



THE CLEAN ENERGY TECHNOLOGY DEPLOYMENT PATH TO CLIMATE SOLUTIONS ACT EXECUTIVE SUMMARY

TECHNOLOGICAL SOLUTIONS TO CLIMATE CHANGE

Cost-effective opportunities exist today to help achieve the nearly 80 percent reductions in greenhouse gas emissions called for in pending climate change proposals. Under a strong, economy-wide and market-based approach that promotes the greater and early use of existing clean energy and energy efficiency technologies and environmentally-friendly fuels, significant greenhouse gas emissions reductions will occur at the lowest cost to the economy.

Deployment of clean energy and energy efficiency technologies will:

- Result in vital near-term greenhouse gas emission reductions
- Lower the cost of compliance with federal greenhouse gas programs over time
- Provide strong price signals to expand clean energy markets
- Increase economic growth and job creation
- Smooth the transition to implementation of a federal greenhouse gas program

A complementary and coordinated set of actions should result in:

- Governments investing in vital research, development and deployment programs for clean generation and energy efficiency technologies
- Energy Developers and Producers receiving incentives to develop and commercialize alternative energy technologies
- Energy Distributors having direct and cost-effective access to transmission
- Consumers and Businesses obtaining incentives to acquire and use these technologies

According to the McKinsey & Company December 2007 report, "Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost?," the United States could reduce greenhouse gas emissions in 2030 by 3.0 to 4.5 gigatons of CO₂e using existing technologies.

AN INFORMED, BALANCED SET OF RECOMMENDATIONS

In the BCSE's Clean Energy Technology Deployment Path to Climate Solutions proposal, which authorizes the creation of new laws and policies and the expansion and extension of existing ones in order to achieve climate change goals, the nation will realize measurable reductions in greenhouse gas emissions in the near-term, while contributing to lower overall costs for businesses and consumers.

Many of these policy recommendations already exist in proposed, but not approved, legislation pending in Congress. The Council, therefore, urges Congress to move these recommendations as a stand-alone package or as part of comprehensive climate change legislation. The key is to move forward now and begin the steps toward a healthier, more sustainable environment with increased U.S. economic growth.

Critical elements of the CETDP include:

- Renewable Electricity Standard (RES)
- Energy Efficiency Resource Standard (EERS)
- Tax and/or comparable clean energy technology incentives
- Energy efficiency savings programs in the form of codes, standards and incentives to promote carbon-efficient buildings and appliances and combined heat and power (CHP)
- Research and development for deployment of emerging technologies

These elements should result in a balanced, competitively neutral and integrated program providing accurate, cost-based price signals to: promote efficient use of energy and reduce energy use at peak times; avoid programs that would encourage inefficient use or production of energy; and encourage additional generation with the right size, location and operation times to have real, positive impacts on the grid and on customer cost.

Implementation of these policies should be carefully designed to recognize and reward accomplishments of individual states, consumers and entities within those states.



CONTACT INFORMATION

The Business Council for Sustainable Energy represents the energy efficiency, renewable energy and natural gas industries. Members include power developers, equipment manufacturers, independent generators, green power marketers, and gas and electric utilities, as well as several of the primary trade associations in these sectors. Please contact the Council for more information at Tel: 202.785.0507.



CLEAN ENERGY DEPLOYMENT PATHS

Renewable Energy

- Adoption of a National Renewable Electricity Standard
- Passage of tax incentive legislation
- Continuation of federal accelerated depreciation benefits
- Adoption of federal capacity incentives
- Allow renewable energy installation in federal Energy Savings Performance Contracting
- Increase federal research, development and deployment funding

Electricity Delivery Infrastructure

- Increase investment and capacity of aging grid to improve transmission
- Ensure application of provisions of the Energy Policy Act of 2005 to expedite new siting
- Accelerate research and development of technologies that increase carrying capacity
- Adopt national interconnection standards and procedures (for DG & CHP)
- Sufficiently fund research, development and deployment of industrial & building-related distributed generation and CHP technologies
- Develop and deploy low-cost, advanced storage and technologies to provide load management for intermittent generators
- Develop and deploy "smart grid" technologies
- Promote use of smart meter technology
- Encourage states and customers to deploy advanced metering technologies
- Enable advanced storage facilities for renewable energy to qualify for tax incentives
- Support tax credits for hydrogen infrastructure to facilitate use of fuel cell technology
- Allow power generation in federal Energy Savings Performance Contracting

Energy Efficiency Investments

- Adopt a National Energy Efficiency Resources Standard
- Enact and extend tax incentives
- Encourage vertically integrated power energy suppliers (and states) to decouple rates
- Fully fund and expand federal support for supply-side and demand-side energy efficiency
- Utilize full fuel energy cycle analysis when considering efficiency programs
- Authorize and encourage green building practices
- Allow new construction in federal Energy Savings Performance Contracting
- Require Department of Energy to support development of advanced building energy codes

Industrial Greenhouse Gas Emissions

- Develop, demonstrate and deploy new, more efficient on-site generation
- Properly structure CHP policy to recognize environmental attributes
- Develop and deploy heat recovery systems
- Provide tax incentives to facilities producing renewable natural gas
- Provide financial incentive for high-efficiency industrial products
- Encourage aggregation of small clean energy systems
- Deploy ultra-high efficiency steam generation technologies
- Develop waste heat recovery systems
- Develop integrated systems that utilize clean energy technologies
- Promote electrochemical conversion technology
- Address facility environmental disadvantages for adding on-site generation systems
- Develop and deploy fuel cell material handling equipment and infrastructure

