February 21, 2013

The Honorable Henry Waxman
Co-Chair
Bicameral Task Force on Climate Change
Ranking Member
House Committee on Energy and Commerce
2204 Rayburn HOB
Washington, DC 20515

The Honorable Sheldon Whitehouse
Co-Chair
Bicameral Task Force on Climate Change
Chairman, Subcommittee on Oversight
Senate Committee on Environment and Public Works
502 Hart SOB
Washington, DC 20510

Dear Congressman Waxman and Senator Whitehouse:

The Business Council for Sustainable Energy[1] is pleased to respond to the questions proposed in your letter dated January 31, 2013 in which you ask for recommendations regarding action the federal government can take to address climate change. You request input regarding suggestions for action by the leading federal agencies like the Environmental Protection Agency and the Department of Energy, and others, as well as suggestions for new authorities to be enacted by Congress.

As you know, the Business Council for Sustainable Energy is a coalition of companies and trade associations from the energy efficiency, natural gas, and renewable energy sectors, and also includes independent electric power producers, investor-owned utilities, public power, equipment manufacturers, and commercial end-users. Founded in 1992, the Council advocates for policies that expand the use of commercially-available clean energy technologies, products and services. The coalitions' diverse business membership is united around the revitalization of the economy and the creation of a diverse, secure and reliable energy future for America.

The Business Council for Sustainable Energy and Bloomberg New Energy Finance, recently released a report entitled, *Sustainable Energy in America Factbook 2013,* which contains information about how the renewable energy, energy efficiency and natural gas sectors have already made significant strides toward reducing U.S. emissions of heat-trapping gases. According to the *Factbook*, in 2012 carbon dioxide (CO_2) emissions from this energy sector were on pace to sink to their lowest level since 1994. The renewable energy, energy efficiency, and natural gas sectors contributed significantly to this reduction in CO_2; for example some of the highlights from the *Factbook* show that in 2012:

- **Renewable energy** installations hit an all-time record high, with at least 17 GW of new nameplate capacity added.
- In April, electricity generation from **natural gas** equaled that from coal for the first time in U.S. history.
- Policies and approaches for financing **energy efficiency** continued to make market headway; energy intensity for U.S. commercial buildings has now dropped by more than 40% since 1980 and investments in smart grid topped $4 billion.

Building upon the federal research and development and the tax and energy policies that have contributed to the growth of these industries will be critical to both growing the U.S. economy and reducing greenhouse gas emissions. In fact reduced air pollution and emissions of greenhouse gases are a welcome consequence of the changes under way in the country's energy mix. The reductions in coal generation, ascendency of natural gas, influx of renewables, expansion of combined heat and power (CHP) and other distributed power forms, adoption of demand-side efficiency technologies and deployment of advanced vehicles are all contributing to the estimated 13 percent decline in CO_2 emissions from the energy sector (including transport), from a peak of 6.02 gigatons in 2007.

Information about the Business Council for Sustainable Energy-Bloomberg New Energy Finance *Sustainable Energy in America Factbook 2013* is attached for your reference. For a complete copy of the *Factbook* visit the Council's website at

[1] As a diverse business coalition not all members of the Business Council for Sustainable Energy endorse or take a position on the recommendations in this letter.

http://www.bcse.org/sustainableenergyfactbook.html. The Council offers the following specific responses to your questions below.

1. What actions or policies could federal agencies adopt, using existing authorities, to reduce emissions of heat-trapping pollution?

The Council believes the optimal policy for regulating greenhouse gas emissions is for Congress to enact comprehensive market-based legislation that allows for flexibility and cost-effective emissions reductions, including carbon offsets. There are, however, a number of areas where Congress has already provided legislative authorities to federal agencies that when fully implemented would make significant reductions in greenhouse gas emissions. These areas range from:

- The Department of Energy should implement energy efficiency measures including the issuance of particular standards, such as appliance and equipment standards, and manufactured housing efficiency standards, and should implement previously announced programs for commercial buildings in order to provide consumers with choices which can reduce total energy consumption and lower overall costs, while advancing economic development opportunities.

- The Department of Housing and Urban Development (HUD) should address energy efficiency financing options such as Property Assessed Clean Energy Bonds (PACE); update codes for new homes with VA and FHA loans and public housing; and administratively implement provisions in the Sensible Accounting to Value Energy (SAVE) Act which would instruct federal loan agencies to assess a borrower's expected energy costs when financing a house.

- Environmental Protection Agency regulations should recognize supply-side efficiency as a pollution control approach, and base those regulations and standards on outputs whereby emissions limits are set based on units of pollution relative to the useful output of both heat and electricity. This approach would both enhance air quality and encourage cost-effective reductions.

  The BCSE continues to advocate that EPA consider—where legally appropriate—the role that existing clean energy technologies and fuels can play in achieving the goals of Clean Air Act regulation. With respect to the development of GHG NSPS for fossil fuel fired power plants, including emissions guidelines under Clean Air Act (CAA) Section 111(d), the BCSE urges EPA to use an output-based approach to setting emissions standards and to provide clear guidance to the states regarding how climate and clean energy programs might show equivalency with federal emissions guidelines.

  The Council has long supported the development and use of output-based emissions regulations as effective ways to promote long-term air quality and to encourage cost-effective emissions reductions. As EPA itself has noted, output-based regulations better reward and drive energy efficiency improvements than do input-based approaches.[2] In its Prevention of Significant Deterioration and Title V Permitting Guidance for Greenhouse Gases, EPA has identified the crucial importance of increased energy efficiency as a means to reduce GHG emissions.[3] EPA can further drive efficiency and cost-effective emissions-reductions by using an output-based approach to setting GHG emissions standards. Many other NSPSs include output-based approaches, including the NSPSs for: Utility Steam Generating Units (40 CFR Part 60 Subpart Da) for mercury, particulate matter, sulfur dioxide (SO2), and nitrogen oxides (NOx); for Industrial/Commercial/Institutional Boilers (40 CFR Part 60 Subpart Db) for NOx; and for Stationary Combustion Turbines (40 CFR Part 60 Subpart KKKK) for SO2 and NOx. The BCSE commends EPA for its increased use of output-based standards and encourages the Agency to continue this approach in the GHG NSPS.

  EPA should craft clear guidance to the states identifying the requirements for programs to be considered eligible for equivalency under Section 111(d). Discussion during EPA's third listening session held in Chicago on February 17, 2012 indicated interest from a number of states to potentially use existing clean energy and climate programs to regulate emissions from existing sources through Section 111(d). Many of the legal and technical issues involved in that debate have been analyzed by the World Resources Institute and the Columbia Law

[2] "Output-Based Environmental Regulations Fact Sheet," EPA Combined Heat and Power Partnership (April 12, 2007). A copy is available at: http://www.epa.gov/chp/policies/output_fs.html.

[3] "PSD and Title V Permitting Guidance for Greenhouse Gases," Office of Air Quality Planning and Standards (November 2010). A copy is available at http://www.epa.gov/nsr/ghgdocs/ghgpermittingtoolsfs.pdf.

School Center on Climate Change in their report "What's Ahead for Power Plants and Industry? Using the Clean Air Act to Reduce Greenhouse Gas Emissions, Building on Existing Regional Programs."[4]

EPA could use the flexibility under Section 111(d) of the Clean Air Act to allow existing power plants to achieve target emission rates through renewable energy capacity additions, energy efficiency, switching to lower-GHG fuels, and investing in carbon offsets. Sec.111(c) and (d) allow EPA to accept compliance plans developed by States, which include these compliance options.

The BCSE encourages EPA to keep in mind the diversity of existing state and regional programs as it crafts guidance for what could be deemed to meet the requirements for 111(d) equivalency, including issues such as the permissibility and potential restrictions on allowance trading (including across sectors and across state and national borders), banking, and offsets. Clear guidance will allow states to move forward with confidence and will give certainty to business.

Any federal actions to regulate greenhouse gas emissions should not preempt or complicate effective existing state or regional emissions reduction programs which provide compatible alternatives. In fact, coordination with these programs is paramount. There should be flexibility to use any real emissions reduction tools available, including not just onsite reductions, but offsite renewable energy, energy efficiency, offsets, and available reductions made in other sectors. Programs that depend upon meeting overarching goals with flexibility at the local and regional level will work most efficiently.

- EPA should recognize the benefits of biogas and biomass as the agency considers the regulation of biogenic emissions under the Tailoring Rule and EPA should use its authority under the Renewable Fuel Standard (RFS2) to apply an expansive interpretation of the legal authority that Congress gave EPA in the Energy Independence and Security Act (EISA) 2007 to include renewable natural gas when used for transportation, electricity generation, industrial process uses, and heating.

- The federal government should assist states in identifying and removing barriers to greater use of combined heat and power and waste heat to energy through the stakeholder process established in White House Executive Order 13624 on industrial energy efficiency.

- The federal government should follow through on commitments made in the White House Executive Order 13514 (Federal Leadership in Environmental, Energy and Economic Performance), clarify that CHP is a qualifying clean energy technology under EO 13514, and should make greater use of federal performance contracting. The federal government is one of the largest owners of buildings in the United States, and federal agencies could help to significantly lower installed costs of clean energy systems by aggregating procurements within federal agencies, between federal agencies, and leveraged with state and local government procurements. This requires no new legislation and ensures federal government procurement of clean energy, such as solar, wind, biomass, renewable natural gas (biogas), combined heat and power and waste heat to energy, hydropower, fuel cell and hydrogen energy systems, and increased energy efficiency in the federal government.

- The federal government should support deployment of clean and efficient technologies that are commercialized but have not yet achieved full market penetration, such as CHP, fuel cells, efficient gas water heaters, and high-efficiency combination gas water heaters/furnaces, fleets of alternative fueled vehicles, including fuel cell vehicles, battery electric, plug-in hybrid, and natural gas fueled vehicles, as well as the delivery infrastructure needed to support these vehicles in federal use.

- Federal agencies should provide support and collaboration for meaningful information to customers about their energy use.

- Federal facilities should consider participation in demand response programs where they available and where it does not compromise the primary mission of the facility. Agencies should report their participation as part of their Sustainability Reports.

[4] "What's Ahead for Power Plants and Industry? Using the Clean Air Act to Reduce Greenhouse Gas Emissions, Building on Existing Regional Programs." The World Resources Institute and the Columbia Law School Center for Climate Change, February 2011. A copy is available at: http://pdf.wri.org/working_papers/whats_ahead_for_power_plants_and_industry.pdf

2. What actions or policies could federal agencies adopt, using existing authorities to make our nation more resilient to the effects of climate change?

Lower-carbon sources of generation (renewables and natural gas) accounted for 43% of all electricity generation in 2012, compared with 27% a decade ago. In addition, electricity market structures in the United States are evolving and the U.S. power sector – long skewed toward large, centralized systems – is considering a growing role for distributed power (e.g., combined heat and power (CHP), waste heat to power (WHP), small scale renewable, and fuel cells). These shifts provide a more flexible, reliable electricity system which will help our nation be more resilient to the effects of climate change. Federal agencies should support efforts to strengthen the smart grid to allow greater use of energy efficiency, renewables and distributed generation as they provide resiliency to extreme weather events related to climate change.

Together, a broad portfolio of technologies including renewable energy, natural gas generation, distributed generation, demand side resources and energy storage fit well together and can provide clean, reliable power to meet the evolving needs of the power grid. To foster this, the Federal Energy Regulatory Commission (FERC) should continue to update market rules to allow for easier access of flexible resources and encourage the development of ancillary service markets that recognize the value of flexible resources, while ensuring that costs are fairly allocated and benefits are clear for these efforts.

Federal agencies should support development of distributed generation able to operate when the grid is down, such as CHP, fuel cells, and appropriately-configured solar photovoltaics, sited to support critical assets such as disaster centers, hospitals, transit operations, and gasoline stations. Agencies should also explore the ability of alternative fueled vehicles to provide transportation services in situations when the primary fueling infrastructure of disaster areas is adversely affected.

In addition federal agencies and departments have developed climate change adaptation plans in response to the President's October 2009 Executive Order 13514 - ("Federal Leadership in Environmental, Energy, and Economic Performance") and the March, 2011 Implementing Instructions to all Federal Department and Agencies. Federal agencies should devote resources as appropriate to ensure that these plans are regularly updated and implemented.

3. What legislation would you recommend Congress enact to strengthen the ability of federal agencies to prevent and respond to the effects of climate change?

Affordable, homegrown and clean energy sources are powering the U.S. economy with jobs and investment, and are promoting the security and diversity of our energy supply. Congress should continue to support research, development and deployment of these technologies to foster market competition here and abroad and to ensure that the United States becomes the world leader in clean energy technology.

The Council believes that continued federal clean energy tax policy and continued funding for programs under the Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) is in the best interest of American taxpayers and supports a well-reasoned national energy strategy that improves our economic conditions at home and strengthens America's competitiveness in the global marketplace. The Council encourages Congress to provide long-term stable clean energy tax policy - such as the Production Tax Credit (PTC), Investment Tax Credit (ITC) and Master Limited Partnerships (MLPs) - and to continue to provide federal support in the following areas:

- Congress should continue to support funding of energy efficiency, including better building technologies, building codes and standards, industrial technologies, vehicles, and advanced manufacturing, in order to drive economic growth, promote the competiveness of U.S. industries, and save consumers money. Congress should also strive to save taxpayers money by restoring funding for the Federal Energy Management Program (FEMP) to improve efficiency in federal buildings.

- Congress should support net zero energy building RD&D that optimizes and combines the best high-value energy efficiency and on-site renewable and distributed energy applications in order to lower costs, emissions, and water use, and to compensate for deteriorating electric grid reliability and power quality. Congress should also support smart grid software and hardware RD&D and deployment as well as modular, inter-operable renewable and distributed energy (and hybrid systems) for electric grid interface as well as to harden critical infrastructure.

- Unlocking the vast hydropower potential of our rivers, oceans, tides and conduits requires funding the research and development initiatives that make innovative ideas a reality. The Department of Energy's Water Power Program is an important source of support for the researchers, scientists and developers working to grow

hydropower's contribution to our country's clean energy resources. Continued investment in this program across all technologies is crucial to ensuring that the nation is on a path to a cleaner economy.

- Maintaining a commitment to fund the SunShot Initiative is a necessity to meet its goal of making solar energy cost-competitive with other sources of electricity by 2020. The SunShot Initiative focuses on cost reductions in all parts of the value chain, from materials research and manufacturing processes to permitting times and installation best practices and has helped the industry double solar installations in 2011 while reducing the installed cost of solar by 20 percent.

- Continued investments in wind energy research and development are delivering value for taxpayers by fostering the development of a domestic energy source that strengthens our national security, provides rural economic development, spurs new high-tech jobs, and protects the environment. For these reasons we urge Congress to continue funding wind energy research and development through the DOE Wind Energy Program.

- Considering the growing use of natural gas in our energy economy the Department of Energy can play a substantial role in supporting research that will ensure natural gas is developed and used, wisely, safely and efficiently. Therefore, the Council supports funding to be directed towards research and development of natural gas production and technology development and improvement.

- Fuel cell and hydrogen technologies produce jobs in domestic and export markets and promote energy independence and environmental stewardship. The Council encourages Congress to continue to support the fuel cell and hydrogen program managed by the Office of Energy Efficiency and Renewable Energy and the Office of Fossil Energy to build upon the substantial progress made by these programs in cost reduction; the Council also encourages Congress to fully restore funding for the successful public-private partnerships to continue the industry's transition to market. In particular, the Council supports funding technology validation for hydrogen fueling infrastructure and fuel cell electric vehicles, as well as market transformation for stationary and backup power, material handling, refrigerated trucks, auxiliary power units, and the associated hydrogen infrastructure.

The Business Council for Sustainable Energy is pleased to respond to the questions regarding action the federal government can take to address climate change and we look forward to working with you to continue progress on these legislative and administrative initiatives.

Sincerely,

Lisa Jacobson, President
Business Council for Sustainable Energy
Attachments (2)