



November 22, 2019

The Honorable Kathy Castor
Chair
House Select Committee on the
Climate Crisis
H2-359 Ford House Office Building
Washington, DC 20002

The Honorable Garret Graves
Ranking Member
House Select Committee on the
Climate Crisis
H2-359 Ford House Office Building
Washington, DC 20002

Re: Business Council for Sustainable Energy comments on the House Select Committee on the Climate Crisis request for information to inform climate policy development

Dear Chair Castor and Ranking Member Graves:

The [Business Council for Sustainable Energy](#) (BCSE) is pleased to submit the following comments in response to the request for information from the House Select Committee on the Climate Crisis. The Council is a coalition of energy efficiency, natural gas and renewable energy companies and associations. Its membership includes investor owned and public utilities, independent power providers, manufacturers, energy services companies, and other sector-specific trade organizations. BCSE members represent commercially available technologies and resource solutions to address climate change mitigation and adaptation.

The Council has advocated on energy and climate change policies at state, federal and international levels since its founding in 1992. At the federal level, the Council has engaged in both legislative and regulatory action on climate mitigation and adaptation. The Council also leads a U.S. business delegation to the annual conference of the United Nations Framework Convention on Climate Change (UNFCCC) in order to demonstrate policies, investment frameworks, and other actions which are needed at the international level to deploy clean energy, address climate change, and shape international agreements in a manner that will leverage private sector investment.

BCSE has a strong understanding of the key policy, regulatory and market considerations which impact, and should inform, comprehensive climate change policy. With their experience implementing a range of energy and environmental policies, BCSE members have found that the private sector responds to clear and consistent policy objectives, provided there is flexibility in achieving the objectives. This provides a range of societal benefits and can provide cost-effective compliance pathways and opportunities for technology innovation. The Council seeks to be a resource to Congress as it develops comprehensive climate change legislation.

Sustainable Energy in America – A Look at Progress Made and Opportunities to Accelerate Action

When considering comprehensive federal climate change legislation, it is important to consider the substantial changes that have occurred in the U.S. energy sector, as detailed in the most recent [Sustainable Energy in America Factbook](#).¹

¹ The 2020 Sustainable Energy in America Factbook will be released in February 2020, please see www.bcse.org/factbook.

The U.S. has made substantial progress over the past decade to decarbonize its energy sector. Overall U.S. greenhouse gas (GHG) emissions are approximately 10% below 2005 levels. This is due to a mix of federal and state policy incentives, as well as market forces that have led to greater investment in energy efficiency, expanded utilization of abundant and affordable supplies of natural gas, and falling technology costs for renewable energy that have led to a rise in deployment.

However, total U.S. GHG emissions rose for the first time in several years in 2018, increasing by a least 2.5%. Energy consumption increased 3.3%, outpacing the GDP growth rate of 2.9% over 2017 levels.

Investments in the energy sector over the past fifteen years helped to mitigate the extent of this rise, as a cleaner electricity mix kept the increase in power sector emissions to just 0.6%. Emission increases in the buildings and industrial sectors, due in part to a record number of high-level heating and cooling days in 2018, point to opportunities and the need for accelerated clean energy deployment.

Similar to strides made in the electrification of passenger vehicles noted in the Factbook, reducing the carbon footprint of commercial and residential buildings through holistic planning will be important to developing effective national climate policies. Increased energy efficiency and use of renewable thermal resources such as Renewable Natural Gas (RNG) as well as electrification strategies will be important considerations.

Looking at the electricity sector more specifically, energy efficiency, natural gas and renewable energy are the areas of growth. This portfolio delivers affordable, safe and reliable power to homes and businesses. Further, investment in these sectors – combined with the deployment of a range of technologies such as energy storage, combined heat and power (CHP) and fuel cells, along with demand response, automation and digital applications – is decarbonizing the power sector, keeping electricity costs low, creating jobs and making the power sector more resilient. Carbon capture, utilization and storage can also play a role, especially with new policies like the extended and expanded 45Q tax credit in place.²

Looking ahead, it will be critical to make progress in passenger vehicle electrification and other modes of sustainable transportation as integrating carbon reduction strategies in the building and industrial sectors.

Consumers at all levels are helping to drive these trends. Retailers, major technology firms, and even a major oil company contracted record volumes of renewable power through direct contracts, amounting to 8.6 gigawatts of capacity in 2018. This is happening increasingly due to economic factors, including low renewable power prices and the ability to lock in predictable electricity prices over a period of time. Companies are also pledging to double energy productivity and/or to green their vehicle fleets, with electric, fuel cell and RNG-powered vehicles.

The Need for Cross Cutting Approaches - Economy-Wide, Market-Based, and Inclusive Policies

The Council encourages the Congress and House Select Committee on the Climate Crisis to consider utilization of the full range of available clean energy technologies, products and services when developing comprehensive climate policy. The broad portfolio of solutions that includes the energy efficiency, natural gas and renewable energy sectors has enabled the important progress we have made to date on emissions reductions and, working with emerging and new technologies, this broad portfolio will be necessary to achieve further reductions.

BCSE is pleased to share its recommendations for comprehensive climate legislation that are included in its [Climate Change Policy Principles](#). The recommendations center around prioritizing a federal, legislative, economy-wide and market-based approach and suggest federal action to:

² See, <https://www.catf.us/2019/02/ccs-reduce-49-million-tonnes-co2-emissions>.

- Develop targets and standards that recognize the findings of the scientific community to avoid the worst impacts of climate change.
- Enact policies that create clear mid-term and long-term market signals through carbon pricing mechanisms to deploy clean energy and carbon reduction technologies, including energy efficiency, renewable energy, natural gas, and more.
- Allow all technologies to participate in policy regimes and create pathways for new entrants to participate.
- Leverage and align federal climate and energy policies with existing local, state and regional policies and allow non-federal actors to achieve higher levels of ambition if so desired.
- Enable states, localities, and international regimes to link with federal emission reduction programs.
- Recognize early action and investments in emissions reductions.
- In addition to carbon pricing mechanisms, enact complementary policies in the areas of research, development and deployment, infrastructure, tax policies, resilience and reliability planning, and appropriations.

With these elements in mind, the BCSE recommends that Congress establish an economy-wide price on carbon rather than a regulatory regime. Carbon pricing, through cap and trade programs, carbon taxes and/or other means, sends the strong market signals needed to allow companies to find the most economically efficient way to reduce carbon emissions and allows for competition, innovation and over-performance with policy objectives.

Congress should also evaluate opportunities to catalyze investments through financing measures that address the risks and barriers that clean technologies face in order to accelerate deployment. In this review, consideration should be given to the geographic spread of implementation, leverage of private sector investments per dollar of government support, consumer interests and technology provider market insights.

In general, policy frameworks are most effective when they focus on desired outcomes and enable the full portfolio of diverse power generation technologies to participate. Further, policy frameworks should leverage private sector activity and create sustainable market-signals for investment.

Private Sector Actions to Reduce Emissions

Many BCSE members have adopted a range of carbon pollution reduction initiatives, including science-based emission reduction targets, energy efficiency goals, renewable energy purchases and green vehicle targets, among others. They are meeting and, in many cases, exceeding their objectives. BCSE members utilize a range of measures including direct investments in energy efficiency, natural gas and renewable energy, and purchase carbon offsets, renewable energy credits (RECs), and Power Purchase Agreements.

The Council routinely gathers [case studies](#) of its members' efforts in this area, which are shared with an international audience at the annual UNFCCC climate conferences. These examples highlight the many ways BCSE members are providing solutions to climate change-related problems.

Further, the Council conducts an annual accounting of the organization's GHG emissions and purchases RECs and carbon offsets in order to account for its electricity use and carbon emissions. The Council is a small organization with a relatively small carbon footprint. Nonetheless, the Council believes in the importance of this annual accounting to demonstrate to its members and to other partners that small organizations can take steps to manage emissions.

In order to conduct the BCSE assessment, it uses resources publicly available from the U.S. Environmental Protection (EPA) Agency and World Resources Institute, among others.

Federal climate change legislation should encourage reporting and management of greenhouse gas emissions throughout the economy, and help small businesses and organizations play a role. BCSE supports the many climate change partnership programs at EPA that facilitate and support this kind of action.

Environmental justice concerns are increasingly the focus on policymakers and companies alike. The EPA defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. More companies are adopting environmental justice policies to ensure communities have a fair and just opportunity to participate in the decision-making process in matters impacting the local environment.³

Opportunities and Barriers to Emission Reductions

While the clean energy sectors have made significant advances in carbon reduction, there are still many challenges and barriers to the full, economy-wide reductions needed to avoid the worst effects of climate change.

A lack of policy certainty – including in the area of carbon pricing and other financial mechanisms – is a barrier to meaningful carbon pollution reductions. Setting long-term, durable targets and providing market-friendly and flexible compliance mechanisms are essential to achieving sustained emission reductions at scale. For example, the uncertainty on clean energy tax policy inhibits investment. Currently, some technologies that have received tax incentives in the past have had their tax provisions expire (non-wind Production Tax Credit technologies, including biogas, biomass, geothermal, hydropower and waste to energy; as well as energy efficiency measures). Others are set to expire, and there are also other newer technologies that have not been fully or effectively integrated into the tax policy frameworks. This creates confusion around the economics of particular projects and can stall investment.

Of note, on November 19, 2019, the Growing Renewable Energy and Energy Efficiency Now (GREEN) Act was introduced by House Ways and Means Committee Chairman Richard Neal (D-MA), Subcommittee on Select Revenue Measures Chairman Mike Thompson (D-CA) and committee members. The GREEN Act includes measures to retroactively extend expired credits, to extend and improve soon to be expiring measures, and to address new areas of focus. Federal tax policy has been an effective driver of investment and deployment for a broad range of clean energy technologies, resulting in significant benefits to the environment and the American economy. BCSE has long called for predictable policy that provides market signals to spur private sector investment and looks forward to working with Congress as it considers this draft legislation.

In addition, policy certainty is key for the private sector to ensure that their decisions to decarbonize their operations are recognized under any future laws. Federal policy efforts must ensure that companies will not be penalized for early action.

Competitiveness challenges can also arise for early mover organizations, but more and more, companies are seeing distinct advantages to reducing emissions, especially in terms of cost savings, investor relations, brand enhancement, and employee recruitment and retention.

The Role of the Federal Government

The federal government has a critical role to play in reducing carbon pollution. While many states and regions have proposed and implemented carbon reduction plans, federal policies are an efficient way to ensure that meaningful emissions reductions and investments in resilient infrastructure occur in all areas of the country.

For example, the need to integrate and expand electric grid infrastructure remains a challenge requiring holistic solutions from the federal government. This is because a modern, efficient and expanded grid is necessary to accelerate the deployment of cost-effective renewable generation resources. Conversely, if new grid infrastructure is not planned and constructed in a proactive manner, adoption of renewables may be substantially delayed. While the construction of

³ Covanta Energy's environmental justice policy is an example of the leadership being undertaken by the private sector in this area. More information can be found: <https://www.covanta.com/In-Your-Community/Community-Outreach-Environmental-Justice>.

new grid infrastructure is subject to a range of overlapping federal and state regulations, there is much the federal government can do to facilitate grid development and much that Congress can do to provide oversight and targeted direction to the Federal Energy Regulatory Commission (FERC) and Department of Energy (DOE) in order to improve and expand the grid.

To enhance U.S. resilience, the federal government should build upon the reforms made in the Disaster Reform and Recovery Act, P.L.115-254 (DRRA), which was enacted in 2018.⁴ DRRA includes provisions to provide funding for pre-disaster investments in communities that enhance resilience of critical assets and buildings. BCSE has been working with Congress, the Federal Energy Management Agency and DOE to raise the profile of energy projects – both from a grid and a buildings perspective – during implementation of DRRA. Specifically, BCSE has focused on implementation of the Building Resilient Infrastructure and Communities (BRIC) program, which when fully operational will provide a new stream of funding for states, localities and tribes to support pre-disaster resilience investments. This program is significant not only because it focuses on pre-disaster investment, but also because it is funded by a 6 percent across the board allocation of the previous year's federal disaster spending (and is not subject to annual federal appropriations). Other actions the federal government should undertake include providing resources to ensure that climate change modeling is robust and based on updated forecasts, not historical data. The federal government could facilitate the transfer and use of forward-looking climate-change information to standards-developing organizations (SDOs) which have often-time struggled to find and incorporate such information into their standards. Further, the federal government should create an inter-agency process to assess and develop forward-looking plans to enhance the resilience of its assets as well as develop resources and provide technical assistance locally and regionally to states, communities and tribes for resilience planning.

Specifically, Congress can:

- Fund programs that help lower the cost of reducing emissions as well as investing in resilient infrastructure. EPA and DOE have strong and effective programs and foster many public-private partnerships. For example, DOE's "Better Buildings" and "Better Plants" programs are model national-level federal programs that have driven private sector action that aligns with state and local policies. Further, EPA's climate change partnership programs in the areas of energy efficiency, clean transportation, combined heat and power (CHP), natural gas and renewable energy are also proven and effective.
 - Federal dollars are also critical for investment in research, development, and deployment (RD&D) that enables new low-carbon and zero-carbon technologies, including carbon capture utilization and storage and other innovative carbon reduction technologies, to reach commercialization.
- Enact proven clean energy policies which are actionable today, such as tax incentives to leverage investment in clean energy technologies.
- Direct relevant regulatory agencies (FERC and DOE) to implement supportive policies that encourage the improvement and development of crucial grid infrastructure.

The federal government can also lead by example in greenhouse gas targets, energy savings, and resilience goals. BCSE works closely with the [Federal Performance Contracting Coalition](#) to promote the use of energy savings performance contracts by federal agencies to finance energy saving investments without using taxpayer funds.

The Importance of U.S. Engagement on International Climate Change Policy

BCSE is a long-standing business observer to the United National Framework Convention on Climate Change (UNFCCC) and understands that addressing the impacts of climate change in the areas of mitigation and adaptation require a global response. Since 1992, the U.S. has worked to help shape the global climate change regime and U.S. companies are leaders in clean energy sectors that serve the global marketplace.

⁴ See, <https://www.fema.gov/disaster-recovery-reform-act-2018>

The U.S. government has been an effective negotiator under the UNFCCC in the areas of transparency and accounting, market-based mechanisms, technology transfer and financing, among others. It also has shown its capacity to galvanize the UNFCCC process and other nations to take on nationally determined commitments under the Paris Agreement and other vital multilateral partnerships and RD&D via the Clean Energy Ministerial.

Further, through its international development assistance the federal government has supported RD&D, capacity building, and technical assistance initiatives with other nations that are seeking to reduce emissions and adapt to climate change. As such, BCSE has long supported appropriations for the DOE, EPA, the Department of State and other agencies in the areas of climate finance, capacity building, and RD&D.

The recent action by the Trump Administration to formally begin the withdrawal process from the Paris Agreement was expected, but nonetheless disappointing. The BCSE remains committed to working with other sub-national actors and governments to achieve the goals of the Paris Agreement. Given the global nature of this challenge, multilateral approaches to address climate change are the most equitable and efficient way forward and send important signals to global markets to accelerate investment and deployment in clean energy. Congress should continue to exercise its oversight role and continue to fund critical international programs as well as urge the U.S. to remain in the Paris Agreement.

Further, international engagement is needed to protect the competitiveness of American companies by maintaining a seat at the diplomatic table when key energy, environment, and security issues are being discussed. Being present is required in order to get the best deal for U.S. manufacturing and technology industries. This includes ensuring that U.S. products and services are treated fairly in global markets and intellectual property rights (IPR) of American companies are protected.

The Council is also concerned that back-tracking on U.S. commitments to the Paris Agreement or UNFCCC could induce negative market outcomes for U.S. companies that are doing business abroad, such as retaliatory trade policies reducing market share for U.S. products, preferential sourcing and procurement practices by governments that favor other countries, and consumer boycotts of U.S. goods and services.

BCSE urges the Trump Administration to reconsider its decision to withdraw from the Paris Agreement and urges the Administration and Congress to maintain funding for climate partnership programs, capacity building, and technical assistance and RD&D initiatives internationally.

Non-CO2 Greenhouse Gases

U.S. Natural Gas Utility Trends, Renewable Natural Gas and Significant Methane Emission Reductions

BCSE member American Gas Association (AGA) and its member natural gas utility companies have long been committed to voluntary action to reduce natural gas emissions to improve the carbon footprint of delivered natural gas. Natural gas utilities' actions, both within and beyond EPA's voluntary Natural Gas STAR programs, have reduced methane emissions by over 73% from the natural gas distribution sector from 1990 through 2017, based on the most recent EPA Inventory of GHG Emissions in the U.S. published April 2019. Now natural gas distribution utilities, pipelines and producers have made commitments through EPA's new Methane Challenge program to reduce their methane emissions further through more extensive adoption of best practices and innovative measures to reduce their methane emissions and methane intensity.

EPA's GHG Inventory shows methane emissions from natural gas distribution have declined to less than 0.1% of annual production. Across the supply chain, the latest EPA GHG Inventory shows the ratio of methane emissions per unit of natural gas produced (methane intensity) has declined continuously during the past 2 and a half decades, dropping 48

percent since 1990. Emissions from the natural gas supply chain from production well to the power plant, industrial, commercial or residential customer declined by 15% over the same timeframe to just 1.3% of annual production. This is well below levels needed to demonstrate *immediate* climate and environmental benefits for switching from any other fossil fuel to affordable, cleaner, lower-carbon natural gas for generating electricity, powering cars, energizing industry, and heating homes and businesses.⁵

In addition, many natural gas utilities are partnering with farmers, municipal waste water treatment facilities and others to capture methane that would otherwise be emitted by manure, sewage, landfills, and food waste and clean it up to pipeline quality Renewable Natural Gas (RNG) that can help reduce net GHG emissions. Depending on the feedstock and process, RNG can provide a zero net carbon or even negative net carbon energy source. This is an important pathway for further reducing GHG emissions while continuing to benefit from the U.S. natural gas energy storage and transportation infrastructure to deliver reliable, affordable and cleaner energy to American homes and businesses.

The federal government can be helpful by supporting expanded RD&D funding for methane detection technologies, with the goal of reducing costs and improving accuracy and sensitivity. Further, the federal government should support RD&D to increase the utilization of RNG and hydrogen, with the goal of driving down process costs and other barriers.

Supporting U.S. Leadership in Next Generation HFC Alternatives

Hydrofluorocarbons (HFCs) are used as coolants in refrigerators and air conditioners and are highly potent greenhouse gases that contribute to climate change. In October 2016, the Montreal Protocol was updated with the adoption of the Kigali Amendment to implement a global phase-down of HFCs. BCSE members helped to shape the Kigali Amendment and support its implementation. The U.S. is a world leader in the production of next-generation HFC alternatives, which provide economic and job benefits throughout the country. Therefore, the Council urges the U.S. Senate to ratify the Kigali Amendment and to provide clarity to manufacturers by passing legislation to give the EPA the authority to ensure a smooth transition to HFC alternatives. Of note, the American Innovation and Manufacturing (AIM) Act, a bipartisan bill recently introduced by Senators John Kennedy (R-LA) and Tom Carper (D-DE), is supported by environmental groups and the manufacturing industry would provide much-needed certainty for American manufacturers as the global community transitions to next generation coolants.

A Call to Action

The Council encourages Congress and the House Select Committee on the Climate Crisis to consider utilization of the full range of available clean energy technologies, products, and services when developing comprehensive climate policy. The broad portfolio of solutions that includes energy efficiency, natural gas, and renewable energy has enabled the important progress we have made to date on emissions reductions and, working with emerging and new technologies, this broad portfolio will be necessary to achieve further reductions.

Our recommendations for federal action are closely tied to positive outcomes for the global climate and the U.S. economy. We seek:

- Clear and consistent policy objectives with long-term, durable targets and flexibility for how they are achieved. These would allow the private sector to provide cost-effective compliance pathways and would create opportunities for innovation.
- Carbon pricing and complementary tax, RD&D, infrastructure, and resilience and reliability planning policies. These would allow companies to discover and implement economically efficient carbon emission reductions.
- Improvements to the electric grid, which would enable greater clean energy deployment and utilization.

⁵ See, EPA GHG Inventory (published April 2019) <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks> and AGA's analysis, Understanding Updates to the EPA Inventory of Greenhouse Gases (May 2019) available at: <https://www.aga.org/research/reports/epa-updates-to-inventory-ghg-may-2019/>

- Funding for resilience planning and infrastructure, which is necessary for climate adaptation at the local, state and regional levels.
- Participation in the UNFCCC and continuing funding for climate-related international development and RD&D, which would positively influence the international climate response and protect the competitiveness of American companies.

The private sector supports meaningful climate action and has technology available today to help meet the challenge at hand. It is imperative that the federal government work to set targets and goals, then let the private sector develop and implement the solutions to meet those goals.