



### **BARACK OBAMA'S PLAN TO MAKE AMERICA A GLOBAL ENERGY LEADER**

Our nation is confronted by two major energy challenges – global climate change and our dependence on foreign oil – both of which stem from our current dependence on fossil fuels for energy. America's 20-million-barrel-a-day oil habit costs our economy \$1.4 billion a day, and nearly \$500 billion in 2006 alone. Every single hour we spend \$41 million on foreign oil. America's oil consumption increased by over 20 percent between 1992 and 2005. Our energy-related carbon dioxide emissions increased by more than 15 percent between 1993 and 2005.

Global warming is real, is happening now and is the result of human activities. The number of Category 4 and 5 hurricanes has almost doubled in the last 30 years. Glaciers are melting faster; the polar ice caps are shrinking; trees are blooming earlier; oceans are becoming more acidic, threatening marine life; people are dying in heat waves; species are migrating, and eventually many will become extinct. Scientists predict that absent major emission reductions, climate change will worsen famine and drought in some of the poorest places in the world and wreak havoc across the globe. In the U.S., sea-level rise threatens to cause massive economic and ecological damage to our populated coastal areas.

Every president since Richard Nixon has spoken to the nation about how our oil addiction is jeopardizing our national security. We are funding both sides in the war on terror and supporting some of the most despotic, volatile regimes in the world. We are held hostage to the spot oil market – forced to watch our fortunes rise and fall with the changing price of every barrel. And we are transferring a growing portion of our national wealth to oil-producing regimes, adding to our trade deficit and enriching countries with economic and national security interests adverse to our own. And we know that our oil dependency is jeopardizing our planet as well as releasing toxic pollutants that harm local communities.

Barack Obama believes 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.

#### **Obama's comprehensive plan to combat global warming and achieve energy security will:**

- ⇒ Implement an economy-wide cap-and-trade program to reduce greenhouse gas emissions to the level recommended by top scientists to avoid calamitous impacts.
- ⇒ Invest \$150 billion over the next ten years to develop and deploy climate friendly energy supplies, protect our existing manufacturing base and create millions of new jobs.
- ⇒ Dramatically improve energy efficiency to reduce energy intensity of our economy by 50 percent by 2030.
- ⇒ Reduce our dependence on foreign oil and reduce oil consumption overall by at least 35 percent, or 10 million barrels of oil, by 2030
- ⇒ Make the U.S. a leader in the global effort to combat climate change by leading a new international global warming partnership.

## **IMPLEMENT A 100% AUCTION CAP-AND-TRADE PROGRAM TO REDUCE GREENHOUSE GAS EMISSIONS.**

**Reduce Carbon Emissions 80 percent by 2050:** Barack Obama is a champion of the national effort to cut greenhouse gas emissions. Obama supports implementation of a market-based cap-and-trade system to reduce carbon emissions by the amount scientists say is necessary: 80 percent below 1990 levels by 2050. Obama will start reducing emissions immediately in his administration by establishing strong annual reduction targets, and he'll also implement a mandate of reducing emissions to 1990 levels by 2020.

In contrast to other approaches like a carbon tax, cap-and-trade programs provide maximum assurances that emissions will decline to desired levels by the targeted dates. A cap-and-trade program draws on the power of the marketplace to reduce emissions in a cost-effective and flexible manner. Under the program, an overall cap on carbon emissions is established. The emissions allowed under the cap are divided up into individual allowances that represent the permission to emit that amount. Because the emissions cap restricts the amount of pollution allowed, allowances that give a company the ability to pollute take on financial value. Companies are free to buy and sell allowances in order to continue operating in the most profitable manner available to them. Those that are able to reduce pollution at a low cost can sell their extra allowances to companies facing high costs. Each year the number of allowances will decline to match the required annual reduction targets.

- 100% Allowance Auction: Without a profit motive or incentive to innovate, corporations do not spend time or money to develop new clean ways of doing business. Obama's cap-and-trade system will require all pollution credits to be auctioned. A 100% auction ensures that all polluters pay for every ton of emissions they release, rather than giving these emission rights away for free to coal and oil companies.
- Invest Revenue for a Clean Energy Future: Some of the revenue generated by auctioning allowances will be used to support the development and deployment of clean energy, invest in energy efficiency improvements and address transition costs, including helping American workers affected by this economic transition and helping lower-income Americans afford their energy bills by expanding the Low Income Home Energy Assistance Program, expanding weatherization grants for low-income individuals to make their homes more energy efficient, and establishing a dedicated fund to assist low-income Americans afford higher electricity and energy bills

### **I. INVEST IN A CLEAN ENERGY ECONOMY AND CREATE AMERICAN JOBS**

Barack Obama will use some of the revenue generated from the cap-and-trade permit auction to invest in climate-friendly energy development and development. This will transform the economy and create millions of new jobs. Obama will invest \$150 billion over 10 years to advance the next generation of biofuels and fuel infrastructure, accelerate the commercialization of plug-in hybrids, promote development of commercial scale renewable energy, invest in low emissions coal plants, and begin transition to a new digital electricity grid. A principal focus of this fund will be devoted to ensuring that technologies that are developed in the U.S. are rapidly commercialized in the U.S. and deployed around the globe.

There are three critical steps in achieving the necessary revolution toward low carbon energy production: 1) Basic Research; 2) Technology Demonstration and 3) Aggressive Commercial Deployment and Clean Market Creation. Obama has specific plans to enhance each of these critical steps in the technology development process:

## **(1) Increase Investment in Basic Research and Human Capital.**

- Invest in Basic Research: Obama will federal double science and research funding for clean energy projects including those that make use of our biomass, solar and wind resources. At present, the federal government spends over \$3 billion per year on all energy innovation efforts. While this may seem like a significant sum, it is much less than what we spent in the late 1970's when adjusted for inflation, and is less than the pet food industry invests in its own products. We must do better. Obama will double our nation's commitment to energy R&D and rely more heavily on the tremendous resources and ability of our national laboratories, universities and land grant colleges which have significant expertise in rural sources of renewable energy.
- Invest in a Skilled Clean Technologies Workforce: Transitioning to a clean energy economy represents a tremendous opportunity for American workers. Barack Obama will use proceeds from the cap-and-trade auction program to invest in job training and transition programs to help workers and industries adapt to clean technology development and production. Obama 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 jobs.

Barack Obama also believes the transition to a clean energy economy holds special promise for low-income communities and families, which are poised to shoulder a disproportionate share of the burden of global climate change. To combat this problem, Obama will 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. The program will engage private sector employers and unions to provide apprenticeship opportunities. 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.

## **(2) Invest in Key Technology Development.**

- Develop the Next Generation of Biofuels: Barack Obama will work to ensure that advanced biofuels, including cellulosic ethanol, are developed and incorporated into our national supply as soon as possible. Corn ethanol is the most successful alternative fuel commercially available in the U.S. today, and we should fight the efforts of big oil and big agri-business to undermine this emerging industry. But it represents only a drop in the bucket of our energy demands and making ethanol from corn has some significant limitations. Today we produce about 5 billion gallons of corn-based ethanol per year while we use about 140 billion gallons of gasoline. Even if we are able to double – or even triple – production of ethanol from corn this will still offset only about 10 percent of our gasoline demand. There are also real concerns about bringing set aside lands into corn production as well as concerns about an increase in the use of pesticides, water use and upward pressure on the cost of food for people and livestock alike. These constraints reveal the scope and scale of our energy and environmental challenges. Obama will invest federal resources, including tax incentives, cash prizes and government contracts into developing the most promising technologies with the goal of getting the first two billion gallons of cellulosic ethanol into the system by 2013. Obama will also work to improve the national supply of advanced biodiesel. From here the Clean Technologies Deployment Venture Fund will speed the deployment of multiple facilities.

- Expand Locally-Owned Biofuel Refineries: Less than 10 percent of new ethanol production today is from farmer owned refineries. New ethanol refineries help jumpstart rural economies. For example, it has been estimated that a 40 million gallon ethanol refinery will add up to 120 jobs, expand a local tax base by \$70 million per year and boost local household income by \$6.7 million annually. The economic development opportunities for advanced cellulosic ethanol technologies hold potential to revitalize rural communities across the country. Barack Obama believes we must ensure that local investment continues to play a significant role as the biofuels industry continues to expand and evolve. Obama will create a number of incentives for local communities to invest in their biofuels refineries, including expanding federal tax credit programs and providing technical advice to rural communities that are in a strong position to open their own refineries. Obama will also provide an additional subsidy per gallon of ethanol produced from new facilities that have a minimum of 25 percent local capital, and he will provide additional loan guarantees for advanced ethanol facilities with local investment.
- Develop and Deploy Clean Coal Technology: Coal is our nation's most abundant energy source and is a critical component of economic development in China, India and other growing economies. Obama believes that the imperative to confront climate change requires that we prevent a new wave of traditional coal facilities in the U.S. and work aggressively to transfer low-carbon coal technologies around the world. In the U.S. Senate, Obama successfully increased funding by \$200 million for carbon storage in the fiscal year 2008 budget resolution.

As president Obama will significantly increase the resources devoted to the commercialization and deployment of low carbon coal technologies. Implementing these technologies as soon as possible is vital to the transition to a clean energy economy and will help other nations dependent on coal reduce their emissions as well. In addition to addressing new facilities, Obama will work to ensure that existing coal facilities are retrofitted with carbon capture and sequestration technology as soon as it is commercially available. Obama will use whatever policy tools are necessary, including standards that ban new traditional coal facilities, to ensure that we move quickly to commercialize and deploy low carbon coal technology. Obama's stringent cap on carbon will also make it uneconomic to site traditional coal facilities and discourage the use of existing inefficient coal facilities.

- 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 from the table. However, there is no future for expanded nuclear without first addressing four key issues: public right-to-know, 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.

Obama will also lead federal efforts to look for a safe, long-term disposal solution based on objective, scientific analysis. In the meantime, Obama will develop requirements to ensure that the waste stored at current reactor sites is contained using the most advanced dry-cask storage technology available. Barack Obama believes that Yucca Mountain is not an option. Our

government has spent billions of dollars on Yucca Mountain, and yet there are still significant questions about whether nuclear waste can be safely stored there.

### **(3) Invest in Key Technology Deployment.**

- Clean Technologies Deployment Venture Capital Fund: Barack Obama will create a Clean Technologies Deployment Venture Capital Fund to fill a critical gap in U.S. technology development. This Fund will partner with existing investment funds and our National Laboratories to ensure that promising technologies move beyond the lab and are commercialized in the U.S. The risks and associated costs of commercializing a new energy technology often prevent critically important technologies from ever seeing the light of day. The gap between the lab and the marketplace is sometimes referred to as the ‘Valley of Death,’ because many technologies enter but few ever make it out the other side because of the prohibitive costs of building the first commercial-scale facility that processes that energy source. Currently, U.S. venture capital funding is doing an effective job promoting research and development stage, but far too often, technologies invented here in the U.S. such as wind turbines, solar panels, and compact fluorescent bulbs are commercialized overseas and then sold back to American consumers.

The Clean Technologies Deployment Venture Capital Fund will be modeled on the highly-successful Central Intelligence Agency In-Q-Tel program. In-Q-Tel is a non-profit, independently-managed venture capital fund led by seasoned venture capital professionals to develop new intelligence technologies for the CIA. The first five years of In-Q-Tel funding led to 22 new technologies being used in 40 government programs.

Coupled with an Obama Administration’s increased investment in renewable energy research and development, this Fund’s efforts to quickly deploy new technologies like cellulosic ethanol, carbon capture and sequestration, and other clean technologies like bio-based plastics will help ensure that the American economy and environment benefit from clean technologies in the next few years, as opposed to the next several decades. Obama will invest \$10 billion in this fund for five years, and reinvest profits back into the fund.

- Production Tax Credit: Obama will also extend the federal Production Tax Credit (PTC) for 5 years to encourage the production of renewable energy.
- 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 believes that America is at a competitive advantage when it comes to building 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 the new skills they may need to produce green products. Along with the increased federal investment in the research, development and deployment of advanced technologies, this investment will help spur sustainable economic growth in communities across the country.

### **(4) Set Standards to Allow the Market to Invest and Innovate**

Obama will also establish new national standards to ensure less carbon intensive energy is used in our energy supply. He will:

- **Establish a National Low Carbon Fuel Standard:** Barack Obama will establish a National Low Carbon Fuel Standard (LCFS) to speed the introduction of low-carbon non-petroleum fuels. The standard, which Obama introduced in the U.S. Senate with Tom Harkin (D-IA), requires fuels suppliers to reduce the carbon their fuel emits by ten percent by 2020. The Obama plan will help incentivize increased private sector investment in advanced biofuels and has a sustainability provision to ensure that this boom in U.S. biofuels production does not come at the expense of environmental conservation. The standard will reduce lifecycle greenhouse gas emissions 10 percent by 2020. The LCFS is an important mechanism in ensuring that our efforts to reduce our oil dependence also reduce carbon emissions.
- **Require 25 Percent of Electricity to Come from Renewable Sources by 2025:** Barack Obama will establish a 25 percent federal Renewable Portfolio Standard (RPS) to require that 25 percent of electricity consumed in the U.S. is derived from clean, sustainable energy sources, like solar, wind and geothermal by 2025. This requirement will spur significant private sector investment in renewable sources of energy and create thousands of new American jobs, especially in rural areas. As an Illinois state senator, Obama cosponsored a measure to create an RPS in Illinois. And recently, Illinois signed into law a 25 percent RPS by 2025 measure modeled on Obama's state senate RPS efforts.
  - Ensure the Federal Government Uses Renewable Sources of Electricity: Currently, there is a federal goal to obtain 7.5 percent of federal government electricity demands from renewable sources by 2013. Barack Obama believes that the federal government, the nation's largest consumer of energy, must do better. As president, Obama will ensure that at least 30 percent of the federal government's electricity comes from renewable sources by 2020. This effort will help create a reliable demand for renewable energy production, thereby incentivizing the private sector to increase its investment in renewable energy production.

## II. INVEST IN THE FASTEST, CHEAPEST WAY TO REDUCE EMISSIONS: ENERGY EFFICIENCY

Improving energy efficiency is the fastest, cheapest most cost-effective method to reducing greenhouse gas emissions, and it results in significant savings for our government, economy and consumers. For example, since DuPont implemented an energy efficiency program in 1990, it has cut its energy bills by \$3 billion, reduced pollution by 72 percent and increased production activities by over 30 percent. Barack Obama will set a bold national goal of reducing the energy intensity of our economy 50% by 2030.

**Make the Federal Government the Leader in Saving Electricity:** As the nation's largest consumer of electricity, Barack Obama believes that the federal government should take the lead in reducing its energy consumption. Obama will:

- Make Federal Buildings More Efficient: Obama will ensure that all new federal buildings are zero-emissions by 2025, and to help reach that goal, he will ensure that all new federal buildings are 40 percent more efficient within the next five years. Obama will also place retrofitting existing federal buildings at a top priority, and seek to improve their efficiency by 25 percent within 5 years.
- Overhaul Federal Efficiency Codes: 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. Obama will overhaul this process for appliances and provide more resources to his Department of Energy so it implements regular updates for efficiency

standards. He will also work with Congress to ensure that it continues to play a key role in improving our national efficiency codes.

**Use Innovative Measures to Dramatically Improve Efficiency of Buildings:** Buildings account for nearly 40 percent of carbon emissions in the United States today and carbon emissions from buildings are expected to grow faster than emissions from other major parts of our economy. It is expected that 15 million new buildings will be constructed between today and 2015. Barack Obama believes that we have both an opportunity and a responsibility to make our new and existing buildings more efficient consumers of electricity.

- Set Building Efficiency Goals: Barack Obama will establish a goal of making all new buildings carbon neutral, or produce zero emissions, by 2030. He'll 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.
- Establish a Grant Program for Early Adopters: Obama will create a competitive grant program to award those states and localities that take the first steps in implementing new building codes that prioritize energy efficiency, and provide a federal match for those states with leading-edge public benefits funds that support energy efficiency retrofits of existing buildings.
- Flip Incentives to Energy Utilities: Obama will work to “flip” incentives to state and local utilities by ensuring companies get increased profits for improving energy efficiency, rather than higher energy consumption. Currently, utilities make profits when consumers purchase more energy, and when consumers purchase energy at peak times when energy prices are higher because of greater demands on the system. This decoupling of profits from increased energy usage will incentivize utilities to partner with consumers and the federal government to reduce monthly energy bills for families and businesses. Obama will provide early adopter grants and other financial assistance from the federal government to states that implement this energy efficient policy.
- Expand Federal Efficiency Grants: Obama will also expand federal grant programs to help states and localities build more efficient public buildings, including libraries, schools and police stations that adopt aggressive green building provisions like those provided by the Leadership in Energy and Environmental Design (LEED) program of the U.S. Green Buildings Council. Obama will also partner with the private sector to ensure that more companies and building contractors are aware of the short-term and long-term benefits of building “green.”

**Phase out Traditional Inefficient Light Bulbs:** For over 125 years, Americans have used the same incandescent light bulb technology, which consumes much more energy for the same results as newer lighting technologies. Barack Obama supports the effort led by Senate Energy and Natural Resources Chairman Jeff Bingaman (D-NM) to update federal lighting efficiency standards to ensure that new lighting technologies are phased into the marketplace. As president, Obama will implement legislation that phases out traditional incandescent light bulbs by 2014. This measure alone will save American consumers \$6 billion per year on monthly electricity bills and will save 88 billion kilowatt hours of electricity per year. By 2030, this change will result in greenhouse gas reductions of nearly 28 million tons of carbon.

**Invest in a Digital Smart Grid:** Like other pieces of infrastructure, such as roads and bridges our energy grid is outdated and inefficient, resulting in \$50-100 billion dollar losses to the U.S. economy each year. The 2003 East Coast blackout alone resulted in a \$10 billion economic loss. Like President Eisenhower did with the interstate highway system, Barack Obama will pursue a major investment in our national utility grid to enable a tremendous increase in renewable generation and accommodate 21<sup>st</sup>

century energy requirements, such as reliability, smart metering, and distributed storage. Obama will invest federal money to leverage additional state and private sector funds to help create a digitally connected power grid. Creating a smart grid will also help insulate against terrorism concerns because our grid today is virtually unprotected from terrorists. Installing a smart grid will help consumers produce electricity at home through solar panels or wind turbines, and be able to sell electricity back through the grid for other consumers, and help consumers reduce their energy use during peak hours when electricity is more expensive. Obama will direct federal resources to the most vulnerable and congested areas and rural areas where significant renewable energy sources are located, as well as work toward national transformation of our energy grid in partnership with states and utilities.

### **III. STRENGTHEN OUR OIL SECURITY AND ENERGY INDEPENDENCE**

Not since the 1970s has America's national security been so threatened by its energy insecurity, and, as we have learned the hard way over the past seven years, achieving energy security in the 21<sup>st</sup> century requires far more than simply expending our economic and political resources to keep oil flowing steadily out of unstable and even hostile countries and regions.

Rather, energy security requires stemming the flow of money to oil rich regimes that are hostile to America and its allies; it requires combating climate change and preparing for its impacts both at home and abroad; it requires making international energy markets work for us and not against us; it requires standing up to the oil companies that spend hundreds of millions of dollars on lobbying and political contributions; it requires that we address nuclear safety, waste, and proliferation challenges around the world; and more.

Obama will halt this dangerous trend, and take the necessary steps to achieving energy independence. Obama will make it a top priority of his climate change and energy independence agenda to reduce oil consumption by at least 35%, or 10 million barrels per day, by 2030. This will more than offset the equivalent of oil we are expected to import from OPEC nations in 2030. To meet this goal, the Obama plan will establish a National Low Carbon Fuel Standard, deploy advanced biofuels, repeal tax breaks for the oil and gas industry, and implement the following policies:

**Increase Fuel Economy Standards:** Obama has developed an innovative approach to double fuel economy standards within 18 years while protecting the financial future of domestic automakers. His plan, which will save nearly a half trillion gallons of gasoline and 6 billion metric tons of greenhouse gases by 2028, will establish concrete targets for annual CAFE increases while giving industry the flexibility to meet those targets. Obama's innovative approach broke through a 20 year deadlock in Congress and is the basis for bipartisan legislation that passed the Senate this year.

- Provide Support for Domestic Automakers: Obama's plan to raise fuel efficiency standards will also provide 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. 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.

**Invest in Developing Advanced Vehicles:** 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 have the capability of getting well over 250 miles per gallon of gasoline. As president, Obama will continue this leadership by investing in advanced vehicle technology that utilizes advanced lightweight materials and new engines. The increased federal funding will leverage private sector funds to bring plug-in hybrids and other advanced vehicles to American consumers. Obama will also expand consumer tax incentives by lifting the 60,000-per-manufacturer cap on buyer tax credits to allow more Americans to buy ultra-efficient vehicles.

**Build Biofuel Distribution Infrastructure:** As the percent of biofuels in gasoline increases over 10 percent, conventional fueling equipment will need to be replaced with pumps and tanks capable of handling higher biofuel blends. Barack Obama has been one of the strongest proponents in Congress for increasing the national supply of home-grown American ethanol and biodiesel. Obama is the only Democratic presidential candidate to cosponsor and actively campaign to establish the nation's first federal Renewable Fuel Standard, which is now law. Obama also led the successful effort to make gas stations eligible for a tax credit to cover 30 percent of the costs of installing E85 ethanol refueling pumps. Obama will build on those efforts to improve the production, supply and distribution of advanced biofuels like cellulosic ethanol and biodiesel.

- Mandate All New Vehicles are Flexible Fuel Vehicles: Barack Obama believes that all new vehicles sold in the U.S. should be flexible fuel vehicles (FFVs), which means they can run on biofuel blends like E85. Obama will work with Congress and auto companies to ensure that all new vehicles have FFV capability by the end of his first term in office.
- Increase Renewable Fuel Standard: As a leader in the effort to establish the nation's first Renewable Fuel Standard, Obama understands firsthand the importance of continuing to increase the supply of biofuels in our national fuel supply. Obama believes it is imperative that Congress adopt the Senate-passed proposal to increase the RFS to 36 billion gallons by 2022. As president, Obama will seek to surpass these targets and establish a requirement to produce at least 60 billion gallons of biofuels, including cellulosic ethanol and biodiesel, by 2030.

**Build More Livable and Sustainable Communities:** Over the longer term, we know that the amount of fuel we will use is directly related to our land use decisions and development patterns, much of which have been organized around the principle of cheap gasoline. Barack Obama believes that we must move beyond our simple fixation of investing so many of our transportation dollars in serving drivers and that we must make more investments that make it easier for us to walk, bicycle and access other transportation alternatives.

- Reform Federal Transportation Funding: As president, Barack Obama will re-evaluate the transportation funding process to ensure that smart growth considerations are taken into account. Obama will build upon his efforts in the Senate to ensure that more Metropolitan Planning Organizations create policies to incentivize greater bicycle and pedestrian usage of roads and sidewalks, and he will also re-commit federal resources to public mass transportation projects across the country. Building more livable and sustainable communities will not only reduce the amount of time individuals spent commuting, but will also have significant benefits to air quality, public health and reducing greenhouse gas emissions.
- Require States to Plan for Energy Conservation: Current law simply asks governors and their state Departments of Transportation to "consider" energy conservation as a condition of receiving federal transportation dollars. As president, Obama will require governors and local leaders in our metropolitan areas to make "energy conservation" a required part of their planning for the expenditure of federal transportation funds
- Level Employer Incentives for Driving and Public Transit: The federal tax code rewards driving to work by allowing employers to provide parking benefits of \$205 per month tax free to their employees. The tax code provides employers with commuting benefits for transit, carpooling or vanpooling capped at \$105 per month. This gives drivers a nearly 2:1 advantage over transit users. Obama will reform the tax code to make benefits for driving and public transit or ridesharing equal.

#### **IV. MAKE THE U.S. A LEADER IN COMBATING CLIMATE CHANGE AROUND THE WORLD**

The United States has historically been the largest emitter of greenhouse gases in the world — accounting for about one-fifth of the global total — but emissions are growing fastest among the rapidly developing countries. Just this year, China may have passed the US as the world’s largest greenhouse gas emitting nation. Unfortunately, the Bush administration has failed to engage the developing world just as it has failed to adopt a meaningful policy at home.

Making the U.S. a leader in combating climate change will require the United States to get its own house in order; re-engage and re-energize international agreements to reduce greenhouse gas pollution; and most importantly do so with the urgency this brewing crisis demands.

**Re-Engage with the U.N. Framework Convention on Climate Change (UNFCCC):** As the world prepares for the post-2012 phase of the UNFCCC, the United States must regain its leadership role in multiple forums to negotiate effective climate agreements. This requires re-engagement with the diplomatic efforts under the U.N. Framework Convention on Climate Change . The UNFCCC process is the main international forum dedicated to addressing the climate problem and an Obama administration will work constructively within it.

**Create New Forum of Largest Greenhouse Gas Emitters:** President Bush recently invited world leaders of the 15 largest emitters of greenhouse gases to a two-day conference, yet he failed to show up with any binding domestic commitments or funding for international efforts to combat climate change. Not surprisingly, these world leaders criticized the U.S. commitment to climate change and we missed an opportunity to join other countries with a serious plan to tackle this challenge.

Barack Obama will take seriously the U.S.’s leadership role in combating climate change. Obama will signal to the world the U.S. commitment to climate change leadership by implementing an aggressive domestic cap-and-trade program coupled with increased investments in clean energy development and deployment. Obama will build on our domestic commitments by creating a negotiating process that involves a smaller number of countries than the nearly 200 countries in the current Kyoto system. Obama will create a Global Energy Forum – based on the G8+5, which included all G-8 members plus Brazil, China, India, Mexico and South Africa – of the world’s largest emitters to focus exclusively on global energy and environmental issues.

Maintaining a standing international body focused on these issues will give a forum for all of the major emitters – past, present and future – to discuss efforts to combat climate change. In addition, it will give the U.S. and its allies regular opportunities to exert maximum pressure on China and India to do their part and make real commitments of their own. Obama believes it is important to make clear that the current Bush voluntary approach allows the biggest emitters to escape all international pressure to be a “responsible stakeholder” in the global environment.

This Global Energy Forum will complement – and ultimately merge with – the much larger negotiation process underway at the UN to develop a post-Kyoto framework. On a technical level, it will also allow facilitate technology transfer, joint international research, and, importantly, the numerous large scale international demonstration projects that must be embarked upon immediately in order to make these technologies economically appealing alternatives.

**Transfer American Technology to the Developing World to Fight Climate Change:** As nations around the world come together to combat global warming, the market for low-carbon energy products will grow significantly. Obama will create a Technology Transfer program within the Department of Energy dedicated to exporting climate-friendly technologies, including green buildings, clean coal and

advanced automobiles, to developing countries to help them combat climate change. Obama will allow U.S. emitters subject to the cap-and-trade mandates to offset some of their emissions by investing in low carbon energy projects in the developing world. This will help ensure that emissions in both the U.S. and the developing world are reduced.

**Cooperate with Oil Importers to Reduce Demand.** As new large oil importers come on the market, the United States is at the mercy of an ever more volatile oil market. Obama believes we should use existing organizations, like NATO, to make energy security a shared global goal. We should take steps to engage the largest new consumers, China and India, including by inviting them to join the International Energy Agency. Though they are not OECD countries, a formalized relationship – where we work together on common analysis and emergency response mechanisms – for them with the International Energy Agency (IEA) is imperative. China has completed the first stage of its strategic petroleum reserves and it is in our interest to see them complete that process so that they no longer can freeload on the strategic reserves of IEA members in times of tight oil markets, as was the case after Hurricane Katrina.

**Ensure the United States Works with Developing Countries on Climate Change.** The world's poorest countries are already suffering the impact of climate change through drought, famine and water scarcity, even though they are not responsible for the greenhouse gas pollution causing the climate to change. The Obama Administration will permit international offsets under the carbon cap to promote the transfer of low carbon energy to developing countries. An Obama administration will also ensure that U.S. foreign assistance is wisely invested in projects designed to help developing countries adapt to a changing climate.

**Confront Deforestation and Promote Carbon Sequestration:** A comprehensive strategy to combat global warming must address tropical deforestation which accounts for approximately 20 percent of global greenhouse gas emissions. As forests are cut down, burned and converted to other uses, carbon stored in wood, leaves, and soils are released into the atmosphere. Reducing rates of tropical deforestation will not only slow greenhouse gas emissions but will also protect the livelihoods of local people and the abundance of biodiversity inextricably linked to those forests. By offering incentives to maintain forests and manage them sustainably, the United States can play a leadership role in dealing with climate change. In addition we must develop domestic incentives that reward forest owners, farmers, and ranchers when they plant trees, restore grasslands, or undertake farming practices that capture carbon dioxide from the atmosphere. Encouraging these efforts will also provide improve water quality and restore natural areas for wildlife and recreation.