

BUSINESS COUNCIL FOR SUSTAINABLE ENERGY AND CLEAN ENERGY BUSINESS NETWORK PROVISIONS FOR CONSIDERATION, FARM BILL REAUTHORIZATION

Reauthorization of the Farm Bill is expected to encompass roughly a half-trillion dollars in spending and will address such topics as the crops farmers choose to grow and the kinds of food low-income families can afford. There are also several areas for consideration in the Farm Bill which could address clean energy and climate change and which would assist agriculture-based entrepreneurs in launching initiatives to generate jobs and economic development. According to the U.S. Environmental Protection Agency (EPA), agriculture is responsible for about 11 percent of U.S. climate pollution, with emissions gradually rising since 1990.

The Inflation Reduction Act (IRA) allocated approximately \$20 billion of climate-related funding to preexisting Farm Bill programs.

Below is an overview of provisions supported by Business Council for Sustainable Energy (BCSE) and Clean Energy Business Network (CEBN) members for consideration in the Farm Bill. As a diverse coalition, not all BCSE and CEBN members endorse or take a position on the issues listed below. For further information, please contact Ruth McCormick at rmccormick@bcse.org.

ESTABLISH NEW TAX CREDITS AND BONDS FOR RURAL COMMUNITIES

1. *Congress should include in the Farm Bill the bipartisan [American Infrastructure Bonds \(AIBs\) Act, S.1695](#) to create a new class of "direct pay" taxable municipal bonds to boost investment in infrastructure and other public projects by providing affordable access to the large taxable bond market.*

Background

The AIBs Act would support infrastructure projects across the country, especially in rural and underserved communities, and would improve upon the model of Build America Bonds (BABs) that were issued after the 2008 financial crisis to attract more investment in public infrastructure.

State and local governments would be allowed to issue taxable bonds for any public expenditure that would be eligible to be financed by tax-exempt bonds. These bonds could be used to support a wide range of infrastructure projects, including roads, bridges, water systems, and broadband internet. AIBs could also be used by public entities to prepay for long-term energy contracts to keep energy rates low for consumers.

The bonds would be modeled as a "direct-pay" taxable bond, with the U.S. Treasury paying a percentage of the bond's interest to the issuing entity to reduce costs for state and local governments. These payments would be issued for projects at 28 percent of the bond's interest.

2. *Congress should establish an ammonia tax credit to cover the cost spread between fossil and renewable ammonia (approximately \$500/ton).*

3. Congress should include in the Farm Bill the [Renewable Natural Gas Incentives Act, H.R.2448](#) to establish a \$1.00/gallon tax credit on the sale or use of Renewable Natural Gas (RNG) as a transportation fuel.

Background

Natural gas trucks save drivers and fleets money each year they are in use compared to diesel trucks, but they cost approximately \$65,000 more per vehicle. A \$1.00/gallon tax credit on the sale or use of RNG as a transportation fuel would help to offset the cost of investing in new, clean vehicles and ensure the oldest, dirtiest diesel trucks are taken off our roads. This would be in line with tax credits allowed for comparable fuels with less environmental benefits.

RNG, or biogas, is gas produced from methane emitted through the decomposition of animal manure, food waste, forest management waste, wastewater sludge, and garbage. RNG captures this methane and redirects it away from the environment, repurposing it as a renewable energy source. RNG is easily stored, distributed, and replenished. Once scrubbed of its impurities, RNG can be injected into the existing global natural gas distribution network. RNG is affordable and easily used in existing systems and vehicles today. In 2022, 69 percent of natural gas motor fuel dispensed in the United States was from renewable sources.

ENACT THE BIOMASS FOR TRANSPORTATION FUEL ACT

1. Congress should include in the Farm Bill the Biomass for Transportation Fuel Act, [H.R.7609](#) and [S.3899](#), being led by Congressman John Garamendi (D-CA-08) and Senator Angus King (I-ME), which would implement the eligibility for electricity generated from renewable biomass, including biogas, under the renewable fuel standard (RFS) program provided by Congress in 2007.

Background

Biofuels are a key part of the clean energy industry's broad portfolio of technologies and are instrumental to decarbonizing the transportation sector and advancing the energy transition. BCSE praises EPA for increasing the renewable fuel volumes for 2023, 2024, and 2025, recognizing the growth of RNG in the U.S. transportation sector. EPA must finalize the long-awaited proposal to incorporate electric renewable identification numbers (eRINs) for all eligible feedstocks into the RFS and align the development of the biofuels industry with the Administration's decarbonization goals. EPA should also expand feedstock eligibility to include fuel derived from federal land at high risk of forest fire.

REAUTHORIZE AND REVISE THE RENEWABLE ENERGY FOR AMERICA PROGRAM (REAP)

1. Congress should reauthorize and revise REAP. Examples of areas to be addressed include:
 - a. Congress should extend mandatory funding for the U.S. Department of Agriculture (USDA)'s REAP that would supplement funding provided by the IRA. (Funding

authorized by the 2018 Farm bill comes to \$50 million per year.) USDA should also bolster means to ensure funding for diverse renewable energy technologies.

- b. The IRA and 2023 Farm Bill language around REAP should be available to cover up to 50 percent of project costs. Further, funding authorized by both the IRA and the 2023 Farm Bill should allow for maximum grants for Renewable Energy Systems (RES) up to \$1 million.*
- c. Congress should also consider expanding types of clean energy projects eligible for REAP grants, such as small-scale ammonia production (i.e., four tons/day production capacity or less) and equipment purchases.*

Background

REAP has provided the means for agriculture-based entrepreneurs to launch initiatives to generate jobs and economic development – from wind, geothermal, hydro, and solar power; to biogas and advanced biofuels; to biopower, bio-based products, renewable chemicals, and energy efficiency.

REAP has historically been oversubscribed. Robust funding for REAP is needed to increase jobs, economic relief, and climate change mitigation and to bring the benefits of energy efficiency and clean energy to more farmers, ranchers, and small businesses in rural communities.

REAUTHORIZE AND FUND THE RURAL ENERGY SAVINGS PROGRAM (RESP)

- 1. Congress should provide robust funding for the RESP to support rural utilities as they seek to assist farmers, ranchers, and small businesses in rural communities to be more energy-efficient and to reduce energy costs.*

Background

The RESP provides loans to rural utilities and other companies who supply energy efficiency loans to qualified consumers to implement durable cost-effective energy efficiency measures. Eligible applicants under the RESP include current and former USDA Rural Utility Service (RUS) borrowers, subsidiaries of current or former RUS borrowers, and entities that provide retail electric service needs in rural areas. Funds may be used for the purpose of implementing energy efficiency measures to decrease energy use or costs for rural families and small businesses.

ENHANCE FARM BILL DEVELOPMENT PROGRAMS

- 1. Congress should create incentives to catalyze distributed ammonia production, lower the cost of ammonia when natural gas prices are high, create lower carbon-intensity fertilizer, allow farmers to participate in energy markets (e.g., sale of ammonia to utilities and energy*

storage services), create more predictable ammonia prices, and increase reliability of ammonia supply. Incentives should:

- a. Provide development funds for small-scale ammonia technology providers to enable increased product availability (must meet Buy America requirements, \$500 million available over three years).*
- b. Provide development funds for new and more efficient ammonia production technologies (\$500 million over three years).*

Background

Ammonia is a critical fertilizer used throughout the United States and the world to enable the food production we have today. It can also serve as a hydrogen energy carrier that can take advantage of intermittent renewable energy and store it for later use. The current large-scale production method using fossil fuels presents cost and logistical challenges for farmers and does not allow for participation in new energy markets that can utilize ammonia.

Large-scale ammonia production facilities have the capacity to produce several thousand metric tons of ammonia per day. This ammonia is produced using natural gas and is distributed by trucks, rail, ships, and pipelines to all corners of the country and the globe. It is typically stored in facilities that serve farming co-ops. Therefore, the cost of natural gas at any given time greatly influences the cost of ammonia. The transportation costs are significant, especially for farmers that are located far from one of the few ammonia production facilities.

Renewable electricity (wind and solar) is routinely located on or near farmland and can provide energy to produce low-carbon hydrogen through electrolysis of water, which is the main feedstock for ammonia. However, small-scale ammonia production technology is not readily available, and the cost of ammonia produced with renewable hydrogen is still significantly more expensive than fossil ammonia even with the new hydrogen production tax credit (PTC) enabled by the IRA.

REFINE AND GROW PROGRAMS FROM THE 2018 FARM BILL TO SUPPORT RURAL GREEN JOBS AND RESILIENCE

- 1. Congress should authorize specific incentives in the Environmental Quality Incentives Program (EQUIP) for waste management practices. These incentives would provide significant value to smaller and rural farming operations and should include manure management, composting and waste stream collection, and logistics for hub and spoke collection infrastructure. EQUIP is administered by the Natural Resources Conservation Service (NRCS) and offers financial assistance to farmers and landowners to implement conservation practices that improve soil health, water quality, and waste management.*
- 2. Congress should more specifically articulate manure and other waste stream management practices in the Conservation Stewardship Program (CSP). The CSP provides financial*

incentives to farmers who actively manage and improve their agricultural lands in ways that benefit the environment. While not exclusively focused on waste management, the program may support practices that enhance waste management, water quality, nutrient recycling, and soil health.

3. *Congress should broaden the Biomass Crop Assistance Program (BCAP) to support the establishment and production of energy-eligible byproducts/waste streams of agricultural processes – for example, by incentivizing the collection and preparation for energy purposes of agricultural residues including hemp, corn, and wheat crops. The BCAP encourages the establishment and production of dedicated energy crops for bioenergy. It provides financial assistance to farmers and landowners for growing biomass crops, such as switchgrass and miscanthus, which can be used as feedstock for biofuel and biopower production.*
4. *Congress should specifically direct financial support to biorefineries associated with biomass gasification and anaerobic biodigesters if these can fit within the definitions of biorefineries and bioproducts in the Biorefinery Assistance Program (BAP). BAP offers loan guarantees for the development, construction, and retrofitting of commercial-scale advanced biofuel and renewable chemical production facilities.*
5. *Congress should connect feedstocks such as native plantings, perennial grasses, and trees to incentivize/highlight biomass gasification applications in the Conservation Reserve Program (CRP). These plantings contribute to carbon sequestration and provide biomass feedstock for bioenergy production. The CRP has supported the establishment of these types of diverse native plantings on environmentally sensitive agricultural land.*
6. *Congress should expand and improve the Inter-Agency Biogas Opportunities Task Force. Language was included in the conference report to the 2018 Farm Bill directing USDA, EPA, and the U.S. Department of Energy (DOE) to establish the Biogas Opportunities Task Force, building upon the pre-existing Biogas Opportunities Working Group. The Task Force is composed of the head of each Federal office responsible for biogas research or biogas system financing, including a representative from the above agencies as well as the National Renewable Energy Laboratory. Requests for the expansion and improvement of the Task Force include:*
 - a. *Regular Task Force participation of industry stakeholders should be facilitated and extended. As stated in the 2018 bill's conference report, the Task Force will have one or more representatives of state or local governments, one or more non-governmental or industry stakeholders, and a community stakeholder. The Task Force will help drive research, collaboration, innovation, education, outreach, and deployment of anaerobic digestion technologies. These technologies are turning agricultural challenges into opportunities by converting manure and other agricultural wastes into RNG, nutrient-rich soil amendments, and fertilizers, among other things. Industry representatives should also participate in the Task Force, and*

Congress should provide oversight to ensure USDA implements a requirement for industry participation.

- b. A staff member from the White House Office of Domestic Climate Policy should also be included as an official liaison to the Biogas Opportunities Task Force. Routine White House staff participation in Task Force convenings will help facilitate a “whole-of-government” approach to growing the RNG industry pursuant to U.S. clean energy and decarbonization goals. It will signal to all relevant stakeholders – including industry, state and local governments, non-governmental organizations, and community leaders – that there is high-level political “buy-in” associated with the Task Force’s activities.*
- c. A representative from the EPA Climate Change Division or the DOE Office of International Affairs should also be included on the Biogas Opportunities Task Force to coordinate exchange with U.S. allies, particularly European Union member states, and to better understand and share know-how on the role of RNG in international energy security and decarbonization strategies. More specifically, the EPA Climate Change Division would facilitate exchange of information on the policy, regulatory, legal, and financial mechanisms that support the sustainable international growth of industry – particularly in developing and less-developed countries.*

SUPPORT RESEARCH AND PROGRAMS TO IMPROVE SUSTAINABILITY ON AMERICAN FARMS

While not specifically energy related, BCSE and CEBN suggest consideration of the following legislation to be included in the Farm Bill to support research and programs to improve water quality, use less water, reduce or sequester greenhouse gas emissions, improve soil health, increase renewable energy, reduce food loss and waste, and improve sustainability on American farms and in rural areas:

1. The [Advancing Cutting Edge \(ACE\) Agriculture Act, S.834](#), sponsored by Senator Michael Bennet (D-CO), to reauthorize, expand, and adequately fund the Agriculture Advanced Research and Development Authority (AgARDA) to invest in research and development to produce an abundant, safe, and affordable food supply.
2. The [Sustainable Agriculture Research Act, H.R.3844](#), introduced by Congressmen Joe Neguse (D-CO-02) and Mike Flood (R-NE-01), to amend the AgARDA to add goals that explicitly address carbon sequestration and reduction of emissions.
3. The [Agriculture Resilience Act, S.1016](#), introduced by Senator Martin Heinrich (D-NM) to focus research on soil health, pasture-based livestock, farm renewable energy, and food loss waste, as well as actions to reduce greenhouse gas emissions in the agriculture sector.
4. The [Advancing Research on Agricultural Climate Impacts Act, S.2241](#), introduced by Senators Tina Smith (D-MN) and Todd Young (R-IN) to invest in innovative methodologies and tools to measure, monitor, report, and verify (MMRV) soil carbon; a national monitoring network;

demonstration projects; and predictive modeling and to improve understanding about agriculture's potential to store emitted carbon and to empower farmers and ranchers to choose the best practices for their unique operations.

5. *The [Converting Our Waste Sustainably \(COWS\) Act, H.R.4327](#), introduced by Congressman Jim Costa (D-CA-21) to create a voluntary program to help livestock producers install equipment and infrastructure for dry manure handling systems that achieve environmental benefits, including improving soil and water quality and reducing methane and nitrous oxide emissions.*

FOSTER U.S. AGRICULTURE'S ROLE IN THE PRODUCTION OF SUSTAINABLE AVIATION FUEL

Sustainable Aviation Fuel (SAF), which can be produced from renewable biomass and agriculture-based feedstocks, presents an opportunity to expand U.S. markets for agricultural goods, bolster our nation's rural economy and provide a renewable, low-emission domestic energy supply for the aviation sector. The U.S. aviation sector is committed to increasing the production and use of SAF with a goal of achieving 3 billion gallons of SAF in 2030 and working closely with U.S. stakeholders across the value chain to increase SAF production.

The Farm Bill should recognize the integral role American farmers play in SAF development to strengthen American agricultural economic viability by incorporating the following:

1. *The Farm To Fly Act ([H.R. 6271/S. 3637](#)), introduced by Congressman Max Miller (R-OH-07) and Senator Jerry Moran (R-KS), would foster U.S. agriculture's role in the production of SAF through existing USDA programs. Specifically, the Farm to Fly Act would:*
 - a. *Affirm eligibility for SAF within current USDA Bio-Energy Programs, expanding markets for American agricultural crops through aviation bioenergy;*
 - b. *Facilitate greater collaboration on SAF among USDA mission areas and with the private sector partners; and*
 - c. *Affirm a "GREET" definition of SAF for USDA purposes to ensure accurate measurement of emission reductions.*
2. *The bipartisan Biomanufacturing and Jobs Act ([S.2452/H.R. 5134](#)), introduced by Senator Amy Klobuchar (D-MN) and Congressman Mark Alford (R-MO-04), and the Agricultural Biorefinery Innovation and Opportunity Act (Ag BIO Act; [S.2987/H.R.6413](#)), introduced by Senator Amy Klobuchar (D-MN) and Congressman Zachary Nunn (R-IA-15), would encourage federal procurement of biobased products, de-risk innovation for U.S. biomanufacturing and biorefining, support domestic renewable energy production, and strengthen biomanufacturing supply chains across the country.*

- a. *The Biomanufacturing and Jobs Act will boost market opportunities for biobased products from agricultural feedstocks. The legislation will enhance USDA's ability to promote bioproducts by improving the longstanding BioPreferred Program, encouraging federal procurement, and promoting American innovation to ensure America maintains its status as a leader in biomanufacturing.*
 - b. *The Ag BIO Act will strengthen USDA's Biorefinery, Renewable Chemical, and Biobased Product Manufacturing Assistance (9003) Program by expanding loan eligibility to better address the development of biofuels, renewable chemicals, and the biobased products sector.*
3. *Preservation of IRA conservation program investment and funding within the Farm Bill.*