

U.S. BEEF SUSTAINABILITY PASSPORT

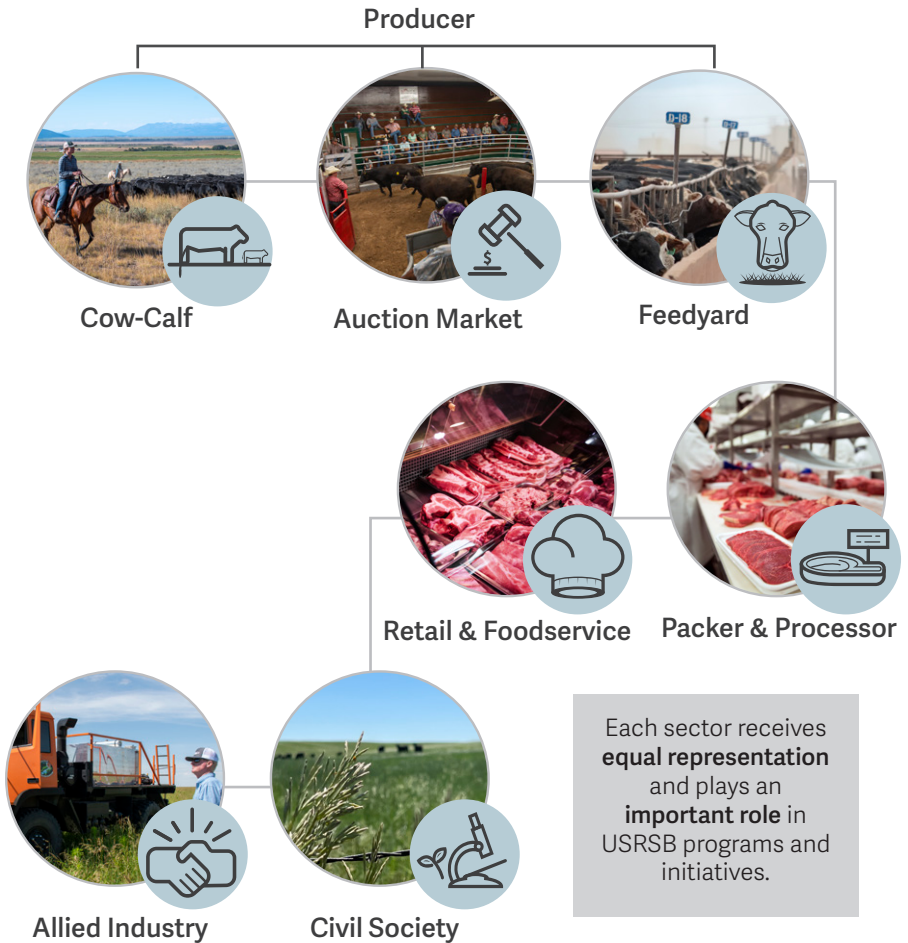


What is USRSB?



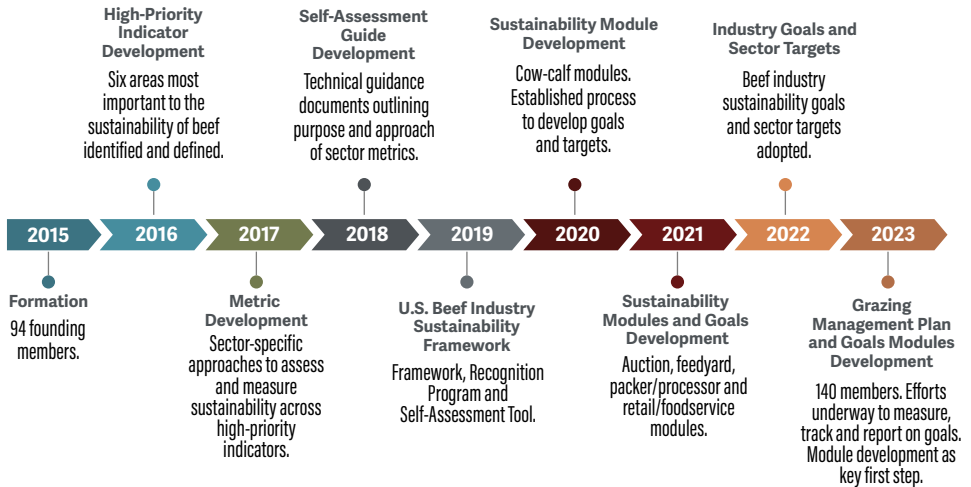
The U.S. Roundtable for Sustainable Beef (USRSB) is a multi-stakeholder initiative developed to advance, support and communicate continuous improvement in sustainability across the U.S. beef value chain. The USRSB achieves this through leadership, innovation, multi-stakeholder engagement and collaboration and aims for the U.S. beef value chain to be the trusted global leader in environmentally sound, socially responsible and economically viable beef. Together with our supporters and partners, we're uniting the beef industry in a common goal — to ensure that beef will have a role to play in a sustainable food future.

The USRSB is made up of representatives from each sector of the beef industry:



USRSB TIMELINE & HISTORY

2015 – 2023



What is U.S. Beef Sustainability?

The USRSB defines beef sustainability as a **socially responsible, environmentally sound and economically viable** product that **prioritizes planet, people, animals and progress.**





Why Should Sustainability be Important to You?

Most cattle, whether grass-finished or grain-finished, spend the majority of their lives on pasture, eating grass and other plant materials, and thus, upcycling low-quality, often human-inedible foods into a high-quality, nutrient-dense protein.¹ Innovations that have led to increased sustainability include improved cattle genetics, more precise animal nutrition in feedyards, increased resilience and efficiency and improved resource use, among others.^{2,3}

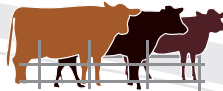


COW-CALF

Calves are born and raised every year on cow-calf farms and ranches, spending time grazing on grass pastures within sight of their mothers.

WEANING

Beef calves are weaned away from their mothers between 6-8 months of age.



LIVESTOCK AUCTION MARKETS

Many calves leave the farm or ranch where they were born and are sold at livestock auction markets to stocker or backgrounder operations.



STOCKERS & BACKGROUNDERS

Between 6-12 months of age, cattle spend time at stocker or backgrounder operations where they continue to graze on pasture or may be fed a diet containing both grasses and grains.



FEEDYARD

Cattle typically spend 3-6 months at the feedyard, where they are fed a high-quality, nutrient-dense diet to support their final growth period.



PACKING PLANTS AND FURTHER PROCESSING

Cattle are processed when they reach 1,200 to 1,400 pounds, typically at 18 to 22 months of age.



SUPERMARKETS & RESTAURANTS

Sources:

1. Brooks et. al. 2017b. Corn as Cattle Feed vs. Human Food. Oklahoma State University. <https://extension.okstate.edu/fact-sheets/corn-as-cattle-feed-vs-human-food.html>
2. Herrero M, et al. Biomass use, production, feed efficiencies, and greenhouse gas emissions from global livestock systems. Proc. Natl. Acad. Sci. 2013. 110: 20888-20893
3. Place, Sara. 2019. Tough Questions about Beef Sustainability: How does productivity affect sustainability? National Cattlemen's Beef Association. BeefResearch.org
4. Brunson, MW and L. Huntsinger. 2008. Ranching as a Conservation Strategy: Can Old Ranchers Save the New West? Rangeland Ecology & Management 61(2): 137-147
5. Johnson, R.L., et al. 2020. Evaluating Ecosystem Services: Value and return on investment of

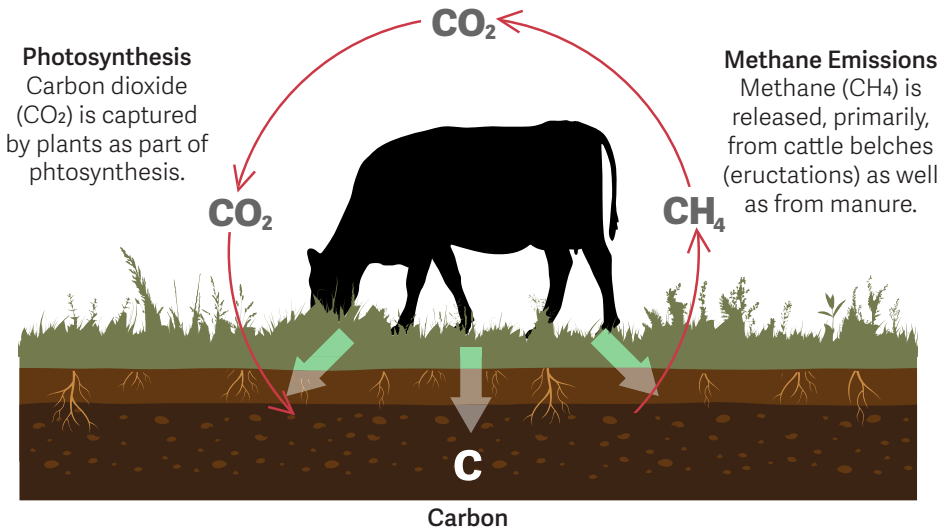
There are numerous environmental benefits from cattle grazing lands, such as preserving and providing habitat for wildlife, defending against wildfires and improving soil health and sequestering carbon—which is critical for buffering against the effects of climate change.^{4,5,6}

Cattle, and similar ruminant animals like bison, have been grazing land and providing food for humans for centuries.⁷ Their unique digestive system allows them to convert human-inedible plants, such as grass and other forages, into high-quality protein.^{8,9}

Biogenic Carbon Cycle

Hydroxyl Oxidation

Methane (CH_4) is converted into carbon dioxide (CO_2) after 12 years through hydroxyl oxidation.



Carbon (C) is stored as carbohydrates in plants that are then consumed by animals as well as sequestered into the soil of lands cattle graze.

Image adopted from UC Davis CLEAR Center. Learn more at www.clear.ucdavis.edu.

- conversation easements held by the California Rangeland Trust. California Rangeland Trust. https://rangelandtrust.org/wp-content/uploads/2020/10/ESS_Executive-Summary_Corrected.pdf
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- Broocks, Ashley et al. 2017a. Carbon Footprint Comparison between Grass- and Grain-finished beef. OSU Extension, AFS-3292.



The U.S. Beef Industry Sustainability Framework

The U.S. Beef Industry Sustainability Framework is a resource developed to identify opportunities for continuous improvement in all types of operations and companies throughout the beef industry. The Framework is an extension of the USRSB's definition of sustainable beef. It is comprised of high-priority indicators, sector specific metrics and sustainability assessment guides. Sector-specific efforts were owned by each beef industry sector with an expectation to actively engage other stakeholder groups including civil society and allied industry members.

The USRSB developed six high-priority indicators: air & greenhouse gas emissions, land resources, water resources, employee safety & well-being, animal health & well-being and efficiency & yield. These indicators are the foundation of the Framework, defining the areas most important to beef sustainability for the entire supply chain. Learn more about each indicator in the call out box to the right. Metrics measure activities linked to each of the high-priority indicators. The metrics were developed to address the unique characteristics of each segment of the value chain, outlining ways an operation or company can measure sustainability progress.

To operationalize the metrics, Sustainability Assessment Guides (SAGs) for each sector serve as technical guidance documents to aid user understanding and facilitate implementation. The SAGs provide industry members with additional tools and resources for assessing their own operation in relation to the high-priority indicators and accompanying metrics. They outline the purpose and resources for approaches and methods to improve each metric.

High-Priority Indicators of Sustainability



Air & greenhouse gas emissions:

The cumulative emissions of pollutants, including particulate matter, greenhouse gases and other gaseous emissions from a sector for each process.



Land resources: The stewardship of terrestrial and aquatic habitat in relation to water, soil and biodiversity in an area. Impacts of land use and land use conversion, both caused by and prevented by ranching and farming activities.



Water resources: The volume of water consumed and any impacts on water quality.





Employee safety & well-being: The implementation of safety programs and training to provide a safe workplace and help to prevent workplace accidents and injuries associated with production, processing and distribution of beef and the relative prosperity of workers employed in those activities.



Animal health & well-being: The cumulative effects of cattle health, nutrition, care and comfort.



Efficiency & yield: Efficiency is the unit of input required to produce a unit of output and yield is the total product generated per unit of time or space. Both concepts address waste as a negative characteristic and drive toward improved profitability.





High-Priority Indicator Goals & Sector Targets

In 2022, the USRSB set goals and sector-level targets for all six high-priority indicators. While each high-priority indicator has its own goal and sector-level targets, these components of beef sustainability substantially overlap, often with clear synergies. Across the diverse membership of the USRSB, we recognize we must strive for continuous improvement in order to leave a better future for generations to come. These goals and sector-level targets are a starting point of accelerating improvements; they are not the end point, rather they are a catalyst for the industry to innovate and demonstrate our collective ambition to improve outcomes and commitment to sustainably produced beef.

Air & greenhouse gas emissions

The U.S. beef supply chain will achieve climate neutrality by 2040.

Sectors with targets for greenhouse gas emissions:



Cow-Calf



Feedyard



Packer & Processor



Retail & Foodservice



Land resources

The U.S. beef supply chain will work to maintain and improve grazing lands under the care of U.S. beef producers. We will do this by:

- Establishing a baseline for acres under grazing management plans (GMPs) by 2023;
- Achieving 385 million acres covered by a written GMP by 2050; and
- Supporting programs that respect property rights, create value and expand producer capacity to deploy well-managed grazing strategies to ensure lasting legacies founded on conservation and economic success

Sectors with targets for land resources:



Cow-Calf



Feedyard



**Packer &
Processor**



**Retail &
Foodservice**



Water resources

By 2050, the U.S. beef supply chain will improve water management strategies and improve water quality. We will do this by:

- Benchmarking water use and quality by 2025;
- Improving retention and capture of nutrients for beneficial use; and
- Supporting feedstuffs growers to achieve their water sustainability goals

Sectors with targets for water resources:



Cow-Calf



**Auction
Market**



Feedyard



**Packer &
Processor**



**Retail &
Foodservice**





Our Sustainability Work

High-Priority Indicator Goals & Sector Targets

Employee safety & well-being

The U.S. beef supply chain is committed to continuously improving the safety, development and well-being of individuals working throughout the industry. We will do this by:

- Reducing the Total Recordable Incident Rate (TRIR) by 50% by 2030 in relevant operations; and
- 10% year-over-year increase in individuals trained for stockmanship and safety through identified programs to reduce injuries on farms and ranches

Sectors with targets for employee safety & well-being:



Cow-Calf



Auction Market



Feedyard



Packer & Processor



Retail & Foodservice



Animal health & well-being



The U.S. beef supply chain will continue to improve animal health and well-being. We will do this by:

- Strengthening our commitment to the highest standards of animal care; and
- Achieving sector-relevant targets linked to optimal animal care through increased participation in trainings, certification programs and implementation of policies

Sectors with targets for animal health & well-being:



Cow-Calf



Auction
Market



Feedyard



Packer &
Processor



Retail &
Foodservice



Efficiency & yield



The U.S. beef supply chain will improve efficiencies, enhance product value and increase demand, which collectively will enable operations and businesses to maintain and improve individual and community financial health.

Sectors with targets for efficiency & yield:



Cow-Calf



Feedyard



Packer &
Processor



Retail &
Foodservice

Learn more about our goals and see the sector-level targets here.





Working Groups and Task Forces

USRSB relies on the efforts of several working groups and task forces to achieve its ambitious mission. Below outlines the scope of work for each group:

Outreach Working Group

Increase awareness, uptake and implementation of the U.S. Beef Industry Sustainability Framework across all sectors of the beef value chain by encouraging the incorporation of USRSB indicators, metrics and sustainability assessment guide material into existing programs. Develop, maintain and promote self-assessment tools, education and outreach programs, resources and initiatives, where needed, to support and encourage progress towards achieving the USRSB High-Priority Indicator Goals & Sector Targets.

Communications Working Group

Assist with the execution and implementation of the communications plan to advance the mission and vision of USRSB, including oversight of the annual report and strategically identifying and utilizing events to deliver key messages and promote progress towards achieving the USRSB High-Priority Indicator Goals & Sector Targets.



Goals Progress Working Group

Engage with life cycle assessment scientists, industry experts, academia, allied industry, civil society and external advisors to establish the methodology for tracking progress towards achieving the USRSB High-Priority Indicator Goals & Sector Targets.

Recognition Program Working Group

While it is not within the scope of USRSB to provide certification or verification for adoption of the U.S. Beef Industry Sustainability Framework, the Recognition Program Working Group will establish and oversee a process to evaluate and reevaluate existing and/or new supply chain programs that include or intend to include parameters that align with the Framework and promote progress towards achieving the USRSB High-Priority Indicator Goals & Sector Targets.



Research Priorities Working Group

Review and support external projects, field trials, pilot projects, research projects and resources that align with the USRSB vision and mission, including oversight of approved projects, progress reports and results. Identify gaps in research knowledge and actively look for new research opportunities to support that will promote progress towards achieving the USRSB High-Priority Indicator Goals & Sector Targets.

General Assembly Working Group

Assist in guiding the planning and execution of the annual General Assembly meeting, including site selection for the meeting, theme, sponsorship opportunities, promotional material, tour stops, keynote addresses, speakers and panels, as well as other meeting logistics.

Feed Sustainability Task Force

Increase collaboration, including networking with other protein groups, as appropriate, to identify areas of engagement around sustainable feed production and manufacturing and promote transparency by encouraging the flow of feed relevant information along the value chain.



Recognition Program



The USRSB developed an official recognition process in 2019 for member industry programs seeking recognition for their program’s alignment with the U.S. Beef Industry Sustainability Framework. This rigorous three-year recognition requires the program manager to submit an application and supporting materials detailing the inclusion of the framework in their program. After evaluation and recommendation by an independent third-party, the program must then be approved by the USRSB Board of Directors to receive recognition. To find out more about the recognition program, visit [USRSB.org/Recognition](https://www.usrsb.org/Recognition).

COW-CALF PROGRAMS



AUCTION MARKET PROGRAMS



FEEDYARD/FINISHER PROGRAMS



PACKER/PROCESSOR PROGRAMS



RETAIL/FOODSERVICE PROGRAMS

There are no retail/foodservice recognized programs at this time. Have a program that applies? Become recognized!

As the USRSB has evolved, it remains committed to supporting and advancing sustainability across the industry. The USRSB achieves this through engaging in and supporting science-based efforts as well as through building partnerships that result in timely collaborative efforts. This is reflected in the 2023-2025 Strategic Plan, which contains four key strategies:

STRATEGY I

MEASURE AND REPORT PROGRESS TOWARDS HIGH-PRIORITY INDICATOR GOALS & SECTOR TARGETS

OBJECTIVES

1. Establish and publish baselines for each Goal and Target
2. Develop data collection and housing capabilities by 2024
3. Annually evaluate outcomes of progress and stated timelines, and plan accordingly

STRATEGY II

DRIVE ADOPTION OF SUSTAINABILITY PRACTICES

OBJECTIVES

1. 90% of USRSB supply chain members have adopted and implemented two or more sector-specific sustainability practices, as identified in the U.S. Beef Industry Sustainability Framework
2. 25% of U.S. beef supply chain stakeholders have adopted and implemented two or more sector-specific sustainability practices, as identified in the U.S. Beef Industry Sustainability Framework

STRATEGY III

IDENTIFY, FACILITATE AND SUPPORT SUSTAINABILITY RESEARCH PRIORITIES

OBJECTIVES

1. Catalyze research to measure and report progress towards Goals and Targets and to maintain continuous improvement
2. Grow credibility of the USRSB as a leader in science-based beef sustainability resources and research

STRATEGY IV

ENSURE ORGANIZATIONAL SUCCESS

OBJECTIVES

1. Ensure 70% of members identify the USRSB as being helpful in achieving their own sustainability objectives
2. Build organizational capacity with funding and staff
3. Continue to build USRSB credibility as the subject matter expert in beef sustainability

Supported Projects



Driving continuous improvement means supporting potential advancements in beef sustainability from all angles. One way the USRSB contributes to advancing improvements is through project support. Organizations that have research projects, pilots or tools shown to advance, support and communicate continuous improvement in the sustainability of U.S. beef can receive official support from the USRSB after going through an application and evaluation process. Below are a few highlights of previously supported projects:



The Grass is Greener on the Other Side – Developing Climate-Smart Beef and Bison Commodities

Through educational outreach and collaboration, this South Dakota State Climate-Smart Commodities-funded project will work with and incentivize producers, especially beginning and Native producers, to equip them with the knowledge and training necessary to successfully implement climate-smart practices, thus positioning producers to enter climate-smart commodity markets.

Climate-Smart Grasslands – The Root of Agricultural Carbon Markets

Through a large-scale pilot project spanning a ten-state region representing the core of grasslands across the eastern U.S., the University of Tennessee Institute of Agriculture’s Climate-Smart Commodities-funded project will work to develop partnerships to empower grassland farmers to enter the emerging carbon economy while enhancing operational resiliency and optimizing profitability, soil health and biodiversity.

Connected Ag Climate-Smart Commodities Pilot Project

This Trust In Food, Farm Journal Climate-Smart Commodities-funded project will work to collect data and insights that will be critical to determining how best to move forward with tracking climate-smart practices and creating record-keeping mechanisms that work for producers on their unique operations.



Scan the QR code to learn more about the program and to view a full list of supported projects.



Attend USRSB General Assembly

Around the start of May, the USRSB holds its annual general assembly meeting as an opportunity to join thought leaders in beef sustainability to collaborate and discuss opportunities for further improvement. This event provides a venue to connect with other sectors of the beef industry, hear the latest updates and build relationships to problem solve issues. It is the only national sustainability-focused event of its kind, where organizations from all aspects of the supply chain come together.

In addition, the USRSB hosts a sustainability tour at the beginning of each meeting, showcasing the way beef and other agricultural commodities take on their unique challenges. This full-day tour is interactive and allows attendees to see new technologies at work. If you are interested in learning more about USRSB programs and efforts, consider attending the General Assembly Meeting.



Scan the QR code for USRSB news and to learn more about upcoming events, including the USRSB General Assembly Meeting.



Become a USRSB Member



As a trusted and respected organization, USRSB members work together to build a better future, one where beef continues to remain an important and vital part of the U.S. and global food systems. USRSB membership provides an opportunity to engage with leaders throughout the beef value chain to shape the dialogue of beef sustainability and contribute to the long-term viability of the U.S. beef industry. Members also have the opportunity to directly engage in collaborative efforts to support sustainable beef research priorities.

Membership is comprised of the following five constituencies: Producers, allied industry, packers/processors, retail/foodservice and civil society.



Hear From USRSB Members:



Debbie Lyons-Blythe, cow-calf producer from Kansas and 2022-2023 USRSB Chair, on why it is important for ranchers to join USRSB:



The U.S. Roundtable for Sustainable Beef is unique among sustainability efforts in that it provides a space for everyone to be at the table – from ranchers with their “boots on the ground,” to retailers and environmental organizations. The full beef value chain has had equal footing in the discussions from the beginning and producers have been given the ability to share and collaborate in ways we have never before been able to.



Rob Manes on why the Nature Conservancy is a part of USRSB:

“

The Nature Conservancy believes that the long-term wellbeing of people and nature must include a truly sustainable food production system, and beef cattle are an essential component of that system. As a dedicated member of the U.S. Roundtable for Sustainable Beef, we are committed to an industry-wide, collaborative effort that strives to ensure long-term sustainable food production, economic security for ranching communities of all cultures and a healthy, biodiverse natural environment for us all.

”

Wayne Morgan, PhD, on why Golden State Foods is a member of USRSB:

“

Golden State Foods is a founding member of the USRSB, beginning our journey in 2015. Engagement in the USRSB has allowed us to work proactively and transparently with the entire supply chain to facilitate continuous improvement. These conversations with key players in every sector provide a better understanding of the opportunities and challenges our industry faces and empowers us to be more agile in addressing them with our stakeholders and customers.

”



Learn more about USRSB membership, including a list of current members from each sector and annual membership dues, at [USRSB.org/Membership](https://www.usrsb.org/membership).





[USRSB.org](https://www.usrsb.org)



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