

CLEAN ENERGY JOBS AND AMERICAN POWER ACT: SUMMARY OF PROVISIONS

SEIZING THE OPPORTUNITY

In this time of economic challenge, we have a unique opportunity to put Americans back to work and take charge of our security, our energy future and the fate of our planet. We have the chance to reclaim our energy destiny.

For too long, Washington has let oil companies, lobbyists, and special interests maximize their profits and minimize our progress. Our dependence on foreign oil has hurt our economy, helped our enemies, and put our national security at risk. It's time to invest in energy solutions that are made in America, and work for America. It's time to take back control.

This bill will get tough on corporate pollution and put American ingenuity to work to dramatically improve every facet of the way America generates and uses energy. It will create millions of new, good-paying jobs, protect our air and water from dangerous pollution, and secure our children's future by making America energy independent. And it does not raise the federal deficit by one single dime.

A New Congressional Approach to Achieving Energy Solutions

This bill departs from previous initiatives by taking a more comprehensive approach to the fundamental problems we face today. By the time this bill reaches the floor, it will include the concerns, advice, and perspective of six Senate Committees: Energy and Natural Resources (which passed the bipartisan American Clean Energy Leadership Act earlier this year), Finance, Agriculture, Commerce, Foreign Relations, and Environment and Public Works. The President has directed new funds for the task of addressing energy and climate, and this bill's provisions support the President's goals.

Our efforts center around four urgent national priorities: putting America back in control of our energy future, reasserting American economic leadership and competitiveness, protecting our families from pollution, and ensuring our national security.

PUTTING AMERICA BACK IN CONTROL OF OUR ENERGY FUTURE

The transition to clean energy means ensuring that all of America's energy sources—from coal and nuclear to solar and wind—are as clean and efficient as possible without damaging our short-term competitiveness. Making America more energy independent means investing in all of these sources of power as well as in a bold cutting-edge transmission and distribution system that reaches every part of America.



- Coal is an abundant energy source that America's consumers and producers depend on for 50% of our power. However, when burned using old technology, it produces dangerous pollutants that damage our health and cause climate change. That's why we need to invest in game-changing technologies that capture and store carbon pollution before it reaches the air we breathe. In the past, we had to rely on dirty, inefficient coal as our nation industrialized. But in the 21st century, we can reinvent coal as a clean, homegrown energy source and enable our coal industry to remain globally competitive as the world reduces its carbon pollution.
 - \$10 billion over ten years to support research and development of new carbon capture and sequestration technology to advance the next generation of coal-fired power plants.
 - Additional funding to reward first-movers who implement carbon capture and sequestration technology on new or retrofitted plants—the higher the level of carbon capture, the greater the level of funding.
 - Performance standards to provide definitive guidance to the industry on advanced technology implementation.
- Natural gas is by far the cleanest form of fossil fuel generated power, producing less
 than half of the emissions of an equivalent plant powered by coal. Currently, it provides
 nearly 20% of our nation's power. Recent discoveries have increased America's
 estimated natural gas reserves by 35%, decreasing our need to import natural gas from
 outside of North America.
 - A new federal program that encourages investment in low-carbon power generation especially natural gas.
 - Additional incentives that reward companies for reducing leaks from natural gas pipelines.
- **Nuclear energy** is a reliable energy source that virtually eliminates carbon pollution and has the capacity to deliver power to millions of Americans in the coming years. Already, it provides clean, affordable energy all around the world and supplies nearly 20% of our power in America—as much as 50% of electricity in individual states. That's why Democrats and Republicans alike agree that we must ease the way for nuclear power to play an increasing role in making America energy independent.
 - Build on the significant provisions included in ACELA, including increased financing for loan guarantees and regulatory risk insurance.



- New programs for research and development for advanced nuclear technology and nuclear waste management.
- Training programs to train the highly-skilled workforce necessary for the construction, operation, maintenance and support of nuclear facilities.
- Renewable energy and energy efficiency are critical to the clean energy economy we
 hope to build. Decades ago, American engineers and scientists invented the
 technologies behind wind and solar power but our competitors adapted them and
 surged ahead of us. Today, just five of the world's top thirty wind, solar, and advanced
 battery companies are American. It's time for us to become world leaders again in these
 fields.

Of course, the cleanest and cheapest kilowatt of energy is the one we never use. The global consulting firm, McKinsey & Company, estimates that 40% of the pollution reduction needed to prevent catastrophic global warming can be achieved through efficiency improvements alone. Already nearly a thousand U.S. cities have heard this message and adopted ambitious environmental standards for new construction and refitting existing buildings. Even as we invest in a wide range of clean sources of energy, every American can help put the country back in control of our energy—and save money on their monthly bills.

Finally, as we develop and deploy the latest electricity-generating technologies, we must ensure we have the transmission lines and power grid to carry American-made energy to every corner of the 50 states.

- Build on the significant successes of ACELA, including ambitious new renewable energy standards, energy efficiency measures, and investments in infrastructure.
- Grants to cities and states that embrace clean energy. Substantial investments to reward cities and states for investing in renewable energy, energy efficiency, retrofits and building upgrades.
- Significant new investments in cutting-edge research and development funding for renewable energy sources. Combined with ACELA, this bill will significantly increases annual investments in scientific innovation to advance clean energy technology.

REASSERTING AMERICAN ECONOMIC LEADERSHIP AND COMPETITIVENESS

Fifteen million Americans are out of work today, and the American people are demanding the next great engine of economic growth. The solution exists: the clean energy economy. It's no



coincidence that the countries making speedy recoveries from the global economic downturn—Japan, Germany, and China—are all making strong investments in their energy sectors. These countries and others have put millions of their people to work by investing in the next-generation of energy technology.

This bill invests billions in clean energy research and development, as well as in deployment to our states, cities, and homes. It also sets ambitious new efficiency goals. And by investing in the solar, wind and other renewable energy sources that will help save the planet, we will also save the economy by developing a workforce trained for the future—from researchers to roofers, the economic benefits will be broad and widespread. This bill is a superhighway to American prosperity that runs far into this century.

Consider this simple fact: Every dollar spent on clean energy creates nearly four times as many jobs as an equal investment in oil and gas. And the jobs it creates are good-paying, regionally diverse, and available to Americans of all educational backgrounds. These are jobs that can't be shipped overseas.

No worker should be left behind. This bill includes targeted protection for our manufacturing sector to ensure that American companies remain competitive and jobs remain here at home. New programs will train workers to succeed in the new energy economy. Agriculture and rural America will see a boom in investments in biofuels and alternative energy sources. Low- and moderate-income families will be protected from price increases through rebates on their electricity bills, and a market stability fund will limit price volatility.

- Turning clean energy into an American economic advantage. By taking bold steps to
 encourage companies to embrace clean energy technology, America's economy can
 retake its global leadership role in these fields. With strong market signals and
 significant investments, America can take charge and become the world's leader in
 clean energy once again.
 - A strong new investment in all aspects of our clean energy economy, including billions of dollars in investment for the clean, efficient, and renewable use of energy and the deployment of twenty-first century energy technologies.
- **Developing and training key workers.** We need to ensure that we not only provide the financial capital to jumpstart these new industries, but we also provide the training American workers need to succeed in the new energy economy.
 - Extensive worker training for new industries, including significant new programs at post-secondary institutions; transition programs for workers in slower-growth industries.



- An online clearinghouse to help workers find new energy jobs.
- Support for affected industries. The Clean Energy Jobs and American Power Act doesn't just create the jobs of the future—it also protects existing jobs in the manufacturing sector as our economy transforms. This bill has strong measures to ensure that jobs don't "leak" to other countries, who think they can pollute their way to economic success.
 - Support for energy-intensive, trade-exposed industries like chemicals to ensure that
 U.S. manufacturing remains competitive in the new energy economy.
 - Robust border measures, consistent with our international obligations.
 - Ironclad provisions to ensure small businesses and agricultural enterprises are not covered.
- **Protecting consumers.** The bill also shields consumers from increases in prices caused by inadvertent or abusive practices as we transition to a new energy economy.
 - Rebates for low- and moderate-income consumers on their energy bills help offset any increased costs.
 - A market stability fund to protect consumers and businesses from excessive price volatility. This mechanism ensures that, even as the energy economy changes, customers will experience stable, affordable prices.
 - Support for strong policing measures to establish marketplace accountability and ensure the new carbon marketplace is transparent, fair, and accountable.

PROTECTING OUR FAMILIES FROM POLLUTION

From chronic asthma to the arrival of diseases such as malaria rarely seen in America, the dangers of unrestrained carbon pollution and the climate change it causes are many and varied. Left unchecked, carbon pollution is a threat to the air we breathe, the water we drink, and the health of our families.

When acid rain and other chemicals threatened our health in the 1990s, we worked across party lines to craft an aggressive and effective response. Today we must return to tried-and-true methods to reduce dangerous pollution by enabling the private sector to seek out the most cost-effective path forward.



The bill sets ambitious and achievable goals to reduce carbon pollution. It targets a reduction of 20 percent by 2020 and 80 percent by 2050 from 2005 levels, the minimum scientists judge necessary to avert a climate disaster. The bill accomplishes these goals through a Pollution Reduction and Investment system that covers less than 2% of American businesses and keeps American industry competitive during the transition to a new energy economy.

And as we reduce carbon pollution, we must also respond to the impacts of the climate change it already has and will continue to create. We must devote resources to address the dangers that this pollution poses to our cities, towns, and wildlife.

- Pollution Reduction and Investment. The system applies only to the largest polluters in the country—initially around 7,500 facilities that account for nearly three-quarters of U.S. carbon pollution. Over ninety-eight percent of American businesses, including farmers, are not covered by this program. It also provides necessary flexibility. If a company needs more time to clean up its carbon pollution, it can pay for the right to keep polluting. Alternatively, if a business can decrease pollution quickly and affordably, it will be rewarded.
 - Pollution reduction. Sets a pollution reduction target of 20% by 2020 and 80% by 2050 from 2005 levels. Preserves the important functions of the Clean Air Act in the area of carbon pollution.
 - Private investment incentives. Allows companies to reduce carbon pollution at a minimal cost; rewards companies that have already taken action; and creates incentives for those American companies that are most innovative and efficient in their pollution reduction going forward.
 - Protections. Ensures that all mechanisms for awarding investment or penalizing
 polluters operate in a transparent and well-regulated manner. Provides significant
 rebates to low-income and middle-income consumers to offset costs and creates
 mechanisms to avoid major price disruptions.
 - Not covered. Does not cover any agricultural enterprise. Does not include any small businesses that pollute less than 25,000 tons of carbon-based pollutants. That's the same as 130 railway cars of coal, 2,300 homes, 4,600 cars, or 58,000 barrels of oil. That's more than a large apartment or commercial building and more than a stadium, shopping mall, or transit center.
- **State adaptation.** As coastal cities and infrastructure are increasingly at risk from rising sea levels, and drought and wildfire threaten our Western landscapes, we need to help states to meet this new and increasing challenge.



- Funding for states to respond to the impacts of global warming, including help in fighting wildfires, combating droughts, protecting water supply, preventing floods, promoting recycling, and addressing sea level rise. Particular focus on coastal adaptation.
- Critical funds for Indian tribes who face potentially dramatic changes to their way of life.
- Wildlife. From symbols of our country, like the bald eagle or the buffalo, to cherished
 American foods like Alaskan salmon or Atlantic cod, we treasure our American wildlife.

 As the climate changes, many of these species will see their habitats threatened.
 - Funding for the identification of at-risk populations, habitats, and ecosystems and selective habitat protection of areas particularly susceptible to climate change.

ENSURING OUR NATIONAL SECURITY

Our national security faces two overarching threats. First, much of our energy supply currently lies in the hands of hostile countries halfway around the world. Americans are fed up with an oil addiction that sends nearly \$1 billion a day overseas to countries that often don't share our values.

Second, climate change injects a major new source of chaos, tension, and human insecurity into an already volatile world. It threatens to bring more famine and drought, worse pandemics, more natural disasters, more resource scarcity, and human displacement on a staggering scale. We risk creating new failed states that offer glaring opportunities to the worst actors in our international system. In an interconnected world, that endangers all of us.

Eleven highly-decorated former Admirals and Generals issued a report calling climate change a "threat multiplier" with "the potential to create sustained natural and humanitarian disasters on a scale far beyond those we see today." General Anthony Zinni, former commander of our forces in the Middle East, warned that "without action...we will pay the price later in military terms. And that will involve human lives. There will be a human toll."

To keep Americans safer, this bill includes measures that:

• Move America toward energy independence. With transportation accounting for 70% of our oil use, we must find ways to provide cleaner alternatives that do not rely as heavily on petroleum. Already public transportation saves more than 4 billion gallons of oil usage annually—we can increase that through smart development policies.



- Reform transportation planning approaches in states and large metropolitan areas.
 By including reductions in harmful greenhouse gases as criteria for transit and development planning, we can encourage people to commute in ways that don't increase our dependence on foreign oil, whether by walking, bicycling, taking public transit, or driving in cars that use less oil—or even no oil at all.
- Prevent runaway climate change. Radical changes to our climate and environment
 threaten to bring more virulent disease and epidemics, more famine and drought, more
 natural disasters, more resource scarcity, and human displacement on a staggering
 scale. In an interconnected world, that endangers all of us.
 - Ambitious goals to reduce, steadily but dramatically, the carbon pollution that causes climate change; market incentives and rewards to help companies meet them.
- Proactively address adaptation needs. By some estimates, more people worldwide
 will be displaced by environmental changes and natural disasters than by war next year.
 America must take a leadership role to prevent the "threat multiplier" effects of climate
 change.
 - A firm annual commitment to help the poorest and most at-risk nations contain the effects of climate change and promote stability.

* * *

Our energy future, our economy, our health and our security all demand the same thing: We must reinvent the way America generates and uses energy. America has never shied away from a challenge before. Now, by passing the Clean Energy Jobs and American Power Act, we can lay the cornerstone for decades of economic growth and a stronger, more powerful America.