

## Climate Action 2.0:

The Next Decade of Greenhouse Gas Reduction and Climate Resilience Efforts in U.S. Agriculture





## INTRODUCTION

Held as part of Climate Week NYC, the goal of this Cross-Sector Dialogue was to explore some of the most innovative examples of how the food and agriculture value chain is scaling the adoption of climate-smart farming, while also examining the serious consequences of not meeting our collective goals.

Rod Snyder, president of Field to Market offered a summary of the newly released report: <u>Climate Action in U.S. Agriculture: A Compendium of Field to Market Member Climate Commitments</u>, which celebrates leadership and momentum on climate action while also underscoring how greater collective action is needed to respond to unprecedented challenges from climate related impacts. The report synthesizes public climate commitments made by more than 85 Field to Market member organizations and includes a joint statement from nine leading conservation organizations that defines key principles of meaningful climate action to match the scale and pace required by science.

"We believe there is an important correlation between setting public targets, reporting on progress, and ultimately improving performance on key environmental indicators. We are proud to see that more than half of our nearly 150 member organizations have set public goals on climate action, and we will continue providing pre-competitive tools and resources to the entire value chain to translate ambition into action." — Rod Snyder, president, Field to Market

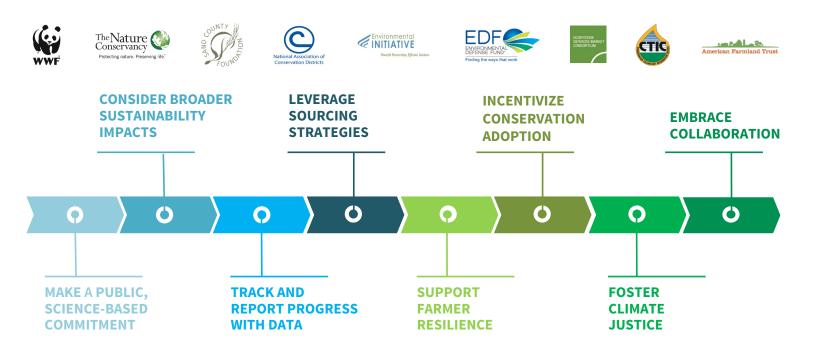
By gathering commitments into a single compendium, Field to Market enables companies and organizations within the food and agriculture sector to benchmark their ambition with peers, drive greater climate performance, facilitate pre-competitive collaboration, foster additional research where needed and promote transparency and accountability for these targets.

### **KEY FINDINGS**

- Field to Market members have established public climate commitments, representing 57% of the Alliance's nearly 150 member organizations
- of Field to Market's 64 corporate members across agribusiness and brands and retail have set specific, measurable targets for emissions reduction
- of Field to Market's 64 corporate members have established science-based targets for greenhouse gas emissions reductions
- **27%** of the 11 commodities engaged in the Alliance have set national, industry-wide targets for emissions reduction from all producers

#### **DEFINING MEANINGFUL CLIMATE ACTION**

Snyder also referenced a joint statement, entitled **A Shared Vision on Climate Action**, from nine leading conservation organizations represented in Field to Market's Civil Society sector that outlines eight key principles for how stakeholders across the food and agriculture value chain can commit to meaningful climate action.



"I am proud to join with peers in the conservation community to signal the importance of ambitious climate action across the food and agriculture sector. While Field to Market's research highlights that many organizations have made public commitments to reduce greenhouse gas emissions, more work remains to meet these goals. The need to align these commitments with tangible action informed by science has never been more urgent." — Melissa Ho, senior vice president, Freshwater and Food, World Wildlife Fund

### TRANSLATING AMBITION INTO ACTION

In addition, Snyder outlined how Field to Market is prepared to help Field to Market members translate ambition into action by engaging farmers to build greater resilience against a changing climate and reduce greenhouse gas (GHG) emissions through the Alliance's Continuous Improvement Accelerator. By supporting greater adoption of climate-smart farming practices and documenting the impact of greenhouse gas emissions reduction within the value chain, Field to Market members are uniquely positioned to meet the challenge of the century. Snyder shared that Field to Market members collectively engaged 3.7 million acres in the Accelerator in 2019.



For more information on how the Alliance's tools, resources and programs can help you translate your organization's climate commitments into action, see Page 8.

Please note that the following summary provides a synthesis of key remarks and observations from the event and does not necessarily represent the views or perspectives of Field to Market.

# TEMPERATURE CHECK: ARE WE MAKING PROGRESS ON OUR SCIENCE-BASED TARGETS

From the Paris Climate Agreement to corporate greenhouse gas reduction goals, the scope of our collective ambition to curb climate change is bold. As the agriculture sector determines what role it can and should play, scientific experts continue to debate the most effective strategies for reducing emissions and sequestering carbon on U.S. farmland. This first session of the Dialogue addressed whether the industry should redouble or reimagine its approach to sustainability and if we are making progress at the scale and pace that is needed.

**Helena Bottemiller Evich**, senior food & agriculture reporter at Politico has been covering the industry for over a decade. In her opening remarks, Bottemiller Evich noted that corporate climate commitments are promising but pointed out that questions remain on how commitments will be met and how they will get to scale. Expert panelists **Allison Thomso**n, vice president of science and research at Field to Market and **Eric Olson**, senior vice president at BSR were then asked whether the agricultural supply chain is moving fast enough or if the industry should change course and modify its strategies?

**Allison Thomson**: Climate change is happening right now; scientists are already seeing extreme weather events happening more frequently and with greater intensity that were not anticipated for decades. Although climate mitigation is important, farmers have a pressing need to focus on climate adaptation in the face of more severe conditions. Fortunately, many of the same agronomic practices that are demonstrated to improve soil health and build farm resilience to climate change are also known mitigation strategies to reduce emissions. The whole value chain has a role to play in enabling farmers to become more resilient.

**Eric Olson**: Agriculture does not need to develop climate warriors; farmers acutely understand the effects of climate change and instead, need to be put at the center of the discussion around creating solutions. We cannot pilot our way to impact, and several key factors are needed to achieve greater scale:

- 1. A unified demand signal across the supply chain. We do not need a new platform to address this. Rather than creating more and different initiatives, we need to consolidate and grow those that already exist.
- 2. Innovative financing is needed to cover the three to five year gap between practice implementation and payoff.
- 3. Greater consensus on measurement technology.
- 4. Actionable policy that allows broader, holistic and sensible engagement from other players at federal and state level. Government payments will not enable us to reach our ambitious goals unless we combine with more robust sources of private sector financing.

## LESSONS LEARNED AND NEEDED ADVANCEMENTS

Breakout groups shared lessons learned over the previous decade of work on climate and sustainability in U.S. agriculture and brainstormed what advancements in science and measurement would be needed support the ag sector's efforts on climate mitigation and adaptation.

#### **LESSONS LEARNED**

- The industry is more open to a conversation about climate change than we were five or ten years ago.
- Early adopters are not enough. We need to crack the mid- to late- adopters to get to scale.
- Scale what works even if it is not perfect with fewer, larger and longer-term initiatives.
- Research is needed to show actual impacts of agronomic practices on climate resilience and mitigation using validation and verification at the field level.
- Partner with ag retailers to build their capacity and expertise to support growers navigating new practices and technologies. Work to change ag retailer mindset that supporting climate smart ag does not mean a loss in revenue if they are adapting their business to sell services.
- There needs to be both strong public policy and private investment. The current level of NRCS payments will not enable us to reach our ambitious goals unless we combine with more robust sources of private sector financing.
- Sustainability metrics must be both accurate and actionable.





## **NEEDED ADVANCEMENTS**

- Uniform data collection methodology across sectors including automated data from satellite imagery coupled with fast, low-cost in-field measurement tools that are easy to use.
- Crop genetics that offer ecosystem services or climate resilience.
- "Setting science-based targets is great, but it needs to involve the entire supply chain to understand what is feasible."
- Brands & Retail representative
- Access to broadband to fully utilize available technology on the farm.
- Honest measurement of the co-benefits to the environment from practices that support farm resilience and productivity.
- Combining markets for several environmental services, not just carbon credits.
- Technical assistance must be easily accessible.
- Assessment of full rotations, rather than a single crop focus, to take a more realistic and holistic view of total farm performance.
- No "silver bullet" exists; no single tool, technology or practice will be the answer for ag climate strategies.

"We need better research to help identify why farmers abandon projects or new practices"

- Affiliate representative



## SCALABLE SOLUTIONS: SECTOR-SPECIFIC STRATEGIES TO ACCELERATING CLIMATE ACTION

From farmers to agribusiness to consumer-facing brands, the entire value chain will benefit from a more resilient agricultural system, and each sector has a unique role to play in delivering solutions. The final session of the Cross-Sector Dialogue addressed how the next decade of climate action will be different than the last, and how greater supply chain collaboration can accelerate progress.

**Sarah Alexander**, vice president, programs of the Keystone Policy Center, talked with experts that represent three distinct links in the agricultural value chain: **Karimah Hudda**, global sustainability lead, procurement, Mondelēz International; **Andy Knepp**, vice president of environmental strategy and industry activation at Bayer Crop Science and **Polly Ruhland**, CEO of United Soybean Board (USB) about their organizations' climate commitments and work they have underway to meet their goals.

Huddah described Mondelēz International's commitment to resilience and sustainability in their raw materials, which includes wheat sourced from the U.S. They have joined the Science-Based Targets Initiative and have committed to reducing greenhouse gas emissions by 10% by 2025 compared their 2018 baseline.

Knepp pointed out that science-based targets will not only drive transparency and accountability, but also needed innovations for sustainability benefits, well-grounded in science. Knepp says the agribusiness sector needs to be comfortable "pushing hard" toward these goals.

Ruhland reminded the audience that raw material providers, including soy producers, have an enormous impact on all areas of sustainability and that USB looks at both production methods and the social aspects of sustainability. They are working on creating a "U.S. Sustainable Soy" seal, using third-party verifiers.

The Dialogue's final speaker, **Dennis Todey**, Director of USDA Midwest Climate Hubs, described their work conducting assessments of the risks of climate change on agriculture and forestry, developing tools and technology to respond to the impacts, and offering education and outreach to producers and resource managers. The ten <u>climate hubs</u> that serve the continental U.S. and Caribbean are under the direction of the USDA Agricultural Research Service and Forest Service and are a collaboration between Natural Resources Conservation Service, Farm Service Agency, Animal and Plant Health Inspection Service, and the Risk Management Agency.

## **SURFACING SOLUTIONS**

Breakout groups tackled practical ways science-based greenhouse targets will affect the ag sector over the next decade and how these new commitments might lead to an increased level of supply chain collaboration and action.

Science-based targets enable the following:

- Create a unified message across all sectors
- Increase transparency and consumer trust
- · Open the door for impact investing
- Unite the entire supply chain around shared goals
- Allow commodity groups to rally around common goals

"Science-based targets improve the legitimacy of climate goals. It's much harder to dismiss when there is scientific evidence."

- Brands & Retail representative

- Encourage company investment in farm level sustainability projects
- Brings precision technologies and artificial intelligence into the spotlight with more emphasis and investment around automated data collection

Next, participants were asked to reflect on their sector's role in the value chain and identify opportunities and barriers that must be addressed to accelerate progress on climate goals.





## IDENTIFYING SECTOR-SPECIFIC STRATEGIES & NEEDS TO ACCELERATE CLIMATE ACTION

## **FARMERS**

- Can improve the resilience of their operations
- Benefit from hearing stories of other growers that have successfully implemented new practices
- · Need to understand how best practices will work on their farm
- Would like to be compensated for delivering environmental benefits

## **AGRIBUSINESS**

- Have the potential to directly support climate-smart agriculture because of their direct contact with farmers
- Shift value of sustainability to the growers they serve
- Make data collection easier for farmers
- Worry that the supply chain will not adequately invest in ecosystem service markets to a degree that will drive scale

## **BRANDS AND RETAILERS**

- Can focus their attention and resources on strategies that work and not wait for circumstances to be perfect before supporting innovation
- Demonstrate the value of working in partnerships
- Need to see the evidence supporting assumptions on the ability of agriculture to sequester carbon

## **AFFILIATES**

- Bring science to the farm
- Conduct research looking at the value of stacking practices for multiple sustainability benefits
- Question who will pay for needed changes

"Carbon prices must be high enough to compensate growers for the actual cost of their efforts."

- Affiliate representative

## **CIVIL SOCIETY**

- Convene stakeholders and cultivate partnerships for greater synergy
- Contribute to telling the story of growers and other supply chain actors that are advancing in their sustainability journey
- · Craft unifying sustainability messages that resonate with different sectors
- Identify and elevate leaders in the space to support peer learning and reach middle adopters

"Keep farmers at the center of the discussion and call on them to advise on federal programs that make sense." – Grower representative



## TRANSLATING AMBITION INTO ACTION

The Cross-Sector Dialogue highlighted several important factors in scaling successful climate strategies for U.S. agriculture, including supply chain collaboration and pre-competitive approaches to measurement and verification. As the industry continues to scale up its efforts to meet ambitious climate commitments, Field to Market is delivering practical tools and resources to accelerate progress and translate ambition into action.

## **CONTINUOUS IMPROVEMENT PROJECTS**

Field to Market's Continuous Improvement Accelerator is designed to harness the power of collaboration across the agricultural value chain to implement locally-led conservation solutions and deliver sustainable outcomes, like greenhouse gas emissions reductions and increased soil carbon, through member-led continuous improvement projects. By following Field to Market's Process-Based Standard for accelerating continuous improvement, organizations across the value chain can bring together partners to design projects that engage growers over time and support them in making relevant farm management decisions that deliver improved outcomes. Projects are organized in three different pathways depending upon the project's intent—**Incubation**, **Insight** and **Innovation**.



#### INCUBATION

Creates enabling conditions by engaging with farmers on the connection between practices and at least one sustainability indicator



#### **INSIGHT**

Offers sustainability insights for farmers and transparency for value chain partners through measurement



## **INNOVATION**

Provides tangible support for farmers to accelerate adoption of practices that deliver improved sustainability outcomes

## FOSTERING GREATER COLLABORATION

Field to Market's membership spans the entire ag value chain and includes numerous organizations with strong ties and trusted relationships with the grower community. The <u>Partnership Exchange</u> provides an entry point where member organizations can highlight expertise or identify potential sponsors for Continuous Improvement Projects. Members can also find existing projects that are seeking additional investments and partnerships to scale successful strategies. These multistakeholder collaborations can help strengthen grower outreach efforts, as well as define the most impactful and locally relevant practices to address climate goals.

## **ENABLING SCOPE 3 REPORTING**

Field to Market's Continuous Improvement Accelerator offers five types of sustainability claims to help organizations demonstrate credible action in advancing sustainability agriculture. Several of these claims can be utilized to demonstrate progress against science-based targets for Scope 3 emissions reduction.



Number of acres and growers



ADOPTION CLAIM

Uptake of a specific practice or intervention



MEASUREMENT CLAIM

One-year snapshot of aggregate environmental outcomes



TRENDS CLAIM

Directional improvement in Field to Market's metrics



IMPACT CLAIM

Sustained Improvement in Field to Market's metrics

For instance, the Fieldprint Platform's Greenhouse Gas Emissions metric can be utilized to aggregate emissions from producers to enable Scope 3 reporting to downstream customers through Measurement Claims. The metric calculates the total emissions from four main sources—energy use, nitrous oxide emissions from soils, methane emissions (from flooded fields) and emissions from residue burning. Projects can use a series of complex algorithms to document changes in average GHG emissions per unit of crop production or total emissions per project. Field to Market's metrics can be used in determining a baseline year value for a Continuous Improvement Project and reporting out annually on metric changes based on practice changes over time.

Three additional sustainability claims—Adoption, Trends and Impact—offer guidance to companies when reporting progress and impact of reduced Scope 3 emissions, including standardized approaches to demonstrating uptake of specific interventions as well as volume based accounting and co-product allocations.

We encourage any organization wishing to demonstrate credible climate action to explore the **Continuous Improvement Accelerator's Project Directory** for examples of how organizations across the food and ag value chain are using our process-based standard, project pathways and sustainability claims to credibly demonstrate action on their climate commitments.

To learn how your organization can benefit from enrolling in the Accelerator, please contact Field to Market's program director, **Lexi Clark**.

## **UPCOMING EVENTS**

Please Join Us for the Final Cross-Sector Dialogue of 2020

Tuesday, December 8, 1:00PM - 3:30PM — The Human Element: What Social Science Can Teach Us About Building Effective Sustainability Strategies for U.S. Agriculture (Remote)

Sustainability experts are turning to social science to learn more about how human behavior and decision-making create barriers and opportunities to advance environmental goals in U.S. agriculture. From consumers' purchases to farmers' agronomic practices, the factors that motivate behavior are complex and extend well beyond the assumptions of rational economic theory. This Cross-Sector Dialogue will look past the bottom line to explore social and cultural factors that influence farmers, supply chains and consumers in the pursuit of sustainability.

