



BARACK OBAMA AND JOE BIDEN: NEW ENERGY FOR AMERICA

America has always risen to great challenges, and our dependence on oil is one of the greatest we have ever faced. It's a threat to our national security, our planet and our economy. For decades, Washington has failed to solve this problem because of partisanship, the undue influence of special interests, and politicians who would rather propose gimmicks to get them through an election instead of long-term solutions that will get America closer to energy independence.

Our country cannot afford politics as usual – not at a moment when the energy challenge we face is so great and the consequences of inaction are so dangerous. We must act quickly and we must act boldly to transform our entire economy – from our cars and our fuels to our factories and our buildings.

Achieving this goal will not be easy. Energy independence will require far more than the same Washington gimmicks and continued dependence on costly and finite resources. It will require a sustained and shared effort by our government, our businesses, and the American people. But America has overcome great challenges before. With clarity of direction and leadership, there is no question that we possess the insight, resources, courage and the determination to build a new economy that is powered by clean and secure energy.

Barack Obama and Joe Biden have a comprehensive energy plan that provides immediate relief to struggling families. It also summons the nation to face one of the great challenges of our time: confronting our dependence on foreign oil, addressing the moral, economic and environmental challenge of global climate change, and building a clean energy future that benefits all Americans.

The Obama-Biden comprehensive New Energy for America plan will:

- Provide short-term relief to American families facing pain at the pump
- Help create five million new jobs by strategically investing \$150 billion over the next ten years to catalyze private efforts to build a clean energy future.
- Within 10 years save more oil than we currently import from the Middle East and Venezuela combined
- Put 1 million Plug-In Hybrid cars – cars that can get up to 150 miles per gallon – on the road by 2015, cars that we will work to make sure are built here in America
- Ensure 10 percent of our electricity comes from renewable sources by 2012, and 25 percent by 2025
- Implement an economy-wide cap-and-trade program to reduce greenhouse gas emissions 80 percent by 2050

SHORT-TERM SOLUTIONS: IMMEDIATE RELIEF FROM PAIN AT THE PUMP

Barack Obama and Joe Biden recognize that skyrocketing energy costs are taking a heavy toll on American families. To address the squeeze on Americans, they are calling for an: emergency energy rebate; an aggressive plan to crack down on speculators; and a swap of oil from the Strategic Petroleum Reserve to help provide immediate relief from soaring energy prices.

- ***Immediately Provide Emergency Energy Rebate.*** Barack Obama and Joe Biden will require oil companies to take a reasonable share of their record-breaking windfall profits and use it to provide direct relief worth \$500 for an individual and \$1,000 for a married couple. The relief would be delivered as quickly as possible to help families cope with the rising price of gasoline, food and other necessities. The rebates would be fully paid for with five years of a windfall profits tax on record oil company profits. This relief would be a down payment on the Obama-Biden long-term plan to provide middle-class families with at least \$1,000 per year in permanent tax relief. The Obama-Biden energy rebates will: offset the entire increase in gas prices for a working family over the next four months; or pay for the entire increase in winter heating bills for a typical family in a cold-weather state. In addition, Barack Obama and Joe Biden have proposed setting aside a portion of a second round of fiscal stimulus to ensure sufficient funding for home heating and weatherization assistance as we move into the fall and winter months.
- ***Crack Down on Excessive Energy Speculation.*** Current loopholes in Commodity Futures Trading Commission regulations have contributed to the skyrocketing price of oil on world markets. Barack Obama and Joe Biden will enact simple legislation to close these loopholes and increase transparency on the market to help bring oil prices down and prevent traders from unfairly lining their pockets at the expense of the American people.
- ***Swap Light and Heavy Crude, Release Oil from Strategic Petroleum Reserve to Cut Prices.*** The United States' Strategic Petroleum Reserve (SPR) is there for a purpose: to help Americans in times of crisis. Barack Obama and Joe Biden believe the doubling of oil prices in the past year is a crisis for millions of Americans and the transfer of wealth to oil producing countries, many of them hostile to our interests, is a threat to our national security. With the goal of bringing down prices at the pump, they support releasing light oil from the SPR now and replacing it later with heavier crude more suited to our long-term needs.

MID- TO LONG- TERM SOLUTIONS: NEW ENERGY FOR AMERICA

Our nation is confronted by two major energy challenges –our dependence on foreign oil and global climate change – both of which stem from our current dependence on fossil fuels for energy. Barack Obama and Joe Biden believe we have a moral, environmental, economic, and security imperative to address our dependence on foreign oil and tackle climate change in a serious, sustainable manner.

Tackle Climate Change

As a result of climate change, the polar ice caps are shrinking causing sea levels to rise; extreme weather is wreaking havoc across the globe; droughts are becoming more severe, tropical diseases are migrating north and numerous species are being threatened with extinction.

- ***Implement Cap and Trade Program to Reduce Greenhouse Gas Emissions.*** Barack Obama and Joe Biden support implementation of an economy-wide cap-and-trade system to reduce carbon emissions by the amount scientists say is necessary: 80 percent below 1990 levels by 2050. This market mechanism has worked before and will give all American consumers and businesses the incentives to use their ingenuity to develop economically effective solutions to climate change. The Obama-Biden cap-and-trade policy will require all pollution credits to be auctioned. A 100

percent auction ensures that all industries pay for every ton of emissions they release, rather than giving these valuable emission rights away to companies on the basis of their past pollution. A small portion of the receipts generated by auctioning allowances (\$15 billion per year) will be used to support the development of clean energy, invest in energy efficiency improvements, and help develop the next generation of biofuels and clean energy vehicles – measures that will help the economy and help meet the emissions reduction targets. It will also be used to provide new funding to state and federal land and wildlife managers to restore habitat, create wildlife migration corridors, and assist fish and wildlife to adapt to the effects of a warming climate. All remaining receipts will be used for rebates and other transition relief to ensure that families and communities are not adversely impacted by the transition to a new energy, low carbon economy.

- ***Make the U.S. a Leader on Climate Change.*** Barack Obama and Joe Biden understand that the only real solution to climate change requires all major emitting nations to join in the solution. While it is time for America to lead, developing nations like China and Brazil must not be far behind in making their own binding commitments. To develop an effective and equitable global program, Barack Obama and Joe Biden will re-engage with the U.N. Framework Convention on Climate Change (UNFCCC) – the main international forum dedicated to addressing the climate problem. They will also invigorate the Major Economies (MEM) effort and bring all the major emitting nations together to develop effective emissions reduction efforts.

Invest in Our Secure Energy Future and Create 5 Million New Jobs

Barack Obama and Joe Biden will use a portion of the revenue generated from the cap-and-trade permit auction to make investments that will reduce our dependence on foreign oil and accelerate deployment of low-carbon technologies. The investments will focus on three critical areas: 1) Basic Research; 2) Technology Demonstration and 3) Aggressive Commercial Deployment and Clean Market Creation.

- ***Invest In A Clean Energy Economy and Help Create 5 Million New Green Jobs.*** Barack Obama and Joe Biden will strategically invest \$150 billion over 10 years to accelerate the commercialization of plug-in hybrids, promote development of commercial scale renewable energy, encourage energy efficiency, invest in low emissions coal plants, advance the next generation of biofuels and fuel infrastructure, and begin transition to a new digital electricity grid. The plan will also invest in America's highly-skilled manufacturing workforce and manufacturing centers to ensure that American workers have the skills and tools they need to pioneer the green technologies that will be in high demand throughout the world. All together these investments will help the private sector create 5 million new green jobs, good jobs that cannot be outsourced.
- ***Create a "Green Vet Initiative".*** The renewable energy economy is exploding in the United States. In terms of venture capital alone, private investment in the sector topped \$2.6 billion dollars in 2007. At the same time, more than 837,000 troops who served in Iraq or Afghanistan are now veterans. Barack Obama and Joe Biden will ensure that more of our veterans can enter the new energy economy. They will create a new "Green Vet Initiative" that will have two missions: first it will offer counseling and job placement to help veterans gain the skills to enter this rapidly growing field; second, it will work with industry partners to create career pathways and educational programs.
- ***Convert our Manufacturing Centers into Clean Technology Leaders.*** America boasts the highest-skilled manufacturing workforce in the world and advanced manufacturing facilities that have powered economic growth in America for decades. Barack Obama and Joe Biden believe that America companies and workers should build the high-demand technologies of the future, and he will help nurture America's success in clean technology manufacturing by establishing a federal investment program to help manufacturing centers modernize and help Americans learn new

skills to produce green products. This federal grant program will allocate money to the states to identify and support local manufacturers with the most compelling plans for modernizing existing or closed manufacturing facilities to produce new advanced clean technologies. This investment will help provide the critical up-front capital needed by small and mid-size manufacturers to produce these innovative new technologies. Along with an increased federal investment in the research, development and deployment of advanced technologies, this \$1 billion per year investment will help spur sustainable economic growth in communities across the country.

- ***Create New Job Training Programs for Clean Technologies.*** The Obama-Biden plan will increase funding for federal workforce training programs and direct these programs to incorporate green technologies training, such as advanced manufacturing and weatherization training, into their efforts to help Americans find and retain stable, high-paying jobs. Barack Obama and Joe Biden will also create an energy-focused youth jobs program to invest in disconnected and disadvantaged youth. This program will provide youth participants with energy efficiency and environmental service opportunities to improve the energy efficiency of homes and buildings in their communities, while also providing them with practical skills and experience in important career fields of expected high-growth employment. Participants will not only be able to use their training to find new jobs, but also build skills that will help them move up the career ladder over time.

Make our Cars, Trucks and SUV's Fuel Efficient

Last year, oil provided more than 96 percent of the energy in our vehicles. It is an economic, national security and environmental imperative that this near-total dependence comes to an end. To achieve this goal, Barack Obama and Joe Biden will implement a strategy that will – within 10 years - allow us to reduce our consumption of oil by more than we currently import from the Middle East and Hugo Chavez's Venezuela combined. In order to do that, he will:

- ***Increase Fuel Economy Standards.*** Barack Obama and Joe Biden will increase fuel economy standards 4 percent per each year while protecting the financial future of domestic automakers. The plan, which will save nearly a half trillion gallons of gasoline and 6 billion metric tons of greenhouse gases, will establish concrete targets for annual fuel efficiency increases while giving industry the flexibility to meet those targets.
- ***Invest in Developing Advanced Vehicles and Put 1 Million Plug-in Electric Vehicles on the Road by 2015.*** As a U.S. senator, Barack Obama has led efforts to jumpstart federal investment in advanced vehicles, including combined plug-in hybrid/flexible fuel vehicles, which can get over 150 miles per gallon of gas. As president, Obama will continue this leadership by investing in advanced vehicle technology with a specific focus on R&D in advanced battery technology. The increased federal funding will leverage private sector funds and support our domestic automakers to bring plug-in hybrids and other advanced vehicles to American consumers. Barack Obama and Joe Biden will also provide a \$7,000 tax credit for the purchase of advanced technology vehicles as well as conversion tax credits. And to help create a market and show government leadership in purchasing highly efficient cars, Barack Obama and Joe Biden will commit to:
 - Within one year of becoming President, the entire White House fleet will be converted to plug-ins as security permits; and
 - Half of all cars purchased by the federal government will be plug-in hybrids or all-electric by 2012
- ***Partner with Domestic Automakers.*** Barack Obama and Joe Biden will also provide \$4 billion retooling tax credits and loan guarantees for domestic auto plants and parts manufacturers, so that the new fuel-efficient cars can be built in the U.S. by American workers rather than overseas.

This measure will strengthen the U.S. manufacturing sector and help ensure that American workers will build the high-demand cars of the future.

- ***Mandate All New Vehicles are Flexible Fuel Vehicles.*** Sustainably-produced biofuels can create jobs, protect the environment and help end oil addiction – but only if Americans drive cars that will take such fuels. Barack Obama and Joe Biden will work with Congress and auto companies to ensure that all new vehicles have FFV capability – the capability by the end of his first term in office.
- ***Develop the Next Generation of Sustainable Biofuels and Infrastructure.*** Advances in biofuels, including cellulosic ethanol, biobutenol and other new technologies that produce synthetic petroleum from sustainable feedstocks offer tremendous potential to break our addiction to oil. Barack Obama and Joe Biden will work to ensure that these clean alternative fuels are developed and incorporated into our national supply as soon as possible. They will require at least 60 billion gallons of advanced biofuels by 2030. They will invest federal resources, including tax incentives and government contracts into developing the most promising technologies and building the infrastructure to support them.
- ***Establish a National Low Carbon Fuel Standard.*** Barack Obama and Joe Biden will establish a National Low Carbon Fuel Standard (LCFS) to speed the introduction of low-carbon non-petroleum fuels. The standard requires fuels suppliers in 2010 to begin to reduce the carbon of their fuel by 5 percent within 5 years and 10 percent within 10 years. The Obama-Biden plan will incentivize increased private sector investment in advanced low-carbon fuels and has a sustainability provision to ensure that increased biofuels production does not come at the expense of environmental conservation. The LCFS is an important mechanism in ensuring that our efforts to reduce our oil dependence also reduce carbon emissions.

Promote the Supply of Domestic Energy

With 3 percent of the world's oil reserves, the U.S. cannot drill its way to energy security. But U.S. oil and gas production plays an important role in our domestic economy and remains critical to prevent global energy prices from climbing even higher. There are several key opportunities to support increased U.S. production of oil and gas that do not require opening up currently protected areas.

- ***A "Use it or Lose It" Approach to Existing Leases.*** Oil companies have access to 68 million acres of land, over 40 million offshore, which they are not drilling on. Drilling in open areas could significantly increase domestic oil and gas production. Barack Obama and Joe Biden will require oil companies to diligently develop these leases or turn them over so that another company can develop them.
- ***Promote the Responsible Domestic Production of Oil and Natural Gas.*** Barack Obama and Joe Biden will set up a process for early identification of any infrastructure obstacles/shortages or possible federal permitting process delays to drilling in:
 - Bakken Shale in Montana and North Dakota which could have as much as 4 billion recoverable barrels of oil according to the U.S. Geological Survey.
 - Unconventional natural gas supplies in the Barnett Shale formation in Texas and the Fayetteville Shale in Arkansas.

- National Petroleum Reserve-Alaska (NPR-A) which comprises 23.5 million acres of federal land set aside by President Harding to secure the nation's petroleum reserves for national security purposes.
- ***Prioritize the Construction of the Alaska Natural Gas Pipeline.*** Barack Obama and Joe Biden will work with stakeholders to facilitate construction of the pipeline. While this pipeline was proposed in 1976, and Congress authorized up to \$18 billion in loan guarantees for this project in 2004, there has been no progress in building this critical energy infrastructure under the Bush Administration. The planned pipeline would have a daily capacity of 4 billion cubic feet of natural gas, or almost 7 percent of current U.S. consumption. Not only is this pipeline critical to our energy security, it will create thousands of new jobs.
- ***Getting More from our Existing Oil Fields.*** Nationally, experts believe that up to 85 billion barrels of technically recoverable oil remains stranded in existing fields. Enhanced oil recovery (EOR) using carbon dioxide offers an immediate- to medium-term opportunity to produce more oil from existing fields. And in the EOR process, large quantities of CO₂ can be sequestered underground, reducing global warming pollution. Under an Obama Administration, we will pass a carbon cap-and-trade bill, which will incentivize emitters to send their CO₂ to old oil fields for EOR, thereby providing economic benefits while also stimulating additional domestic oil and gas production. To speed that process, we will map all stationary CO₂ sources and develop a database to help industry calculate the most cost-effective oil field destination for each source's CO₂.

Diversify Our Energy Sources

There are no silver bullet solutions to our energy crises. Our economy, security and environment will be best served through a sustained effort to diversify our energy sources. Barack Obama and Joe Biden will:

- ***Require 10 Percent of Electricity to Come from Renewable Sources by 2012.*** Barack Obama and Joe Biden will establish a 10 percent federal Renewable Portfolio Standard (RPS) to require that 10 percent of electricity consumed in the U.S. is derived from clean, sustainable energy sources, like solar, wind and geothermal by 2012. Many states are already well on their way to achieving statewide goals and it's time for the federal government to provide leadership for the entire country to support these new industries. This national requirement will spur significant private sector investment in renewable sources of energy and create thousands of new American jobs, especially in rural areas. And Barack Obama and Joe Biden will also extend the federal Production Tax Credit (PTC) for 5 years to encourage the production of renewable energy.
- ***Develop and Deploy Clean Coal Technology.*** Carbon capture and storage technologies hold enormous potential to reduce our greenhouse gas emissions as we power our economy with domestically produced and secure energy. As a U.S. Senator, Obama has worked tirelessly to ensure that clean coal technology becomes commercialized. An Obama administration will provide incentives to accelerate private sector investment in commercial scale zero-carbon coal facilities. In order to maximize the speed with which we advance this critical technology, Barack Obama and Joe Biden will instruct DOE to enter into public private partnerships to develop 5 "first-of-a-kind" commercial scale coal-fired plants with carbon capture and sequestration.
- ***Safe and Secure Nuclear Energy.*** Nuclear power represents more than 70 percent of our non-carbon generated electricity. It is unlikely that we can meet our aggressive climate goals if we eliminate nuclear power as an option. However, before an expansion of nuclear power is considered, key issues must be addressed including: security of nuclear fuel and waste, waste storage, and proliferation. Barack Obama introduced legislation in the U.S. Senate to establish

guidelines for tracking, controlling and accounting for spent fuel at nuclear power plants. To prevent international nuclear material from falling into terrorist hands abroad, Obama worked closely with Sen. Dick Lugar (R-IN) to strengthen international efforts to identify and stop the smuggling of weapons of mass destruction. As president, Obama will make safeguarding nuclear material both abroad and in the U.S. a top anti-terrorism priority. In terms of waste storage, Barack Obama and Joe Biden do not believe that Yucca Mountain is a suitable site. They will lead federal efforts to look for safe, long-term disposal solutions based on objective, scientific analysis. In the meantime, they will develop requirements to ensure that the waste stored at current reactor sites is contained using the most advanced dry-cask storage technology available.

Commitment to Efficiency to Reduce Energy Use and Lower Costs

According to the United Nations, America is only the 22nd most energy efficient country among the major economies in the world, which means we spend more on energy than we need to because our lifestyle and our built environment are wasting too much excess energy. Since 1973, the average amount of electricity each of us uses has tripled. We can do better. An Obama administration will strive to make America the most energy efficient country in the world.

- ***Deploy the Cheapest, Cleanest, Fastest Energy Source--Energy Efficiency.*** The Department of Energy (DOE) projects that demand for electricity will increase by 1.1 percent per year over the next few decades. Cutting this demand growth through efficiency is both possible and economically sound. Barack Obama will set an aggressive energy efficiency goal—to reduce electricity demand 15 percent from DOE’s projected levels by 2020. Implementing this program will save consumers a total of \$130 billion, reduce carbon dioxide emissions by more than 5 billion tons through 2030, and create jobs. A portion of this goal would be met by setting annual demand reduction targets that utilities would need to meet. The rest would come from more stringent building and appliance standards.
- ***Set National Building Efficiency Goals.*** Barack Obama and Joe Biden will establish a goal of making all new buildings carbon neutral, or produce zero emissions, by 2030. They will also establish a national goal of improving new building efficiency by 50 percent and existing building efficiency by 25 percent over the next decade to help us meet the 2030 goal.
- ***Overhaul Federal Efficiency Standards.*** The current Department of Energy has missed 34 deadlines for setting updated appliance efficiency standards, which has cost American consumers millions of dollars in unrealized energy savings. Barack Obama and Joe Biden will overhaul this process for appliances and provide more resources to his Department of Energy so it implements regular updates for efficiency standards. They will also work with Congress to ensure that it continues to play a key role in improving our national efficiency codes.
- ***Reduce Federal Energy Consumption.*** Currently, the federal government is the world’s largest single consumer of energy in the world, spending approximately \$14.5 billion on energy consumption in FY 2008. Barack Obama and Joe Biden believe in the importance of leading by example. They will make the federal government a leader in the green building market, achieving a 40 percent increase in efficiency in all new federal buildings within five years and ensuring that all new federal buildings are zero-emissions by 2025. They will invest in cost-effective retrofits to achieve a 25 percent increase in efficiency of existing federal buildings within 5 years. The Obama-Biden plan will put forward the resources necessary to achieve a 15 percent reduction in federal energy consumption by 2015.
- ***Flip Incentives to Energy Utilities.*** An Obama administration will “flip” incentives to utility companies by: requiring states to conduct proceedings to implement incentive changes; and

offering them targeted technical assistance. These measures will benefit utilities for improving energy efficiency, rather than just from supporting higher energy consumption. This “regulatory equity” starts with the decoupling of profits from increased energy usage, which will incentivize utilities to partner with consumers and the federal and state governments to reduce monthly energy bills for families and businesses. The federal government under an Obama administration will play an important and positive role in flipping the profit model for the utility sector so that shareholder profit is based on reliability and performance as opposed to total production.

- ***Invest in a Smart Grid.*** Achieving these aggressive energy efficiency goals will require significant innovation in the way we transmit electricity and monitor its use. Barack Obama and Joe Biden will pursue a major investment in our national utility grid using smart metering, distributed storage and other advanced technologies to accommodate 21st century energy requirements: greatly improved electric grid reliability and security, a tremendous increase in renewable generation and greater customer choice and energy affordability. They will establish a Grid Modernization Commission to facilitate adoption of Smart Grid practices across the nation's electricity grid to the point of general adoption and ongoing market support in the U.S. electric sector. They will instruct the Secretary of Energy to: (1) establish a Smart Grid Investment Matching Grant Program to provide reimbursement of one-fourth of qualifying Smart Grid investments; (2) conduct programs to deploy advanced techniques for managing peak load reductions and energy efficiency savings on customer premises from smart metering, demand response, distributed generation and electricity storage systems; and (3) establish demonstration projects specifically focused on advanced technologies for power grid sensing, communications, analysis, and power flow control, including the integration of demand-side resources into grid management.
- ***Weatherize One Million Homes Annually.*** In the struggle with higher energy prices low income families are suffering the most and receiving the least attention. Across the nation, poor families this winter will increasingly face the choice between heating and eating as prices for natural gas, heating oil, propane and electricity skyrocket. To address the immediate challenge this winter, we must fully fund LIHEAP and ensure that everyone who needs it has access to heating assistance. Over the longer-term, a significant part of the answer for low income families is home weatherization. By upgrading a home's furnace, sealing leaky ducts, fixing windows, and adding insulation we can cut energy bills by 20 - 40 percent and the substantial savings accrue with summer air conditioning as well as winter heating. And by adding energy efficient appliances and lighting the savings are even greater. While the nation has weatherized about 5.5 million low-income homes since 1976, more than 28 million remain eligible. Barack Obama and Joe Biden will make a national commitment to weatherize at least one million low-income homes each year for the next decade, which can reduce energy usage across the economy and help moderate energy prices for all.
- ***Build More Livable and Sustainable Communities.*** Over the long term, we know that the amount of fuel we will use is directly related to our land use decisions and development patterns. For the last 100 years, our communities have been organized around the principle of cheap gasoline. Barack Obama and Joe Biden believe that we must devote substantial resources to repairing our roads and bridges. They also believe that we must devote significantly more attention to investments that will make it easier for us to walk, bicycle and access other transportation alternatives. They are committed to reforming the federal transportation funding and leveling employer incentives for driving and public transit.