

Energy Security, Innovation & Sustainability Initiative

Prioritize.

A 100-Day Energy Action Plan
For the 44th President of the United States



Compete.

Council on
Competitiveness

The Council on Competitiveness recognizes that energy will be a defining challenge for the new Administration—for economic competitiveness, national security and long-term environmental sustainability. Energy price and supply volatility impact economic growth, global trade and investment, the location of industrial production and job creation, retention and loss. Over four decades, Administrations have emphasized the need for sustainable and secure sources of energy to little avail. The new President must effect real change. Economic, environmental, geopolitical and technological forces—concurrent with the impending political transition—have converged forcefully to create a tipping point and sense of urgency in the public and private sectors about the need and opportunity to act now.

The Council launched the Energy Security, Innovation & Sustainability (ESIS) Initiative in July 2007 with the firm belief that the crucial role of private sector demand in driving energy system transformation has gone largely unrecognized and unaddressed in prior policy initiatives. The government has the power to greatly strengthen the business case for investment and innovation in sustainable energy solutions. There is no one single policy that will mobilize market forces and assure a successful transformation of our energy system. The enabling conditions must be set simultaneously on a number of interdependent fronts—including energy efficiency, technology, investment, infrastructure and workforce readiness.

The Council puts forth the following recommendations to the 44th President as the critical measures for immediate action upon taking office. It is important to stress that these actions mark the beginning, not the end, of a concerted commitment to ensure the United States achieves energy security in a sustainable manner, while ensuring the competitiveness of its workers, industries and economy. The Council will issue a comprehensive set of recommendations, addressing the need for both public and private sector action, at a National Energy Summit & International Dialogue in September 2009. The New President and his cabinet will be invited to this important meeting.

Setting the Global Bar for Energy Efficiency

Issue an executive order mandating that the Federal Government use the procurement process to lead the market toward efficient energy standards for goods and services, as well as in the construction and retrofitting of facilities, while reducing the carbon load. Using its purchasing power, the government can move the marketplace.

- Direct the Secretaries of Energy and Commerce and the Administrators of the Environmental Protection Agency and General Services Administration, in coordination with the Secretaries of State and Defense and the U.S. Trade Representative, to work together with private sector standard-setting bodies to accelerate the development, rapid adoption and international recognition of the world's leading energy efficiency standards, together with a labeling, measurement and verification system.
- Direct all federal agencies and U.S. Government contractors to procure the most advanced and cost-competitive energy efficient equipment and

vehicle fleets and to purchase low carbon fuel and electric power where available.

- Direct the Administrator of the General Services Administration, the Secretary of Defense and the Administrator of the National Aeronautics and Space Administration to amend the Federal Acquisition Regulation to require comprehensive energy efficiency compliance provisions in all U.S. Government contracts, without undue regulatory burden on small and medium-sized businesses.

Assuring Access to Clean and Competitive Energy

Immediately develop and utilize all sources of energy in America in sustainable ways—including oil, gas, coal, nuclear, hydro, wind, solar, biofuels, geothermal, laser fusion-fission and other advanced energy sources—and level the playing field on subsidies while creating incentives to discover and deploy new energy sources, consistent with environmental standards and safeguards.

- Direct the Secretary of Treasury to lead a Cabinet-level working group on “Clean Energy Incentives” to construct a transparent, non-discriminatory, long-term and consistent investment framework to promote affordable clean energy, taking into account full life-cycle costs and environmental impact, as well as regulatory compliance, legal liability, tax rates, incentives and depreciation schedules and market distortion from global trade subsidies and tariffs.
- Direct the Office of Management and Budget to create a cross-governmental task group to identify barriers to various sources of energy production and to issue a Presidential Executive Order, or propose legislation as necessary, to optimize federal agency regulatory regimes.

Jumpstarting Energy Infrastructure Investments

Throughout history, our government has set aside loans for Americans to afford homes, start small businesses and pursue higher education in order to strengthen and stabilize our nation. Today, our country requires a \$200 billion National Clean Energy Bank to provide debt financing and drive private investment in the development of sustainable energy solutions and supporting infrastructure.

- Direct the Secretaries of Treasury and Energy to propose legislation to establish and capitalize a \$200 billion National Clean Energy Bank, modeled on the U.S. Export-Import Bank and Overseas Private Investment Corporation, to provide long-term financing—including loan guarantees, lines of credit, equity investments and insurance—for the market deployment of breakthrough energy efficiency and clean energy products, technologies, services and projects that reduce, avoid or sequester carbon.

Spawning Technological Breakthroughs and Entrepreneurship

From the Great Depression to 9/11, Americans have come together to address threats to our nation's security and prosperity. Today, energy is the biggest national and economic security issue facing our country, and America needs to answer the call again. To ensure the American way of life is preserved, we

need to drastically ramp up investment in R&D and market commercialization to deliver secure, sustainable and affordable clean energy while generating well paying domestic jobs.

- Direct the Secretary of Energy to create the “21st Century Clean Energy Leadership Initiative,” a public-private partnership funded at \$250 million and matched by state and private sector investments, to create regionally-based R&D test-beds and large-scale commercial pilots, while leveraging the existing federal R&D infrastructure.
- Expand the Small Business Innovation and Research (SBIR) Program, which allocates 2.5 percent of eleven cabinet agencies' extramural R&D budgets, to provide critical “Phase III” mezzanine financing for clean energy start-up businesses.
- Create a Small Business Administration “Clean Energy Entrepreneurs Initiative” to support the job engines of America's economy—small- and medium-sized businesses—in the development and deployment of clean energy technologies.
- Allocate at least 10 percent of the existing funding for technology pre-commercialization programs across all federal agencies to accelerate development and deployment of mature clean energy technologies across the R&D portfolio.
- Triple the current federal investment in basic and applied energy R&D across all federal agencies and departments.
- Direct the Secretary of Energy to establish and operate a web-based “Clean Energy Resource Center” to serve as a one-stop clearinghouse for information on all federally-funded energy programs, pilots, test-beds, projects and RD&D and to track international energy initiatives and developments.

Mobilizing a World-Class Energy Workforce

Much as computer scientists and aerospace engineers were crucial to winning the space race in the 1960s, we will win the clean energy race by educating the next generation of science and technology researchers, game-changing innovators and profes-

sionally trained workers, thereby filling the workforce pipeline with a new generation of skilled talent.

- Direct the Secretary of Labor to create a \$300 million “Clean Energy Workforce Readiness Program,” augmented by state and private sector funding, to foster partnerships between the energy industry, universities, community colleges, workforce boards, technical schools, labor unions and the U.S. military to attract, train and retain the full range of skilled workers for America’s clean energy industries.
- Require all federal agencies to commit 1 percent of their R&D budgets to competitive, portable undergraduate and graduate fellowships in energy-related disciplines for American students.
- Direct the Secretary of Labor to assess, classify and widely publicize the demand-driven needs for energy-related occupations and align federal workforce investment programs and state-directed resources to support skills training and career path development in energy fields for American citizens.

Clearing Obstacles to a National Transmission Superhighway

As with the interstate highway system and the information superhighway, our leaders must knit together

the current patchwork of regulations and oversight into a seamlessly connected electrical power highway that is technologically capable of allowing both on and off ramps for all energy sources in the 21st century, while retaining and strengthening current consumer and worker protections.

- Direct the Federal Energy Regulatory Commission (FERC) to appoint a fully independent regional planning entity for the transmission superhighway, with FERC having final regulatory authority on determining the need for siting of transmission facilities.
- Direct the FERC to set national interconnection standards for a 21st century interoperable grid and transmission system capable of connecting multiple new energy sources and devices to the system.
- Direct the President’s Science Advisor to establish the “High-Performance Computing Transmission Initiative,” creating a consortium of national laboratories, universities, industry and organized labor to model and simulate the design, construction and operation of an intelligent, self-healing, electrical grid—integral to a national high-performance transmission system.

The next President is invited to join with the Council on Competitiveness as the ESIS Initiative continues to address these critical issues and to attend a National Energy Summit & International Dialogue on September 23-24, 2009. This event will convene chief executive officers, university presidents, labor leaders, governors and other thought leaders to forge a comprehensive roadmap for a secure, sustainable and competitive energy future.

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The Council on Competitiveness launched the Energy Security, Innovation & Sustainability (ESIS) Initiative in July 2007 with the firm belief that the crucial role of private sector demand in driving the way America produces and uses energy has gone largely unrecognized in prior policy initiatives. The ESIS Initiative, which was called for in the Council’s 2004 seminal report *Innovate America*, is led by a Steering Committee comprised of 41 chief executives from U.S. industry, academia, government laboratories and organized labor, and has benefited from the guidance of more than 200 executive-level energy experts.

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