

April 29, 2021

The Honorable Tom Vilsack
Secretary, U.S. Department of Agriculture
1400 Independence Avenue, SW
Washington, DC 20250

Submitted electronically via Regulations.gov

Re: U.S. Department of Agriculture *Notice of Request for Public Comment on the Executive Order on Tackling the Climate Crisis at Home and Abroad* (Docket No. USDA–2021–0003)

On behalf of the Business Council for Sustainable Energy¹ (BCSE), thank you for the opportunity to provide input to U.S. Department of Agriculture (USDA) on the implementation of climate-smart agricultural and forestry practices.

BCSE is a coalition of companies and trade associations from the energy efficiency, energy storage, natural gas, renewable energy, sustainable transportation and emerging decarbonization technology sectors. It includes independent electric power producers, investor-owned utilities, public utilities, equipment manufacturers, commercial end users and service providers in energy and environmental markets. Founded in 1992, the coalition's diverse business membership is united around the revitalization of the U.S. economy and the creation of a clean, secure and reliable energy future for America.

BCSE is pleased to have an independent small- and medium-size businesses initiative under its banner, the Clean Energy Business Network (CEBN). Together, BCSE and CEBN represent a broad range of the clean energy economy, from Fortune 100 companies to small businesses working in all 50 states. On a national basis, these industries support over 3 million U.S. jobs.

BCSE members support current and future efforts of USDA to ensure that American agriculture has a role in tackling the climate crisis at home and abroad, both from climate mitigation and climate adaptation perspectives. BCSE acknowledges the input of several of its members in compiling this submission and encourages consideration of their individual submissions. These include: the American Biogas Council², the Biomass Power Association³ and the Plant Based Products Council⁴. As a diverse coalition, not all BCSE members take a position on or endorse the recommendations in this submission.

¹ <https://bcse.org>

² <https://americanbiogascouncil.org>

³ <https://www.usabiomass.org>

⁴ <https://pbpc.com>

1. Climate-Smart Agriculture and Forestry Questions

A1. How can USDA leverage existing policies and programs to encourage voluntary adoption of agricultural practices that sequester carbon, reduce greenhouse gas emissions, and ensure resiliency to climate change?

BCSE supports USDA building upon existing voluntary Natural Resources Conservation Service (NRCS) conservation programs like the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP) to achieve nationwide progress in this effort. These programs, among other notable NRCS programs, are well known and trusted by farmers and technical advisors. As USDA considers how to leverage these existing programs, BCSE would urge USDA to ensure that any additional funding for financial assistance be complemented with sufficient additional technical assistance for farmers. While the spirit of these programs is understood and respected, the administrative elements of receiving assistance and conceptual development of plans to carry out any subsequent improvements should be supported by qualified technical advisors who can assist farmers. With an expansion of these programs, more technical assistance in the form of personnel and a regional footprint will be necessary.

Related to EQIP, BCSE requests a special EQIP funding pool for biogas system resource recovery. We recommend that this funding reside at USDA headquarters and not be counted toward regular state EQIP allocations. While anaerobic digestion projects provide a strong economic and conservation bang for the buck – deploying 20-plus conservation practices in a single project – they are more expensive than many of the stand-alone conservation practices. The expense of these projects may skew the overall funding available to the state, so these large-scale projects should be undertaken outside the normal state funding allocation process.

Rural Clean Energy Programs

Rural clean energy programs should be utilized and expanded, as they have provided the means for agriculture-based entrepreneurs to launch initiatives to generate jobs and economic development, while combating climate change – from wind, geothermal, hydro and solar power; to biogas and advanced biofuels like renewable natural gas; to biopower, bio-based products, renewable chemicals and energy efficiency. For America’s farmers, ranchers and rural small businesses to continue to be leaders in the development and advancement of the clean energy economy, it is critical to adequately fund and expand USDA clean energy programs.

In its outreach to congressional appropriators for fiscal year 2022, BCSE members have requested \$150 million per year or a minimum \$300 million upfront infusion for the Rural Energy for America Program (REAP). The REAP program is historically oversubscribed, and this infusion of funds would quickly bolster jobs, economic relief and climate change mitigation.

Within that program, we have asked Congress to include funding for a new 15% renewable energy grants “Reserve Fund” from REAP funds for underserved technologies. This reserve fund could be used to bolster technology diversification and to provide economic opportunities to producers and businesses seeking to use the full suite of renewable technologies such as biogas, renewable natural gas, distributed wind power and small hydropower.

Further, BCSE has asked Congress to include more funding for the soon-to-be-announced Renewable Energy Grants Pilot Program, which is dedicated to the same goal. BCSE has also asked Congress to increase the cost share to 50% for all REAP grants, when additional funding is provided. Finally, BCSE has asked Congress to expand funding for the Rural Energy Savings Program (RESP), to assist rural areas with upgrades and resilience.

Carbon Utilization and Biogas Education Program

We urge USDA to establish the Carbon Utilization and Biogas Education Program, which was authorized in the 2018 Farm Bill but has not yet received funding. As outlined above, renewable natural gas and biogas systems are one of the most impactful technologies available to combat climate change and improve the health of our soils. However, there needs to be additional outreach to farmers and agriculture producers so these potential users of the technology understand the significant benefits that digesters can provide to their farms, ranches and rural economies.

The Biogas Opportunities Roadmap Task Force

Also contained within the 2018 Farm Bill was a directive that USDA reconvene the Biogas Opportunities Roadmap Task Force. The Roadmap was published in 2014 by the Obama administration as part of its Climate Policy. Its aim was to coordinate existing programs that relate biogas throughout the USDA, Department of Energy and Environmental Protection Agency (EPA) that could be leveraged in order to deploy more renewable natural gas and biogas systems throughout the agricultural economy. We urge USDA to focus on the significant benefits that are provided from anaerobic digesters through the production of renewable energy and enhancing the health of our soils, water, and air, by fulfilling Congress' directive and reconstituting the Biogas Opportunities Roadmap Task Force.

Updating the North American Industry Classification System (NAICS)

A number of bio-based products and biogas are not currently included in the North American Industry Classification System (NAICS), a system for classifying establishments by type of economic activity in Canada, Mexico and the U.S. This deficit harms the industry, especially in market development of bio-based products as well as permitting or financing digester projects. We urge the agency to work with the Department of Commerce to establish these NAICS codes.

A2. What new strategies should USDA explore to encourage voluntary adoption of climate-smart agriculture and forestry practices?

In considering new strategies to encourage the broader voluntary adoption of climate-smart agriculture, USDA should look to efforts of the private sector to encourage practices like regenerative agriculture throughout their supply chains. Numerous companies are leveraging strategic partnerships to encourage growers in these efforts to voluntarily adopt more climate-friendly management practices. In seeking out new opportunities, USDA may consider how it could better support these existing and emerging private sector efforts through technical assistance or otherwise in the regions in which these projects are underway.

B. How can partners and stakeholders, including state, local and Tribal governments and the private sector, work with USDA in advancing climate-smart agricultural and forestry practices?

Alluding to the previous response, many efforts are emerging or exist in the private sector that are working to advance climate-smart management practices on large acreage across the country. The stakeholders in these efforts may work more closely with USDA to acquire technical assistance for participating farmers in developing multi-year management plans or seeking out federal or state financial assistance that may help them achieve their stewardship goals as well as the goals of the specific private sector effort.

C. How can USDA help support emerging markets for carbon and greenhouse gases where agriculture and forestry can supply carbon benefits?

In general, the landscape of emerging agricultural greenhouse gas (GHG) emissions markets can be confusing for farmers looking to engage in them due to various uncertainties, including, though not limited to: Which market can they participate in? Are GHG credit prices guaranteed over an entire growing season? How long must practices be committed to in a particular market? Or even, how is individual farm data for the granting of GHG credits managed? All of these questions may be answered differently by the administrators of the numerous agricultural GHG markets that exist today. Simply put, to support these emerging markets, USDA should work to clarify these questions for farmers. BCSE cannot prescribe one solution, as this may be achieved through a host of different policies; however, the main goal of any USDA support for these emerging markets right now should be to fulfill a clarifying role for farmers and stakeholders.

Payments for Ecosystem Services

BCSE urges USDA to support the development of quantified ecosystem benefits and a voluntary, market-based, private sector funding mechanism/incentive for ecosystem services.

- Move to adjust U.S. agricultural cost assistance (via combined international support, public good investments, payments to producers, international trade policy in a carbon-conscious future market, and other mechanisms) toward incentivizing climate adaptation and mitigation in agriculture and the broader food system.
- Take forward 10 recommendations for scaling up and mainstreaming Climate Smart Agriculture, and improve opportunities for leveraging further agricultural investments.
- Provide tax incentives for farmers who adopt conservation Best Management Practices (BMPs) and other emission and runoff mitigation practices on farm.
- Authorize tax incentives or federal transferable tax credits between landowners who own the land and farmers who lease the land for farming. Allow for an exchange of tax credits for climate mitigation BMPs.

- Revise the provisions of the USDA Conservation Reserve Program’s 7 CFR § 1410.63 “Permissive Uses” to clearly articulate that “the sale of carbon, water quality, or environmental credits is permitted by CCC,” instead of the current provision that indicates they “may be permitted.”
- Permit the sale of ecosystem credits generated by farmer or rancher actions on federal lease land resulting from private actions.

Recognize and Monetize the Non-Energy and Environmental Benefits of Sustainable Agriculture Systems and Practices

Biomass and biogas systems provide many non-energy production benefits. USDA should promote methodologies to quantify these benefits as well as compensate farmers who implement carbon sequestration practices and technologies.

BCSE also encourages USDA’s help to measure the environmental and carbon sequestration benefits of digesters specifically and then create the structure for a market that allows farmers to be paid for providing carbon reducing and sequestering benefits from anaerobic digestion of animal manure, biomass and other organic waste streams.

2. Biofuels, Wood and Other Bioproducts, and Renewable Energy Questions

A. How should USDA utilize programs, funding and financing capacities, and other authorities to encourage greater use of biofuels for transportation, sustainable bioproducts (including wood products), and renewable energy?

EPA has a role to play to support greater use of biofuels, sustainable bioproducts and renewable energy.

Recognition of the Life Cycle Emissions Benefits of Bio-Based Products

EPA currently fails to distinguish in its Clean Air Act permitting regulations between the one-year life cycle of carbon dioxide (CO₂) emissions resulting from the use or processing of agricultural crops and the carbon stock emissions released by fossil fuel combustion. By clarifying the insignificant nature of biogenic carbon emissions from fermentation and similar uses of annual agricultural crops, EPA can spur increased domestic production of sustainable, plant-based products and materials with a wide range of environmental benefits.

Expanded production of plant-based alternatives to petrochemical-based plastics and, in turn, the growth of the U.S. bioeconomy, will substantially reduce greenhouse gas emissions, improve water quality, divert waste from landfills and augment soil health. BCSE asks that USDA support EPA in whatever ways possible to make this *de minimis* determination on biogenic CO₂ emissions.

Additionally, an existing USDA program that can be utilized more effectively to promote the greater use of sustainable bioproducts is the BioPreferred program. Not only can the federal procurement of sustainable bioproducts facilitated by BioPreferred support this industry, but the program’s other activities increase consumer awareness of these important products. In addition to these existing

activities, there is potential for BioPreferred to act as a coordinator for state-level activities or programs of a similar nature to increase procurement and consumer awareness on a larger scale than strictly federal activities could provide. As such, BCSE urges USDA to support the activities of this program with increased enthusiasm as it considers ways to encourage the greater use of sustainable bioproducts in tackling the climate crisis.

Implement the Renewable Energy Pathway and Expand Definitions under the Renewable Fuel Standard (RFS) to Support Biomass and Biogas Power Generation

Domestic bioenergy sources – spanning biomass, biogas and waste-to-energy – are perhaps the least understood renewable energy sources. In general, the public, lawmakers and their staffers, and environmental groups understand the value of forests in combating climate change; however, the role of forest products including biomass is much less tangible.

The Climate 21 proposal that the Biden transition team released outlining its climate goals across the federal agencies made clear that bioenergy is an essential element of forest management, wildfire reduction and wood utilization. BCSE and its members look forward to working with USDA and the U.S. Forest Service to encourage a better public understanding of the role of biomass in mitigating the effects of climate change.

Biomass power is as much a method for managing resources as it is a method for generating renewable electricity. It is the most efficient way to dispose of low-value organic material like forest thinnings, tops and limbs discarded from forest products manufacturing, as well as agricultural waste like rice and oat hulls or nut shells. Despite the many benefits, U.S. biomass power growth has remained flat in the past decade. Our members are contending with dramatically lower power prices and other market barriers. Participation in the RFS, beyond the government honoring its mandate from Congress, represents stability for a small but important industry and the many rural jobs it supports.

Biomass power also is critical to forest management and wildfire risk reduction, particularly in the western United States. Fuels collected from the wildland-urban interface (WUI) should be eligible to qualify for RFS credits. In addition, many states, such as Maine and states in the U.S. northwest, have been stymied by EPA staff's narrow interpretation of "slash" and "pre-commercial thinnings" under the RFS, which flies in the face of forestry science and creates an unequal playing field as states attempt to grow their bioeconomies.

Biogas systems provide sustainable materials management solutions for organic wastes (e.g., food waste, animal manures, wastewater treatment biosolids, green waste and yard trimmings and food manufacturing residuals). Through the natural process of anaerobic digestion, biogas systems recycle these materials into renewable energy, important agronomic nutrients (nitrogen, phosphorus, potassium, calcium, sulfur, micronutrients and more) as well as a range of high-value products that improve soil health, water quality and air quality. Biogas systems are unique among renewable energy technologies because of this wide range of non-energy benefits. And yet the energy is also more reliable, contributing significantly to community resilience. Biogas systems produce biogas 24/7, 365 days a year with a 95% availability rate. This reliable source of biogas can be converted to electricity, heat, and renewable natural gas (RNG) or compressed natural gas (CNG) for vehicle fuel.

One of the best ways that USDA can encourage greater use of bio-based electricity is to urge EPA to implement the electricity portion of the RFS, and activate its biomass, biogas and waste-to-energy pathways, as soon as possible. Despite electricity's inclusion in the RFS2 law passed by Congress in 2007, not one electricity producer has been able to participate in the program as of 2021. Biomass power producers, along with biogas and waste-to-energy electricity producers, have been supplying low-carbon fuel for transportation use without receiving the credit to which they are entitled.

Further, USDA should weigh in on EPA's forthcoming Renewable Volume Obligation for the years 2021 and 2022 and make clear that it is beyond time to implement the RFS electricity program and activate its biomass pathways. Additionally, USDA should look at the definition of biomass used by EPA and urge re-interpretation to ensure that biomass removed from lands for wildfire management can qualify under the RFS.

B. How can incorporating climate-smart agriculture and forestry into biofuel and bioproducts feedstock production systems support rural economies and green jobs?

The Role of Biobased Products

As with any product derived from agricultural commodities, the production of feedstock for biobased products is often the greatest contributor to the overall environmental footprint of these products. When this is recognized in combination with a generally increasing desire among consumers for more sustainable products, it is evident that agricultural production is inextricably tied to the consumer appeal and future of the bioproducts industry. For this sector to continue to expand and support more high-paying green job creation in rural America, agricultural production needs to continue to lower its overall climate impact.

In the broader sense, climate-smart agricultural production of these feedstocks is tied to the concept of a healthy circular bioeconomy. This is the concept of using renewable resources like agricultural commodities to manufacture consumer products and materials, which at the end of their useful life are used to produce the next generation of renewable product feedstock, whatever that may be. This concept is represented well by compostable bioproducts.

In the case of compostable bioproducts, the circular nature of these materials extends back to agricultural production itself. When supported by necessary end-of-life infrastructure, compostable bioproducts can be turned into soil-enriching compost. Among the many environmental benefits of compost, this product enhances the ability of soils to sequester and hold carbon from the atmosphere. In relation to supporting rural economies, composting facilities provide jobs to local communities, avoid expensive landfill tipping fees, and can be a source of profit for municipalities or private businesses.

BCSE applauds USDA's current programs that support composting infrastructure, as the lack of this critical infrastructure hinders the adoption of compostable bioproducts. Programs like USDA Rural Development's funding of food waste reduction projects, research on compost use conducted through the National Institute of Food and Agriculture, and grants through the Office of Urban Agriculture and Innovative Production have been helpful for the modest expansion of composting infrastructure.

The Role of Biomass Electricity Generation

Biomass power is a vital part of rural forestry and agricultural economies. The presence of a biomass power facility represents an additional revenue stream for landowners and farmers who produce organic waste as a byproduct of their primary harvest. The well-paying jobs offered by biomass power facilities support the local economy and residents.

By providing an outlet for organic waste, biomass power facilities can also improve air quality by discouraging open burning. Utilizing byproducts and waste products at a biomass facility means they are subject to environmental controls, substantially reducing emissions when compared to open burning.⁵ Using these materials as fuel at a biomass power facility also means that they will not remain on a forest floor decomposing and releasing the harmful gas methane,⁶ or causing additional forest fire risk.

Incentivizing biomass power in areas with considerable organic waste, where farms and forests are prevalent, supports the economic and environmental health of that community.

3. Addressing Catastrophic Wildfire Questions

A. How should USDA utilize programs, funding and financing capacities, and other authorities to decrease wildfire risk fueled by climate change?

USDA should consider incentives and grants that would accelerate the deployment of microgrid technology for the nation's food supply chain. Microgrids provide back-up power during the event of a grid failure brought on by natural disasters or forced blackouts. When Hurricane Harvey displaced 30,000 people in Texas (\$125 billion damage), microgrids helped keep grocery stores and gas stations running to provide victims with shelter, food and supplies. Microgrids serve as a force multiplier for digitized, decarbonized power as integrators of a combination of solar, storage, combined heat and power, fuel cells and other energy resources. In August 2020, the Department of Defense's largest microgrid, located at Miramar Marine Air Corps Station in San Diego, islanded from the grid and provided needed power for 2,000 homes during rolling blackouts.⁷

Applications to Indoor, Vertical Farming

In the last few months, modern supply chains experienced volatility like never before, including U.S. food production. Indoor, vertical and urban farming serve as solutions for mitigating supply chain and climate risks and improve resilience for communities and the country. These alternatives to conventional farming require lower land use and bring agricultural production closer to consumers — reducing transportation emissions and increasing footprint productivity. This is especially important during times of turmoil, which is broader than the current pandemic as weather events and changing climate continue to strain traditional farming practices. In addition to shortening supply chains, indoor farming has many other advantages in comparison to traditional agriculture, such as using zero

⁵ <https://www.rosevilletoday.com/news/archives/placer-county-air-pollution-control-district-receives-epa-award>

⁶ <https://www.edf.org/climate/methane-crucial-opportunity-climate-fight>

⁷ <https://www.nbcsandiego.com/news/local/mcas-miramar-helps-san-diego-combat-rolling-blackouts/2388878>

pesticides, employing 95% less water and reducing food waste. Health benefits include fresher food, increased urban availability and pollution reduction.

However, indoor farming is very energy intensive. As microgrids provide localized renewable power generation, flexibility and communication with the grid, and load management, all within a digital architecture, vertical farms can reduce energy and keep the farm producing even when the electric grid goes down. Additionally, microgrids can capture and repurpose CO₂ emissions to help in crop production. Two case studies are Bowery Farming⁸ and Fifth Season⁹.

C. How can USDA ensure that programs, funding and financing capabilities, and other authorities related to climate-smart agriculture and forestry practices are implemented equitably?

Urban/Vertical Farming Benefits for Low-Income, Economically Disadvantaged Communities

In addition to shortening supply chains, indoor farming has many other advantages in comparison to traditional agriculture. As an example, AppHarvest¹⁰ has brought new jobs to Appalachia, a region that has struggled since the coal industry collapsed¹¹. In Compton, to help bring more jobs and fresh produce to the California city, Plenty¹² has said it will condense 700 acres of farmland into a 95,000 square foot warehouse in Los Angeles County, where food-bearing plants will grow vertically and in abundance. The unique layout will also make it possible to establish farms in urban areas, where land resources are limited and food insecurity is widespread.

Thank you for your consideration of these comments. Please contact me at 202.494.5133 or ljacobson@bcse.org if you have any questions.

Sincerely,



President
Business Council for Sustainable Energy

⁸ https://www.se.com/us/en/download/document/PR-13Nov2018-Bowery_Microgrid

⁹ https://www.se.com/us/en/download/document/PR-29Jan2020-fifth_season

¹⁰ <https://www.appharvest.com>

¹¹ <https://www.fastcompany.com/90360546/this-startup-is-going-to-put-one-of-the-worlds-largest-sustainable-greenhouses-in-coal-country>

¹² <https://www.plenty.ag>