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Introduction

The world continues to look to the United States for innovative solutions and leadership on energy and environmental issues. Energy and environmental leadership in the U.S. historically has been driven by technological advancements encouraged by government policies that reflect our tradition of entrepreneurship. As you know, Congress recently enacted a new comprehensive set of tools that will encourage innovative solutions through the development of advanced energy technologies and initiatives found in the Energy Policy Act of 2005, which was signed into law only six months ago. Forward-looking leadership must provide full implementation and funding for these authorized energy programs in the law in order to propel U.S. energy policy into the 21st Century. A mandatory cap on carbon emissions is not the answer and will likely undermine the U.S. economy while creating the framework of an uncertain environmental outcome.

By way of background, the National Association of Manufacturers (NAM) is the nation's largest industrial trade association, representing small and large manufacturers in every industrial sector and in all 50 states. Headquartered in Washington, D.C., the NAM has 10 additional offices across the country.

The NAM's mission is to enhance the competitiveness of manufacturers by shaping a legislative and regulatory environment conducive to U.S. economic growth and to increase understanding among policymakers, the media and the general public about the vital role of manufacturing to America's economic future and living standards.

The NAM's Policy on Climate Change

The NAM recognizes that there is a relationship between economic growth, global energy consumption and the environment. The NAM also recognizes that concern about the potential impact of human activities on the earth's natural greenhouse effect has become an international issue. However, there remains considerable scientific uncertainty and disagreement regarding human impacts on climate, and there is an inability to predict accurately future climate change. In fact, observational data have not confirmed evidence of global warming that can be attributed to human activities. This argues that any proposed policies to reduce greenhouse gas emissions must be subject to thorough and open public debate, including consideration of their impact on the U.S. economy and its international competitiveness. We believe any U.S. climate change policies should be voluntary, cost-effective, compatible with our marketplace economy, flexible, global in scope and involve all of our trading partners, and take into account all greenhouse gas sources and reservoirs. Therefore, the NAM opposes any federal or state government actions regarding climate change that could adversely affect the international competitiveness of the U.S. marketplace economy.

The NAM also recognizes that knowledge of the environment is not static, nor is our ability to protect it. Technological advances developed by the marketplace have greatly minimized and continue to reduce the environmental impact of domestic energy production and consumption. The NAM encourages policies which recognize these technological advances and allow for balance between economic growth and protection of our environment.

The NAM Opposes Federal Policies That Will Increase Market Demand for Scarce Natural Gas, Increase Reliance on Energy Imports, and Undermine Domestic Energy Security

Federal rules mandating air emission reductions, combined with federal moratoria restricting the development of abundant natural gas and oil resources on the Outer Continental Shelf (OCS), have already strained the supply for natural gas. These dual policies have resulted in sky-rocketing costs, increased reliance on imports, and undermine domestic energy security. If the federal government moves forward with any form of carbon emission mandate, more manufacturers and power generators will be forced to switch from plentiful coal resources to more scarce natural gas. U.S. consumers currently pay among the highest prices in the world for natural gas, approximately \$6.60 per million British Thermal Units (BTUs). The U.S. price is substantially higher than many of our major trading partners, including China, South Korea and Japan. The Energy Information Administration (EIA) Annual Energy Outlook 2006 released on December 12, 2005 forecasts continued high natural gas prices for all sectors of the economy. Any constraints on the use of coal, through mandates on carbon emissions and other greenhouse gases, can only make a very bad situation worse.

Natural gas costs have had a strong adverse impact on the manufacturing sector since 2000. The chemical industry alone estimates that 100,000 jobs were lost since 2000 as a direct result of the high natural gas prices due to the gas supply and demand imbalance. Over half of the fertilizer capacity in the United States is shut in or closed permanently. The chemical industry has gone from the lead net export industry in the United States to a net importer of chemicals. Other industries, including plastics, aluminum, steel, metal heat treating, glass and paper are struggling to stay afloat in the current natural gas cost environment. The manufacturing sector as a whole has lost more than three million jobs since 2000. If sky high natural gas costs continue, much of the technological know-how and industrial base that will be necessary to increase carbon efficiency will be sent overseas. The U.S. must promote policies that advance innovative manufacturing, which will lead the world in developing technologies that will address current and future environmental challenges, including climate change.

A Mandatory Cap and Trade Program Will Hurt Manufacturers

A recent NAM study, *The Impact of Energy and Environmental Policy Choices on U.S. Manufacturing, U.S. Economic Growth and Energy Markets*[submit this for the record], determined that actions such as mandatory cap and trade proposals would increase the price of gasoline and diesel by 8 to 9 percent by 2010. Manufacturers would pay 57 percent more for natural gas, and electricity would increase by 39 percent. Furthermore, manufacturing production would decrease by 4.1 percent and trade systems and employment would decrease by

almost 3 percent. In other words, mandatory cap and trade would only exacerbate the economic hardships that the manufacturing sector is currently experiencing.

Emission reporting provisions should not be adopted by Congress in the absence of some demonstrated need, because regulatory requirements will undoubtedly be costly. Creating additional paperwork for the many commercial, industrial, agricultural and other interests potentially impacted, whether large or small, will neither enhance environmental quality nor address the nation's energy problems. Moreover, the secretary of energy long ago established an "inventory of national aggregate" GHG emissions under section 1605(a) of the Energy Policy Act of 1992 (EPAct) and annually publishes that data. In addition, electric utilities now report their carbon dioxide (CO₂) emissions under section 821 of Public Law 101-52. Further, the EPA and the secretary of state jointly prepare an annual, comprehensive Greenhouse Gas (GHG) inventory pursuant to the United Nation's Framework Convention on Climate Change (UNFCCC) with much of the data derived from the DOE.

Congress Must First Address the Numerous Climate Change Provisions Within the Energy Policy Act of 2005 Before Initiating a Review of Climate Change Policy

The Energy Policy Act, approved by Congress and signed into law by the President in August 2005, advances responsible action on potential climate change. Specific new policies address climate change through new technologies that will diversify America's energy portfolio, promoting clean, affordable and reliable energy for decades. Below is a one-page summary of these new policies, followed by the details on specific new provisions. These have been categorized into technology development, technology adoption, and energy source adoption.

Long-term technology development: Basic research in the energy bill could lead to fundamental reductions in GHG emission trends even with a healthy growing economy. These new technologies also could be used in developing countries where greenhouse gas emissions are growing most rapidly. Funded research could lead to significant advances in:

- Hydrogen Fuels -- funding enhances the potential for practical use of hydrogen fuels by addressing everything from safe delivery to the codes and standards for hydrogen use.
- Coal Gasification, Carbon Sequestration and Efficiency Improvements – could allow coal to be used to generate carbon-free or low-carbon electricity.
- Fuel Cell Research -- will address technical and cost issues and potentially speed fuel cell use in residential, commercial and transportation applications.
- Energy Conservation and Efficiency – the Next Generation Lighting Initiative and initiatives like advanced electric motor control device research could significantly reduce overall energy use, further reducing GHG emissions.

Near- and medium-term technology adoption. The energy bill promotes or requires actions to improve energy efficiency and reduce greenhouse gas emissions throughout the economy. Actions include:

- National Requirements for increased ethanol use and decreased petroleum use;
- Federal Agency Requirements covering metering, percentage reduction schedules and new options for contracting to reduce energy use and GHG emissions;

- Communities and States have new funding for energy efficient appliance programs, weatherization assistance and state energy conservation plans;
- Efficiency Standards and Incentives for Public Housing will improve energy efficiency;
- Efficiency Standards and Incentives for Individuals and Businesses adds energy conservation standards for a wide range of commercial appliances and other products.

Near- and medium-term adoption of new energy sources. A wide range of specific actions promoting the supply of zero and low-GHG energy sources include:

- Renewable Energy options for increased production of renewable energy on federal lands;
- Natural Gas incentives and reduction of barriers to marginal or unconventional natural gas and installation of LNG terminals will increase supplies of this lowest-carbon fossil fuel;
- Nuclear Power options improve, promoting continued use of carbon-free nuclear power, development of new modular nuclear reactors.

***The Energy Bill's Contribution
To Energy Efficiency and Responsible Climate Policy***

The energy bill advances the following significant actions on potential climate change.

Technology Research, Development and Demonstration

Hydrogen

- Authorizes \$1.25 billion over 10 years for the Next Generation Nuclear Plant Project for research, development, design, construction and operation of an advanced, next-generation, nuclear energy system leading to alternative approaches to reactor-based generation of hydrogen. (Title VI -- Nuclear Matters, Sec. 641-645)
- Authorizes \$3.2 billion over five years for programs enhancing the potential for using as an energy source in the US economy. Program elements address:
 - Hydrogen and Fuel Cell Technology Research and Development (\$1.92 billion);
 - Hydrogen Supply and Fuel Cell Demonstration Program (\$1.31 billion);
 - Development of Safety Codes and Standards (\$38 million);
 - Reports (\$7.5 million); (Title VIII – Hydrogen)

Energy Efficiency

- Authorizes \$1.8 billion over nine years for the Clean Coal Power Initiative for projects that advance efficiency, environmental performance or cost competitiveness of coal gasification and related projects. Establishes a 50% thermal efficiency target for coal gasification technologies and 7% improvements in thermal efficiencies of existing units. (Title IV- Coal, Sec. 401)
- Authorizes \$2.6 billion over eight years for energy efficiency and conservation research, development, demonstration and commercial applications including:
 - Minimum \$350 million over eight years for the Next Generation Lighting Initiative for energy efficient advanced solid-state lighting technologies. (Title IX: Research and Development, Sec. 912)

- Creates National Building Performance Initiative to, in part, energy conservation. (Title IX: Research and Development, Sec. 913)
- Minimum \$21 million over three years for research, development and demonstration for improving performance, service life and cost of used vehicle batteries in secondary applications. (Title IX: Research and Development, Sec. 915)
- Establishes the Energy Efficiency Science Initiative. (Title IX: Research and Development, Sec. 916)
- \$780 million over three years for advanced cost-effective technologies to improve the energy efficiency and environmental performance of vehicles. (Title IX: Research and Development, Sec. 911)
- \$4 million over 2 years for advanced control devices to improve the energy efficiency of electric motors, including those used in industrial processes, heating, ventilation, and cooking. (Title IX: Research and Development, Sec. 911)
- \$768 million over three years to promote distributed energy and electric energy systems including:
 - High Power Density Industry Program to improve the energy efficiency of data centers, server farms and telecommunications facilities; (Title IX: Research and Development, Sec. 921)
 - \$40 million over two years for Micro-Cogeneration Energy Technology for increased efficiency in small-scale combined heat and power for residential applications; (Title IX: Research and Development, Sec. 923)
 - Distributed Energy Technology Demonstration Program to accelerate utilization of efficient and low-emitting technologies such as fuel cells, micro-turbines and combined heat and power systems. (Title IX: Research and Development, Sec. 924)
 - Electric Transmission and Distribution Programs to ensure in part, energy efficiency of electrical transmission and distribution systems. (Title IX: Research and Development, Sec. 925)
- Authorizes \$1.137 billion over three years for R&D and commercial application programs to facilitate systems including innovation for existing plants (including mercury removal), integrated gasification combined cycle, advanced combustion systems, turbines for synthesis gas derived from coal, carbon capture and sequestration research and development, coal derived chemicals and transportation fuels, liquid fuels derived from coal, solid fuels and feedstock, advanced coal related research, advanced separation technologies, and fuel cells for the operation of synthesis gas derived from coal. (Title IX: Research and Development, Sec. 962)
- Establishes a Federal/State cooperative program for research, development, and deployment of energy efficiency technologies. (Title I -- Energy Efficiency, Sec. 127)
- Authorizes \$65 million over three years to establish a research partnership to develop and demonstrate railroad locomotive technologies that, in part, increase fuel economy. (Title VII – Vehicles and Fuels, Sec. 751)
- Mandates a study of feasibility and effects of reducing the use of fuel for automobiles. (Title VII – Vehicles and Fuels, Sec. 773)
- Calls for a study of how to measure energy efficiency. (Title XVIII – Studies, Sec. 1802)

- Provides that the Federal government use energy efficient technologies in their buildings and vehicles associated with the National Park System, National Wildlife Refuge System, National Forest System, National Marine Sanctuaries System, and other public lands and resources managed by the Secretaries of Interior, Commerce and Agriculture. (Title I – Energy Efficiency, Sec. 111)
- Creates an amendment to the Low-Income Home Energy Assistance Act of 1981 permitting the State or an agent thereof to purchase renewable fuels, including biomass. (Title I – Energy Efficiency, Sec. 121)
- Requires a report on failure to comply with deadlines for new or revised energy conservation standards. (Title I – Energy Efficiency, Sec. 141)
- Provides \$250 million over 5 years toward a joint program with NASA to develop ultra-efficient engine technologies for aircraft, with goals including a fuel efficiency increase of at least 10%, and a reduction of the impact of landing and take-off nitrous oxides emissions on local air quality of 70%. (Title VII – Vehicles and Fuels, Sec. 758)
- Provides \$40 million over four years for a program to improve technologies for the commercialization of a combination hybrid/flexible fuel vehicle or a plug-in hybrid/flexible fuel vehicle. (Title VII – Vehicles and Fuels, Sec. 706)
- Provides that the Secretary shall accelerate efforts directed toward the improvement of hybrid vehicle technologies. (Title VII – Vehicles and Fuels, Sec. 711)
- Provides that the Secretary shall accelerate efforts to improve diesel combustion and after-treatment technologies for use in diesel fueled motor vehicles. (Title VII – Vehicles and Fuels, Sec. 754)
- Provides that the Secretary will carry out a program of research, development, demonstration, and commercial application of technologies for ultra-deepwater and unconventional natural gas and other petroleum resources exploration and production in order to maximize the value of natural gas and other petroleum resources of the US, by increasing the supply, through reducing the cost and increasing the efficiency of exploration and production, while improving safety and minimizing environmental impacts. (Title IX – Research and Development, Sec. 999A, 999B)

Renewable Energy

- Authorizes \$22.27 billion over three years for renewable energy research, development and demonstration including:
 - \$738 million for Biofuels research aimed at making fuels that are price-competitive with gasoline or diesel in internal combustion or fuel- cell-powered vehicles; (Title IX: Research and Development, Sec. 931, 932)
 - \$450 million over three years for Concentrating Solar Power Research Program for the production of hydrogen including cogeneration of hydrogen and electricity. (Title IX: Research and Development, Sec. 931, 934)
 - Hybrid Solar lighting R&D for novel lighting that combines sunlight and electrical lighting. (Title IX: Research and Development, Sec. 934)
- Establishes a Federal/State cooperative program for research, development, and deployment of renewable energy technologies. (Title I -- Energy Efficiency, Sec. 127)
- Establishes the Advanced Biofuel Technologies Program to demonstrate advanced technologies for the production of alternative transportation fuels. (Title XV – Ethanol and Motor Fuels, Sec. 1514)

- Requires a study of the Energy Policy Act of 1992 and its impact on alternative fueled vehicle technology, availability of technology and cost of alternative fueled vehicles. (Title XVIII – Studies, Sec. 1831)
- Provides a tax credit of 30% of the cost of any qualified alternative fuel vehicle refueling property built. (Title XIII – Energy Policy Tax Initiative, Sec. 1342)
- Provides \$300 million over five years for the creation of a photovoltaic energy commercialization program, in order to accelerate growth of the industry, reduce fossil fuel consumption, attain the goal of installing solar energy systems in 20,000 Federal buildings by 2010, and to develop program performance data to support policy decisions on future incentive programs with respect to energy. (Title II – Renewable Energy, Sec. 204)
- Establishes that the Secretary prepares detailed roadmaps for the research, development, and other related programs of solar and wind technologies. (Title VIII – Hydrogen, Sec. 812)
- Authorizes \$250 million for production incentives for cellulosic biofuels. (Title IX – Research and Development, Sec. 942)
- Establishes a program for education and outreach on biobased fuels and biobased products consisting of training programs and education. (Title IX – Research and Development, Sec. 947)
- Creates an amendment to the 1986 code providing bonds to be held by qualified applicants for the use of renewable energy in the creation of electricity. (Title XIII – Energy Policy Tax Initiatives, Sec. 1303)

Nuclear

- Authorizes \$1.18 billion over 3 years for Nuclear Energy research, development, demonstration and commercial application activities including:
 - Research to examine reactor designs for large-scale production of hydrogen using thermochemical processes. (Title IX: Research and Development, Sec. 952)
 - Generation IV Nuclear Energy Systems initiative to advance understanding of efficiency and cost opportunities for next generation nuclear power plants. (Title IX: Research and Development, Sec. 952)
- Provides a tax credit of 1.8 cents per kilowatt-hour of electricity produced and sold by advanced nuclear power facilities. (Title XIII – Energy Policy Tax Initiatives, Sec. 1306)

Sequestration

- Establishes a grant program to provide incentives to promote the capturing, transportation and injection of CO₂, and to promote oil and natural gas production from the Outer Continental Shelf and onshore Federal lands by providing royalty incentives to use enhanced recovery techniques. (Title III – Oil and Gas, Sec. 354)
- Mandates research on technologies to capture carbon dioxide from pulverized coal combustion units. (Title IX – Research and Development, Sec. 963)
- Institutes loan guarantees for projects that avoid, reduce, or sequester anthropogenic emissions of greenhouse gases and employ new or significantly improved technologies. (Title XVII – Incentives for Innovative Technologies, Sec. 1703)

Science

- Authorizes \$13.9 billion over three years for basic science research that could have significant implications for long-term trends in the nation's greenhouse gas emissions. (Title IX: Research and Development, Sec. 961). These programs include:
 - \$1.1 billion for Fusion Energy Science Program (Sec. 972);
 - Fission and Fusion Energy Materials Research Program (Sec. 978);
 - \$74.7 million for Catalysis science research that may contribute to new fuels for energy production and more efficient material fabrication processes (Sec. 973);
 - Nanoscale science and engineering research (Sec. 971);
 - \$995 million for Advanced scientific computing for energy missions (Sec. 967);
 - Genomes to Life Program with a goal of developing technologies and methods that will facilitate production of fuels, including hydrogen, and convert carbon dioxide to organic carbon (Sec. 977).
- Provides \$5 million for a project to demonstrate the viability of high-energy electron scrubbing technology. (Title IV – Coal, Sec. 416)

Technology Adoption

International

- Directs the Secretary of State, in coordination with the Administrator of the U.S. Agency for International Development, to provide assistance to developing countries specifically for projects to reduce greenhouse gas intensity. (Title XVI – Climate Change, Sec. 1602)

National Private Sector -- Energy Use Policies

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- Establishes a self-sustaining national public energy education program that will cover, among other things, conservation and energy efficiency, and the impact of energy use on the environment. (Title I -- Energy Efficiency, Sec. 133)
- Authorizes \$450 million over five years to create a comprehensive national public awareness program regarding the need to reduce energy consumption, the benefits of reducing energy consumption during peak use periods, and practical, cost-effective energy conservation measures. (Title I -- Energy Efficiency, Sec. 134)
- Authorizes the Secretary of Energy to enter into voluntary agreements with energy intensive industrial sector entities to significantly reduce the energy intensity of their production activities. (Title I -- Energy Efficiency, Sec. 106)

National Private Sector -- Efficiency Standards and Incentives

- Creates energy conservation standards for commercial clothes washers, icemakers, refrigerators, freezers, air conditioners, and heaters. (Title I -- Energy Efficiency, Sec. 136)
- Authorizes \$6.2 million for pilot projects designed to conserve energy resource by encouraging use of bicycles in place of motor vehicles. (Title VII – Vehicles and Fuels, Sec. 755)
- Authorizes \$94.5 million over three years to reduce energy use by reducing heavy-duty vehicle long-term idling. (Title VII – Vehicles and Fuels, Sec. 756)

- Authorizes \$45 million over three years to reduce energy use by reducing locomotive long-term idling. (Title VII – Vehicles and Fuels, Sec. 756)
- Authorizes \$25 million over five years for a biodiesel testing partnership with engine, fuel injection, vehicle and biodiesel manufacturers to test and improve biodiesel technologies. (Title VII – Vehicles and Fuels, Sec. 757)
- Authorizes \$17.5 million over five years for CAFÉ enforcement obligations. (Title VII – Vehicles and Fuels, Sec. 771)
- Establishes a DOE/EPA voluntary Energy Star Program under the Energy Policy and Conservation Act to identify and promotes energy-efficient products and buildings. (Title I -- Energy Efficiency, Sec. 131)
- Directs the Secretary of Energy in cooperation with EPA to undertake an educational program for homeowners and small businesses on energy savings from properly maintained air conditioning, heating, and ventilating systems. (Title I -- Energy Efficiency, Sec. 132)
- Adds energy conservation standards definitions for additional products (e.g. lamps, battery chargers, refrigerators, external power supply, illuminated exit sign, low-voltage, transformer, traffic signal module) to the Energy Policy and Conservation Act. (Title I -- Energy Efficiency, Sec. 135)
- Initiates a rulemaking under the Energy Policy and Conservation Act to evaluate and improve the effectiveness of current energy efficiency labeling on consumer products. (Title I -- Energy Efficiency, Sec. 137)
- Provides a tax deduction of a maximum of \$1.80 per square foot, adjusted for the aggregate amount of the deductions from all prior years, for energy efficient commercial buildings. (Title XIII – Energy Policy Tax Initiatives, Sec. 1331)
- Provides tax credits to promote energy efficiency for qualifying entities under the following categories: construction of new energy efficient homes; certain non-business energy property; energy efficient appliances; residential energy efficient property; business installation of qualified fuel cells and stationary micro-turbine power plants; and business solar investment. (Title XIII – Energy Policy Tax Initiatives, Sec. 1332, 1333, 1334, 1335, 1336, 1337)
- Provides tax credits for fuel cell, advanced lean burn technology, hybrid, and alternative fuel motor vehicles. (Title XIII – Energy Policy Tax Initiatives, Sec. 1341)
- Establishes grant and loan programs given on a competitive basis from the Federal level, state level, or both, to eligible entities to achieve significant reductions in diesel emissions in terms of tons of pollution produced and diesel emissions exposure. (Title VII – Vehicles and Fuels, Sec. 792, 793)
- Provides a tax credit of maximum 20 percent of the qualified investment, for investments in clean coal facilities. (Title XIII – Energy Policy Tax Initiatives, Sec. 1307)

Federal Agencies

- Directs Secretary of Energy to revise Federal building energy efficiency performance standards to require, if life-cycle cost-effective, that new Federal buildings achieve energy consumption levels at least 30 percent below the most recent version of ASHRAE or the International Energy Conservation Code. (Title I -- Energy Efficiency, Sec. 109)

- Promotes plans for energy and water savings measures in Congressional buildings as well as reductions in energy consumption in federal buildings nationwide. (Title: I -- Energy Efficiency, Sec. 101)
- Establishes percentage reduction schedule for fuel use per gross square foot of Federal buildings for 2006 through 2015. (Title: I -- Energy Efficiency, Sec. 102)
- Calls for all Federal buildings to be metered or sub-metered to promote efficient energy use and reduce electricity costs. (Title I -- Energy Efficiency, Sec. 103)
- Directs federal agencies to procure Energy Star or FEMP designated-energy efficient products. (Title I -- Energy Efficiency, Sec. 104)
- Permanently extends and expands existing federal agency authority to contract with energy service companies to assume the capital costs of installing energy and water conservation equipment and renewable energy systems in federal facilities, and recover life-cycle energy cost savings over the term of the contract. (Title I -- Energy Efficiency, Sec. 105)
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- Promotes increased use of recovered mineral component in Federally funded projects involving procurement of cement or concrete. (Title I -- Energy Efficiency, Sec. 108)
- Amends the Energy Policy Act of 1992 to require Federal agencies to purchase renewable sources of fuel. (Title II – Renewable Energy, Sec. 203)
- Amends Energy Policy and Conservation Act to promote Federal agencies' use of alternative fuels in dual-fuel vehicles. (Title VII – Vehicles and Fuels, Sec. 701)
- Requires energy savings goals for each Federal agency and requires the use of fuel cell vehicles, hydrogen energy systems, and stationary, portable, and micro fuel cells. Authorizes \$450 million over five years to achieve these goals. (Title VII – Vehicles and Fuels, Sec. 782, 783)
- Mandates a study on energy conservation implications of widespread adoption of telecommuting by Federal employees. (Title XVIII – Studies, Sec. 1803)
- Requires a study on the amount of oil demand that could be reduced by oil bypass filtration technology and total integrated thermal systems and feasibility of using the technologies in Federal motor vehicle fleets. (Title XVIII – Studies, Sec. 1805, 1806)

Communities and States

- Amends the Energy Conservation and Production Act and reauthorizes \$1.8 billion over three years for weatherization assistance. (Title I -- Energy Efficiency, Sec. 122)
- Authorizes \$325 million over three years and amends the Energy Policy and Conservation Act to promote State review their energy conservation plans, with a state energy efficiency goal of a 25 percent or more improvement by 2012 compared to 1992. (Title I -- Energy Efficiency, Sec. 123)
- Authorizes \$250 million over five years for State energy efficient appliance rebate programs. (Title I -- Energy Efficiency, Sec. 124)
- Authorizes \$150 million over five years for grants to State agencies to assist local governments in constructing new energy efficient public buildings that use at least 30 percent less energy than comparable public building meeting the International Energy Conservation codes. (Title: Energy Efficiency, Sec. 125)

- Authorizes \$60 million over three years for grants to local government, private, and non-profit community development organizations, and Indian tribes to improve energy efficiency, develop alternative renewable energy supplies, and increase energy conservation in low income rural and urban communities. (Title I -- Energy Efficiency, Sec. 126)
- Authorizes \$125 million worth of grants over five years to States to develop and implement building codes that meet or exceed the energy efficiency of the most recent building energy codes. (Title I -- Energy Efficiency, Sec. 128)
- Calls for a study of State and regional policies that promote utilities to undertake cost-effective programs reducing energy consumption. (Title I -- Energy Efficiency, Sec. 139)
- Authorizes \$25 million for States to carry out programs that encourage energy efficiency and conservation of electricity or natural gas. (Title I -- Energy Efficiency, Sec. 140)

Public Housing

- Encourages increased energy efficiency and water conservation through amendments to the U.S. Housing Act of 1937 by promoting installation of equipment conforming to new standards. (Title I -- Energy Efficiency, Sec. 151)
- Requires public housing agencies to purchase energy-efficient appliances that are Energy Star products or FEMP-designated products when purchasing appliances unless these products are not cost-effective. (Title I -- Energy Efficiency, Sec. 152)
- Includes energy efficiency standards in amendments to the Cranston-Gonzalez National Affordable Housing Act. (Title I -- Energy Efficiency, Sec. 153)
- Directs the Secretary of Housing and Urban Development to develop and implement an integrated strategy to reduce utility expenses at public and assisted housing through cost-effective energy conservation, efficiency measures, as well as energy efficient design and construction. (Title I -- Energy Efficiency, Sec. 154)

Energy Source Adoption

Renewable Energy and Increased Efficiency

- Mandates that motor vehicle fuel sold in U.S. contain 4 billion gallons of renewable fuel in 2006, rising to 7.5 billion gallons in 2012. (Title XV – Ethanol and Motor Fuels, Sec. 1501)
- Authorizes study of the potential for increasing hydroelectric power production capability at federally owned or operated water regulation, storage, and conveyance facilities. (Title XVIII – Studies, Sec. 1834)
- Prioritizes funds for renewable energy production incentives, placing emphasis on solar, wind, geothermal and closed-loop biomass technologies. (Title II – Renewable Energy, Sec. 202)
- Establishes goals for the share of federal government purchases of electricity from renewable sources to the extent economically feasible and technically practicable. (Title II -- Renewable Energy, 203)
- Authorizes \$36 million for the establishment of a Sugar Cane Ethanol Program to promote the production of ethanol from sugar cane. (Title II – Renewable Energy, Sec. 208)

- Authorizes \$125 million over ten years for grants to facilities that use biomass to produce electricity, sensible heat, transportation fuels or substitutes for petroleum-based products; and for grants to persons researching ways to improve the use of biomass or add value to biomass utilization. (Title II -- Renewable Energy, Sec. 210)
- Improves geothermal energy leasing procedures, terms and conditions to increase use of geothermal energy. (Title II -- Renewable Energy, Subtitle B)
- Facilitates use of the OCS for alternative energy sources such as wind power and ocean thermal energy. (Title III – Oil and Gas, Sec. 388)
- Calls for a study of the potential for renewable energy on Federal land and make recommendations for statutory and regulatory mechanisms for developing these resources. (Title XVIII – Studies, Sec. 1833)
- Establishes a program to encourage domestic production and sales of efficient hybrid and advanced technology diesels. (Title VII – Vehicles and Fuels, Sec. 712)

Natural Gas Supplies

- Provides incentives to continue natural gas production on low-yield (marginal) properties by reducing the royalty rate when prices fall. (Title III – Oil and Gas, Sec. 343)
- Provides incentives for natural gas production from deep wells in the shallow water of the Gulf of Mexico. (Title III – Oil and Gas, Sec. 344)
- Extends royalty relief for natural gas production in the deepwater of the Gulf of Mexico. (Title III – Oil and Gas, Sec. 345)
- Authorizes \$125 million over five years to reduce fugitive methane emissions by establishing a program to properly plug and abandon orphaned, abandoned, or idled wells on federal land. (Title III – Oil and Gas, Sec. 349)
- Authorizes \$350 million over five years to facilitate timely action on natural gas leases and permits and creation of Best Management Practices for processing permits. (Title III – Oil and Gas, Sec. 362)
- Requires the creation of a Memorandum of Understanding between the Department of Interior and Department of Agriculture to facilitate natural gas development on National Forest lands. (Title III – Oil and Gas, Sec. 363)
- Establishes a Federal Permit Streamlining Pilot Project to expedite processing of natural gas permits. (Title III – Oil and Gas, Sec. 364)
- Facilitates the building of LNG terminals thereby increasing the supply of natural gas. (Title III – Oil and Gas, Sec. 311)
- Authorizes \$155 million over 5 years for research aimed at facilitating production of natural gas from Methane Hydrates. (Title IX – Research and Development, Sec. 968)
- Provides incentives to promote natural gas production from natural gas hydrates. (Title III – Oil and Gas, Sec. 353)

Nuclear Energy Technologies

- Reauthorizes for 20 years the Price-Anderson Act, the long-standing liability insurance system for all nuclear operations in the country. This system has existed for more than 40 years and never required payment from the federal government. (Title VI -- Nuclear Matters, Sec.602)
- Improves the regulatory treatment modular reactors, facilitating the installation of new,

more cost effective nuclear power reactor designs. (Title VI -- Nuclear Matters, Sec. 608).

The NAM supported and key voted Senators Hagel and Pryor's amendment to the Energy Policy Act of 2005 that provided an incentives-oriented, cost effective plan for improving greenhouse gas emissions intensity, which addresses both domestic and international components. As you know this amendment passed 66-29 and was accepted by the House. Hagel-Pryor provides incentives, loans, loan guarantees, and other financial assistance for advanced climate technology or systems, including coal gasification, carbon sequestration, advanced nuclear power, and renewable energy. It would provide incentives for companies to export this technology to the developing world. Moreover, the amendment would direct the State Department to act as the lead agency for integrating the goal of reducing GHG intensity in developing countries into U.S. foreign policy.

As you can see, there are many provisions in the Energy Policy Act of 2005 and the tax title that take a positive approach to increasing energy efficiency and providing incentives for clean coal technology, nuclear and renewable energy sources, as well as facilitating increases in natural gas supplies. We urge you to oppose a "command and control" approach by seeking to establish mandatory carbon dioxide cap and trade and mandatory carbon dioxide reporting schemes. Such schemes will undermine the very purposes of the Energy Policy Act of 2005 before it has a chance to bear fruit. The Act is needed to increase the supplies, the infrastructure and the efficiency with which energy is used to create economic growth, jobs and quality of life. EIA's AEO2006 analysis shows the progress that can be made in improving the energy intensity of the economy if programs authorized by the Act are fully funded.

Thank you for the opportunity to express our views.