



June 19, 2020

Senate Democrats' Special Committee on the Climate Crisis

RE: Request for Information from Rural and Agriculture Stakeholders on Policies to Mitigate Climate Change

Dear Senators Baldwin, Schatz and Members of the Committee:

Thank you for providing the opportunity to offer policy recommendations to address the impacts of climate change. Climate change poses an existential threat to our world and bold policy solutions are needed to mitigate the impacts and help farmers and communities adapt to the changing climate. Our comments and recommendations are focused on reducing pollution and greenhouse gas emissions and maximizing carbon storage in agriculture as well as helping farmers adapt to the changing climate.

The Organic Trade Association (OTA) is the membership-based business association for organic agriculture and products in North America. OTA is the leading voice for the organic trade in the United States, representing over 9,500 organic businesses across 50 states. Our members include growers, shippers, processors, certifiers, farmers' associations, distributors, importers, exporters, consultants, retailers and others. OTA's mission is to promote and protect organic with a unifying voice that serves and engages its diverse members from farm to marketplace.

What is Organic?

Organic farming is a production system of cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. Organic refers to the way agricultural products are grown and processed and requires that products bearing the United States Department of Agriculture (USDA) Organic seal be produced according to strict guidelines.

Crops are grown without the use of toxic pesticides and without synthetic nitrogen fertilizers, genetic engineering, sewage sludge, or irradiation. To control pests, diseases, and weeds, organic farmers rely on hand weeding, mulches, cover crops, crop rotation, and dense planting. Additionally, the land must be managed without prohibited materials for at least three years to qualify for organic certification. By law, organic farmers are required to raise animals without the use of antibiotics or synthetic growth hormones. Organic farmers must provide animals with 100% organic feed and safe, clean, cage-free living conditions. In addition, organic farmers must provide their animals with access to the outdoors and pasture.

A voluntary public-private partnership, organic certification is defined by the USDA and is monitored by the National Organic Program (NOP). Organic Certification is designed to certify every step of the organic supply chain in strict accordance with federal regulations. Organic operators must develop an organic system plan, which is overseen by a certification agent with

annual third-party inspections. Guided by these and other standards, organic is the most comprehensively regulated and closely monitored food production system in the U.S.

U.S. organic sales have grown substantially from \$1 billion in 1990, when the organic law was signed, to \$8.6 billion in 2002 when the USDA seal was introduced, and now to over \$55 billion in 2019. U.S. organic food sales continue to grow at a rate more than double the growth rate of the overall U.S. food market, and now account for over 6% of all food sales.

Organic Farming Practices Benefit the Environment

Organic production has always required practices that advance sustainability in agriculture like crop rotation, cover cropping, building soil health, increasing biodiversity, and reducing nutrient pollution. Organic agriculture is based on practices that not only protect environmental health, but also strive to improve it. By absorbing more carbon dioxide from the air and prohibiting the use of petroleum-based fertilizers, organic agriculture helps to reduce humans' carbon footprint, combat climate change, and protect the land and natural resources for future generations.

Organic farmers are required to manage their operations in a manner that does not contribute to environmental contamination of crops, soil, or water. Production and management practices on organic farms must maintain or improve the natural resources of the farm, including soil, water, wetlands, woodlands, and wildlife. Instead of relying on synthetic pesticides and fertilizers that can deplete the soil of valuable nutrients and increase environmental degradation, organic farmers build soil and plant health using practices that incorporate organic materials like manure and compost. Petroleum-based fertilizers are prohibited, as are most synthetic pesticides. Organic practices help keep our water supply clean of runoff from toxic and persistent chemicals.

Organic farmers use tillage and cultivation practices that maintain or improve soil conditions and minimize soil erosion. Using complex and diversified crop rotations, cover crops, green manure crops, and catch crops, organic practices build soil health and biodiversity, improve soil structure, and increase nutrient availability without synthetic fertilizers.

The Science Behind Organic and Soil Health

Organic standards require that farmers use practices that maintain or improve the physical, chemical, and biological condition of soil and minimize soil erosion. Many research studies have found that organic practices improve a variety of soil health components.

Organic practices reduce greenhouse gas emissions and increase carbon sequestration in the soil. Organic farming increases soil properties that enhance long-term storage of carbon, providing a viable greenhouse gas mitigation strategy.¹

¹ Cooper J.M. et al. 2016. Shallow non-inversion tillage in organic farming maintains crop yields and increases soil C stocks: a meta-analysis. *Agronomy for Sustainable Development*, 36, 1–20.

The Organic Center co-authored a groundbreaking study with the National Soil Project at Northeastern University showing that organic soils combat climate change by locking away carbon, which would otherwise be in the atmosphere, in long-term reserves. The research compared over 1,000 soil samples from organic and agricultural soils as a whole to understand how organic compares to average agricultural management practices that influence components of soil organic carbon. The study was the first to compare the amount of total sequestered soil organic carbon—found in the form of long-lived humic substances—between agricultural systems on such a wide-scale basis. The findings showed that the components that make up humic substances were respectively 150% and 44% greater in organic soils. The results also show that soils from organic farms sequester 26% more carbon. Overall, these results demonstrate that organic farms store more carbon in the soil, and keep it out of the atmosphere for longer than other farming methods.²

Organic farming supports soil biodiversity since synthetic pesticides are prohibited, important organisms in the soil can thrive. Increased soil organic carbon found on organic farms provides important building blocks for beneficial micro-organisms in the soil that are vital to decomposition and nutrient cycling.³

Organic farming also increases water retention in the soil. Organic management improves the ability of soil to store and retain water, which is critical for protecting crops against extreme weather events such as drought and flooding. It also protects water quality because less agricultural water is contaminated by runoff.⁴

Policy Recommendations to Advance Organic

Given the many benefits that organic farming contributes to environmental health and sustainability, policies that support organic farmers and encourage transition to organic farming should be considered by Congress as a key strategy for climate change mitigation in the agriculture sector. Improvements to existing federal programs at the U.S. Department of Agriculture to better serve the needs of organic farmers as well as reduce risk and incentivize farmers interested in transitioning to organic will support proven climate friendly practices in agriculture while helping farmers adapt to the impacts of climate change.

Support for Research and Technical Assistance

Federally funded research on organic production methods and organic ingredients, pest control, and weed management is critical to the survival of organic farms by helping them meet the unique challenges they face. Research funded by the Organic Agriculture Research and Extension Initiative (OREI) and other federally funded research programs supports organic farmers, reduces barriers for transitioning farmers and supports cost effective and environmentally sustainable solutions for

² Ghabbour E.A. et al. 2017. Chapter One - National Comparison of the Total and Sequestered Organic Matter Contents of Conventional and Organic Farm Soils. *Advances in Agronomy*, 146, 1–35.

³ Moebius-Clune B.N. et al. 2016. *Comprehensive Assessment of Soil Health – The Cornell Framework Manual*, Edition 3.0. Cornell University: Geneva, NY.

⁴ Lotter, D. W. 2003. Organic Agriculture. *Journal of Sustainable Agriculture*, 21, 59–128.

conventional farmers. However, there is a shortage in many areas of the country in agronomists and extension agents trained in organic system and production methods. This lack of technical assistance severely undercuts organic farmers success as well as acts as a significant barrier to farmers seeking to transition to organic production.

- Develop a competitive grant program for providing technical services to organic and transitioning farmers.
- Reduce the industry contribution under the USDA NRCS cooperative agreements from 50:50 to 25:75 for organic technical assistance providers.
- Policy improvements to the Organic Research and Extension Initiative
 - Increase current cap of \$2 million to invest in larger scale and longer term grants
 - Increase the budget allowance for extension and outreach activities
 - Prioritize small grains, food grade and perennial grains breeding
 - Encourage applied research to develop strategies and techniques to reduce the risk of transitioning
 - Emphasize disease resistance, climate change resilience and water conservation and holding capacity

Improve Risk Management Tools

Organic farmers need continued improvements in the farm safety net in order to achieve appropriate risk management tools for organic farms as well as to eliminate policies that penalize farms when transitioning to organic production.

- Under the Whole-Farm Revenue Protection Program, recognize the change in farm revenue after a farm has transitioned to organic. Eliminate the 30% cap on increased production value under the expansion provision.
- Review policies that cap Contract Price Addendums at two-times the conventional price election for any specific crop.
- Direct the Farm Service Agency (FSA) to develop organic price elections for farm storage facility loans offered. Producers will then have the ability to access working capital based on the actual value of their crops to cash flow their operations.
- Require the Risk Management Agency allow producers to utilize their previous yield history, whether conventional or transitional, with appropriate discounts for known reductions in yields that may occur when employing organic production practices, when calculating Actual Production History for their organic crop insurance coverage.
- Require FSA to make adjusted Marketing Assistance Loans based on organic prices available to organic producers with crops in storage.

Market and Infrastructure Development

Improved access to land, credit and capital, investment in distribution systems and infrastructure, and facilitating more market connections between buyers and sellers for the organic market will create opportunities to expand organic production. The government should adopt policies that encourage organic transition in a way that does not distort markets but rather facilitates producer and handler choice in response to market signals.

- Provide market and infrastructure development grants for minor rotational crops that improve soil health.
- Provide tax credits for landowners who have long-term leases under organic production.
- Require a government report that analyzes the impacts of short and long-term land leases on the adoption of sustainability and conservation practices.
- Encourage organic's eligibility within the following rural development programs:
 - Rural business development grants
 - Locally and regionally produced agricultural food products
 - Value-added agricultural product market development grants
- Under USDA credit programs include organic's eligibility in the valuation of local and regional crops and include farmers that have newly transitioned to organic under the definition of qualified beginning farmer and ranchers in rural business development grants.

Increase Stakeholder Advisory Capacity

Congress should establish an independent scientific commission based on the model employed by the National Academy of Sciences to build a road map for rewarding and scaling ecosystems services from organic agriculture. Organic is an increasingly important part of the diverse U.S. agricultural economy and Congress should formalize direct engagement by USDA with organic producers and handlers.

- Establish a commission to evaluate ecosystems services delivered by organic production, and recommend policies to reward and incentivize these ecosystem services.
- Establish a new federal USDA advisory committee for certified organic farmers, ranchers and handlers to advise the Secretary on organic farm policies and issues outside of organic standards (which fall in the National Organic Standards Board's advisory capacity).

Establish a Federal Program to Help Farmers Transition to Organic

Many farmers face steep challenges and barriers when seeking to transition to organic production. The arduous three-year transition process is important to becoming a successful organic farmer but there is little federal support to help farmers through this transition whether it is providing agronomic and technical assistance, access to credit and loans, or adequate tools to manage on-farm

risk. Despite these challenges, there is no single federal program at USDA to assist farmers with managing the process of transitioning to organic. Most programs administered by USDA to help U.S. farmers are tailored to the needs of conventional farmers, not organic farmers, which serves as a major barrier and disincentive for farmers interested in transitioning. Given the long-term economic and environmental benefits organic agriculture provides, Congress should wisely invest in establishing a program at USDA that reduces barriers and assists farmers in transitioning to organic.

- Establish a national program at USDA to help farmers transition to organic production

Core Principles for Climate Policy

The challenges for U.S. agriculture in reducing its carbon footprint and serving as a climate mitigation tool while also adapting to the impacts of a changing climate are immense and go beyond organic. As you consider solutions, The Organic Trade Association will evaluate opportunities for engagement in climate policy guided by the following core principles:

- 1. Advances organic agriculture:** Any policy that addresses the role of climate change in food and agriculture must advance the opportunity for organic agriculture to be a climate change solution and allow organic to be successful. Policies must not directly conflict with or undermine organic.
- 2. Science-based, data-driven and verifiable:** Policy solutions should be based on and supported by science and data. Data collection and life-cycle analysis are critical to evaluating emissions and improving outcomes. Tools for conducting data collection and life-cycle analysis should be best in class and subject to continual improvement with support from USDA and experts across science, industry, and agriculture. Strong verification measures are needed to meaningfully reduce agriculture's impact on climate change.
- 3. Focuses on outcomes and continuous improvement:** Policies should reward the outcomes of good agricultural practices, including emissions reduction and improvements to soil health and soil carbon sequestration. Improving outcomes in agriculture is not a linear process with a clear end-point, but rather a system of continuous improvement that achieves specific positive outcomes over time.
- 4. Improves soil health:** Improving soil health is an important and central component in addressing agriculture's role in climate change. Policies should include provisions for advancing soil health and carbon sequestration.
- 5. Reduces use of fossil-fuel based chemicals:** Chemical fertilizers and pesticides are a key source of greenhouse gas emissions in agriculture. Therefore, minimizing the use and eliminating the dependency on fossil-fuel based inputs is an important tenant of climate policy. In particular, policies should prioritize reductions in synthetic nitrogen fertilizers due to their out-sized role in accumulation of greenhouse gasses.

- 6. Includes both mitigation and adaptation:** Resources should be provided to not only mitigate the impacts of climate change but also help the agricultural sector adapt to a changing climate. The impacts of human caused climate change are already being felt in our food and agriculture system, some of which will cause irreversible harm.
- 7. Incentivizes farmers and businesses:** Farmers are struggling and should not bear the sole burden of making transformational changes. Federal, state and local governments and private sector programs should provide tools and resources for farmers and businesses to achieve outcomes. Good conservation practices that mitigate climate change should be rewarded by market-based incentives and farmers should receive financial payments for ecosystem services.
- 8. Decarbonizes economy:** The global scientific consensus is clear, in order to reverse the most serious damage to our planet caused by manmade climate change, greenhouse gas emissions have to reach net-zero by 2050. Policies that increase greenhouse gas emissions or rollback progress in decarbonizing the economy and reducing emissions should be opposed.
- 9. Encourages agricultural diversity and innovation:** Mitigating agriculture's impact on climate change will require innovative thinking and whole systems approaches that embrace diversity. It is important that policies do not encourage reductionism and discourage diversity in agriculture. Policies should not only accommodate diversity and innovation in farming systems, but provide incentives for increasing diversity in cropping systems.
- 10. Advances equity and inclusion:** Policies should address the environmental and economic inequities that arise from climate change and include mechanisms to support disadvantaged communities in adapting to climate change.

Thank you for providing the opportunity to comment. The organic sector has been a leading pioneer in advancing sustainable agriculture practices for decades. If you have questions or would like to further discuss any of the information presented in our comments please contact Megan DeBates at the Organic Trade Association (mdebates@ota.com).

Sincerely,



Laura Batcha
Executive Director/CEO
Organic Trade Association