

Introduction

Friends of the Earth U.S., on behalf of 2.8 million members and supporters in the United States, is pleased to present these comments in response to USDA's Request for Public Comment on the Executive Order on Tackling the Climate Crisis at Home and Abroad. We commend President Biden and the USDA for recognizing that agriculture is both a major driver of climate change but also an indispensable solution to climate change.

We are, however, concerned by the scope of USDA's questions and some of the implied assumptions in this request for public comment. We will respond to the questions in detail below, but we wish to flag a few of these overarching concerns first:

- 1) The administration appears to presuppose that *voluntary* actions are sufficient when it comes to addressing climate change in agriculture. While farmers must have a seat at the table and be instrumental in designing interventions, it is naive and dangerous to assume that all climate mitigation strategies for agriculture must be voluntary. What if the U.S. had taken this approach with fossil fuels and relied on oil and gas companies and consumers to voluntarily shift to clean energy? Why should industrial agriculture corporations receive special treatment relative to other climate change-causing industries? On the contrary, industrial agriculture must be subject to reasonable regulations that ensure clean air, clean water, healthy soil, disclosure of emissions, and other responsible uses of natural resources. Specific examples are included in responses to Question 1, Part D .
- 2) USDA's framing of "climate-smart agriculture" implies a narrow view that focuses only on *how* foods are produced and not the *types* of food that are produced. The United Nations Intergovernmental Panel on Climate Change and a growing body of peer-reviewed research have made it clear that we must look not only at production practices within crops but that we also must shift away from resource-intensive monocultures and industrial animal production to diversified agriculture.¹ USDA needs to look more broadly at how to initiate a just transition away from pesticide-intensive monocropping and factory farming toward diversified ecologically regenerative production of plant foods and a sustainable amount of pasture-based animal agriculture.
- 3) USDA rightly asks for comments regarding environmental justice and disadvantaged communities, but signals support for strategies that run directly counter to environmental justice and the well-being of disadvantaged communities, including biofuels, biogas from factory farms, biomass, and carbon markets. If USDA genuinely wants input from an environmental justice perspective, it should not ask *how* the agency can support biofuels, biogas, biomass, and carbon markets, but rather *whether* the agency should

¹ 2020 Intergovernmental Panel on Climate Change. (2020, January). *Climate Change and Land: An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*.
https://www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_Updated-Jan20.pdf

support these approaches. The answer will be that it should not. These strategies have a proven track record of harming frontline and BIPOC communities while failing to deliver meaningful emissions reductions, and irreversibly harming agricultural ecosystems.

- 4) The narrow framing of the request for comments neglects to consider the critical role of reducing consumption-based emissions from food. USDA can leverage its food procurement and nutrition programs to meet climate and environmental justice goals. USDA is the second largest food procurer in the federal government, buying billions of dollars of food each year. Right now, the majority of this purchasing power is directed toward buying meat and dairy from factory farming corporations that are a major driver of climate change.²

USDA should instead leverage its purchasing power to purchase from farmers using climate-smart agricultural practices, and independent and BIPOC producers, as well as purchasing plant-based foods with a low carbon footprint that are under consumed relative to recommendations in the *Dietary Guidelines for Americans*.³ The request for comments also neglects to consider how USDA could use the largest portion of its budget - for nutrition programs including SNAP, WIC, and school meals - to encourage and incentivize healthy and climate-friendly diets among program participants.

Please consider the aforementioned comments as USDA devises its broader approach to climate change, in addition to our responses to USDA's specific questions below.

In addition, we wish to make clear that our comments are not a comprehensive response to every question posed in USDA's request for comment. Our responses are limited in scope to subjects where Friends of the Earth U.S. has sufficient expertise. Regarding environmental justice and disadvantaged communities, we believe that support for these communities must be embedded in every program, initiative, and office at USDA. These comments do not cover every opportunity to do this, and we hope USDA will look to BIPOC-led organizations and farmers for additional recommendations to integrate and prioritize environmental justice.

1A1: How can USDA leverage *existing* policies and programs to encourage voluntary adoption of agricultural practices that sequester carbon, reduce greenhouse gas emissions, and ensure resilience to climate change?

Current subsidies and risk management policies encourage environmentally destructive monocultures and industrial-scale animal production that degrade our natural resources, hurt rural communities, and fuel climate change. We need a massive shift of farm subsidies and USDA programs to support diversified, ideally organic farms using ecologically regenerative

² Friends of the Earth. (2021). *USDA Foods Policy Brief*. <http://foe.org/wp-content/uploads/2021/04/USDA-Foods-Policy-Brief-2021-v8.pdf>

³ U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2020–2025). *Dietary Guidelines for Americans* (No. 9). <https://www.dietaryguidelines.gov>

practices that build soil carbon and which reduce pesticide use. To facilitate this transition, USDA should:

a) Expand and improve conservation programs

USDA should work with Congress to expand the Conservation Reserve Program (CRP) from 21 million acres to 50 million acres, prioritize and expand the CLEAR30 pilot program, increase annual payments and implement climate incentives on CRP land. USDA should also work with Congress to expand funding for and retool the Environmental Quality Incentives Program and the Conservation Stewardship Program to increase the adoption of climate-friendly practices, as defined in the Climate Stewardship Act of 2019, Sec. 102(b)(2) and Sec. 103(a)(2)(B). Additional funding should be limited to these practices.

In addition to the inclusion of additional funding for climate-friendly practices in EQIP and CSP, USDA should work with Congress to:

- Make Concentrated Animal Feeding Operations (CAFO) ineligible for conservation payments and require corporate integrators and meatpackers to include emissions from these operations in any future reporting of corporate GHG emissions (see section 1Db)
- Increase payments for the transition to certified organic production
- Create priority set asides for BIPOC farmers and ranchers
- Strengthen Conservation Compliance to ensure that implementation of integrated, sustainable farming practices that sequester carbon and protect soil health, water quality, and wildlife habitat are mandatory for participation in farm safety net programs including crop insurance.

USDA should work with Congress to dramatically increase funding for Conservation Technical Assistance and ensure adequate staff and training at all NRCS offices to assist with participation in USDA conservation programs. The agency should also work with Congress to increase funding for other technical assistance and land access programs such as the Regional Conservation Partnership Program and the Conservation Reserve Program - Transitions Incentive Program to increase participation and facilitate land access for new and socially disadvantaged producers.

b) Expand and improve funding and support for USDA organic programs and certified farmers

Research demonstrates that organic agriculture sequesters approximately 25% more carbon in soil and achieves deeper and more persistent carbon storage, mitigates GHG emissions, reduces the environmental impacts of fertilizers and pesticides, and builds resilience to a changing climate in our farms, ranches, rural communities, and food systems.⁴ Organic

⁴ Ghabbour, E. A., Davies, G., Misiewicz, T., Alami, R. A., Askounis, E. M., Cuzzo, N. P., Filice, A. J., Haskell, J. M., Moy, A. K., Roach, A. C., & Shade, J. (2017). National Comparison of the Total and Sequestered Organic Matter Contents of Conventional and Organic Farm Soils. *Advances in Agronomy*, 1–35.

production prohibits the use of synthetic nitrogen fertilizers, the production of which currently accounts for as much as 10 percent of global agricultural GHG emissions.⁵ Research finds that organic systems require 15 percent less energy than conventional systems on average, with some using as much as 70 percent less energy than their conventional counterparts.⁶ In addition, organic farming helps to protect soil organisms that play a role in carbon sequestration. The most comprehensive review to date found that pesticides commonly used in conventional agriculture negatively impact soil invertebrates such as springtails, beetles, earthworms, ants, and solitary ground-nesting bees in 70.5% of cases.⁷ These ecosystem engineers play a critical role in sequestering carbon and combating climate change. Significant investments should be made in organic agriculture to advance its climate change mitigation potential. USDA should work with Congress to:

- Increase EQIP payments for organic transition, funding for the Organic Certification Cost Share Program, and for the National Organic Program.
- Significantly increase funding for the Organic Research and Extension Initiative (OREI), Sustainable Agriculture Research and Education program (SARE), Agriculture and Food Research Initiative (AFRI), and Organic Transitions Program (ORG) with a focus on effective climate change strategies and climate-resilient seeds and animal breeds.
- Provide funding and support to train public university extension, NRCS, and other agency personnel on organic agriculture.

c) Leverage USDA's food purchasing power and oversight of nutrition programs to meet climate goals

USDA should leverage its existing food purchasing authority through AMS, FSA, and CCC to meet climate and environmental justice goals. USDA is the second largest food procurer in the federal government, buying billions of dollars of food each year. Right now, the majority of this purchasing power is directed toward buying meat and dairy from factory farming corporations that are a major driver of climate change. For example, from FY 2017-2019, 68% of spending on the USDA Foods Program went toward animal products. Those products accounted for 98% of the emissions associated with USDA Foods.⁸ Specifically, USDA should:

- Incentivize farmers to adopt climate-smart agricultural practices, as defined in the Climate Stewardship Act, by creating set-asides and/or price preferences for producers using climate-smart practices, especially organic producers.

<https://doi.org/10.1016/bs.agron.2017.07.003>; Tautges, N. E., Chiartas, J. L., Gaudin, A. C. M., O'Geen, A. T., Herrera, I., & Scow, K. M. (2019). Deep soil inventories reveal that impacts of cover crops and compost on soil carbon sequestration differ in surface and subsurface soils. *Global Change Biology*, 25(11), 3753–3766.
<https://doi.org/10.1111/gcb.14762>

⁵ Scialabba, N. E. H., & Müller-Lindenlauf, M. (2010). Organic agriculture and climate change. *Renewable Agriculture and Food Systems*, 25(2), 158–169. <https://doi.org/10.1017/s1742170510000116>

⁶ International Federation of Organic Agriculture Movements. (2004). *The Role of Organic Agriculture in Mitigating Climate Change*. <http://re.indiaenvironmentportal.org.in/files/ClimateStudy%20IFOAM%20Screen.pdf>

⁷ Gunstone, T. G., Cornelisse, T. C., Klien, K. K., Dubey, A. D., & Donley, N. D. (2021). Pesticides and Soil Invertebrates: A Hazard Assessment. *Frontiers in Environmental Science*, 1.
<https://doi.org/10.3389/fenvs.2021.643847>

⁸ Friends of the Earth. (2021). *USDA Foods Policy Brief*.

<http://foe.org/wp-content/uploads/2021/04/USDA-Foods-Policy-Brief-2021-v8.pdf>

- Require its vendors to disclose supply chain emissions and establish deforestation-free supply chains by 2025.
- Disqualify vendors with repeated violations of federal and state environmental laws, as well as for violations of labor and animal welfare laws.
- Create a set-aside for purchasing from socially disadvantaged farmers.
- Reduce its purchases of carbon-intensive animal foods and increase its purchases of low-carbon plant-based foods.

The seven billion school meals served each year through USDA's meal programs could have a significant role in achieving climate goals. Fortunately, more climate-friendly school meals also mean healthier school meals since low-carbon foods like fruits, vegetables, legumes, tofu, and seeds are typically under consumed while high-carbon foods like meat and cheese are overconsumed relative to the *Dietary Guidelines for Americans* recommendations.⁹ Diets high in plant-based foods are associated with a lower risk of heart disease, diabetes, obesity, and some forms of cancer.¹⁰ Improving the nutritional quality of school meals is also an effective point of intervention to mitigate racial health disparities since students of color disproportionately rely on school meals as a primary source of nutrition.¹¹ Specifically, we recommend that USDA:

- Expand offerings of non-GMO, plant-based sources of protein available through the USDA Foods Program and make minimally processed plant-based entrees available through USDA Foods processing.
- Provide technical assistance and resources to support schools in serving plant-based entrees, reducing food waste, and switching to an offer vs. serve model. The California Department of Education's web page: "Vegetarian Meal Options in Child Nutrition Programs" can serve as a model.
- Update regulations to remove barriers to serving plant-based entrees and ensure nutrition standards are consistent with the most recent *Dietary Guidelines for Americans*.
- Rename the Meat/Meat Alternate category the Protein Category.
- Advocate to dramatically expand funding for kitchen equipment and the Farm to School Program, as well as to increase meal reimbursement rates and provide universal free meals.

⁹ U.S. Department of Agriculture and U.S. Department of Health and Human Services. (2020–2025). *Dietary Guidelines for Americans* (No. 9). <https://www.dietaryguidelines.gov>

¹⁰ Marshall, P., & Marinova, D. (2019). Health Benefits of Eating More Plant Foods and Less Meat. *Environmental, Health, and Business Opportunities in the New Meat Alternatives Market*, 38–61. <https://doi.org/10.4018/978-1-5225-7350-0.ch003>; Petersen, K. S., Flock, M. R., Richter, C. K., Mukherjea, R., Slavin, J. L., & Kris-Etherton, P. M. (2017). Healthy Dietary Patterns for Preventing Cardiometabolic Disease: The Role of Plant-Based Foods and Animal Products. *Current Developments in Nutrition*, 1(12), cdn.117.001289. <https://doi.org/10.3945/cdn.117.001289>

¹¹ Isong, I. A., Rao, S. R., Bind, M.-A., Avendaño, M., Kawachi, I., & Richmond, T. K. (2018). Racial and Ethnic Disparities in Early Childhood Obesity. *Pediatrics*, 141(1), e20170865. <https://doi.org/10.1542/peds.2017-0865>; Myers, A. M. C., & Painter, M. A. (2017). Food insecurity in the United States of America: an examination of race/ethnicity and nativity. *Food Security*, 9(6), 1419–1432. <https://doi.org/10.1007/s12571-017-0733-8>; Mlilo, M. M., & Waterman, C. W. (2020, July 15). *Healthier school food is key to fighting COVID-19 and systemic racism*. Friends of the Earth. <https://foe.org/blog/healthier-school-food-is-key-to-fighting-covid-19-and-systemic-racism/>

The largest component of USDA's budget - SNAP - is also a significant opportunity for USDA to achieve climate goals. Again, a healthy diet pattern (low in red and processed meats, sugar, saturated fat and high in fruits, vegetables, whole grains, nuts, seeds, and legumes) is also a climate-friendly one. USDA should study its points of leverage to encourage and incentivize diets that are aligned with the *Dietary Guidelines* in SNAP participants, for example by expanding the ability to use benefits at farmers markets, utilizing fruit and vegetable incentive programs, and by focusing SNAP-Ed programming on healthy and climate-friendly diets.

1A2: What new strategies should USDA explore to encourage voluntary adoption of climate-smart agriculture and forestry practices?

USDA should initiate a just transition away from pesticide-intensive, genetically engineered monocropping and factory farming toward diversified, ecologically regenerative production of plant foods and a sustainable amount of pasture-based animal agriculture.

The United Nations Intergovernmental Panel on Climate Change and a growing body of peer-reviewed research have made it clear that we must look not only at production practices within crops but that we also must shift away from resource-intensive monocultures and industrial animal production to diversified agriculture and table crops.¹² Specifically, USDA should:

- Conduct a comprehensive study across all programs to examine the ways the agency subsidizes or otherwise incentivizes production of carbon-intensive, industrially produced meat and dairy, and then make recommendations for realigning subsidies and incentives to support climate-friendly agriculture.
- Leverage its purchasing power to meet climate goals (see section 1A1(b)).
- Implement provisions from Senator Booker's Farm System Reform Act.
- Place a moratorium on Farm Service Agency guaranteed loan program backing of new or expanding factory farms.

1C: How can USDA help support emerging markets for carbon and greenhouse gases where agriculture and forestry can supply carbon benefits?

USDA should not support the creation of, or facilitate participation in, soil carbon markets or any other carbon offset-based market. Soil carbon markets will neither help mitigate climate change, nor provide a meaningful benefit to small-to-medium-sized and socially disadvantaged producers. Additionally, USDA should study and work with Congress to prevent multinational corporations with extreme market concentration from benefiting from any future soil carbon trading systems.

¹² 2020 Intergovernmental Panel on Climate Change. (2020, January). *Climate Change and Land: An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*.
https://www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_Updated-Jan20.pdf

American agriculture currently faces unprecedented consolidation across the industry, from seed suppliers to retailers. The number of farms operating more than 2,000 acres of cropland has quadrupled since the 1980s.¹³ The U.S. lost 100,000 farms from 2012 to 2018. Much of this consolidation has been driven by low commodity prices, economies of scale, and market facilitation and/or disaster payments primarily benefiting the largest producers.¹⁴

All of these factors combine to signal that soil carbon markets will only benefit the largest producers. The high cost of credit verification, the potential inputs required, and the need for technical assistance can collectively prevent a large swath of producers from accessing these markets categorically. An oversupply of credits and economies of scale can ensure that even if every producer in the country participated, only the largest farms will earn substantial profit. The data platforms many producers will be forced to use, discussed further below, will be designed to derive value for the largest producers as well.

In addition to challenges with the current agricultural economy, offset markets represent an environmental and environmental justice disaster, both within and outside the U.S. food system, and are fundamentally incompatible with a “fair share” approach of limiting global temperature rise to 1.5 degrees Celsius, let alone 2 degrees Celsius.

Less than a decade remains for the world to have a reasonable chance at limiting global temperature rise to 1.5 degrees Celsius and avoiding the worst impacts of climate change. With the largest economy in the world and the greatest historical emissions of greenhouse gases, the U.S. must commit to doing its fair share of the global effort to limit global temperature rise to 1.5 degrees Celsius. This effort must be carried out in a manner that prioritizes the dignity, well-being, and safety of frontline communities and the most vulnerable in both the U.S. and around the world. There is absolutely no room in the remaining global carbon budget to allow for *any* offsetting of U.S. emissions, and thus there is no place whatsoever for soil carbon markets within a fair, justice-based, and science driven approach to the climate crisis by the U.S. Greenhouse gas reductions must be absolute reductions without any possibility of offsets. The total U.S. fair share contribution to global mitigation is equivalent to the reduction of at least 195% of U.S. greenhouse gas emissions below 2005 levels by 2030 (i.e., 14 gigatonnes annually by 2030). (This commitment includes a reduction of at least 70% domestically by 2030 compared to 2005 levels, as well as the equivalent of a further 125% reduction to be undertaken by financial and other forms of international support to developing countries.)

¹³ MacDonald, J. M., Hoppe, R. H., & Newton, D. N. (2018). *Three Decades of Consolidation in U.S. Agriculture*. <https://www.ers.usda.gov/webdocs/publications/88057/Eib-189.Pdf>.

<https://www.ers.usda.gov/webdocs/publications/88057/eib-189.pdf>

¹⁴ Fremont, A. W. S. (2019, November 27). “*They’re Trying to Wipe Us Off the Map.*” *Small American Farmers Are Nearing Extinction*. Time. <https://time.com/5736789/small-american-farmers-debt-crisis-extinction/>; *New USDA Records Show Trade Bailout and Coronavirus Payments Went to the Largest Farms*. (2020, September 22). Environmental Working Group.

<https://www.ewg.org/news-insights/news/new-usda-records-show-trade-bailout-and-coronavirus-payments-went-large-st-farms>

Previous years have been wasted at the UNFCCC and elsewhere trying to negotiate carbon markets over the objections of many developing countries and civil society. More than a decade of carbon trading has shown that carbon markets have been gamed to benefit polluters, failed to reduce emissions, and even led to increased emissions in many cases. In 2016, the European Commission found that only 2% of projects in the United Nations' premier offsetting scheme, the Clean Development Mechanism (CDM), had a high likelihood of ensuring emissions reductions.¹⁵ In 2010, the Chicago Climate Exchange, a voluntary offset program in the U.S., collapsed as a result of too many credits and not enough buyers, leaving farmers and ranchers without support for their efforts.

Carbon markets have exacerbated pollution hot-spots in low-wealth communities and BIPOC communities. In California, a 2016 [review](#) found that cap and trade sources are disproportionately found in BIPOC communities. Worldwide, carbon markets have led to human rights [abuses](#), violations of the rights of Indigenous Peoples and forest dwellers, land rights conflicts and land grabs, and environmental devastation.

Further, carbon markets have been plagued by fraud, creative accounting, and a lack of environmental integrity. They also come with high regulatory and financial stability risks. Carbon prices have remained extremely low as governments have auctioned quotas cheaply to appeal to the fossil fuel industry.¹⁶

Offset markets allow polluters to greenwash their operations, from CAFOs exempt under the Clean Air and Water Acts to urban interior power plants predominantly found in BIPOC communities and other pollution hotspots, without meaningfully reducing their own reductions. Carbon sequestration and emissions reductions should occur alongside, not instead of, reductions in other sectors.

1D: What data, tools, and research are needed for USDA to effectively carry out climate-smart agriculture and forestry strategies?

a) Protect producer data and prevent agribusiness from using such data to fuel consolidation and manipulate markets

USDA should work with Congress to develop regulations that protect producer data and prevent the agribusinesses already wielding near-monopolistic power and collecting farm data from using it to fuel further consolidation or manipulate markets, for example, by agrochemical companies and big data companies.

One of the challenges with compensating farmers for carbon sequestration in soil carbon markets is verifying the amount of carbon sequestered. Coincidentally, third party verification of

¹⁵ Öko-Institut. (2016). *How additional is the Clean Development Mechanism?* Oeko.De. https://ec.europa.eu/clima/sites/clima/files/ets/docs/clean_dev_mechanism_en.pdf

¹⁶ Ball, J. (2018). *Why Carbon Pricing Isn't Working: Good Idea in Theory, Failing in Practice*. Stanford Law School. <https://law.stanford.edu/publications/why-carbon-pricing-isnt-working/>

carbon sequestration may act as one of the principal drivers of consolidation and/or barriers to entry in agriculture. Furthermore, it is most certainly likely to provide corporations with extreme market power and even more leverage over farm inputs, production decisions, and markets.

USDA should work with Congress to :

- Develop regulations to ensure all farmer data is owned by the farmer.
- Develop regulations that ensure a farmer can remove and/or transfer their data to any other provider, while ensuring their data is no longer used in aggregated data.
- Develop regulations to create clearinghouses within digital agriculture providers, modeled after the Health Insurance Portability and Accountability Act, to avoid conflicts of interest within companies that sell inputs and services as well as digital agriculture platforms.

Data collected from a farm, entered into an algorithm and then used to offer specific advice and/or input prescriptions via a digital application can be broadly defined as digital agriculture. In an already high-consolidated industry, digital agriculture may be the largest driver of future consolidation.

Digital agriculture poses two major challenges that are integral to its use in soil carbon markets.

First, the reliance on digital agriculture will fundamentally exclude a number of producers from participating in certain markets. Potential third party carbon credit verifiers like Bayer have a clear model for “climate smart” agriculture. This model, contingent on a producer using their data platform, Climate FieldView, and following its prescriptions, is based around the use of Roundup or other synthetic herbicides to knock down cover crops. If a producer relies on Bayer to enter a carbon market, and Bayer requires the use of synthetic herbicides to qualify, any producer who chooses not to use these chemicals, be they Indigenous communities or organic producers, will not have access to that market. In addition, many of these data platforms are built for large monocultures and other large commodity crop operations. They may either be less effective or simply unavailable to smaller producers.

Second, the mass collection of farm data without significant protections may also lead to farm and agribusiness consolidation. Digital agriculture providers are considering a number of tools that can be used to discriminate against certain producers. Bayer’s pilot “outcome-based pricing” would cut into farmer profits based on the final value of their crop when using Bayer’s digital agriculture platform. The company also came under fire for sharing its data with a company that was using it to kick farmers off their land.

Digital agriculture providers have tremendous power to promote certain kinds of agriculture while making it easier to externalize the cost of farming at a large scale, further exacerbating economies of scale and benefitting the largest producers. There are also virtually no statutory limits to the ways these companies can use farmer data.

b) Track emissions and mitigate pollution from Confined Animal Feeding Operations

We cannot manage what we cannot measure. USDA and EPA must track - and regulate - emissions from CAFO, which we know are a major driver of climate change, air pollution, and water pollution, and which disproportionately harm BIPOC Communities.¹⁷

Specifically, the administration should:

- Regulate CAFOs under the Clean Air Act, in part by developing mechanisms to better monitor air emissions and collect air emissions data to improve understanding of community exposure risks.
- Finalize Emission Estimation Methods (EEMs) using all available peer-reviewed data, require Animal Feeding Operations (AFOs) to seek Clean Air Act permits if they emit above threshold amounts of pollutants according to the EEMs, and rescind the rule exempting AFOs from reporting hazardous emissions.
- Conduct systematic planning for future development of a more comprehensive study or model to develop more accurate EEMs. This plan should be developed through a transparent process with input from expert stakeholders including researchers.
- Regulate methane emissions from industrial hog and dairy facilities under section 111 of the Clean Air Act.

Current exemptions under the Emergency Planning and Community Right to Know Act (EPCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) deprive communities of crucial information about releases of dangerous air pollution from animal waste at CAFOs, including ammonia and hydrogen sulfide— two highly toxic gases, exposure to which can cause sickness and even death.

The administration should:

- Rescind all versions of its guidance and rules exempting CAFOs from reporting under EPCRA and CERCLA. .

c) Implement and enforce regulatory oversight of all genetic engineering, including gene editing

Many of these new gene-edited applications will have direct, and potentially harmful, impacts on soil health and may encourage increased pesticide use. All genetic engineering techniques should fall within the scope of government regulatory oversight of genetic engineering and genetically modified organisms.

2A: 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?

¹⁷ University of Michigan, Center for Sustainable Systems. (2020). *Environmental Justice Factsheet* (Pub. No. CSS17-16.). http://css.umich.edu/sites/default/files/Environmental%20Justice_CSS17-16_e2020.pdf

The USDA should not encourage greater use of biofuels for transportation, “sustainable” bioproducts (including wood products), and “renewable” energy. These are rarely sustainable or renewable. Instead, the USDA should utilize programs, funding, and financing capabilities through a proforestation framework. The forestry and factory farm gas (i.e., biogas) industries are devastating to local ecologies and community health. An important step towards the reorientation to a proforestation lens would be for the USDA to participate in facilitating a just transition from industrial forestry and wood production. Utilization of bioenergy is also not a solution to the climate crisis (see 2C).

2B: How can incorporating climate-smart agriculture and forestry into biofuel and bioproducts feedstock production systems support rural economies and green jobs?

The USDA should not support or encourage biofuel and bioproducts feedstock production systems. These industries do not create thriving rural economies nor green jobs. USDA should not approve or promote biofuel proposals such as genetically engineered trees, which will contaminate native forests, negatively impact the conservation of biodiversity, and threaten economic sovereignty of local communities. Wood pellet facilities provide a good example of the impact of biofuels and bioproducts. As with most biofuels, wood pellet facilities are disproportionately sited in low-wealth and BIPOC communities across the Southern Black Belt, these communities are the epicenter of U.S. industrial logging and wood production, making them ground zero for continued expansion of wood pellet production for electricity generation. The impacts of this industry on communities are detrimental health outcomes from air pollution and ecologically degraded forests and watersheds.

The attempt to connect “green jobs” to the forestry industry belies the fact that logging is one of the most dangerous jobs in the U.S. commercial tree plantations and wood product facilities (e.g., paper mills) are constantly exposing their workers to hazardous chemicals. This compares to the alternative opportunities for rural economies, such as outdoor recreation, which relies on standing forests and creates five times the number of jobs as the forest industry.

Other biofuel feedstocks, such as cellulosic biofuels from corn, create similar negative impacts on local communities and economies.

2C: How can USDA support adoption and production of other renewable energy technologies in rural America, such as renewable natural gas from livestock, biomass power, solar, and wind?

The USDA should not support biomass or “renewable natural gas” (aka factory farm gas) production. These are not clean energy sources, and result in significant carbon emissions and co-pollutants. Industrial-scale, wood-based biomass energy emits more carbon dioxide than coal per unit of energy generated. Wood pellet production facilities are frequently in or near low-wealth communities and/or BIPOC Communities. The resulting air and noise pollution add to already overburdened pollution loads, causing sharp increases in respiratory illnesses, allergies, sleep disruption, and other health problems. Biomass power stations release toxins

that threaten the respiratory and cardiac health of nearby communities. The health impacts from this air pollution are disproportionately borne by low-wealth and BIPOC communities. Additionally, supporting the infrastructure and industry required for biomass incinerators and factory farm gas will extend the sacrifice zones of these communities and the surrounding ecosystems.

The anaerobic digestion of animal wastes to create and concentrate methane (i.e., factory farm gas) puts local communities at risk from nitrogen from the wastewater contaminating surrounding soil and groundwater. In North Carolina, factory farm gas sites have caused harmful algal blooms, fish kills, and eutrophication in rivers and estuaries; respiratory ailments; pollution of drinking water sources; excessive noxious odors; soil contamination; and eye, nose, and throat irritation.

Additionally, directed factory farm gas projects require building out a network of in-ground pipelines to transport the onsite methane for processing and distribution. These pipelines leave the local communities at constant risk of additional pollution from rupture or leakage. Additionally, in the Southeast, the factory gas pipeline infrastructure often requires destruction of local ecosystems, such as wetlands, that provide important flooding protections for communities.

4C: How can USDA ensure that programs, funding and financing capabilities, and other authorities related to climate-smart agriculture and forestry practices are implemented equitably?

- a) Initiate a just transition away from industrially produced animal agriculture, the environmental, economic, and health hazards of which are disproportionately borne by Black, Indigenous, Latinx, and immigrant communities.**

Black, Indigenous, and People of Color are harmed the most by a food system that relies heavily on industrially produced animal products:

- Industrial animal agriculture accounts for 16.5 percent of global greenhouse gas emissions, making it a major driver of climate change.¹⁸ As is well documented, climate change will hurt BIPOC communities at home and abroad first and worst.
- BIPOC communities are significantly more likely to have inadequate access to healthy food and, relatedly, suffer from diet-related disease at higher rates than white people.¹⁹

¹⁸ Calculated using the 2017 online update to the FAO 2013 GLEAM assessment that estimates the livestock sector emitted 8.1 GT CO₂eq in 2010 (using 298 and 34 as global warming potentials for N₂O and CH₄, based on the IPCC 2014 report). The IPCC 2014 report estimates total anthropogenic GHG emissions in 2010 of 49 GT CO₂eq. See: FAO, Global Livestock Environmental Assessment Model (GLEAM) [online], Rome, www.fao.org/gleam/en/ and IPCC [Intergovernmental Panel on Climate Change], Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, [Core Writing Team, R.K. Pachauri & L.A. Meyer (eds.)], IPCC, Geneva, Switzerland (2014), http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf.

¹⁹ Myers, A. M. C., & Painter, M. A. (2017). Food insecurity in the United States of America: an examination of race/ethnicity and nativity. *Food Security*, 9(6), 1419–1432. <https://doi.org/10.1007/s12571-017-0733-8>

- CAFOs are more likely to be located in BIPOC communities, where they pollute air, land, and water, making people sick.²⁰
- BIPOC communities — including many immigrants and migrants — comprise the majority of meatpacking workers, who work some of the most dangerous jobs in our society without adequate compensation.²¹

As a result, USDA must:

- Initiate a just transition away from industrially produced animal agriculture and diets high in factory farmed meat as described in 1A2(a).
- Disclose information about and regulate air pollution, water pollution, hazardous substances, and greenhouse gas emissions from CAFOs as described in 1D(b).

b) Leverage USDA purchasing power to support BIPOC producers.

Right now, the majority of USDA's food purchasing contracts benefit the largest, white-owned food corporations. If USDA is committed to achieving racial equity across all of its programs, it must look at the billions of dollars of food it purchases each year and ensure BIPOC producers and vendors benefit equitably from these programs.

c) Ensure producers of color have access to USDA Conservation programs

Farmers and producers of color face a number of systemic barriers that prevent them from accessing or benefitting from USDA Conservation programs. For example, Black farmers represented only 3.2% of Environmental Quality Incentives Program participants and 1.33% of Conservation Stewardship Program participants.

To ensure that farmers of color have access to these programs, USDA should:

- Set aside a set amount of conservation dollars to be limited to only producers of color.
- Work with Congress to increase spending on farmer outreach and technical assistance for BIPOC Communities
- Identify barriers within NRCS that prevent farmers of color from participating in conservation programs

d) Refrain from creating a carbon bank or supporting carbon offsets

As described in Section 1D, carbon markets will further consolidation that has historically harmed producers of color and focus pollution in rural and urban BIPOC communities.

If USDA is to take environmental justice seriously and implement programs that work for farmers of color, the agency should focus on improving access to proven, existing programs rather than

²⁰ Missouri Coalition for the Environment. (2020, June 10). *Injustice in Our Industrial Food System: CAFOs and Racial Inequity*. <https://moenvironment.org/injusticecafos/>

²¹ Dollar, N. D., & Stuesse, A. S. (2020). *Who are America's meat and poultry workers?* Economic Policy Institute. <https://www.epi.org/blog/meat-and-poultry-worker-demographics/>

facilitating participation in soil carbon markets. Carbon offsets will allow polluters who are harming BIPOC communities to continue business as usual or even increase emissions while claiming to do the opposite. Offsets will further entrench environmentally polluting and economically damaging industrial animal feeding operations and monocultures, which is the opposite of a just transition to a climate-friendly food system.

Conclusion

We believe that USDA, farmers and rural communities can be a major part of the climate solution. But we will never have an equitable food system and justice for BIPOC communities by propping up offset markets; promoting biofuels, biomass, or factory farm gas; allowing Big Ag to operate without oversight; and failing to shift to climate-friendly diets. Instead, USDA must incentivize a transition to diversified, regenerative production of plant-based crops and a sustainable amount of pasture-based animal agriculture.

We thank USDA and the Biden administration for this opportunity to comment, and hope that we can work together to create a just and healthy food and agriculture system.

Sincerely,

Friends of the Earth U.S.