



# The Business Council For Sustainable Energy

*An Energy Agenda for the 21<sup>st</sup> Century*

March 19, 2007

**To:** **The Honorable John D. Dingell**  
**Chairman, House Committee on Energy and Commerce**

**The Honorable Rick Boucher**  
**Chairman, Subcommittee on Energy and Air Quality**

**Regarding:** **BCSE Recommendations for Federal Climate Change Legislation**

**Submitted Via Email:** [chris.treanor@mail.house.gov](mailto:chris.treanor@mail.house.gov)

On behalf of the members of the Business Council for Sustainable Energy (the Council), we appreciate the opportunity to respond to your February 27, 2007 letter to industry requesting input on design questions for a federal greenhouse gas program. The Council is pleased to submit the following recommendations for federal climate change legislation for consideration by the House Committee on Energy and Commerce and its Subcommittee on Energy and Air Quality. We also request the opportunity to share our views in greater detail during any future Committee-sponsored hearings or conferences on this topic.

### ***Introduction***

The Business Council for Sustainable Energy is a broad-based industry coalition of energy efficiency, natural gas and renewable energy interests that advocates energy and environmental policies that promote 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. *Please see Appendix A for a select list of the Council's members and supporters.*

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. The Council and its members represent available technologies that offer vastly deployable solutions to climate change.

The Council's members support and encourage voluntary measures to reduce greenhouse gas emissions. Nevertheless, with state and regional efforts in the U.S. mandating the reduction of greenhouse gas emissions, the Council supports a national climate change program that creates market drivers for clean energy technology innovation, economic efficiency and enhanced energy security.

### ***The Council's Views on Federal Climate Change Legislation***

The Business Council for Sustainable Energy supports the enactment of federal climate change legislation that provides long-term market signals for clean energy deployment and energy efficiency. From an industry perspective, it is essential to have regulatory certainty and consistency to effectively tackle the challenge presented by global climate change.

To be most effective, a federal program should integrate energy and environmental policy. This will maximize energy sector and emission reduction investments. Further, the Council believes that any federal climate change program should place existing clean energy technologies at the center of compliance strategies. This will reduce compliance costs, mitigate fuel price increases and achieve the complementary objective of enhanced energy security.

In addition, it is important for federal climate change policy and clean energy policy to move forward together, whereby design elements are developed with an integrated approach and within the broader context of existing federal and state energy policy.<sup>1</sup>

Further, design of specific elements and economic relief mechanisms will have a significant impact on market signals and need to be evaluated in a holistic rather than an isolated manner.

More specifically, the Council supports a federal climate change policy that:

- 1) **Is national in scope.** A federal program is preferable to the current patchwork of state and regional programs, both regulatory and voluntary. Such a program would enlarge the pool of participants, thereby lowering compliance costs, creating stronger price signals for clean energy options and offering greater compliance flexibility while advancing national security objectives.
- 2) **Expands alternative energy resources from clean energy technologies** including wind, solar, hydropower, biomass, geothermal, fuel cells, advanced battery systems, and natural gas.
- 3) **Expands the development and use of energy efficiency and natural gas technologies**, including the direct use of natural gas, on-site generation from combined heat and power, and energy efficiency for demand reduction.
- 4) **Recognizes improvements in energy efficiency.** A federal program should reward energy efficiency in existing and replacement energy infrastructure to fully maximize market-driven incentives for energy and environmental improvements.
- 5) **Incorporates a mandatory, economy-wide and market-based approach.** A federal program should include a cap-and-trade and project-based approach that efficiently achieves both energy and climate objectives. These types of approaches provide long-term signals to the economy and also offer compliance flexibility.
- 6) **Establishes near-term and long-term targets** that are consistent with investment cycles to signal the marketplace and drive technology investment and innovation.
- 7) **Promotes compatibility with voluntary renewable energy, energy efficiency, and greenhouse gas markets** so non-capped businesses and households can continue to support markets that result in actions that are above and beyond mandatory obligations.
- 8) **Establishes linkages with international programs.** The federal program should establish international linkages at the outset of the program. These linkages should demonstrate comparability, and should be verifiable and transparent. The program should permit trading with compatible cap-and-trade programs and project-based initiatives in other parts of the world.

It is widely recognized that the development of new technology will be an integral part of achieving climate change goals cost-effectively.<sup>2</sup> There are many solutions available today that should be explicitly encouraged in any climate change program to achieve early emission reductions, reduce our nation's future carbon liability, and mitigate the cost of achieving long-term reduction goals. Addressing global climate change by promoting clean energy technologies that emit fewer greenhouse gases provides an opportunity to create jobs here at home and improve our environmental, national, and global security.

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<sup>1</sup> For example, federal climate change policy should work together with other programs designed to reduce greenhouse gas emissions, such as renewable and energy efficiency portfolio standards, and extension of the Production Tax Credit, among others.

<sup>2</sup> It should be noted that while new technology development is a vital component of climate change solutions, the U.S. Department of Energy R&D budget for such technologies has decreased by 85 percent between 1978 and 2005, according to a December 2006 Government Accountability Office report, available at <http://www.gao.gov/new.items/d07106.pdf>.

### **Responses to Committee Questions on Federal Climate Change Policy**

**1a: Impacts federal climate change policy would have on emissions of greenhouse gases and the rate and consequences of climate change; and, 1b: the effects on the U.S. economy, consumer prices and jobs.**

**Federal climate change policy can viably achieve greenhouse gas emissions reductions without harm to the U.S. economy, consumer prices and jobs:** The Council's views are founded upon a wealth of growing evidence on the economic, environmental and health benefits of reducing greenhouse gas emissions, consistent with recent government analysis and findings of preeminent institutions and organizations involved in economic, energy and climate change policy.

In January 2007, the Energy Information Administration (EIA) released an analysis on a federal climate change proposal by Senate Energy and Natural Resources Committee Chairman Jeff Bingaman and Senator Arlen Specter, which found that "mandatory steps to reduce greenhouse gas emissions can be achieved at very low cost to American households and without harming the U.S. economy." The EIA analysis clearly demonstrated that federal climate change policy can viably achieve cost-effective greenhouse gas emissions reductions.

In addition to reducing greenhouse gas emissions, increased use of renewable energy, energy efficiency and natural gas will:

- **Offset fuel price volatility.** Expanding energy efficiency and increasing renewable energy could reduce demand for other fossil fuels, thereby reducing price volatility.
- **Save consumers money.** According to the July 2006 National Action Plan for Energy Efficiency, well-designed energy efficiency programs save, on average, about one-half of the typical cost of new power sources and about one-third of the cost of natural gas supplies.<sup>3</sup> In addition, every federal dollar spent on the Energy Star program yields savings of more than \$75 in consumer energy bills, helps reduce about 3.7 tons of carbon dioxide emissions, and contributes over \$60 to the economy, according to the Alliance to Save Energy.<sup>4</sup>
- **Create jobs and economic growth, especially in rural and urban areas.** A University of Tennessee study found that if America were to produce 25 percent of its energy from renewable sources by 2025 ("25x'25"), the projected annual impact would be in excess of \$700 billion in economic activity and could yield over 5 million jobs in 2025, most of which would occur in rural areas.<sup>5</sup> In urban areas, businesses can invest in energy-efficient supply alternatives such as combined heat and power (CHP) that recycle waste energy and put it to productive use for heating and cooling, increasing fuel utilization efficiency compared to central power and increasing customer value from each unit of energy input consumed. These investments support the nation's economic competitiveness and local jobs.
- **Have a positive impact on public health.** According to a study by the Harvard University School of Public Health, one energy efficiency measure alone could have substantial health benefits: insulating new and existing homes to levels set in the 2003 International Energy Conservation Code could save 300 lives and prevent 8,500 asthma attacks across the U.S. each year.
- **Enhance economic competitiveness.** Businesses in countries that fail to act could face economic disadvantages in a carbon-constrained global market. According to the November 2006 UK Stern Review on climate change, the social cost of inaction in 2050 will be more than \$300 per ton of carbon. The Stern Review also found that the impact of stabilizing greenhouse gas concentration levels at 500-550 parts per million on global world product would be approximately 1 percent in 2050,<sup>6</sup> that is, with significant emissions reductions, global world product would grow by 2.48 percent instead of 2.5 percent.
- **Increase energy reliability.** The strategic use of energy efficiency and renewable energy technologies offers the enhanced energy reliability required of our digital economy without expensive enhancements to the transmission system.

<sup>3</sup> Press release from EIA for *Energy Market and Economic Impacts of a Proposal to Reduce Greenhouse Gas Intensity with a Cap and Trade System*, January 2007. Estimated impact on U.S. gross domestic product is a reduction of 0.1% (approximately \$232 billion) between 2009 and 2030, with cumulative GDP projected to double from 2006 to 2030.

<sup>4</sup> Alliance to Save Energy FY'07 Energy Star fact sheet.

<sup>5</sup> See <http://www.agpolicy.org/ppap/REPORT%2025x25.pdf>.

<sup>6</sup> See [http://www.hm-treasury.gov.uk/media/999/76/CLOSED\\_SHORT\\_executive\\_summary.pdf](http://www.hm-treasury.gov.uk/media/999/76/CLOSED_SHORT_executive_summary.pdf), p. 1.

- **Promote energy security.** Energy security is improved with the use of local energy resources and the capability to sustain critical services (i.e., healthcare, communications, shelter, public safety) after natural or man-made disasters. Over 97 percent of our transportation system relies on oil, making the U.S. economy vulnerable to market disruptions and price shocks. This reliance adds roughly \$200 billion a year to the trade deficit.<sup>7</sup> A sound energy security policy can be developed hand-in-hand with climate solutions through greater deployment of renewable and energy efficiency technologies.

### ***Initial Recommendations on Cap-and-Trade Policy (Response to Questions 2-5)***

The following is an elaboration of the market-based approaches to achieve the Council's principles, reflecting the Committee's questions 2 – 5. The Council is pleased to provide additional information on any or all of these elements.<sup>8</sup>

#### ***2a: Which sectors should cap-and-trade policy cover? Should some sectors be phased-in over time?***

**Implement economy-wide federal greenhouse gas program:** The Council recommends that a federal cap-and-trade program should be implemented economy-wide to ensure the most comprehensive approach to reducing greenhouse gas emissions from all sectors; however, the timing and method of the coverage need not be uniform across sectors. Consideration must be given to the sector's contribution to greenhouse gas inventory and its contribution in helping the nation reduce such emissions. Given the experience the power sector has with environmental regulatory programs and emissions markets, the Council supports moving forward with multi-pollutant legislation for the power sector. Of critical importance is the need for Congress to act now to create necessary market drivers for investment in cleaner generation, clean energy technology innovation, economic efficiency and enhanced energy security.

#### ***2b: To what degree should the details be set in statute by Congress or delegated to another entity?***

**Congress should lead efforts on federal greenhouse gas legislation and harmonization of existing programs:** The Council urges Congress to act as the responsible entity for developing federal climate change legislation. In addition, Congress should work with state and regional greenhouse gas programs to develop clear and consistent harmonization measures to transition from existing state and regional programs to the federal program. A federal program should preserve the value of prior state mandated actions and should preempt state programs or be compatible enough to co-exist with them without creating an undue administrative burden.

#### ***2c: Should the program's requirements be imposed upstream, downstream, or some combination thereof?***

**Updating, output-based allocation whether program is applied upstream or downstream:** Given our broad membership scope, Council members would likely be affected under both upstream and downstream allocation policies. Under an upstream program, allocation of allowances should only be considered when there is an ability to pass the costs along to end-users and when that price signal is the most cost-effective way to achieve greenhouse gas reductions. Making this determination is a complex undertaking, given the range and dynamic nature of state regulatory programs. In the Council's view, the answer to whether allocations should be given to downstream generators varies depending on regulatory status and the ability to pass fuel costs and administrative costs on to customers. To the extent that allowances are allocated in an upstream or downstream (or combination thereof) program, the Council supports an updating, output-based allocation system to provide an incentive for increasing new, clean generation and increasing energy efficiency.

#### ***2d: How should allowances be allocated? By whom? What percentage of the allowances, if any, should be auctioned? Should non-emitting sources, such as nuclear plants, be given allowances? And 2e: How should the cap be set (e.g. tons of greenhouse gases emitted, CO2 intensity)?***

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<sup>7</sup> *Over a Barrel? Myths and Facts about U.S. Dependence on Foreign Oil*, The Century Foundation, 2004, available at: [www.tcf.org/Publications/InternationalAffairs/oildep\\_detchon.pdf](http://www.tcf.org/Publications/InternationalAffairs/oildep_detchon.pdf).

<sup>8</sup> In addition, these recommendations are elaborated upon in the Council's responses to the Senate Energy and Natural Resources Committee's White Paper on climate change from 2005: *Design Elements of a Mandatory Market-Based Greenhouse Gas Regulatory Program*.

**Promoting clean generation and energy efficiency through allocation policy:** A successful federal allocation policy will drive clean energy investments and promote cost-effective emissions reductions. The Council recommends the following criteria for national greenhouse gas allocation policy:

1. Allowance allocation should reduce the carbon intensity of electric generation;
2. Allowance allocation should reduce energy demand;
3. Allowance allocation should provide benefit to the economy; and
4. Allowance allocation should promote private investment through partial funding of investments.

These recommendations are consistent with the Council's recommendations to states that are developing a carbon cap-and-trade program in the Northeast U.S. under the Regional Greenhouse Gas Initiative (RGGI) and states implementing the Clean Air Interstate Rule (CAIR).

The Council believes that any allowances distributed under federal climate change legislation should be allocated by using an output-based methodology. An output-based approach focuses on carbon-energy efficiency and promotes clean generation – including renewable energy – since distribution is based on the amount of electricity generated, not on the amount of fuel used or a facility's historic emissions. The Council recommends a fuel-neutral, updating, output-based allocation that rewards greater efficiency and encourages investment in new generating technologies. Output-based policies send a clear signal to the marketplace – lower-carbon emitting energy options receive direct, clear, consistent and bankable value.

In addition, output-based allowance allocation accommodates the carbon dioxide emission reduction claims associated with renewable energy generation, allowing the federal climate change program to encourage voluntary markets for renewable energy. Given the strength of the U.S. voluntary renewable energy credit market and its significant potential for growth, the Council recommends that federal climate change legislation adopt an approach that allows the voluntary market to continue to create surplus emission reductions and meet consumer demand. This can be done easily through the output-based allocation approach, as recommended by the Council, which would allow renewable generators to transfer or retire allocated allowances to or on behalf of their end-use customers to enable those customers to make surplus emission reductions. If a free allocation system approach is not adopted in a future federal program, there are other approaches that can make a cap-and-trade system compatible with voluntary markets.<sup>9 and 10</sup>

**Avoid undue economic hardship on affected sources, including clean generators:** The Council recognizes that several states developing stand-alone or regional climate change programs are considering large-scale auctions as a means of distributing emissions allowances -- such as New York's RGGI Pre-Proposal, which suggests a 100 percent auction of allowances. The Council encourages these states and, in turn, encourages the House Committee on Energy and Commerce and its Subcommittee on Energy and Air Quality, to consider the possible dramatic economic impacts such an auction approach might have on affected sources, including clean generators.

## **2g: Which greenhouse gases should be covered?**

**Cover all six greenhouse gases:** The Council recommends that all six greenhouse gases – carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride – should be covered under a federal greenhouse gas program. However, the federal program should recognize that all six gases are different and do not need to be covered in the same manner. As noted by the 2005 Energy Information Administration report, CO<sub>2</sub> from combustion accounts for almost 81 percent of total U.S. greenhouse gas emissions.<sup>11</sup>

## **2h: Should early reductions be credited? If so, what criteria should be used to determine what is an early reduction?**

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<sup>9</sup> For example, 1) Allowances can be retired on behalf of the voluntary renewable energy credit market, the approach adopted by the RGGI Model Rule; and, 2) Set-aside allocations can also be made to renewable generators based on a percentage of the total allowances, (i.e., 5-10 percent).

<sup>10</sup> For example, a Voluntary Renewable Energy Credit Set-Aside Allocation could follow recommendations outlined on pages 47-50 of the RGGI Model Rule at: [http://www.rggi.org/docs/model\\_rule\\_corrected\\_1\\_5\\_07.pdf](http://www.rggi.org/docs/model_rule_corrected_1_5_07.pdf).

<sup>11</sup> See EIA's *Emissions of Greenhouse Gases in the United States 2005 - Executive Summary* at: [http://www.eia.doe.gov/oiaf/1605/ggrpt/executive\\_summary.html](http://www.eia.doe.gov/oiaf/1605/ggrpt/executive_summary.html)



**Credit for early action:** The Council believes early investments in greenhouse gas reductions should be recognized in a federal greenhouse gas program. Rewarding emission reductions that occur in advance of the enactment of the program has the potential to generate economic and environmental benefits, as well as hasten clean-energy technology deployment. In particular, high-quality mandatory programs at the state level, such as those in Oregon, Washington, and Massachusetts, which have affected new power generation facilities in those states over the past decade or more, should be recognized in any future federal legislation. In addition, companies making voluntary early reductions want assurances that they will not be penalized later for reducing greenhouse gas emissions in advance of a national, mandatory program.

To ensure robust participation by interested companies, the Council believes that an early reduction credit program should be simple and transparent. Further, the rules for an early reduction credit program should be broad enough to capture gains that may differ in form, and from one region of the country to another.

**2i: *Should the program employ a safety valve? If so, at what level?***

**Individual program elements should be considered holistically:** The Council understands the rationale for a safety valve. However, the Council's primary recommendation to lower the costs of a federal climate change program is to design it in a manner that deploys clean energy technologies.

As previously stated, the Council believes that looking at individual features of a federal greenhouse gas program in isolation, such as a safety valve, does not effectively demonstrate overall program impacts on a broader scale. Design of elements such as specific caps, timetables, safety valves and other economic relief mechanisms will have a significant impact on market signals and must be developed and evaluated in a holistic manner, as well as in terms of their relation to, and interactions with, other existing state and federal energy programs.

**2j: *Should offsets be allowed? If so, what types of offsets? What criteria should govern the types of offsets that would be allowed?***

**Offset program for compliance flexibility:** The Council supports establishing an emissions offset program under a national greenhouse gas reduction program. Offsets offer the possibility of lower compliance costs and encouragement of technology innovation and deployment. Ensuring the environmental integrity of an offset program is essential. Therefore, eligible offsets should be real and verifiable.

In the Council's recommendations to RGGI and the Kyoto Protocol's Clean Development Mechanism (CDM), it has urged objective and standardized eligibility criteria for offset projects. The Council is concerned about the efficiency and consistency of the case law approach adopted by the CDM that looks at each project individually or on a project-by-project manner.<sup>12</sup>

Overall, however, it may be overly optimistic to expect establishment of sector-by-sector standards in a timely fashion and commensurate with the urgent need for action. Therefore, the Council supports a case-by-case program that builds on the experience of the CDM Executive Board and processes, while at the same time devoting resources to eventual establishment of technical standards for key sectors. As a national greenhouse gas offset program is executed, standardized mechanisms/methods, such as performance standards or benchmarks, can be integrated into the case-by-case project approach.

The Council cautions against the use of pure financial additionality tests in determining project eligibility. In our experience, financial additionality tests alone deter good projects and weaken the credibility and market power of offset programs. Further, financial additionality tests are subject to gaming and cannot reasonably account for market behavior. Instead, we recommend practical application of a number of "barriers tests," as is recommended by the World Resource Institute's Greenhouse Gas Protocol for Project Accounting.<sup>13</sup>

**2k: *If an auction or a safety valve is used, what should be done with the revenue from those features?***

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<sup>12</sup> Of particular concern are post-facto changes to previous "final" regulatory decisions, which have occurred in a few cases reviewed by the CDM Executive Board. An ability to change regulatory rulings creates direct and intolerable risk to investment decisions.

<sup>13</sup> See the WRI Greenhouse Gas Protocol for Project Accounting at:

[http://www.ghgprotocol.org/DocRoot/m1Tv5lnUuFTjYZx3x1ev/GHG\\_Project\\_Protocol.pdf](http://www.ghgprotocol.org/DocRoot/m1Tv5lnUuFTjYZx3x1ev/GHG_Project_Protocol.pdf)

**Use revenue features to reduce program costs by driving clean energy technology investment:** The Council supports using potential auction revenue or an allowance set-aside program to drive clean energy technology investments, which will be key to keeping program costs low. For example, the Council is actively working with the RGGI states to establish allowance set-aside programs that will drive investments in renewable energy, clean generation and energy efficiency in the cap-and-trade program. A minimum 25 percent set-aside provision that can be used to support clean energy technologies was included in the RGGI Memorandum of Understanding and the RGGI Draft Model Rule. In addition, several RGGI states are now considering set-aside provisions in their respective pre-proposals.<sup>14</sup>

**Proposed Set-Aside Criteria Guidelines:** Council members believe that a public benefit set-aside has the potential to be a strong driving force for renewables and energy efficiency. This is why criteria for the use of the set-aside are of great importance. The Council has compiled the following list of criteria to ensure that the set-aside provides the greatest benefit. We believe that set-aside allowances should:

1. Reduce the carbon intensity of electric generation
2. Reduce energy demand
3. Provide benefit to the nation's economy
4. Promote private investment through partial funding of investments
5. Enhance complementary energy program benefits
6. Help establish new energy programs
7. Increase the market potential of new technologies

Further, the Council supports the use of set-aside programs to allow for competition and ensure a level playing field for new entrants. New entrants in the marketplace should be eligible to receive allowances so they are not put in a position of competitive disadvantage.<sup>15</sup>

In addition, the use of set-aside funds should take into account existing energy priorities, existing clean energy programs and environmental regulations and objectives. The preferred use of auction or set aside resources would be for deployment via direct allocation or funding to clean generators, as well as for investors/investments in clean energy technology and energy efficiency projects.

**2l: *Are there special features that should be added to encourage technological development?***

**Expanding alternative energy technologies:** The Council supports regulatory flexibility and market drivers that would allow maximum inclusion of clean, alternative energy technologies in the nation's energy infrastructure. This includes demand-side and supply-side rates, rate decoupling, power purchase contracts between utilities and on-site generation, direct allocation to generators of clean generation, a level playing field for new market entrants and set-aside provisions to directly support clean energy technologies. As previously stated, federal climate change policy should also take into account other federal and state energy programs designed to reduce greenhouse gas emissions, such as renewable and energy efficiency portfolio standards, and tax incentives, among others.

**2m: *Are there design features that would encourage high-emitting developing countries to agree to limits on their greenhouse gas emissions?***

**Flexibility for cooperation among industrialized and developing countries:** The scale of climate change requires multiple initiatives at multiple levels – international, federal, state, regional and municipal – to drive the economic and environmental changes to meet climate change objectives. The Council has long recognized that industrialized countries, such as the U.S., should take the lead now in acting to reduce greenhouse gas emissions. Further, the Council acknowledges the importance of cooperation within a global climate change regime and resulting opportunities for joint action and collaboration among industrialized and developing countries. Design elements such as cap-and-trade and

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<sup>14</sup> Many RGGI states are considering auctioning large portions of their set-aside allocation and using the auction revenue to support clean energy technology deployment, among other objectives.

<sup>15</sup> For example, the set-aside program under the Clean Air Planning Act introduced by Senator Thomas Carper (D-Delaware) was included to avoid the situation of a generator of new, clean and efficient energy having to purchase allowances from an existing competitor.

offset programs – like the Kyoto Protocol’s Clean Development Mechanism and Joint Implementation program (JI) – offer developing countries platforms for significant engagement and action. In addition, a federal greenhouse gas program that includes design features for other forms of multi- and bi-lateral action, such as the Asia-Pacific Partnership, will provide valuable vehicles for developing country and emerging economy engagement and action on greenhouse gas emission reductions.

**3: *How well do you believe the existing authorities permitting or compelling voluntary or mandatory actions are functioning? What lessons do you think can be learned from existing voluntary or mandatory programs?***

**Mandatory programs needed to drive clean energy transformation:** The Council supports voluntary greenhouse gas reduction programs and the importance of “learning by doing,” but recognizes that these efforts are inadequate and insufficient to drive the transformation needed to dramatically reduce greenhouse gas emissions. Across the board, the Council and its members have been highly supportive of voluntary programs such as Climate Leaders, Climate Vision, the Department of Energy’s Voluntary Reporting of Greenhouse Gases 1605(b) Program, and the Asia-Pacific Partnership.

The success of state-level caps on emissions from new power plants, such as those in Oregon, Washington and Massachusetts, offer very valuable lessons regarding specific policy tools. In particular, the project-based reductions financed by The Climate Trust of Oregon and the greenhouse gas emission credits generated by those projects constitute an important, successful demonstration of “offsetting” in the U.S. market.<sup>16</sup>

At this time, the Council encourages the U.S. to move forward with a mandatory federal greenhouse gas program that would create stronger price signals and accelerate the transition to cleaner generation.

**4: *How should potential mandatory domestic requirements be integrated with future obligations the United States may assume under the 1992 United Nations Framework Convention on Climate Change? In particular, how should any U.S. domestic regime be timed relative to any international obligations? Should adoption of mandatory domestic requirements be conditioned upon assumption of specific responsibilities by developing nations?***

**Act now, create links between trading systems, and focus on the long term:** To ensure lowest-cost compliance with a global environmental challenge, a U.S. greenhouse gas emissions reduction program should permit trading among other credible greenhouse gas cap-and-trade programs. Further, allowance-trading markets should be linked globally to help ensure as level a regulatory playing field as possible for U.S. firms. Due to competitiveness concerns and the need to access least-cost greenhouse gas emissions reductions, it is critical that linkages with other greenhouse gas trading programs are established at the beginning of a national program.

Linkages should be based on a comparable environmental commodity, and based on allowance transactions that are transparent and verifiable. Appropriate accounting systems and enforcement mechanisms will be required to facilitate the transfer of credible allowances, offsets and other greenhouse gas-related commodities. U.S. experience with Clean Air Act emissions markets, U.S. energy disclosure requirements and other environmental commodity trading markets offer the foundation for a U.S. accounting system that would be able to link with non-U.S. trading programs.

As previously noted, it is important for Congress to act now to create strong market drivers for investment in cleaner generation, clean energy technology innovation, economic efficiency and enhanced energy security. Congressional action should not be forestalled by the adoption of specific, binding, emission-reduction responsibilities by developing nations; OECD countries, including the U.S., should act now to reduce greenhouse gases and further encourage clean energy deployment and innovation.

Most other industrialized countries are acting already to reduce greenhouse gas emissions. For example, earlier this month (March 2007), European leaders pledged to cut overall levels of greenhouse gas emissions by 20 percent from

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<sup>16</sup> The project-based offsets purchased and monitored by The Climate Trust meet generally recognized international standards for high-quality and credibility and have been used to meet compliance goals established in Oregon, Massachusetts, and Montana, as well as a number of corporate, voluntary goals. The processes and policies created by The Climate Trust are now also being used to solicit and secure project-based offsets (up to 7.5 million tons of CO<sub>2</sub> equivalent) for potential early crediting of generators subject to RGGI rules which take effect in 2009.



1990 levels by 2020, with an agreement to cut emissions by 30 percent if other industrialized countries commit to do the same. Ministers also agreed to legally-binding targets of obtaining at least 20 percent of Europe's energy needs from renewable sources by 2020. With an even greater focus on long-term reductions, the United Kingdom also introduced legislation this month that would require a 60 percent cut in its carbon emissions from 1990 levels by 2050.

In the Council's extensive and ongoing experience with the international climate change negotiation process of more than a decade, it recommends that domestic and international requirements focus on the long term. A more forward-looking, long-term domestic focus would also create more synergy with international efforts within the United Nations Framework Convention on Climate Change, where there is significant movement to focus on the longer-term (i.e., 2012 and beyond).

We also understand the importance of flexibility to adapt as technologies evolve and other climate change issues come to the forefront. That is why the Council recommends the inclusion of an evaluation methodology/mechanism that would occur at periodic intervals, perhaps every five years, to assess program performance and other related issues.

**5: *What, if any, steps have your organization's members or its individual members taken to reduce their greenhouse gas emissions? Which of these have been voluntary in nature? If any actions have been taken in response to mandatory requirements, please explain which authority (State, Federal, or international) compelled them?***

Several of the Council's members have provided a response on their actions to reduce greenhouse gas emissions. Please see Appendix B for these responses.

#### **Conclusion**

Thank you again for the opportunity to provide input toward the development of climate change legislation by the House Committee on Energy and Commerce and its Subcommittee on Energy and Air Quality. The Council strongly supports Congressional efforts to establish a federal climate change program to spur greater clean energy technology innovation, economic efficiency and enhance energy security. To that end, we remain available to the Committee to elaborate upon the Council's views in greater detail, and we specifically request the opportunity to testify during any future Committee-sponsored hearings or conferences on this topic to be held in the coming months.

If you have any questions or comments please feel free to contact me at (202) 785-0507 or via email at [ljacobson@bcse.org](mailto:ljacobson@bcse.org).

Sincerely,



Lisa Jacobson  
Executive Director

CC: Senator Jeff Bingaman, Chairman, Senate Committee on Energy and Natural Resources  
Senator Arlen Specter

Representative Joe Barton, Ranking Member, House Energy and Commerce Committee  
Representative J. Dennis Hastert, Ranking Member, Subcommittee on Energy and Air Quality

**Appendix A – Select List of BCSE Members 2007**

American Gas Association  
American Standard/Trane  
American Wind Energy Association  
Bergey Windpower  
Brookfield Power  
Calpine  
Center for Energy, Economic & Environmental Policy, Rutgers University  
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  
The Energy & Security Group  
The Stella Group, Ltd.  
TowPath Renewables  
Trexler Climate & Energy Services, Inc.  
Winrock International  
Worldwatch Institute  
York International

**2007 BCSE Supporters**

Interstate Natural Gas Association of America  
Sun Edison LLC

## Appendix B

**5: *What, if any, steps have your organization's members or its individual members taken to reduce their greenhouse gas emissions? Which of these have been voluntary in nature? If any actions have been taken in response to mandatory requirements, please explain which authority (State, Federal, or international) compelled them?***

### Econergy International Corporation

BCSE Board Member Econergy International Corporation is now calculating its emissions from office operations, travel, and related business activity to better assess the company's "carbon footprint". With this information in hand, the company will institute a series of operating rules and guidelines to reduce direct and indirect greenhouse gas emissions associated with its business activity, such as energy management systems, travel policies, and other policies regarding preferred vendors and office product purchases and operation. In addition, Econergy International Corporation will purchase some amount of offsets in the voluntary market from independent, high-quality, credible providers, such as The Climate Trust, to account for emissions which it can not cost effectively address through best practices.

### Jupiter Oxygen Corporation

BCSE Member Jupiter Oxygen Corporation's oxy-fuel combustion technology enables cost-effective carbon capture from fossil fuel power plants. Carbon capture and sequestration (CCS) require technologies that can effectively and efficiently perform, as well as allow consumers to have affordable power. The ability to retrofit the existing 600 coal-fired electric power plants is very important to the elimination of CO<sub>2</sub> emissions for climate change, and for energy efficiency and security. In addition, gas plants also emit CO<sub>2</sub>, and many need efficiency improvement.

Jupiter's undiluted high flame temperature oxy-fuel combustion technology, combined with the Integrated Pollutant Removal (IPR) technology developed by the National Energy Technology Laboratory of the U.S. Department of Energy, has test results which indicate that this approach is a very promising solution to create fully equipped, truly capture ready power plants.

Section 1407 of 2005 Energy Bill authorized \$100,000,000 a year for three years for this type of undiluted, high flame temperature oxy-fuel technology. To date, the Department of Energy has yet to move forward to obtain that funding. In fact, the Administration's last three budgets have had no funding for oxy-fuel technology nor have they had any funding for retrofitting the existing coal-fueled power plants or natural gas power plants in the U.S., even though there is wide spread congressional support for both. There should be appropriate R&D funding for a power plant retrofit now, which will provide empirical data on the efficiency, feasibility, reliability, and economics of this approach. If test results to date reflect value of the undiluted high flame temperature oxy-fuel combustion and IPR technology pathway, the R&D results then will show that there is a practical means to retrofit our existing fleet, make the United States the world leader in Clean Coal Technology, and substantially reduce emissions of greenhouse gases and other harmful emission, such as mercury, from the our current electric power plant fleet.