

Energy Efficiency & Clean Energy Make Common Sense for America

"What I want to do, because I think it's important for our long-term security, is get America in a position where the fuel efficiency of our vehicles is so great -- or our ability to use alternative-fuel vehicles, or dual-use vehicles, biofuels, mixed electric and gasoline-fuel vehicles that have automatically regenerating batteries -- that our capacity to do that is so great that we will not be reliant on the ups and downs of supplies, and the increases that might come in the future would have a much more limited impact on us."

-- President Clinton, February 16, 2000.

As America considers its long-term energy future, and as we deal with short-term market fluctuations, we must consider the fundamental benefits of becoming more energy efficient and using alternative energy. By pursuing an energy policy that allows us to get more from a barrel of oil, we can help shield the economy and consumers from future energy price shocks, while at the same time creating new job opportunities and reducing air pollution and greenhouse gas emissions. While some believe that the way to respond to market fluctuations is to unbalance the budget and hurt the environment, the President and Vice President have a policy that rejects this false choice and that is putting us on a path to a more self-reliant energy future that will save Americans' money and protect our environment.

MAKING AMERICA'S HOMES AND BUILDINGS MORE EFFICIENT

- **R&D for Energy Efficient Homes.** The President's FY 2001 budget proposes \$275 million for building efficiency efforts, including the *Partnership for Advancing Technology in Housing* – a government-industry partnership to develop and deploy affordable, safe housing technologies to make new homes 50% more energy efficient and at least 15 million existing homes 30% more energy efficient within a decade. Meeting these goals would save consumers \$11 billion per year.
- **Tax Credits for Energy Efficient Homes.** Buyers of new homes that are 50% more energy efficient than current standards would receive a tax credit of \$2000. Buyers of new homes that are 30% more efficient would receive a tax credit of \$1000.
- Buildings in the top 25% of energy efficiency qualify for EPA's "**Energy Star Buildings**" label. In 2001, EPA's buildings programs (both residential and commercial) will help reduce energy consumption by more than 70 billion kilowatt hours, resulting in over \$5.5 billion in energy savings to participating consumers and businesses.
- **Energy Efficient Appliances and Products.**
 - DOE is accelerating its program to establish **energy efficiency standards** for commercial heating and cooling, water heaters, and electrical distribution transformers.
 - EPA and DOE's **Energy Star Products** program saves consumers money and reduces greenhouse gas emissions at the same time by promoting the use of energy efficient products – everything from computers to refrigerators. If we all used Energy Star products, America would reduce its energy bill by *\$100 billion over the next 15 years!*
- **Federal Government Leadership in Energy Efficient Buildings.** The President's Executive Order of June 1999 requires each Federal agency to improve buildings energy efficiency by 35% relative to 1985 levels by 2010. The President's action will save taxpayers more than \$750 million a year and also reduce greenhouse gas emissions equal to taking 1.7 million cars off the road.

- Since 1976 DOE's **Weatherization Assistance Program** has weatherized some 4.8 million low-income households. Some 75 million gallons of oil have been saved in the half a million weatherized homes heated by oil. Over 900,000 homes will be weatherized from 2000 to 2005, more than 10% of which use fuel oil, saving an additional 15 million gallons of oil.

MAKING AMERICA'S VEHICLES MORE EFFICIENT

- **R&D for Energy Efficient Cars and Trucks.** *Partnership for a New Generation of Vehicles* is a government-industry effort that aims to develop attractive, affordable cars that meet all applicable safety and environmental standards and get up to three times the fuel efficiency of today's cars. *By 2010, DOE will help develop and commercialize fuel efficiency and alternative-fuel technologies that reduce oil consumption by nearly 700,000 barrels per day. By 2020, these same technologies will reduce oil consumption by nearly 1.5 million barrels per day.*
- **New Tax Credits for Energy Efficient Cars.** The President's proposed tax package extends the current tax credit (of up to \$4000) through 2006 for qualified electric and fuel cell vehicles and also includes a credit of \$500-3000 for the purchase of a qualifying hybrid vehicles from 2003-2006.

PROMOTING CLEAN RENEWABLE ENERGY

- **R&D for Renewable Energy.** The President's FY01 budget proposes \$410 million for DOE efforts to develop key renewable technologies, including wind, bioenergy, photovoltaics and geothermal energy.
- **Bioenergy & Bioproducts.** The President's August 1999 Executive Order coordinates Federal efforts to accelerate the development and deployment of technologies that convert trees, crops and other biomass into a vast array of fuels and products. Meeting the President's goal of tripling U.S. use of bioenergy and bioproducts by 2010 would reduce U.S. oil consumption, create new income opportunities in rural America, and meet environmental challenges, such as climate change.
- **Tax Credits for Clean Electricity Production.** The President proposes to reduce the demand for oil to produce electricity by extending current tax credits for electricity from wind and closed-loop biomass and providing new credits for electricity produced from open-loop biomass facilities, coal-biomass cofiring, and methane from landfills.
- **Electricity Restructuring.** The Administration's proposal to restructure the electricity industry will make the industry more competitive, save consumers at least \$20 billion annually on their electricity bills, improve energy security, and reduce air pollution and greenhouse gas emissions.

MAKING AMERICA'S INDUSTRY MORE EFFICIENT AND COMPETITIVE

- **Industrial Combined Heat and Power (CHP) Systems.** DOE is developing new industrial CHP systems to capture thermal heat that would otherwise be wasted. These systems are expected to be 15% more energy efficient, 80% cleaner, and 10% less expensive than conventional power systems
- **Voluntary Industrial Partnerships.** EPA's array of partnership programs help businesses cut energy costs while reducing both air pollution and greenhouse gas emissions.

- **Industries of the Future.** This DOE program works cooperatively with the nation's most energy-intensive industries (aluminum, glass, chemicals, forest products, mining, petroleum refining, and steel), aiming to reduce energy consumption per unit of output by 25% below 1990 levels by 2010, increasing the competitiveness of U.S. industries through \$30 billion in reduced energy costs (from 2000 to 2010) and saving 2.2 Quads of energy.

DRAFT

Improving America's Energy Efficiency: Part of a Long-term, Common Sense Energy Policy

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-- President Clinton, February 16, 2000.

As America considers its long-term energy future, and as we deal with short-term market fluctuations, we must consider the fundamental benefits of becoming more energy efficient and using alternative energy. By pursuing an energy policy that allows us to get more from a barrel of oil, we can help shield the economy and consumers from future energy price shocks, while at the same time creating new job opportunities and reducing air pollution and greenhouse gas emissions.

This Administration has an energy policy to achieve this. The President and the Vice President have put in place or proposed a broad array of common-sense policy, budget, and tax initiatives to further these goals. Our policies and initiatives will accelerate the research, development, and deployment of clean and efficient energy technologies. The initiatives span the major energy using sectors of the economy: buildings, transportation, industry, and electricity.

While some believe that the way to respond to market fluctuations is to unbalance the budget and hurt the environment, the President and Vice President have a policy that rejects this false choice and that is putting us on a path to a more self-reliant energy future that will save Americans' money and protect our environment.

MAKING AMERICA'S HOMES AND BUILDINGS MORE EFFICIENT

- **R&D for Energy Efficient Homes.** *Partnership for Advancing Technology in Housing* is a partnership between the Federal government and building industry to develop and deploy affordable, safe housing technologies to make new homes 50 percent more energy efficient and to make at least 15 million existing homes 30 percent more energy efficient within a decade. Meeting PATH's goals would save consumers \$11 billion a year in energy costs. The President's FY 2001 budget for building efficiency efforts, such as PATH, Energy Star, and Building America totals \$275 million.
- **Tax Credits for Energy Efficient Homes.** Buyers of new homes that are 50% more energy efficient than current standards would receive a tax credit of \$2000. Buyers of new homes that are 30% more efficient would receive a tax credit of \$1000. A home that is 50% more

efficient reduces demand for energy for both heating and cooling. This provides a double benefit -- consumers get a tax credit when they purchase their home, as well as the ongoing savings of reduced energy bills.

- **Labeling Energy Efficient Buildings.** Buildings in the top 25 percent of energy efficiency qualify for EPA's and DOE's "Energy Star Buildings" label. In 2001, EPA's buildings programs (both residential and commercial) will help reduce energy consumption by more than 70 billion kilowatt hours, resulting in over \$5.5 billion in energy savings to participating consumers and businesses. By 2010, the savings will reach more than \$30 billion per year.
- **Energy Efficient Appliances and Products.** Various DOE and EPA programs aim to promote the dissemination of energy efficient appliances and products:
 - DOE is accelerating its program to establish **energy efficiency standards** for commercial heating and cooling, water heaters, and electrical distribution transformers, and will begin efforts to harmonize international energy-efficiency standards and test methods to promote exports of efficient U.S. products.
 - EPA and DOE's **Energy Star Products** program saves consumers money and reduces greenhouse gas emissions at the same time by promoting the use of energy efficient products – everything from computers to refrigerators to central air-conditioning units. Proposed new funding will support the launch of new Energy Star product lines and will promote the Energy Star labeling program in 6-10 export markets. If we all used Energy Star products, America would reduce its energy bill by *\$100 billion over the next 15 years!*
- **Federal Government Leadership in Energy Efficient Buildings.** On June 3, 1999, President Clinton issued Executive Order 13123 that requires each Federal agency to improve its energy efficiency in its buildings by 35% relative to 1985 levels by 2010. The Federal government is the largest energy consumer in the United States, and spends more than \$4 billion annually to heat, cool, and power 500,000 buildings. Federal agencies have already reduced energy consumption 19 percent per square foot relative to 1985 levels. The President's action will also reduce greenhouse gas emissions equal to taking 1.7 million cars off the road, and save taxpayers more than \$750 million a year.
- **Low-Income Weatherization.** DOE's Weatherization Assistance Program delivers home energy efficiency services, such as insulation, to low-income U.S. households, reducing energy consumption and costs. Since 1976, 4.8 million low-income homes have been weatherized. Some 75 million gallons of oil have been saved in the half a million weatherized homes heated by oil. Over 900,000 homes will be weatherized from 2000 to 2005, more than 10 percent of which use fuel oil for heating, saving an additional 15 million gallons of oil.

MAKING AMERICA'S VEHICLES MORE EFFICIENT

- **R&D for Energy Efficient Cars and Trucks.** *Partnership for a New Generation of Vehicles* is a government-industry effort that aims to develop attractive, affordable cars that meet all applicable safety and environmental standards and get up to three times the fuel efficiency of today's cars. In January 2000, the auto-industry partners unveiled their PNGV "concept cars", keeping the program on schedule for meeting its 2004 goal. Similar government-industry efforts are aimed at developing cleaner, more efficient diesel engines for both light and heavy trucks. The President's FY 2001 budget includes \$255 million for PNGV-related work. A new car which gets twice the fuel economy of today's average car would save customers more than \$300 a year in fuel costs; SUV owners would save more than \$400 a year. *By 2010, DOE will help develop and commercialize fuel efficiency and alternative-fuel technologies that reduce oil consumption by nearly 700,000 barrels per day. By 2020, these same technologies will reduce oil consumption by nearly 1.5 million barrels per day.*
- **New Tax Credits for Energy Efficient Cars.** The President's proposed tax package extends the current tax credit (of up to \$4000) through 2006 for qualified electric and fuel cell vehicles and also includes a credit of \$500-3000 for the purchase of a qualifying hybrid vehicles from 2003-2006.

PROMOTING CLEAN RENEWABLE ENERGY

- **R&D for Clean, Renewable Energy.** Over the past 20 years, Federal R&D has resulted in a 90 percent cost reduction in solar photovoltaics and wind power. The President's FY 2001 budget proposes a total of \$410 million for DOE's solar and other renewable energy programs. The package includes expanded efforts in key renewable technologies, such as wind, bioenergy, photovoltaics, and geothermal energy.
 - In 2001, U.S. wind-power generating capacity (using many technologies developed by DOE) will increase to 3,000 megawatts on-line (up from 2,000 megawatts in 1999). Under the *Wind Powering America* initiative, DOE will accelerate research on next-generation wind technologies with a long-term goal of supplying 5 percent of U.S. electricity needs by 2020.
 - DOE's *GeoPowering the West* initiative seeks to supply at least 10 percent of the electricity of the American West with geothermal energy by 2020, with 20,000 megawatts of capacity installed.
 - DOE is continuing research on low-cost hydrogen production and storage, prerequisites to the widespread use of hydrogen in Proton-Exchange Membrane fuel cells for hybrid vehicles and buildings, which will be ready within 5 years.
- **Bioenergy & Bioproducts.** On August 12, 1999, President Clinton issued Executive Order 13134 coordinating Federal efforts to accelerate the development and deployment of technologies that convert trees, crops and other biomass into a vast array of fuels and

products. The President specifically called for tripling U.S. use of bioenergy and bioproducts by 2010. Meeting the President's goal would reduce U.S. oil consumption, create new income opportunities in agricultural communities, and meet environmental challenges, including global warming. To follow through on that commitment, the President is proposing \$289 million to accelerate the development of bioproducts and bioenergy.

- **Tax Credits for Clean Electricity Production.** The President proposes to extend the current 1.5 cent per kilowatt hour tax credit for production of electricity from wind and closed-loop biomass and to provide new credits for electricity produced from open-loop biomass facilities, coal-biomass cofiring, and methane from landfills. These efforts will reduce demand for oil to produce electricity.
- **Electricity Restructuring.** The Administration's proposal to restructure the electricity industry will make the industry more competitive, save consumers at least \$20 billion annually on their electricity bills, improve energy security, and reduce air pollution and greenhouse gas emissions. The Administration's proposal includes a requirement that utilities open up their distribution and transmission wires to all qualified sellers; a renewable portfolio standard to increase the use of renewable energy; a \$3 billion per year Public Benefits Fund to spur greater investment in energy efficiency and renewable energy technologies; and a labeling requirement to inform consumers about clean energy options.

MAKING AMERICA'S INDUSTRY MORE EFFICIENT AND COMPETITIVE

- **Industrial Combined Heat and Power (CHP) Systems.** DOE is developing new industrial CHP systems to capture thermal heat that would otherwise be wasted. These systems are expected to be 15 percent more energy efficient and 80 percent cleaner than conventional power systems and cut electricity costs by 10 percent. In addition, EPA and DOE are also working to eliminate barriers to the rapid dissemination of combined heat and power technology.
- **Voluntary Industrial Partnerships.** EPA is proposing to expand a host of industrial partnership programs that help businesses develop and implement win-win strategies for cutting energy use, saving on energy costs, and reducing both air pollution and greenhouse gas emissions.
- **Industries of the Future.** This DOE program works cooperatively with the nation's most energy-intensive industries – such as aluminum, glass, chemicals, forest products, mining, petroleum refining, and steel – on developing technologies that increase energy and resource efficiency. By 2010, industrial energy intensity (energy consumption per unit of output) will be reduced 25 percent below 1990 levels, increasing the competitiveness of U.S. industries through \$30 billion in reduced energy costs (from 2000 to 2010) and saving 1.4 Quads of energy.

① Soc. Sec.

② Bonus

Andy - good work/budget