



The Business Council For Sustainable Energy

An Energy Agenda for the 21st Century

June 11, 2007

Dear Senator:

As the Senate is expected to begin consideration of energy legislation this week, the Business Council for Sustainable Energy would like to bring your attention to several priority issues that are essential to ensuring a balanced national energy strategy that enhances our energy security and reliability, creates jobs and economic opportunity in the United States, and provides a down payment on reducing greenhouse gas emissions that contribute to global climate change.

The Business Council for Sustainable Energy is a broad-based industry coalition of energy efficiency, natural gas, renewable energy and electric utility interests that advocates energy and environmental policies that expand markets for clean, efficient and sustainable energy products and services. The Council's coalition includes 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. The Council and its members have advised legislators and regulators on the development of domestic and international clean energy, clean air and climate change initiatives for over a decade.

As you enter into this important debate, we encourage you to support policies that advance clean energy technologies. The implementation of these policies will need to be carefully designed to recognize and reward the accomplishments of individual states, and entities within those states, in reducing greenhouse gases, increasing renewables and enhancing the efficient use of energy -- both through programs and through building and appliance codes.

An important feature of many of these policies, including all those dealing with rates and rate design, is to give accurate, cost-based price signals to 1) encourage the wise use of energy and to reduce the use of energy at peak times, 2) avoid creation of cross subsidies that would encourage inefficient use or production of energy, and 3) encourage the addition of generation with the right size, location and operating times to have real and positive impacts on the grid and on the cost to serve customers.

Specifically, we urge your support for the following provisions that are expected to be considered during the upcoming floor debate and/or during consideration of energy-related tax provisions in the near future:

- Adopt a National Renewable Portfolio Standard
- Adopt a National Energy Efficiency Resource Standard
- Enact and Extend Tax Incentives for Homes, Commercial Buildings and Building Equipment
- Upgrade Residential and Commercial Building Codes
- Create Tax Incentives for Advanced, High-Efficiency Appliances
- Promote Innovative Utility Rate Design
- Promote Use of Smart Meter Technology
- Allow Excess Electricity from Waste Heat Systems to Supplement the Nation's Energy Supply

More details on the above mentioned provisions, as well as other elements that should be included as part of balanced and sustainable energy legislation, are included by technology sector below. Please note that not all Council members¹ work on, or take positions on, all of the issues presented in this letter.

¹ See Appendix for a select list of Council members and supporters.

Adoption of federal policies to accelerate deployment of clean energy and energy efficiency technologies will achieve essential economic, energy, and national security goals, while addressing pressing environmental challenges such as climate change.

Renewable Energy

To effectively reduce greenhouse gas emissions and further diversify the nation's energy portfolio, greater federal support for renewable energy technologies is needed now to massively spur deployment and implementation of wind, solar, hydropower, geothermal and biomass technologies. Moving forward, the Council recommends strengthening or adding the following measures to federal energy legislation currently under consideration to provide much needed support to renewable technologies:

1. **Adopt a National RPS.** The Council supports the creation of a federal Renewable Portfolio Standard (RPS) that provides a strong foundation for large-scale deployment of a broad set of renewable energy technologies. A federal RPS would better facilitate long-term planning and investment decisions for renewable project developers, leading to significant increases in renewable electricity generation, greenhouse gas emissions reductions, increased energy security, expansion of the renewable energy certificate market, and reduced costs, among other economic and environmental benefits. To ensure that renewable energy and energy efficiency receive the maximum benefits associated with their environmental attributes under a federal RPS, Congress should provide for unbundling of environmental attributes, allowing renewable energy certificate (REC) qualities to be sold separately from greenhouse gas emissions reductions. Congress should also consider extra incentives (e.g., share requirements or direct financial incentives) within the federal RPS for technologies that might need additional support such as solar, following successful models developed at the state level. In addition, Congress should consider inclusion of certain fuel cell technologies for eligibility under a federal RPS, following precedent set at the state level. Lastly, Congress should include the addition of power generation at existing, non-hydropower dams in a federal RPS.²
2. **Extend the Renewable Production Tax Credit.** The Council supports a long-term extension of the Production Tax Credit (PTC) for at least an additional eight years at its current full value. A long-term extension will send strong signals to renewable industries, leading to more consistent and stable investment cycles, substantial increases in renewable electricity generation, reduction of equipment costs and creation of more high-quality manufacturing and operations jobs here in the U.S. Further, credit parity for hydropower should be considered for the PTC to bring it in line with the credit for other renewable resources. Lastly, the PTC should be expanded to include cutting-edge hydropower technologies such as ocean, tidal and in-stream hydrokinetic.
3. **Extend and Expand the Solar/Fuel Cell Investment Tax Credit.** The Council recommends a long-term extension of the investment tax credit (ITC) of 30 percent for solar/fuel cell systems for business and residential applications for at least an additional eight years at its current full value. Further, the Council recommends expanding the ITC to include business and residential small wind projects, which would significantly stimulate small wind development, especially in rural areas.
4. **Increase Authorizations of Clean Renewable Energy Bonds.** Congress should increase authorizations of Clean Renewable Energy Bonds (CREBs) to encourage state and local governments and other eligible tax-exempt entities such as rural electric cooperatives to develop interest-free clean energy projects, building upon the successful models created under the Energy Policy Act of 2005 (EPACT).
5. **Increase Federal Funding for Renewables Programs.** The Council recommends funding for renewable energy R&D programs at the U.S. Department of Energy (DOE) and other federal renewable energy funding programs at the maximum levels authorized by EPACT. At a minimum, funding should meet levels suggested by the respective national renewable energy trade associations as follows:

² Addition of power generation at existing, non-hydropower dams has been proposed as part of the "Clean Energy Investment Act" and should be included in any federal RPS to maximize use of this zero-carbon source of new renewable energy, recognizing that incentives should be limited to hydropower projects that do not create new impoundments or withhold additional water.

Solar:	\$250 million ³
Geothermal:	\$113 million
Wind:	\$110 million
Hydropower:	\$22 million ⁴
Ocean/Marine Renewable Technologies:	\$50 million

6. **Create Energy Efficiency/Renewable Energy Worker Training Program.** Congress should establish an energy efficiency and renewable energy worker training program to further catalyze economic growth linked to clean energy jobs and boost U.S. competitiveness in clean energy industries.
7. **Facilitate Inclusion of Renewable Energy Projects in Energy Savings Performance Contracting.** The Council supports efforts to expand the definition of Energy Savings Performance Contractors (ESPCs) to include renewable energy, provide for financing flexibility in utilizing appropriated dollars in ESPCs and allow a 50-year term for federal renewable energy contracts. In addition, the Council recommends changes to Section 203 of EPACT 2005, which mandates federal use of renewable energy to separate production and use of that energy.

Energy Efficiency

Greater use of federal energy efficiency policies, focused on both supply and user applications, could play a substantial role in reducing greenhouse gas emissions. The following measures should receive priority attention to immediately capitalize on untapped energy efficiency resources:

1. **Adopt a National EERS.** The Council supports the adoption of a federal Energy Efficiency Resource Standard (EERS) to encourage more efficient generation, transmission, and use of electricity and natural gas. The EERS should be separate and apart from a national RPS. A strong national EERS would provide cost-effective energy savings, significantly reduce energy use, provide net benefits to consumers and businesses, as well as substantially reduce greenhouse gases and air pollutants.
2. **Enact and Extend Tax Incentives for Homes, Commercial Buildings and Building Equipment.** Congress should enact and extend the tax incentives included in EPACT that facilitate improvements to new and existing homes, manufactured homes and commercial buildings and building equipment.⁵
3. **Support Upgrade of Residential and Commercial Building Codes.** Congress should continue to support the development of building energy efficiency model codes and the standards of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) and the International Energy Conservation Code (IECC). In so doing, it would be appropriate for Congress to set targets for standards for enhanced building envelopes such as a 30 percent improvement by 2010 and a 50 percent improvement by 2020. Congress should continue to provide funding for DOE to help the standard setting organizations work towards these targets. Further, DOE should provide states and national organizations with assistance in meeting these targets, and retain an EPACT provision for grants to states for implementing plans to achieve high rates of compliance with their state and local codes.
4. **Create Tax Incentives for Advanced, High-Efficiency Appliances.** Congress should enact tax incentives to promote use of advanced, high-efficiency appliances that yield highly cost-effective energy savings. Tax incentives should be enacted for technologies that provide highly efficient means to heat/cool space and water, such as natural

³ The \$250 million solar request includes \$175 million for photovoltaics, \$50 million for concentrating solar power, and \$25 million for solar heating and lighting.

⁴ The \$22 million hydropower request includes funding for conventional hydropower R&D and funding for ocean, tidal and instream hydrokinetic technologies.

⁵ As an example of the impact of this policy, the Harvard School of Public Health found that nearly 65 percent of U.S. homes have insulation levels that are inadequate. If these homes were insulated to the 2000 International Energy Conservation Code, the cumulative savings would equal approximately 76 supertankers of crude oil or 800 billion cubic feet of natural gas. Greenhouse emissions would be reduced by over 62 million metric tons. In addition, the McKinsey Institute conducted a study demonstrating that insulating buildings is the most cost effective way to reduce greenhouse gas emissions.

gas furnaces and water heaters,⁶ and highly efficient air conditioners, washers and dryers, among others. Further, DOE should be granted authority to expedite appliance standard setting.

5. **Promote Innovative Utility Rate Design.** Congress should encourage states to implement innovative rate designs that further encourage energy conservation and energy efficiency, including decoupling programs for utility rates. Stronger alignment between the interests of consumers and utilities in a decoupled environment will significantly advance demand-side management by breaking the historic links between utility earnings and customer consumption.
6. **Promote Use of Smart Meter Technology.** In connection with demand response programs, Congress should further encourage the use of time-based electricity pricing or “smart metering” technologies to save consumers billions of dollars in avoided electricity costs and significantly reduce greenhouse gas emissions through avoided electricity use. Congress should qualify smart meters as Qualified Technological Equipment (QTE) with a five-year tax depreciation to move beyond the current 20-year tax depreciation classification that is a disincentive to greater utility investment in smart meter technology.
7. **Adopt an Energy Efficiency Commercial Buildings Initiative.** Congress should adopt a public-private Energy Efficient Commercial Buildings Initiative to reduce the energy consumption and greenhouse gas emissions of commercial buildings by about 20 percent by 2030, adopting a long-term vision, and a phased approach to achieve these goals that includes research, development, monitoring and reporting.
8. **Improve the Federal Government’s Own Efficiency by Fully Utilizing Energy Savings Performance Contracting.** The Council supports a variety of policy initiatives that would facilitate the use of ESPCs and thereby improve the federal government’s energy efficiency. These include: permanent reauthorization of ESPCs, elimination of the Congressional Notification Cap, and a mandate that federal agencies implement all energy efficiency measures that have a 15-year or less payback period.
9. **Increase Federal Funding for Energy Efficiency.** The Council supports funding energy efficiency at the Department of Energy and other federal agencies at the maximum levels authorized by EPACT. At a minimum, programs should be funded at the levels advocated by the energy efficiency community:

Buildings:	\$143 million
Distributed Generation:	\$56 million
Federal Energy Management:	\$24 million
Industrial:	\$66 million
Vehicles:	\$206 million
Public Education Campaign:	\$30 million
Hydrogen and Fuel Cells:	\$228 million
Weatherization:	\$300 million
State Energy Programs:	\$80 million

Efficient Use of Natural Gas and Other Clean Energy Recommendations

1. **Promote Transmission Reforms.** Congress should further promote clean energy resources through much needed transmission reforms, including federal net metering and transmission access reforms.
2. **Improve Interconnection Standards.** Congress should adopt federal interconnection standards for small electricity generation systems to improve access to transmission interconnection and delivery service.
3. **Encourage Distributed Generation.** Congress should facilitate transition to smarter, more efficient transmission and distribution grids and technologies which allow a broad portfolio of technologies that are cleaner, more reliable and agile. Increased use of distributed generation (DG) will: improve electric power quality, substantially lowering surges, sags and transients; increase power reliability, allowing users and feeder line options for virtually uninterruptible power; overcome transmission and distribution blockages (power augmentation at substations); and

⁶ A “full fuel cycle” or “total energy efficiency” analysis demonstrates that natural gas space heating and water heating requires less primary energy and produces a smaller carbon footprint than space and water heating from electricity. This conclusion follows from a comparison of the primary energy used to heat space and water versus the primary energy necessary to generate electricity to heat space and water.

level out peaks, thus lowering energy costs. At a minimum, Congress should fund distributed generation technology programs at DOE at \$55.6 million, which represents the level recommended by the distributed generation community and the level of FY06 funding.

4. **Create Tax Incentives for High-Efficiency On-Site Combined Heat and Power.** Congress should enact tax incentives to promote private investment in advanced, high-efficiency combined heat and power (CHP) that yield highly cost-effective energy and fuel savings. Tax incentives for small energy systems (below 20 MW) would support economic competitiveness while providing additional power capacity and support for the nation's energy infrastructure.
5. **Promote Fair Market Access for CHP.** Congress should enable fair access and pricing for excess electricity produced by on-site energy systems that capture wasted industrial energy. Greater use of localized CHP would increase the electricity system's efficiency, reduce the emission of criteria pollutants and greenhouse gases, curtail line losses and the need for new transmission, and cut the demand for expensive fuels. Further, Congress should address current laws and regulations that restrict CHP projects from connecting to the grid due to exorbitant back-up power rates, stand-by capacity limitations, and regulations that prevent recovery of capital and operating expenses for CHP operations.
6. **Increase Natural Gas Supply.** To mitigate potential natural gas price increases, which may impact consumers as a result of a federal climate change program, Congress should permit environmentally sound exploration and production of natural gas to increase its supply in the U.S.
7. **Promote Carbon Capture and Storage.** To maximize efficiency and greenhouse gas emissions reductions from existing and future fossil fuel power generation, Congress should encourage use of carbon capture and sequestration technologies through greater incentives for environmental control and retrofit technologies, such as oxy-fuel technology. Congress should support full funding for R&D for carbon capture and storage technologies as authorized in EPACT, and move forward with appropriations for coal gasification for pipeline quality gas. Further, Congress should consider carbon capture and storage technologies as eligible for tax credits and other tax incentive provisions related to clean technology for power plants.
8. **Implement a Transition to Market Program for Fuel Cells.** The Council supports government activities and funding to support market introduction of early fuel cell products, particularly into government markets. This program and concept was included in Section 783 of EPACT and has been under consideration at the Department of Energy.

Thank you for the opportunity to share our views. As the Senate considers energy legislation in the coming weeks, please feel free to contact the Council as a resource. If you have any questions or comments, I can be reached at (202) 785-0507 or via email at ljacobson@bcse.org.

Sincerely,



Lisa Jacobson
Executive Director
Business Council for Sustainable Energy

Appendix

Please note that not all Council members work on, or take positions on, all of the issues presented in this letter.

Select List of Business Council for Sustainable Energy Members and Supporters

Alliance to Save Energy
American Gas Association
American Standard/Trane
American Wind Energy Association
Bergey Windpower
Brookfield Power
Calpine
Econergy International
EcoSecurities
Enel North America, Inc.
Energy Conversion Devices, Inc.
First Environment, Inc.
GE Wind
Green Mountain Energy Company
Green Strategies, Inc.
Ideal Jacobs Corporation
Jupiter Oxygen Corporation
National Hydropower Association
NiSource
North American Insulation Manufacturers Association
PG&E Corporation
3 Phases Energy Services
Plug Power
Polyisocyanurate Insulation Manufacturers Association
PPM Energy
Public Service Enterprise Group
Sacramento Municipal Utility District
Sempra Energy
Solar Energy Industries Association
Solar Turbines
Sun Farm Network
Sun Edison LLC
The Energy & Security Group
The Stella Group, Ltd.
TowPath Renewables
Winrock International
Worldwatch Institute
York International