format, 11 pages].

THE STRATEGIC PETROLEUM RESERVE: HISTORY, PERSPECTIVES, AND ISSUES. Congressional Research Service, RL33341, Library of Congress. Robert Bamberger. Web posted April 7, 2008.
Congress authorized the Strategic Petroleum Reserve (SPR) in the Energy Policy and Conservation Act (EPCA, P.L. 94-163) to help prevent a repetition of the economic dislocation caused by the 1973-1974 Arab oil embargo. The program is managed by the Department of Energy (DOE). Physically, the SPR comprises five underground storage facilities, hollowed out from naturally occurring salt domes in Texas and Louisiana. Together, these facilities have a capacity of 727 million barrels of crude oil. Currently, it holds some 698 million barrels. This reports examines the background of the SPR and how the government manages it.
http://assets.opencrs.com/rpts/RL33341_20080214.pdf [pdf format, 16 pages]

RENEWABLE ENERGY: BACKGROUND AND ISSUES FOR THE 110TH CONGRESS
CRS Publication Date: 03/25/2008
Author(s): Fred Sissine, Resources, Science, and Industry Division
Abstract: Renewable energy can be used to produce liquid fuels and electricity. A variety of funding, tax incentives, and regulatory policies have been enacted to support renewables as a means for addressing concerns about energy security, air pollution, international competitiveness, and climate change. This report reviews the background for renewables and describes the current congressional debate.
http://opencrs.com/document/RL34162

THE EUROPEAN UNION'S ENERGY SECURITY CHALLENGES
CRS Publication Date: 01/30/2008
Author(s): Paul Belkin, Foreign Affairs, Defense, and Trade Division
Abstract: This report examines some of Europe's critical energy challenges and EU efforts to coordinate a common European energy strategy. It also includes an overview of broader transatlantic energy security cooperation.
http://assets.opencrs.com/rpts/RL33636_20080130.pdf

ALTERNATIVE FUELS AND ADVANCED TECHNOLOGY VEHICLES: ISSUES IN CONGRESS
CRS Publication Date: 02/01/2008
Author(s): Brent D. Yacobucci, Resources, Science, and Industry Division
Abstract: In the 110th Congress, alternative fuels and advanced technology vehicles have received a good deal of attention, especially in discussions over U.S. energy security. In his January 24, 2007, State of the Union Address, President Bush called for the increased use of renewable and alternative motor fuels to 35 billion gallons annually by 2017. U.S. consumption was roughly five billion gallons in 2006. Therefore, such an initiative would mean a seven-fold increase in the use of these fuels over 11 years. On December 19, 2007, President Bush signed the Energy Independence and Security Act of 2007 (EISA, P.L. 110-140). EISA requires an increase in renewable fuel consumption to 9.0 billion gallons in 2008 and 36 billion gallons in 2022. Further within the 36-billion-gallon requirement, by 2022 the new law mandates the use of 21 billion gallons of "advanced biofuels," defined as fuel derived from renewable biomass other than corn starch, with 50% lower lifecycle greenhouse gas emissions compared to petroleum fuels.
http://opencrs.com/document/RL33564

NATO AND ENERGY SECURITY
CRS Publication Date: 12/28/2007
Author(s): Paul Gallis, Foreign Affairs, Defense, and Trade Division
Abstract: Energy security is of increasing importance to the United States and its European allies, as some energy producers are using oil and gas for political leverage. Although most European allies believe that a market solution exists to ensure security of energy supplies, NATO has begun to discuss the issue as an allied concern.
http://opencrs.com/document/RS22409/2006-12-21%2000:00:00

RUSSIAN ENERGY POLICY TOWARD NEIGHBORING COUNTRIES. Congressional Research Service, RL34261, Library of Congress. Steven Woehrel. Web posted April 21, 2008.
Russian oil and natural gas industries play an important role in the Europe
and Eurasia energy market. At the same time, the Russian government has majority control of these industries. There are cases when assets were sold to non-Russian firms, Russian firms cut off energy supplies to the facilities and also build new pipelines to circumvent infrastructure, which are not under their control. The neighboring countries are concerned that Russia could use their energy dependency to interfere in their domestic affairs or to force them to make foreign policy concessions.
http://opencrs.com/document/RL34261/2008-03-27%2000:00:00

Think Tank Reports

THE GOOD AND BAD APPROACHES TO AFFORDABLE ENERGY POLICY. By Ben Lieberman. Heritage Foundation WebMemo #1927. 19 May 2008
Good energy policy is easy to distinguish from bad energy policy: Good policy leads to more supplies of affordable energy, and bad policy leads to less. The recently rejected American Energy Production Act of 2008 (S. 2958), sponsored by Senator Mitch McConnell R-KY), sought for the most part to make it easier to access domestic energy supplies by undoing past constraints, including restrictions on domestic oil production.
http://www.heritage.org/Research/EnergyandEnvironment/upload/wm_1927.pdf

ENERGY INDEPENDENCE ISN'T VERY GREEN. By Steve Stein. Hoover Institution. Policy Review No. 148. April & May 2008
Conflicting priorities are confusing policy.
There's broad agreement that America should reduce its dependence on imported oil, but far less agreement on why. Are we combating global warming, or are we distancing ourselves from hostile and unstable regimes? The popular reply is that it hardly matters — we need to do both and the goals reinforce each other. But these two national energy goals are not only different but frequently in conflict, and effective policy will not be forged until those conflicts are addressed. Meanwhile, we'll continue to see watered down legislative efforts similar to the Energy Act of 2007 and its predecessors. When dependence on foreign oil first became a major issue in 1973, the country imported less than a third of its petroleum; it now imports over 60 percent.
http://www.hoover.org/publications/policyreview/17086446.html

THE GLOBAL ENERGY MARKET: COMPREHENSIVE STRATEGIES TO MEET GEOPOLITICAL AND FINANCIAL RISKS. The G8, Energy Security, and Climate Issues.
BIPP-IEEJ Working Paper Series. Houston, May 21, 2008
The Baker Institute conference, "The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks," brings together senior policymakers, economists, academic specialists and industry professionals to discuss the geopolitical risks currently facing international energy markets and the global financial system. It also investigates the consequences that such risks could pose to energy security, pricing and supply, as well as to the transparent and smooth operation of the global market for oil and natural gas trade and investment. At the conference, the Baker Institute will release a new energy study titled "The Global Energy Market: Comprehensive Strategies to Meet Geopolitical and Financial Risks." By analyzing these key geopolitical threats in depth, the study identifies a series of policy frameworks that can be used to fortify the current market system and ensure that it can respond flexibly to the array of threats that might be encountered in the coming years. The study also examines the impact of emerging climate policy on future U.S. foreign and national energy policy.
http://www.rice.edu/energy/events/past/21may08_GlobalEnergyMkt-Hou.html#_gempres

DOES RAIL TRANSIT SAVE ENERGY OR REDUCE GREENHOUSE GAS EMISSIONS?
Cato Institute. Randal O'Toole. Web posted May 3, 2008.
Even though most rail transit system uses less energy than buses, it is heavily supplemented by extensive feeder bus operations, with very low number of users. Therefore, most rail transit systems

end up using more energy per passenger mile. Many decades of energy savings would be needed to repay the energy cost of rail transit system construction. Even with the attempts to improve the environment by changing people's behavior so that they drive less, such behavioral efforts have been far less successful than technical solutions to toxic air pollution associated with automobiles. http://www.cato.org/pubs/pas/pa-615.pdf [PDF format, 24 pages].

ENVIRONMENTAL, SAFETY, AND ECONOMIC IMPLICATIONS OF NUCLEAR POWER
Author: Cochran, Thomas B
Organization: Natural Resources Defense Council
Publication Date: April 23, 2008
Congress should: Pass a climate bill that puts stringent limits on CO2 and other greenhouse gas emissions--"cap carbon." This is not only the best and most economically efficient way to mitigate climate change, but it is the single policy that would provide the greatest benefit to the domestic nuclear power industry; Stop subsidizing the construction of new nuclear power plants, and reject further subsidies for new nuclear plants in climate mitigation legislation. The economically inefficient way to mitigate climate change is to continue to subsidize new nuclear power plants. This will penalize and slow investment in improved energy efficiency and energy supply technologies that can mitigate climate change in less time, with less cost and risk; Terminate DOE's misguided 100+ year effort to close the nuclear fuel cycle and introduce fast burner reactors in the United States, and stop funding research on advanced nuclear fuel reprocessing; Establish an unbiased outside commission to report on ways to improve the NRC's safety culture. The biggest barrier to significant improvement of U.S. nuclear plant safety is the poor safety culture of the NRC; Initiate a search for a second geologic repository for disposal of spent fuel.
http://docs.nrdc.org/nuclear/nuc_08042301A.pdf

SMART COUNTRIES, FOOLISH CHOICES.
Center for Geoeconomic Studies, Council on Foreign Relations. Amity Shales and Gaurav Tiwari. April 8, 2008.
It seems to be a common belief that oil-rich countries are not friendly to the United States, and that entrepreneurial or "smart" countries are not endowed with oil. Shales and Gaurav find a triangular relationship between oil wealth, entrepreneurial spirit, and friendliness to the United States. They conclude that oil producing countries are not U.S.-friendly, in contrast to entrepreneurial countries, which are friendly to the United States, do not have oil. The authors recommend that it is in the U.S. interest to support education and economic diversification in oil producing countries so those countries can become entrepreneurial and friendly.
http://www.cfr.org/content/publications/attachments/CGS_WorkingPaper_1.pdf [pdf format, 26 pages].

NEW ENGINES AND FUELS FOR CARS AND LIGHT TRUCKS
Author: Keefe, Ryan; Griffin, James; Graham, John
Organization: The RAND Corporation
Publication Date: April 2008
This publication discusses the benefits and costs of gasoline-electric hybrid technology, advanced diesel technology, and vehicles powered by a blend of ethanol and gasoline, as well as potential improvements to the traditional gasoline engine.
http://rand.org/pubs/corporate_pubs/2008/RAND_CP521-2008-04.pdf

URANIUM MINING IS IMPORTANT FOR SECURING AMERICA'S ENERGY FUTURE
Author: Spencer, Jack; Loris, Nick
Organization: The Heritage Foundation
Publication Date: March 25, 2008
As nuclear power expands, it will be critical that uranium resources are accessible when mining can be done in a safe and economical way.
http://www.heritage.org/Research/EnergyandEnvironment/upload/wm_1866.pdf

FINLAND'S RATIONAL APPROACH TO NUCLEAR POWER.
Heritage Foundation Backgrounder #2117. Jack Spencer. March 19, 2008.
Finland faces growing energy demands and needs to double its electricity generation capacity in the next 25 years. It ranks fifth in the world for per capita electricity consumption, so it has a significant incentive to secure long-term energy solutions. Unlike many nations, including the United States, Finland is developing a broad mix of environmentally friendly, economically competitive energy sources. Nuclear energy is an important part of that effort. Not only has Finland begun to construct a new, modern 1,600-megawatt reactor, but it is successfully executing a cohesive, workable strategy to manage spent fuel.
http://www.heritage.org/Research/EnergyandEnvironment/bg2117.cfm [direct link]

ENDING THE ENERGY STALEMATE: A BIPARTISAN STRATEGY TO MEET AMERICA'S ENERGY CHALLENGES
Author: Holdren, John P
Organization: Environment and Natural Resources Program, Harvard University
Publication Date: March 14, 2008
John P. Holdren provides the context for and an overview of the recommendations made by the National Commission on Energy Policy its 2004 and 2007 reports to the President and Congress of the United States.
http://belfercenter.ksg.harvard.edu/files/2008_holdren_NAS.pdf

RISE OF CHINA: ENERGY AND ENVIRONMENTAL IMPLICATIONS
Author: Gallagher, Kelly Sims
Organization: Environment and Natural Resources Program, Harvard University
Publication Date: March 14, 2008
In this presentation, Kelly Sims Gallagher discusses the environmental and energy implications of China's economic growth in the 20th and 21st centuries.
http://belfercenter.ksg.harvard.edu/files/gallagher_summit_ppt.pdf

UNDERSTANDING CLIMATE CHANGE
Author: Schneider, Nicholas; Organization: The Fraser Institute; Publication Date: March 6, 2008
Global warming, climate change, and greenhouse gas emissions have received extensive media coverage in the past few years. Governments and the public are grappling with calls "to do something"". Some world leaders and prominent writers even say the future of humanity is at stake. People everywhere are trying to learn what the issues are all about. This publication takes on the challenge of summarizing this complex and evolving subject matter into one publication.
http://www.fraserinstitute.org/COMMERCE.WEB/product_files/Understanding_Climate_Change_2008.pdf

ADVANCED ENERGY TECHNOLOGIES: BUDGET TRENDS AND CHALLENGES FOR DOE'S ENERGY R&D PROGRAM
Organization: U.S. Government Accountability Office
Publication Date: March 5, 2008
For decades, the nation has benefited from relatively inexpensive energy, in the process growing heavily reliant on conventional fossil fuels--oil, natural gas, and coal. However, in the current wake of higher energy costs and environmental concerns about fossil fuel emissions, renewed attention is turning to the development of advanced energy technologies as alternatives. In the United States, the Department of Energy (DOE) has long conducted research, development, and demonstration (R&D) on advanced renewable, fossil, and nuclear energy technologies. DOE's Office of Science has also funded basic energy-related research. This testimony addresses (1) funding trends for DOE's renewable, fossil, and nuclear energy R&D programs and its Office of Science and (2) key challenges in developing and deploying advanced energy technologies.
http://www.gao.gov/new.items/d08556t.pdf

A VISION FOR A CONTINENTAL ENERGY STRATEGY
Author: Klein, Ralph; Tobin, Brian; Angevine, Gerry
Organization: The Fraser Institute
Publication Date: February 19, 2008
A number of current global and intra-continental factors affecting North America's energy sector suggest that the development of a comprehensive energy strategy is important at this time. These factors -- including policy considerations, certain aspects of international agreements pertaining to North American energy trade, and the current geopolitical situation -- are discussed in this paper.
http://www.fraserinstitute.org/COMMERCE.WEB/product_files/ContinentalEnergyStrategy2008.pdf

MANAGING THE TRANSITION TO A SECURE, LOW-CARBON ENERGY FUTURE
Author: Ladislaw, Sarah; Zyla, Kathryn; Childs, Britt
Organization: The Center for Strategic and International Studies
Publication Date: February 4, 2008
In the years to come, the world must meet the energy needs of a growing and developing world population while mitigating the impacts of global climate change. This policy brief seeks to establish a framework for considering the complex and evolving links between energy security and climate change.
http://www.csis.org/media/csis/pubs/080204_managing_the_transition.pdf

RUSSIAN ENERGY AND EUROPEAN SECURITY: A TRANSATLANTIC DIALOGUE
Author: Saunders, Paul J
Organization: Nixon Center
Publication Date: February 2008
How to deal with the energy-rich and increasingly assertive Russia has become a source of considerable concern and debate in both the United States and Europe. It is beyond doubt that Russia's new energy leverage represents a challenge to European energy security, European unity, and indeed Europe's unique relationship with the United States. Yet it is also beyond doubt that Europe needs and will continue to need Russian energy and that supplies from Russia are useful alternatives to reliance on the Persian Gulf, particularly Iran. Emotional characterizations Russian actions are not a substitute for a sober evaluation of actual Russian policies, U.S. and European interests, or principled but practical solutions.
http://www.nixoncenter.org/monographs/saunders08.pdf

PUTTING THE PIECES TOGETHER: HOW DO CITIZENS AND EXPERTS SEE THE ENERGY ISSUE?
Author: Friedman, Will; Morrigan, McKenna; Kadlec, Alison
Organization: Public Agenda
Publication Date: February 2008
This report describes the findings from a series of focus groups across the country and interviews with experts on an array of energy issues. It lays out some of the commonalities and differences in thinking between voters and a cross-section of government, technical, industrial, and policy experts on energy issues and illuminates a number of communications and policy challenges and opportunities.
http://www.publicagenda.org/research/pdfs/energygap.pdf

BIOFUELS AND DEVELOPMENT: WILL THE EU HELP OR HINDER?
Author: Stevens, Chris
Organization: Overseas Development Institute
Publication Date: January 2008
Because Europe is a major producer of biofuels, with an estimated 10% share of world bioethanol, its policies can have a significant effect on them. We identify changes to EU policy that would not only foster development, but help to cut greenhouse gas emissions. These could be incorporated into the initiatives on renewable energy sources that the Commission will be launching in 2008.
http://www.odi.org.uk/publications/briefing/bp32-jan08-biofuels.pdf

THE GEOPOLITICS OF ENERGY: FROM SECURITY TO SURVIVAL
Author: Pascual, Carlos
Organization: The Brookings Institution
Publication Date: January 2008
The political nature of energy, linked to the sources of supply and demand, comes to public attention at moments of crisis, particularly when unstable oil markets drive up prices and politicians hear constituent protests. But energy politics have become yet more complex. Transport systems, particularly in the United States, have become largely reliant on oil, so disruption of oil markets can bring a great power to a standstill. Access to energy is critical to sustaining growth in China and India - not only to lift these countries out of poverty, but to keep pace with burgeoning populations. Failure to deliver on the hope of greater prosperity could unravel even authoritarian regimes, and even more so democratic ones, as populations become more educated and demanding. And it is these very factors that have turned the market power of energy suppliers into political power. Importers have come to compete for supplies, driving up prices, supplier wealth and the capacity to play roles in regional and international politics that go well beyond the GDP of countries such as Russia, Venezuela and Iran. This paper seeks to address interconnections, and the kinds of measures that will be needed to ensure sustainability, prosperity, and security.
http://www.brookings.edu/~/media/Files/rc/papers/2008/01_energy_pascual/01_energy_pascual.pdf

WATER AND ENERGY FUTURES IN AN URBANIZED ASIA: SUSTAINING THE TIGER.
Erik R. Peterson and Rachel Posner, editors. Global Strategy Institute, Center for Strategic and International Studies (CSIS). Web posted December 15, 2007.
For the first time in history, more people live in urban rather than rural areas. By 2030, the U.N. predicts that 60 percent of the global population will live in cities. The Pacific- Asian region is a key driver in this urban transition.
This paper explores the complex phenomena of rapid urbanization, resource management (focusing on water and energy), and public policy challenges and opportunities in Asia. The Institute queried experts from nongovernmental organizations and academia for this report. The report is divided into three parts. The first part discusses China's strategic plan to lead the world in science and technology and to resolve the region's resource management conundrum. The report then transitions to a discussion of the technological innovations to help China with its environmental challenges. Lastly, experts lay out "new modes of environmental governance that could be implemented in both China and it neighboring developing countries."
http://www.csis.org/media/csis/pubs/071210_petersonwaterenergy-web.pdf [pdf format, 65 pages]

NUCLEAR POWER IN A WARMING WORLD: ASSESSING THE RISKS, ADDRESSING THE CHALLENGES.
Lisbeth Gronlund, David Lochbaum, and Edwin Lyman. Union of Concerned Scientists. Web posted December 11, 2007.
Nuclear power results in less global warming emissions, but nuclear power could also increase the threat to human safety and security due to a power plant meltdown or a terrorist attack. This report assesses the risks posed by nuclear power and offers ways to minimize them.
http://www.ucsusa.org/assets/documents/global_warming/Nuclear-Power-in-a-Warming-World.pdf
[pdf format, 82 pages]

ARTICLES

PROVIDING ENERGY SECURITY IN AN INTERDEPENDENT WORLD
Verrastro, Frank - Ladislaw, Sarah
Washington Quarterly, 2007, vol.30, no.4, p.95

Focusing on energy independence, although politically attractive, is a misguided quest that can actually distract from the more important objective of managing the transition to a more sustainable and secure energy future in an interdependent world.

WORLD ENERGY PROSPECTS AND CHALLENGES
Birol, Fatih
Asia Pacific Review, 2007, Vol. 14, No.1, p.1

The world is facing twin energy-related threats: that of not having adequate and secure supplies of energy at affordable prices and that of environmental harm caused by its use. Soaring energy prices and recent geopolitical events have reminded us of the essential role affordable energy plays in economic growth and human development, and of the vulnerability of the global energy system to supply disruptions. Safeguarding energy supplies is once again at the top of the international policy agenda. Yet the current pattern of energy supply carries the threat of severe and irreversible environmental damage. Reconciling the goals of energy security and environmental protection requires strong and coordinated government action and public support. The Member countries of the International Energy Agency (IEA) recognise the urgent need to curb the growth in fossil-energy demand, to increase geographic and fuel-supply diversity and to mitigate climate-destabilising emissions. G8 leaders, meeting with the leaders of several major developing countries and heads of international organisations - including the IEA - at Gleneagles in July 2005 and in St. Petersburg in July 2006 called on the IEA to "advise on alternative energy scenarios and strategies aimed at a clean, clever and competitive energy future." The World Energy Outlook 2006 responds to that request. It confirms that fossil-fuel demand and trade flows, and greenhouse-gas emissions would follow their current unsustainable paths through to 2030 in the absence of new government action - the underlying premise of the Outlook's Reference Scenario. It also demonstrates, in an Alternative Policy Scenario, that a package of policies and measures that countries around the world are considering would, if implemented, significantly reduce the rate of increase in demand and emissions.

Reports by U.S. Government & Other International Organizations

RENEWABLE ENERGY CONSUMPTION AND ELECTRICITY: PRELIMINARY 2007 STATISTICS.
Energy Information Administration, U.S. Department of Energy. Fred Mayes et al. May 2008.
Renewable energy consumption declined 1 percent between 2006 and 2007 to 6,830 trillion Btu, according to preliminary 2007 data. In contrast, both total and nonrenewable energy consumption increased 2 percent. Hydro electricity production dropped 14 percent in 2007 due to reduced precipitation in several regions of the country. On the plus side, biomass-based energy grew 7 percent and wind-generated electricity increased 21 percent. Major increases in consumption of biomass to produce and use biofuels, ethanol and biodiesel, were almost entirely responsible for the increase in biomass during 2007.
Full Text:
http://www.eia.doe.gov/cneaf/alternate/page/renew_energy_consump/reec_080514.pdf [PDF format, 16 pages].

20% WIND ENERGY BY 2030.
U.S. Department of Energy. May 2008.

Energy prices, supply uncertainties, and environmental concerns are driving the United States to rethink its energy and develop diverse sources of clean, renewable energy. The nation is working toward generating more energy that can be cost-effective, replaced or “renewed” without contributing to climate change or major adverse environmental impacts. The report identifies requirements to achieve this goal including reducing the cost of wind technologies, citing new transmission infrastructure, and enhancing domestic manufacturing capability. Most notably, the report identifies opportunities for 7.6 cumulative gigatons of CO_2 to be avoided by 2030, saving 825 million metric tons in 2030 and every year thereafter if wind energy achieves 20 percent of the nation’s electricity mix.
Full Text:
http://www1.eere.energy.gov/windandhydro/pdfs/41869.pdf [PDF format, 248 pages].

OPEC REVENUES FACT SHEET.
Energy Information Administration, Department of Enerygy. Web posted May 6, 2008.

Energy Information Administration (EIA) estimates that members of the Organization of the Petroleum Exporting Countries (OPEC) earned $674 billion in net oil export revenues in 2007, a 10 percent increase from 2006. Saudi Arabia earned the largest share of these earnings, $194 billion, representing 29 percent of total OPEC revenues. On a per-capita basis, OPEC net oil export earning reached $1,143, an 8 percent increase from 2006. Based on projections from the EIA May 2008 Short Term Energy Outlook (STEO), OPEC net oil export revenues could be $1,060 billion in 2008 and $990 billion in 2009.
http://www.eia.doe.gov/emeu/cabs/OPEC_Revenues/pdf.pdf [PDF format, 3 pages].

STATE AND TRENDS OF THE CARBON MARKET 2008.
World Bank. Karan Capoor and Philippe Ambrosi. May 2008.

The global carbon market grew to a US$64 billion in 2007, more than doubling over 2006, according to this World Bank report. The European Union Emission Trading Scheme (EU ETS) also saw a doubling of both value and number of allowances transacted to a US$50 billion. The report's data shows that the global carbon market doubled or tripled in value for all segments, except for projects in developing countries. It cautions that market momentum may be at a crossroads for many developing countries just as they are beginning to reap the benefits of carbon finance and are stepping forward to show that they are making efforts to mitigate climate change through advancing clean energy technology.
http://siteresources.worldbank.org/NEWS/Resources/State&Trendsformatted06May10pm.pdf [PDF format, 78 pages].

SHORT TERM ENERGY AND SUMMER FUELS OUTLOOK.
Energy Information Administration, U.S. Department of Energy. April 8, 2008.

West Texas Intermediate crude oil prices, which averaged $72.32 per barrel in 2007, are projected to average $101 per barrel in 2008 and $92.50 per barrel in 2009. The projected higher costs for crude oil will contribute to higher petroleum product prices. Motor gasoline prices are projected to average $3.36 per gallon in 2008, up 55 cents from last year. The monthly average gasoline price is projected to peak at about $3.60 per gallon this spring. This document looks at production and consumption of oil for both OPEC and non-OPEC nations and evaluates the effects on the United States.
http://www.eia.doe.gov/emeu/steo/pub/apr08.pdf [pdf format, 43 [ages]

STRATEGIC PETROLEUM RESERVE: OPTIONS TO IMPROVE THE COST-EFFECTIVENESS OF FILLING THE RESERVE.
Government Accountability Office; testimony before Senate Committee on Energy and Natural Resources. Frank Rusco. February 26, 2008.
Purchasing oil to fill the SPR—as DOE did until 1994—is likely to be more cost-effective than exchanging oil from the royalty-in-kind program for other oil to fill the SPR.
http://www.gao.gov/new.items/d08521t.pdf [pdf format, 15 pages]

ENERGY IN 2020: ASSESSING THE ECONOMIC EFFECTS OF COMMERCIALIZATION OF CELLULOSIC ETHANOL.
Stefan Osborne. Manufacturing and Services Competitiveness Report, Office of Competition and Economic Analysis, International Trade Administration, U.S. Department of Commerce. November 2007.

This report examines the effect on the U.S. economy by 2020 if cellulosic ethanol becomes commercially viable and if total ethanol production reaches 30 billion gallons. The findings of the report are:

- U.S. crude oil imports will be 4.1 percent lower than projected and the worldwide and domestic price of oil will be lower;

- The annual benefits to U.S. consumers of increased cellulosic ethanol will be $12.6 billion in 2020;
- The primary beneficiary of ethanol production will be crop-producing U.S. industries;
- U.S. oil producers will be hurt by the lower prices for crude oil.

Full Text:
http://trade.gov/media/publications/pdf/cellulosic2007.pdf [pdf format, 20 pages]

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View this document:
http://kyiv.usembassy.gov/files/irc_esw_072008.pdf

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http://kyiv.usembassy.gov/irc_subscr_form_ukr.html (Українською)

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