

BARACK OBAMA: PROMOTING A HEALTHY ENVIRONMENT

"We cannot afford more of the same timid politics when the future of our planet is at stake. Global warming is not a someday problem, it is now. We are already breaking records with the intensity of our storms, the number of forest fires, the periods of drought. By 2050 famine could force more than 250 million from their homes . . . The polar ice caps are now melting faster than science had ever predicted. . . . This is not the future I want for my daughters. It's not the future any of us want for our children. And if we act now and we act boldly, it doesn't have to be."

[Barack Obama, Portsmouth, NH, 10/8/07]

BARACK OBAMA ON THE ENVIRONMENT

Barack Obama has worked to ensure that our nation's environmental laws and policies balance America's need for a healthy, sustainable environment with economic growth. He has reached across the aisle to sponsor ambitious legislation to drastically reduce greenhouse gas emissions and turn this crisis of global warming into a moment of opportunity for innovation and job creation. *The League of Conservation Voters has given Barack Obama the highest lifetime rating of anyone currently running for president.*

As president, Barack Obama will make combating global warming a top priority. He will reinvigorate the Environmental Protection Agency (EPA), respecting its professionalism and scientific integrity. And he will protect our children from toxins like lead, be a responsible steward of our natural treasures and reverse the Bush administration's attempts to chip away at our nation's clean air and water standards.

CLIMATE CHANGE

Global warming is real, is happening now and is the result of human activities. Barack Obama believes we have a moral, environmental, economic and security imperative to tackle climate change in a serious, sustainable manner.

Reduce Carbon Emissions 80 Percent by 2050: Barack 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.

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 national 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 Percent Allowance Auction: Barack Obama's cap-and-trade system will require all pollution credits to be auctioned. A 100 percent auction ensures that all large corporate 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 to help families reduce their energy prices, and to address transition costs, including helping American workers affected by this economic transition and helping lower-income Americans with their energy costs.

I. Invest in a Clean Energy Economy and Create American Jobs

Barack Obama will invest \$150 billion over 10 years in advanced energy technologies.

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

- Invest in Basic Research: Barack Obama will double federal science and research funding for clean energy projects.
- Invest in a Skilled Clean Technologies Workforce: Barack Obama will invest in job training and transition programs to help workers and industries adapt to clean technology development and production.

(2) Invest in Key Technology Deployment.

- Clean Technologies Deployment Venture Capital Fund: Barack Obama will create a Clean Technologies 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.
- Production Tax Credit: Barack Obama will also extend the federal Production Tax Credit (PTC) for 5 years to encourage the deployment of renewable technologies.

(3) Set Standards to Allow the Market to Invest and Innovate.

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

- 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 requires fuels suppliers to reduce the carbon their fuel emits by ten percent by 2010.
- 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.
- Ensure the Federal Government Uses Renewable Sources of Electricity: Obama will ensure that at least 30 percent of the federal government's electricity comes from renewable sources by 2020.

II. Invest in the Fastest, Cleanest Way to Reduce Emissions: Energy Efficiency

As president, Barack Obama will make energy conservation a top priority and use his position as president to communicate directly with the American people about the importance of reducing our energy consumption. His agenda will provide the American people the tools they need to begin reducing their energy consumption and energy bills.

Make the Federal Government the Leader in Saving Electricity:

Make Federal Buildings More Efficient: Barack Obama will ensure that all new federal buildings

are zero-emissions by 2025, and he will ensure that all new federal buildings are 40 percent more efficient within the next five years. Obama will also make retrofitting existing federal buildings a top priority and seek to improve their efficiency by 25 percent within five years.

Overhaul Federal Efficiency Codes: Barack Obama will ensure his Department of Energy will regularly update efficiency standards.

Use Innovative Measures to Dramatically Improve Efficiency of Buildings:

- Set National 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: Barack 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. He will also provide a federal match for those states with public benefits funds that support energy efficiency retrofits for existing buildings.
- Flip Incentives to Energy Utilities: Barack Obama will work to provide incentives for energy conservation by ensuring utilities get increased profits for improving energy efficiency, rather than higher energy consumption. 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: Barack Obama will expand federal grant programs to help states and localities build more efficient public buildings that adopt aggressive green building provisions like those provided by the Leadership in Energy and Environmental Design program of the U.S. Green Buildings Council.

Phase out Traditional Inefficient Light Bulbs: 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.

Create a Green Job Corps: Obama will create an energy-focused youth jobs program for disconnected and disadvantaged youth. This program will provide participants with service opportunities to improve energy conservation and efficiency of homes and buildings in their communities, while also providing practical experience in important career fields of expected high-growth employment. It will also engage private sector employers and unions to provide apprenticeship opportunities. The program will also work closely with Obama's proposed Clean Energy Corps to help participants find additional service opportunities after they complete the Green Job Corps.

Invest in a Digital Smart Grid: Barack Obama will pursue a major investment in our national utility grid to enable a tremendous increase in renewable generation and accommodate 21st century energy requirements, such as reliability, smart metering and distributed storage. Obama will direct federal resources to the most vulnerable and congested urban and rural areas where significant renewable energy sources are located. Obama will work toward national transformation of our energy grid in partnership with states and utilities.

Increase Fuel Economy Standards: Barack Obama will double fuel economy standards within 18 years while protecting the financial future of domestic automakers. His plan will 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.

Invest in Developing Advanced Vehicles: Barack Obama will invest in advanced vehicle technology that

utilizes advanced lightweight materials and new engines. 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 More Livable and Sustainable Communities:

- Reform Federal Transportation Funding: Barack Obama will re-evaluate the transportation funding process to ensure that smart growth considerations are taken into account and he will also re-commit federal resources to public mass transportation projects across the country.
- Require States to Plan for Energy Conservation: Barack 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.

III. Make the U.S. a Leader in Combating Climate Change around the World

Re-Engage with the U.N. Framework Convention on Climate Change (UNFCCC): The UNFCCC process is the main international forum dedicated to addressing the climate change problem and an Obama administration will work constructively within it.

Create New Forum of Largest Greenhouse Gas Emitters: Barack Obama will create a Global Energy Forum – based on the G8+5, which includes all G-8 members plus Brazil, China, India, Mexico and South Africa – comprised of the largest energy consuming nations from both the developed and developing world, which would focus exclusively on global energy and environmental issues. 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.

Transfer American Technology to the Developing World to Fight Climate Change: Barack 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.

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. 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, Barack Obama will 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.

CLEAN AIR

Air pollution causes thousands of deaths each year. Barack Obama has a record of successfully fighting for cleaner air. As president, he will continue that fight.

Fight for Clean Air: During his time on the Senate Environment and Public Works Committee, Barack Obama helped stop President Bush's attempt to undermine the Clean Air Act, which would have increased industrial emissions of mercury and sulfur. He also helped block attempts to roll back environmental regulations on oil refineries. And he has been an outspoken proponent of funding for the Diesel Emissions Reduction Act of 2005, a bipartisan initiative that could achieve major reductions in harmful emissions by helping states clean up diesel vehicles.

As president, Barack Obama will restore the force of the Clean Air Act. He will fight for continued reductions

in smog and soot, and continue his leadership in combating toxins that contribute to air pollution. Unlike President Bush, Obama will listen to his scientific advisers on air quality standards. And he will reverse the Bush administration's attempts to chip away at our nation's clean air standards.

Reduce Health Risks Caused by Mercury Pollution: More than five million women of childbearing age have high levels of toxic mercury in their blood and approximately 630,000 newborns are born every year at risk. The EPA estimates that every year, more than one in six children could be at risk for developmental disorders because of mercury exposure in the mother's womb. Barack Obama fought a Bush administration rule that would have imposed very weak emissions reductions on utilities, delaying meaningful reductions in power plant mercury emissions for another two decades. Recognizing that one major cause of mercury also comes through the air from across the oceans, particularly from China, Obama introduced legislation to ban the export of elemental mercury, and he successfully pressured the U.S. Department of Energy to stop its proposed sale of large quantities of mercury to companies overseas. Obama also introduced legislation to phase out the use of mercury in the manufacture of chlorine.

CLEAN WATER

As a senator, Barack Obama has been a strong leader on clean water issues. He fought against offshore drilling in the U.S. Senate, and he supports maintaining current moratoriums on new offshore oil and natural gas drilling. He supports full funding for the Clean Water State Revolving Fund, which funds water quality protection projects for wastewater treatment, nonpoint source pollution control, and watershed and estuary management. He also supported a new stormwater cleanup program to manage polluted runoff from roads and highways, which is the largest source of water pollution in coastal areas today. In Illinois, Obama cosponsored legislation that stopped the use of MTBE, a fuel additive which has been found to contaminate ground water. As president, he will improve the quality of our nation's lakes, rivers, and drinking water.

Clean up our Water: Barack Obama will reinvigorate the drinking water standards that have been weakened under the Bush administration and update them to address new threats. He will help communities by restoring better federal financing for water and wastewater treatment infrastructure, and he will continue his leadership in protecting national treasures like the Great Lakes from threats such as industrial pollution, water diversion, and invasive species. Obama will establish policies to help high-growth regions with the challenges of managing their water supplies.

Regulate CAFOs: Concentrated Animal Feeding Operations (CAFOs), which raise more than 40 percent of U.S. livestock, comprise a larger share of the livestock industry every year. Barack Obama has worked for tougher environmental regulations on CAFOs. He has supported legislation to set tough air and water pollution limits for livestock operations, including limits on nitrogen, phosphorus, hydrogen sulfide, ammonia, and other pollutants. In the Obama Administration, the Environmental Protection Agency will strictly monitor and regulate pollution from large CAFOs, with fines for those who violate tough air and water quality standards. Obama also strongly supports efforts to ensure meaningful local control.

Restore the Wetlands: Barack Obama is an advocate for preserving our wetlands and supports a broad range of traditional conservation programs, including the North American Wetlands Conservation Act and the Wetland Reserve Program in the Farm Bill. He will work with local governments to develop the best strategies for protecting and expanding wetlands. Obama's record on protecting wetlands dates back to his days as a state senator, when he was a cosponsor of the Wetlands Protection Act, which provided for the conservation of wetlands in Illinois.

Barack Obama will help the Gulf Coast restore the wetlands, marshes and barrier islands that are critical to tamping down the force of hurricanes and serve as critical fish and wildlife habitat. As president, Obama will immediately close the Mississippi River Gulf Outlet, which experts say funneled floodwater into New Orleans.

Restore the Great Lakes: Having lived near Lake Michigan for 20 years, Barack Obama has a deep appreciation for the Great Lakes – for their beauty as well as their centrality to the region's economy, recreation, transportation, and drinking water. He has worked tirelessly in the Illinois State Senate and U.S. Senate to protect the Great Lakes from sludge, mercury, and invasive species. As president, Barack Obama will push for the passage of the Great Lakes Collaboration Implementation Act, which will move us past playing defense against environmental problems and toward a comprehensive restoration of the Great Lakes. He is a cosponsor of the Great Lakes Environmental Restoration Act, which would provide grants for projects including wetland restoration, coastal wildlife and fisheries habitat improvement, water quality improvement and nonpoint source pollution reduction. Recently, when the Indiana Department of Environmental Management agreed to allow a BP refinery to release significantly more ammonia, treated solids and mercury into Lake Michigan, Barack Obama fought back, calling for congressional hearings into the permit and its relation to Clean Water Act provisions intended to prevent any decline in water quality.

Water in the West: Barack Obama understands that the American West is facing a serious water crisis. In the long run, we do not have enough water to meet the West's fast-growing needs. Obama believes the federal government has an important role to play in helping local communities conserve water. He supports federal policies to encourage voluntary water banks, wastewater treatment, and other market-based conservation measures. We also need to improve technology for water conservation and efficiency, and remove institutional barriers to increase cooperation and collaboration among federal, state, tribal, and private organizations. Nevada's "cash for grass" program, in which people are paid to remove grass and put in desert landscaping, is an excellent model of conservation, and Obama intends to help local communities develop similar projects that work for them.

HEALTHIER COMMUNITIES

As president, Barack Obama will continue his fight, begun as a community organizer, to protect our children from health hazards and developmental disabilities caused by environmental toxins, such as lead, mercury, particulate matter, and industrial land waste. Obama will fight to clean brownfields, restore abandoned industrial riverfront sites, and give communities the tools they need to eat healthy foods and expand livable, walkable neighborhoods.

Protect Children and Families from Lead Poisoning: Lead is a neurotoxin that is especially harmful to the developing nervous systems of fetuses and young children. There are currently 400,000 children suffering from lead poisoning in the U.S. In 2005, Barack Obama introduced the Lead-Free Toys Act, which would require the Consumer Product Safety Commission to ban children's products containing more than a trace amount of lead. Following news reports that millions of Chinese-made toys were being recalled because of lead paint, he has pressured toy manufacturers and Bush administration officials to do a better job of protecting American children.

In 2006, Barack Obama introduced the Lead Poisoning Reduction Act, which would help protect children from lead poisoning by requiring all non-home-based child care facilities, including Head Start programs and kindergartens, to be lead-safe within five years. The legislation would also establish a \$42.6 million grant program to help local communities pay to make these facilities safe. The Environmental Protection Agency recently announced support for Obama's proposal to remove toxic lead from child care, pre-school, and kindergarten facilities.

Barack Obama has fought to get the Environmental Protection Agency to publish long-overdue rules for how contractors involved in the renovation and remodeling of homes should deal with lead paint hazards. When the rules are eventually finalized, they will prevent 28,000 lead-related illnesses each year, resulting in an annual net economic benefit of more than \$4 billion.

Protect the Public from Nuclear Material: After a series of reports that Illinois nuclear power plants failed to

disclose that radioactive substances had leaked into the groundwater, Barack Obama worked with Senator Dick Durbin (D-IL) to introduce legislation that would require nuclear companies to inform state and local officials if there is an accidental or unintentional leak of a radioactive substance. In 2005, Obama introduced legislation requiring the Nuclear Regulatory Commission to track unaccounted spent nuclear fuel rods used at power plants in the United States.

Control Superfund Sites and Data: Barack Obama demanded that the Environmental Protection Agency report on what it is doing to reduce and control human exposure to hazardous contaminants at more than 100 Superfund sites nationwide. As a state senator, he voted to create the Brownfields Rehabilitation and Redevelopment Program, which encourages private sector voluntary remediation of environmentally-distressed and underutilized sites. As president, Obama will restore the strength of the Superfund program by requiring polluters to pay for the cleanup of contaminated sites they created.

Strengthen Federal Environmental Justice Programs: Barack Obama will make environmental justice policies a priority within the Environmental Protection Agency (EPA). As a U.S. Senator, Obama has worked to ensure that low-income communities are represented in the EPA's long-term planning. As president, Obama will work to strengthen the EPA Office of Environmental Justice and expand the Environmental Justice Small Grants Program, which provides non-profit organizations across the nation with valuable resources to address local environmental problems. Obama will also work to ensure that environmental health issues in the wake of man-made or terrorist disasters are promptly addressed by federal, state and local officials. Obama will work to provide low-income communities the legal ability to challenge policies and processes that adversely affect the environmental health of low-income and minority communities.

Build Healthy Communities: How a community is designed – including the layout of its roads, buildings and parks – has a huge impact on the health of its residents. For instance, nearly one-third of Americans live in neighborhoods without sidewalks and less than half of our country's children have a playground within walking distance of their homes. This lack of a safe place to walk and play is a major contributor to the growing numbers of overweight children. Barack Obama introduced the Healthy Places Act to help local governments assess the health impact of new policies and projects, like highways or shopping centers. Once the health impact is determined, the bill gives grant funding and technical assistance to help address potential health problems.

Minorities in America are significantly more likely to be affected by toxins and pollutants. To focus federal attention on this environmental health problem, Barack Obama introduced the Healthy Communities Act, which would expand research on toxins and provide the resources to clean up blighted communities.

Encourage Organic and Sustainable Agriculture: Organic food is the fastest growing sector of the American food marketplace. Demand for sustainable, locally-grown, grass-finished and heritage foods is also growing quickly. These niche markets present new opportunities for beginning farmers because specialty operations often require more management and labor than capital. To support the continued growth of sustainable alternative agriculture, Barack Obama will increase funding for the National Organic Certification Cost-Share Program to help farmers afford the costs of compliance with national organic certification standards. He will also reform the U.S. Department of Agriculture (USDA) Risk Management Agency's crop insurance rates so that they do not penalize organic farmers.

Support Local Family Farmers with Local Foods and Promote Regional Food System Policies: Farming is a vanishing lifestyle. Less than one million Americans claim farming as their primary occupation. Those farmers who sell directly to their customers cut out all of the middlemen and get full retail price for their food - which means farm families can afford to stay on the farm, doing the important work they love. Barack Obama recognizes that local and regional food systems are better for our environment and support family-scale producers. As president, he will emphasize the need for Americans to Buy Fresh and Buy Local, and he will

implement USDA policies that promote local and regional food systems.

PRESERVING OUR LAND

Barack Obama believes that we have a responsibility to our children to leave this Earth better than we found it. All Americans have an interest in the protection and proper maintenance of our irreplaceable national treasures. Conservation is also vitally important to providing clean drinking water, cleaning our air and reducing greenhouse gas pollution. Barack Obama believes we need a new vision for conservation that both protects our existing publicly-owned lands while dramatically expanding investments in protecting and restoring forests, grasslands, and wetlands across America for generations to come.

Protect National Parks and Forests: For too long, America's National Parks and Forests have been threatened by lax protection. Barack Obama fought efforts to drill in the Arctic National Wildlife Refuge. Obama supports the Roadless Area Conservation Rule, which keeps over 58 million acres of national forests pristine. As president, he will repair the damage done to our national parks by inadequate funding and emphasize the protection and restoration of our National Forests.

Barack Obama is also an original cosponsor of the Combat Illegal Logging Act, which would prohibit the importation of illegally harvested wood products. This would make foreign companies much less likely to engage in massive, illegal deforestation in other countries. Saving these endangered forests preserves a major source of carbon sequestration.

Conserve New Lands: Barack Obama is a strong supporter of increased funding for the Land and Water Conservation Fund, which supports land acquisition and maintenance of parks. As a state senator, he supported the creation of the Illinois Open Land Trust Act, which allowed the state to buy property from willing sellers for conservation and recreation purposes and make grants and loans to local governments for acquiring land for open spaces.

While Americans can take great pride in our National Parks and other public lands, there are many landscapes and ecosystems which do not have adequate protection. As president, Barack Obama will lead efforts to acquire and conserve new parks and public lands, focusing on ecosystems such as the Great Plains and Eastern forests which do not yet have the protection they deserve.

Partner with Landowners to Conserve Private Lands: Because most land is privately-owned, private landowners are the principle stewards of America's land and water. As a U.S. Senator, Barack Obama has supported conservation programs that serve as a resource to landowners and assist them with sustainable environmental planning and best land management practices. As president, Obama will put an unprecedented level of emphasis on the conservation of private lands. He will advance legislation that works with landowners and follows in the tradition of the Wilderness Act, the Clean Water Act, and the Clean Air Act to focus federal attention and increased resources for this key environmental issue. He will also increase funding for the Conservation Security Program and the Conservation Reserve Program and will create additional incentives for private landowners to protect and restore wetlands, grasslands, forests, and other wildlife habitat.

Encourage Farmers at the Cutting Edge of Renewable Energy and Energy Efficiency: Farmers realize that they can help their bottom line and the environment by using more wind and solar power production systems and sharing energy with other users. They are using new irrigation practices to conserve energy and water. Barack Obama will encourage the use of methane digesters that are being used to produce power from animal waste.

"No till" and other agricultural practices are reducing energy input and keeping the health of our soil sustainable. As president, Obama will expand USDA projects that focus on energy efficiency and conservation.