ESMC is a non-profit that works to compensate farmers and ranchers who improve the environment through their agricultural practices. Our market program to reduce greenhouse gases, improve water quality, and increase other ecosystem services benefits all of society.
A Letter from ESMC/ESMRC’s Executive Director, Debbie Reed

2020 in Review

As we publish our first-ever annual report, I want to acknowledge what an unprecedented year 2020 was for us all. The global COVID-19 pandemic changed our lives in many ways. Our agricultural, food systems, and personnel were pressure tested and strained by the pandemic. While the sector stepped up to the new operating realities, the entire supply chain has been impacted and changed. Many farmers and ranchers, farm labor personnel, and those selling food in grocery stores or via deliveries have suffered from COVID-19 and from the economic and social disruptions that continue to be felt.

As we look back on 2020 and to the future, we know we need to better prepare and adapt to the COVID-19 aftershocks and for future shocks. More global pandemics are likely to occur. The already observable effects of climate change on agriculture, on water use and availability, on humans, plants, and animals and related economic disruptions precipitated by these events and others are predicted to increase. Collective preparation and adaptation and the ability to leverage our resources and knowledge to invest in a more resilient and nimble infrastructure able to overcome challenges known and unknown is imperative.

As a public private partnership of collaborators across the agricultural food supply chain and value chain, we value the contributions and leadership of all our members and stakeholders working to increase opportunities to scale regenerative food and agricultural systems and their resulting benefits to consumers and society. During 2020, we saw the agriculture, food, and beverage supply chains double down on commitments to mitigate environmental and natural resource impacts and resolve to overcome the many challenges we face, at many levels, working together.

We want to publicly thank all our members, collaborators, stakeholders, funders, advisors and supporters for their contributions and efforts this last year that supported our growth. I’m pleased to highlight that our membership grew from 37 to 62 member organizations during 2020. We were fortunate to expand ESMC/ESMRC staff from five to twelve during the year. As a result, we expanded our program buildout and coverage to six of twelve US regions and
launched six more pilot projects – for a total of eight pilots across various major crop and livestock systems throughout the country. We also invested nearly $3.7 million in research projects to build a better market program that is credible, scalable, and cost-effective. Additional milestones and progress are highlighted in this report.

Looking to 2021, we have an ambitious agenda that brings us closer to our 2022 market program launch. Key milestones in 2021 include becoming a stand-alone 501(c)3 (non-profit) organization; expanding our program coverage to eight of twelve US regions; unveiling version 9.0 of our integrated credit generation protocols, and version 2.0 of our monitoring reporting and verification (MRV) platform; and further refining our API and other data tools and program resources.

With an active policy environment focused on climate change mitigation and other natural resource challenges relevant to ESMC/ESMRC, we are poised to engage more fully in policy discussions at federal and state levels. We launched a policy committee in 2021 and look forward to hosting additional opportunities for our members and stakeholders to engage with us more fully – through webinars, educational forums, and hopefully, in-person member meetings.

There is much that we are grateful for. We thank our members, collaborators, funders and supporters for your continued participation and collaboration, and look forward to a more resilient future.

ESMC/ESMRC Staff

We could not achieve all our progress without the work of our dedicated and experienced staff. A key milestone in 2020 was growing our team from five to twelve staff. Our team in 2020 included Debbie Reed, Shiva Scotti, Caroline Wade, David Dayhoff, Cassie Aherin, Benjamin Bartley, Brandy McFadden, Thayer Tomlinson, Amanda Raster, Stacy Cushenbery, Neville Millar, and Paul Meints. Our thanks to all team members for their valued contributions.

To read about these staff, and those who have joined ESMC recently, see: www.ecosystemservicesmarket.org/about-us/esmc-emsrcteam.
Initial Multi-stakeholder Discussion Phase

- Agreement that carbon markets tailored to agriculture can scale soil health outcomes

Market Design

- Commissioned market assessment that showed $13.9B demand for carbon/GHG, water quality
- Completed assessment of carbon market programs, protocols, tools and methodologies that informed ESMC market design
- Developed protocols reflecting ESMC's innovative tiered and modular market design

ESMC & ESMRC Public Private Partnership Formed, Market Program Development Begins

- Launched public-private partnership, announced 37 members by year end
- Awarded $20.6M FFAR grant, launched Ecosystem Services Market Research Consortium (ESMRC) and developed 4 technical working groups
- Completed program development and launched first pilot US Southern Great Plains region

ESMC Market Program Development and Buildout

- Completed program development in 6 of 12 US regions
- Launched 6 pilots; 8 total for cropland and grazing land
- Had 62 members by year end
- Invested nearly $3.7 million in applied research projects
- Launched Producer Circle with 34 producers
- Created Working Group on Inclusion & Racial Justice
- Developed MRV platform and producer enrollment portal
- Developed soil sampling protocol and soil stratification approach
- Developed ESMC Enrollment Specialist Training program
- Submitted Protocol versions 8.4 for Member and SustainCERT review
- Continued Scope 1 and 3 protocol certification process with Gold Standard and SustainCERT

ESMC Market Program Launch

- Finalize market launch, program details, protocol certifications
- Refine soil C measurement/quantification methods; improve MRV interface for producers and advisors; MRV version 3.0 integrates & automates program operations
- Refine MRV interface and functionality for producers, advisors

ESMC’s Path to a 2022 Market Program Launch
Praise for ESMC/ESMRC from Funders and Members

“The Foundation for Food & Agriculture Research (FFAR) invests in research that benefits farmers, consumers, and the environment. FFAR connects funders, researchers, and farmers through public-private partnerships to support audacious research addressing the biggest food and agriculture challenges. FFAR provided funding to establish the Ecosystem Services Market Research Consortium (ESMRC), the research arm of ESMC. ESMRC is a prime example of connecting stakeholders to produce actionable results that can benefit the entire food supply chain. ESMRC provides the research necessary to create a scaled, efficient, cost-effective marketplace that works for farmers and ranchers. ESMRC’s progress in the last year underscores the power of public-private partnerships in the pre-competitive space as ESMC is building a science-based national scale market program that will launch in 2022. ESMC launched 6 pilot projects in 2020 - a key step in testing ESMC’s protocol, support network, technology, and structure. FFAR looks forward to the expansion of these pilots in the next year to test and demonstrate the consortium’s considerable research and development, technology, and knowledge investments to build a national market.”

Dr. LaKisha Odom
Scientific Program Officer, Foundation for Food and Agriculture Research

“General Mills is a founding member of ESMC. As a food company committed to being a force for good, we have made commitments to reduce greenhouse gas emissions across our full value chain and to advance regenerative agriculture. We know farmers and ranchers need support and incentives to adopt regenerative practices at scale which is why we believe in the promise of the ESMC. ESMC is an important vehicle to advance farmer support and do good for our planet while allowing flexibility for companies to collaborate and make it easier for farmers and ranchers to get rewarded for their land stewardship efforts. Engagement in ESMC not only allows General Mills to report its impact with credibility and scientific rigor, but it also provides an opportunity for our employees to participate in ESMC’s program development to ensure protocols meet the needs of all stakeholders.”

Mary Jane Melendez
Chief Sustainability & Social Impact Officer, General Mills
“The development of a private carbon market has a long history and is an interesting concept. Many people knew storing carbon in the soil and plants was a great plan. Companies and individuals understood this could be an opportunity to reduce their carbon footprint. But there are questions of, how much can we store, what factors does this include and who are the key players to accomplish this monumental task. I have had the opportunity to work with ESMC which took on the task of answering these questions by using experts in the field and putting boots on the ground in research. ESMC’s work includes all aspects of creating a program that will allow the buyer and seller of carbon to know how much they have available based on sound science. ESMC is currently looking at cropping and grazing systems throughout the United States to create a market that is not one size fits all, while providing a simple program that is user friendly for all. What has impressed me the most is ESMC is a non-profit organization that has brought businesses, consumers, and farmers to the table to discuss how this process can help all parties that are interested in improving the environment in which we live. I believe that as this market continues to develop, businesses will be able to meet their carbon goals and farmers will have to opportunity to again show how sustainable they are. As well as demonstrating they are the true stewards of the land.”

Charles Atkinson  
Kansas Farmer and American Soybean Association Director for Kansas

“Participating in ESMC’s GHG Asset Quantification and the N₂O Measurement strike team gave me an opportunity not only to lend my professional expertise on the challenges of collecting, measuring, and verifying the metrics that will be required, but it also gave me insight that I found useful for my role at Syngenta. The opportunity to discuss the complexities of accurate data collection with the inputs of multiple different ESMC representatives and experts was a good example of the benefits of this collaborative, multi-stakeholder approach.”

Gigi Arino  
Syngenta
ESMC/ESMRC Work to Advance Inclusion and Racial Justice in Agriculture

An important aspect of ESMC is not just what we do, but how we do it. In parallel to ESMC’s programmatic development, we also want to ensure our work is as inclusive as possible as we look ahead to our market program launch. That applies to all forms of American agriculture, as well as all farmers and ranchers. To that end, since our founding, ESMC has focused on major cropping and livestock grazing systems as well as fruit and vegetable crops in our portfolio plans. We have initiated work beyond grazing to include tree nuts, as well as dairy feed systems. We also launched a Working Group on Inclusion and Racial Justice, to ensure that during our program design we are creating a program that invites participation from producers of all backgrounds. We have been very encouraged by the strong support from ESMC’s member organizations. Representatives from many different member organizations have played an active role in our Working Group on Inclusion and Racial Justice, and we look forward to having new members representing historically disadvantaged groups in our membership during 2021.

Read more on our website at https://ecosystemservicesmarket.org/our-work/inclusion.
ESMC/ESMRC Funding

ESMC/ESMRC is funded from a diverse mix of sources, from public/private foundation support to competitive and philanthropic grants and dues from each of our members. As a part of ESMC/ESMRC’s FFAR grant, ESMC can release research funds when cash or in-kind matching funds are identified from our members as well – so these matching funds are included as a funding source.

ESMC/ESMRC expenses are primarily centered on funding for research, development, demonstration, and deployment efforts to build and test our dynamic program, to retain staff and technical contractors, and support to allow ESMC/ESMRC representation at meetings, conferences and presentations, the latter of which were greatly reduced due to the COVID-19 pandemic.
ESMC/ESMRC Funders

We thank our funders for their generous support in 2020. In particular, we would like to thank the Foundation for Food and Agriculture Research, whose strong 3-year investment underpins our public-private partnership. Without our funders and their support and commitment to ESMC/ESMRC, we would be unable to drive such meaningful change for the betterment of agriculture, farmers and ranchers, and our members.

1. Foundation for Food and Agriculture Research
2. General Mills Foundation
3. Noble Research Institute
4. The Ida and Robert Gordon Family Foundation
5. The McKnight Foundation
6. The Nature Conservancy
8. United Soybean Board
9. United States Department of Agriculture
10. United States Department of Agriculture: Natural Resources Conservation Service
11. Walton Family Foundation
ESMC/ESMRC Members

As a public-private partnership, we had over 60 members in 2020 (highlighted below), including farmers, ranchers, agriculture commodity organizations, food and beverage companies, agribusinesses, land-grant universities, and non-profit environmental and conservation organizations across the agricultural supply chain and value chain. ESMC/ESMRC members represent the spectrum of the agricultural sector supply chain with whom we are scaling sustainable agricultural sector outcomes.

Founding Circle Members

[Logos of various companies]

Legacy Partner Members

[Logos of various organizations]
ESMC/ESMRC Board of Directors

Chad Ellis, Chair of the Board, Chief Executive Officer of the Texas Agricultural Land Trust

Kris Johnson, Vice Chair of the Board, Ph.D., Deputy Director, North America Agriculture Program of The Nature Conservancy

Wayne Honeycutt, Ph.D., President and CEO of the Soil Health Institute

Bruce Knight, Principal and Founder, Strategic Conservation Solutions

Mary Jane Melendez, Chief Sustainability and Social Impact Officer, General Mills

Tim Palmer, President of National Association of Conservation Districts (NACD) and farmer

Gary Price, Rancher, 77 Ranch

Debbie Reed, Executive Director, ESMC

For more information on our work, visit our website at www.ecosystemservicesmarket.org.