

FRAMEWORK SUMMARY



U.S. BEEF INDUSTRY **SUSTAINABILITY FRAMEWORK**



FRAMEWORK SUMMARY

INTRODUCTION

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; a socially responsible, environmentally sound, and economically viable product that prioritizes planet, people, animals, and progress. The Framework is comprised of high-priority indicators, sector specific metrics, and sustainability assessment guides.

Engaging each sector of the value chain was a critical component of the Framework development. From cattle production to value chain sourcing and from veterinary science to soil health, these diverse backgrounds and expertise created a comprehensive and scientifically informed Framework that can be adapted to diverse operation and company situations in the beef industry.

The ability to establish benchmarks for current conditions and assess progress toward goals is critical to the U.S. beef industry's sustainability efforts. The USRSB is committed to measuring and documenting sustainability progress over time and will use surveys, the U.S. Beef Industry Life Cycle Assessment, and reported information to measure the implementation effectiveness of the U.S. Beef Industry Sustainability Framework and how it can best assist with industry wide progress.

HIGH PRIORITY INDICATORS:



WATER RESOURCES:

The volume of water consumed and any impacts on water quality.



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.



AIR & GREENHOUSE GAS EMISSIONS:

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



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.



ANIMAL HEALTH & WELLBEING:

The cumulative effects of cattle health, nutrition, care and comfort.

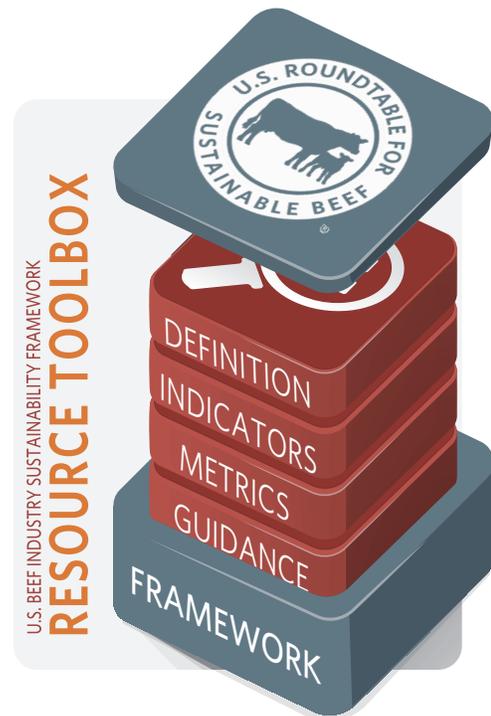


EMPLOYEE SAFETY & WELLBEING:

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.

METRICS

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. The approach and development of metrics was owned by each value chain sector with an expectation to actively engage other stakeholder groups including civil society and allied industry members.



SUSTAINABILITY ASSESSMENT GUIDES

To operationalize the metrics, a technical guidance document was needed to aid user understanding and facilitate implementation. This effort led to development of the Sustainability Assessment Guides (SAGs) for each sector which provide value chain members additional tools and resources for assessing their own operation in relation to the high priority indicators and accompanying metrics. Much like the metric development process, value chain sectors took the lead in developing these resources utilizing feedback received from every sector. The SAGs outline the purpose and resources for approaches and methods to improve each metric.



CONTINUOUS IMPROVEMENT IMPLEMENTATION STRATEGY

The U.S. beef value chain is committed to continually seeking opportunities for voluntary improvement, by implementing the Framework. In turn, the Framework will help connect consumers to the beef production community, answering questions they may have about beef production. As value chain participants apply the Framework, and develop and implement the plans and practices described, it may be useful for all value chain participants to answer the following questions to help measure the effectiveness of efforts, document progress, and ensure continuous improvement over time:

Indicator Improvement Process:

How will the indicator be improved through implementation of the metric?

Metric Success Criteria:

What constitutes continuous improvement for the metric as it applies to the operation? What outcomes need to be improved?

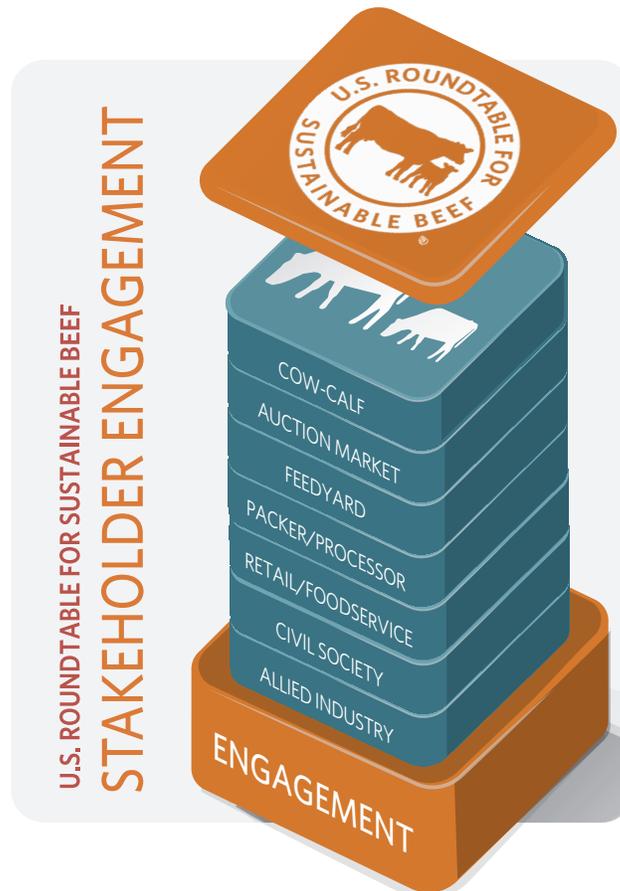
Metric Implementation Plan:

What will be measured, when, how, and by whom?

Metric Recording Strategy:

How will the metrics be recorded, benchmarked, and analyzed within the operation?

The following is a summary of the metrics and SAGs, by sector. For the full version please visit www.BeefSustainability.us.





COW-CALF SECTOR SUMMARY

The Cow-Calf Sector is made up of individuals, organizations, and associations of people who are actively engaged in the ownership and management of cattle used to produce beef. For the purpose of this document, the Cow-Calf Sector is inclusive of cow-calf producers (operations that maintain a breeding herd of cows and bulls and produce weaned calves), stockers (operations with grazing or high-roughage diet programs for cattle from the time they are weaned until they are on a finishing ration), and backgrounders (operations with growing programs for cattle from the time they are weaned until they are on a finishing ration).

The U.S. is the world's largest producer of beef, and the Cow-Calf Sector is the largest, most diverse value chain segment. Based on the 2012 Census of Agriculture conducted by the U.S. Department of Agriculture, there were 727,000 beef farms and ranches in the U.S. Of these, 91 percent were family-owned or individually-operated.

Cow-calf operations differ across the country, from less than 50 head of cattle on a few dozen acres, to thousands of animals spread across hundreds of thousands of acres.

WATER RESOURCES

Is a grazing management plan (or equivalent), being implemented that maintains or improves water resources?

What are the desired outcomes?

The use of grazing management plans (GMPs) is a powerful means of achieving:

- Improved ground cover and root systems of forages, growing or dormant
- A slowed rate of water runoff following precipitation events
- Increased rates of water infiltration into soil
- Reduced soil erosion
- Increased water availability in plant rooting zones and percolation into the water table or aquifer
- Protected and enhanced flows in groundwater dependent springs, creeks, and other riparian areas

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

The decisions and actions that cattle producers make in the management of their lands directly influence the health of those lands. Managed grazing plays a key role in maintaining healthy grasslands which provide important benefits for the water quality and quantity interacting with that grassland. The GMPs are key tools for producers to use to achieve their goals by optimizing the use of land and water resources relative to many factors. Implemented GMPs can provide the benefits outlined above for water resources while also delivering co-benefits for the land resources, air and greenhouse gas (GHG) emissions indicators, and the overall performance of the grasslands.

The USRSB will measure success by assessing increases in the number of U.S. cow-calf producers who implement a GMP (or equivalent).



LAND RESOURCES

Is a grazing management plan (or equivalent) being implemented to protect and/or improve the land resources, including succession/transition planning?

What are the desired outcomes?

A range of improvements in land resources sustainability outcomes can be attained through GMPs including:

- Creation of optimum conditions for plant regrowth that proper grazing management supports
- Maintained healthy root systems and an associated healthy microbiology of the soil
- Healthy ecosystems and ecological processes, which
- Increase resilience to climate, invasive species, wildfire, and other stresses and
- Promote biological diversity and productive wildlife habitat
- Increased carrying capacity of the grassland for livestock and wildlife over time

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Optimizing land resources requires the consideration of many factors, including soil type, climate, vegetative cover, wildlife and their habitat, soil ecological function, cattle health requirements, invasive species (including plants), and many others. The most useful tool for cattle producers to manage all of these factors to maintain and improve land resources is a GMP. The GMPs are also powerful tools for helping producers adapt management plans and actions to or mitigate risks like drought, wildfire, market fluctuations, and accidents where the outcomes are positive for the land and allow the operation to maintain economic viability. Well-conceived and implemented GMPs can provide the benefits outlined above for land resources while also delivering co-benefits for the water resources, air and GHG emissions indicators, and the overall performance of the grazing operation.

The USRSB will measure success by assessing increases in the number of U.S. cow-calf producers who implement a GMP (or equivalent).

AIR AND GREENHOUSE GAS EMISSIONS

Has a grazing management plan (or equivalent) been implemented that protects or improves soil and plant community health, including soil carbon sequestration?

What are the desired outcomes?

Improvements in the air and GHG emissions sustainability outcomes, based on implementation of a GMP, include:

- Properly managed forages resulting in healthy and increased ground cover from plant and litter
- This protects soil surface from wind and water erosion and holds and builds soils through increased organic matter that can aid in increased carbon sequestration
- Through proper grazing, grassland fuel loads can be reduced, leading to reduced risk of high-intensity fires which reduces the potential for more than normal volumes of GHG emissions emitted to the atmosphere during a wildfire

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Properly managed grazing can increase the carbon storage capacity of soil and reduce losses to the atmosphere. Many factors must be considered to do this and the most useful tool for cattle producers to manage all these factors, to increase carbon storage capacity of soil and reduce air and GHG emissions, is a GMP. The fact that GMPs are central to improving so many different sustainability outcomes across water resources, land resources, and air and GHG emissions also makes it possible to advance diverse goals through a single integrated plan embedded in operations, which also increases the potential for increased metric adoption across the Cow-Calf Sector.

The USRSB will measure success by assessing increases in the number of U.S. cow-calf producers who implement a GMP (or equivalent).

EFFICIENCY AND YIELD

Is there a strategy implemented to optimize animal productivity through improved nutrition, reproduction, genetics, technologies, and practices?

What are the desired outcomes?

Improvements in the efficiency and yield sustainability outcomes based on operation implementation of a strategy to optimize animal productivity include (on a per unit basis):

- Increased animal performance and efficiency
- Reduced idle animal units
- Increased calving rate
- Decreased morbidity
- Decreased mortality
- Reduced input costs
- Increased profitability

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Cow-calf operations who optimize animal productivity will use fewer amounts of resource inputs for the same unit of output which benefits both the overall sustainability of the beef industry and the profitability of their individual operation.

The metric for efficiency and yield intersects with the indicators (and their associated metrics) for water resources, land resources, air and GHG emissions, and animal health and well-being. Sustainability outcome improvements in one of these metrics can positively influence improved outcomes in the other metrics.

The USRSB will measure success by assessing increases in the number of producers who have a strategy implemented to optimize animal productivity through improved nutrition, reproduction, genetics, technologies, and practices.

ANIMAL HEALTH AND WELL-BEING

Has the operation adopted Beef Quality Assurance (BQA), or similar program principles into management of the farm or ranch?

What are the desired outcomes?

The following improvements in the animal health and well-being sustainability outcomes can be realized if an operation has implemented the principles outlined in the BQA program:

- Low stressed cattle
- Healthier herds
- Reduced use/need for animal health products or interventions
- Improved animal performance
- Reduced risk of injury to employees

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Cattle producers have a moral and ethical responsibility to ensure, to the best of their ability, the health and well-being of the livestock in their care. The BQA program is a scientifically founded and an industry accepted national program that provides educational resources designed to improve beef safety and quality while improving cattle well-being. The BQA program includes guidelines on the proper administration of animal health products including antibiotic stewardship, best management practices for animal well-being, and animal handling recommendations and is consistent with global standards as identified by the World Organization for Animal Health (OIE).

The USRSB will measure success by assessing increases in the number of U.S. cow-calf producers who have implemented BQA, or similar program principles on their farm or ranch.



EMPLOYEE SAFETY AND WELL-BEING

Are all individuals who are involved in the operation trained in stockmanship and safety, and are they implementing these practices on the farm or ranch?

What are the desired outcomes?

The following improved employee safety and well-being sustainability outcomes can be realized if an operation has trained employees who are implementing proper stockmanship and safety procedures:

- Reduced injury to employees and animals
- Reduced employee turnover
- Reduced stress in cattle

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Training plays a key role in making sure everyone in an operation is following the same procedures for employee safety and well-being, as well as animal health and well-being. If employees are not trained and procedures for stockmanship and safety are not properly implemented, risk of injury or death to an operation's employees is elevated. Increasing the number of farms and ranches in the U.S. who train their employees regarding stockmanship and safety can help prevent workplace accidents and injuries associated with production and transport of cattle. It can also improve animal health and well-being on that operation.

The USRSB will measure success by assessing increases in the number of U.S. cow-calf producers who have a training program for employees and are documenting employee participation in trainings that emphasize appropriate stockmanship and safety on the farm or ranch.





AUCTION MARKET SECTOR SUMMARY

There are approximately 1,000 auction markets in the U.S., with a heavy concentration in the Midwest, Plains, and Southeast regions. Livestock auction markets act as an agent, facilitating a sales transaction between livestock buyers and sellers. These markets accommodate producers with herds and consignments of all sizes. At 31 million head sold annually, cattle are the largest per-head species sold through auction markets. Approximately 80 percent of cattle producers market their cattle at an auction market each year.

Recognizing that cattle only spend a very brief time (usually 48 hours, almost always less than a week) in the care of auction markets, the auction impact on water resources, animal health and well-being, and employee safety and well-being can still be substantial. Conversely, the auction sector is observed to have a lesser ability to impact efficiency and yield, air and GHG emissions, and land resources. While metrics may emerge for these remaining high-priority indicators for the Auction Market Sector in the future, the ability of auctions to drive improvement across those indicators was limited. Thus, the Auction Market Sector has focused efforts on the three indicators where they have the greatest opportunity to contribute improvements.

WATER RESOURCES

Are water resource management strategies implemented at the auction that address water management, water use optimization/conservation, and water quality?

What are the desired outcomes?

A properly developed and implemented water resource management strategy can have positive effects related to water resources sustainability outcomes including:

- Conserving water for future generations
- Retaining and reusing of storm water runoff
- Recycling organic nutrients
- Ensuring auction market practices are protective of surface and groundwater

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

A water resource management strategy for auctions impacts both water quantity and quality. Water resource management strategies allow the auction to monitor and put measures in place to optimize the usage of water, protect surface and groundwater quality, and utilize water wisely as a heat or dust control measure, as well as maintain and provide an adequate supply of clean water to animals. Increased adoption of the water resources metric by auction market operations over time should lead to improved outcomes for responsible water use and improved water quality for both surface and ground water resources.

The USRSB will measure success by assessing increases in the adoption of the U.S. Beef Industry Sustainability Framework water resources metric by auction markets.



ANIMAL HEALTH AND WELL-BEING

Are employees trained and auction-specific Beef Quality Assurance (BQA) principles being implemented at the auction market?

What are the desired outcomes?

Focusing on BQA implementation, through the Livestock Marketing Association (LMA) guide, at livestock auction markets in the U.S. can have significant positive effects on improving animal health and well-being sustainability outcomes including:

- Ensured proper care and handling of all animals
- Supported outcome of healthy, low stressed animals
- Increased employee safety and well-being

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

The BQA program and its accompanying guidelines cover the major areas of animal nutrition, health, care, and handling. Increased adoption and implementation of BQA principles as relevant to auction specific settings, training all employees in their area(s) of responsibility(ies), conducting a BQA assessment to inform and allow change or implementation of additional BQA principles, and encouraging cattle transporters to become BQA certified can all have significant positive effects on improving animal health and well-being.

The USRSB will measure success by assessing increases in the number of livestock auction market employees trained in and implementing BQA principles through the LMA guide.

EMPLOYEE SAFETY AND WELL-BEING

Is an employee safety program in place?

What are the desired outcomes?

Livestock auction markets that have and actively support employee safety programs can enhance the following employee safety and well-being sustainability outcomes:

- Increased employee safety
- Increased employee retention
- Increased employee productivity
- Reduced stress in cattle

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Making an employee safety program a priority at an auction market has the dual benefit of (a) protecting the safety and improving the well-being of those who are employed at the auction market as well as (b) reducing stress and potential injury to cattle, thereby improving animal health and well-being. Providing safety training to employees in their respective area(s) of work responsibilities can have a significant positive effect on the outcome-based metrics associated with employee safety and well-being.

The USRSB will measure success by assessing increases in the number of auction markets developing and implementing an employee safety program in the U.S.



FEEDYARD SECTOR SUMMARY

The Feedyard Sector consists of operations where cattle are fed a balanced diet for four to six months and receive daily care. The U.S. is the world's largest beef producer and hosts the largest fed-cattle industry. Beef production in the U.S. is for both domestic consumption and global export.

Geographically, there are feedyards distributed across the U.S., with the greatest concentrations in the Great Plains, Midwest (corn belt), Southwest, and Pacific Northwest. Generally, the cattle feeding industry utilizes grain and a variety of other byproducts to finish cattle and produce high quality grades (Select, Choice, and Prime), of beef.

WATER RESOURCES

Are water resource management strategies implemented at the feedyard that address water management, water use optimization and conservation, and water quality?

What are the desired outcomes?

A properly developed and implemented water resource management strategy can have positive effects related to water resources sustainability outcomes including, but not limited to:

- Conserved water for future generations
- Retained and reusing of storm water runoff
- Recycled organic nutrients through crop production
- Offset demand of local freshwater resources by using storm water runoff water to irrigate crops
- Ensure feedyard practices are protective of surface and groundwater

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Adopting a water resource management strategy at a feedyard impacts both water quantity and quality by allowing the feedyard to monitor and put measures in place to optimize and recycle water, as well as protect surface and groundwater quality. Feedyards are uniquely positioned to capture stormwater runoff with associated nutrients and utilize the water and nutrients to produce feed. This water that would otherwise go unused reduces irrigation demand on local water supplies. This sustainability metric also has an impact on land resources and animal health and well-being because it provides a process for appropriately applying nutrients from captured water to improve and protect soil quality, as well as maintaining and providing an adequate supply of clean water to animals.

Additionally, through the USRSB and Field to Market (FTM) partnership, water used for feed production will be aggregated and evaluated in accordance with FTM reports, tools and calculators.

The USRSB will measure success by assessing increases in the number of feedyards implementing water resource management strategies.



LAND RESOURCES

Has a nutrient management strategy or plan been implemented?

What are the desired outcomes?

A feedyard owner and operator who implements a nutrient management strategy or plan will have a significant impact on land resources sustainability outcomes. Outcomes of such a strategy or plan include:

- Managing wastewater
- Monitoring soil health
- Prescribing the proper application rates of nutrients to crops and pastures

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

A feedyard owner and operator who implements a nutrient management strategy or plan will have a significant impact on the sustainability indicators of land resources and water resources as listed above. Application of nutrient-rich wastewater can reduce the need for artificial or commercial fertilizer, increasing the profitability of the feedyard and potentially other nearby farms by providing an economically feasible and readily-available source of nutrients. This is also a positive impact on the sustainability indicator of air and GHG emissions. The efficient recycling of nutrients through a nutrient management strategy, in most cases will also reduce air and GHG emissions.

The USRSB will measure success by assessing increases in the adoption and implementation of a nutrient management strategy on feedyards in the U.S.

AIR AND GREENHOUSE GAS EMISSIONS

Are strategies in place to manage air and greenhouse gas emissions?

What are the desired outcomes?

Collectively, the practices that are a part of a strategy to manage air and GHG emissions can:

- Improve performance of the animal
- Reduce feed required and therefore reduce overall outputs such as GHG and air emissions and waste
- Reduce excessive air emissions through management decisions that appropriately react to outside conditions

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Each feedyard has different conditions to consider, and therefore, it is appropriate for this metric to allow for a strategy to manage all air and GHG emissions based on the specific characteristics of that operation. Feedyards that have strategies in place such as pen management for both wet and dry conditions, and feed processing management, can help mitigate air emissions associated with the outside nature of agricultural production.

Feedyards that have strategies in place such as properly formulated rations to optimize animal performance, and feedyards that review use of fossil fuels and/or electricity can help mitigate GHG emissions. A feedyard that has a strategy in place to manage air and GHG emissions would not only reduce emissions but would also have a secondary benefit to the sustainability indicators of land resources, animal health and well-being and efficiency and yield.

The USRSB will measure success by assessing increases in the adoption and implementation of strategies that manage air and GHG emissions on feedyards in the U.S.

EFFICIENCY AND YIELD

Are cattle performance and operational efficiency tracked over time for this facility?

What are the desired outcomes?

Improved efficiency and yield sustainability outcomes can be realized over time if an operation tracks and acts on improving cattle performance and operational efficiency. By doing this, the following specific outcomes are realized:

- Improved closeout performance
- Improved ration formulation to optimize resources and performance
- Increased efficiency in energy utilization per unit of production
- Minimized shrink and storage losses of feedstuffs through improved methods
- Increased efficiency of feed delivery

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Efficiency and yield are related to the economic viability of the beef community and can affect the metrics of land resources, water resources, and air and GHG emissions through improved nutrient use efficiency. Reviewing and comparing performance outcomes over time can enhance decision making, reduce the operations resource use, and improve profitability. Increasing the number of feedyards tracking cattle performance and operational efficiency in the U.S. can have a significant positive effect on the overall efficiency and yield of a specific feedyard and the sector as a whole.

The USRSB will measure success by assessing increases in efficiency and yield at U.S. feedyard operations over time.

ANIMAL HEALTH AND WELL-BEING

Are feedyard employees trained in Beef Quality Assurance (BQA) principles and are these principles implemented at the feedyard?

What are the desired outcomes and how will USRSB measure success?

The BQA Program and its accompanying guidelines cover the major areas of animal nutrition, health, care and handling. Adoption of these scientifically based practices allows the beef value chain to:

- Produce healthier, lower stressed animals
- Create a significant positive impact on the animal health and well-being sustainability indicator outcomes

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Feedyards have a moral and ethical responsibility to ensure, to the best of their ability, the health and well-being of the livestock in their care. The BQA Program was developed by veterinarians, industry representatives, animal scientists and extension professionals and it is consistent with the World Organization for Animal Health (OIE) code that provides global standards for animal well-being and beef cattle production systems. The BQA Program also includes guidelines on antibiotic stewardship. A properly developed and implemented BQA Program (including employee training) helps ensure proper care and handling of all animals.

The USRSB will measure success by assessing increases in the number of feedyard employees trained in BQA, and BQA principles being implemented at feedyards.



EMPLOYEE SAFETY AND WELL-BEING

Are feedyard employees trained and is an employee safety program implemented at the feedyard?

What are the desired outcomes?

Feedyards that have, and actively support, employee safety programs (including employee training) have positive effects related to employee safety and well-being sustainability outcomes. The positive effects include:

- Improved employee safety performance
- Increased employee retention
- Increased employee productivity
- Reduced stress in cattle

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Making an employee safety program a priority at a feedyard has the dual benefit of protecting the safety and improving the well-being of those who are employed at the feedyard as well as reducing stress and potential injury to cattle, thereby also improving animal health and well-being. Employee well-being can broadly be defined as providing the knowledge, skills, and environment to safely perform their job responsibilities as well as improving the employees' perception of their work environment. Implementing practices to support employees in their job as well as in their family life can pay off in terms of employee engagement, reducing turnover, and improving productivity.

The USRSB will measure success by assessing the number of U.S. feedyards developing and implementing an employee safety program.





PACKER AND PROCESSOR SECTOR SUMMARY

The Packer and Processor Sector is made up of organizations and facilities that process, package, and distribute beef. The U.S. is the world's largest producer of beef, primarily high-quality, grain-fed beef for domestic and export consumption. In 2018, U.S. beef production (commercial carcass weight), was more than 26 billion pounds and U.S. commercial slaughter was almost 33 million head. Most packing plants in the U.S. are relatively small in size; 92 percent of plants slaughter less than 50,000 head per year, however, large plants with capacity over 50,000 head per year account for the vast majority of cattle slaughter.

WATER RESOURCES

LEVEL 1

Is a water resource management plan implemented at the facility?

LEVEL 2

How many wastewater permit non-compliances has the facility had in the previous calendar year?

What is the water use in gallons/head/day (packers), or gallons/pounds of beef processed (processors)?

LEVEL 3

Does the company track discharge water quality over time?

Does the company have set goals for continued improvement?

Does the company make water performance efforts public?

Does the company participate in partnerships, initiatives, or programs to further advance water resource management?

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Water plays an important role in beef packing and processing plants being critical to sanitation and food safety. Even so, it is a controllable element, and in most cases, facilities have (or could have) the ability to measure its use. Further, in the U.S., there are often regulatory requirements that can be leveraged for tracking and goal setting at the facility and company level. Through identification of current state, setting goals for continued improvement, being transparent regarding progress, and working with the industry, the packer and processor segment can better utilize water resources.

The USRSB will measure success by assessing increases in the number of beef packers and processors that adopt the U.S. Beef Industry Sustainability Framework water resource metrics.



LAND RESOURCES

Does the company have initiatives and/or explore opportunities to mitigate land and biodiversity impacts to new facility developments?

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

Packers and processors are responsible for maintaining and protecting the land associated with their property, including water and soil ecosystems. In general, manufacturing facilities have a relatively small land footprint but one significant point of impact to land would be at site selection when considering new developments. Considering the environmental impact of a new facility is a prudent practice to allow a company to address potential issues prior to a construction project and improve upon land resources sustainability outcomes.

The USRSB will measure success by assessing increases in the number of companies who have initiatives and/or explore opportunities to mitigate land and biodiversity impacts from new facility developments.

AIR AND GREENHOUSE GAS EMISSIONS

LEVEL 1

Are strategies in place to optimize energy efficiency and reduce GHG emissions at company facility(ies)?

LEVEL 2

What is the company's CO₂e per head or CO₂e per mass of finished product?

LEVEL 3

Does the company make CO₂e publicly available?

Does the company track greenhouse gas and air emissions over time and set goals for continued improvement?

Does the company participate in partnerships, initiatives or programs to further greenhouse gas reduction and improve air quality?

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Packers and processors have tremendous opportunity to focus on what they can directly control—environmental performance within their plant walls. Improving energy efficiency is one of the easier and most cost-effective ways to combat climate change and improve the competitiveness of the packer or processing business. Through evaluation and improvement on environmental performance, packers and processors can continue to reduce emissions within their sector and increase awareness of the risk climate change has on agriculture, farmer livelihoods, and the ability to produce safe, wholesome food for years to come.

The USRSB will measure success by assessing increases in the number of facilities who have strategies in place to optimize energy efficiency and reduce GHG emissions, who measure CO₂e per head or CO₂e per mass of finished product and who publicly report CO₂e and set targets to reduce GHG emissions.

EFFICIENCY AND YIELD

LEVEL 1

Is a program to divert waste from landfills implemented at the facility?

LEVEL 2

How much mass of waste/head or waste/mass of finished product does the company divert from landfill?

LEVEL 3

Does the company track waste reduction over time and set goals for continued improvement?

Does the company participate in partnerships, initiatives, or programs to further advance waste reduction strategies?

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Waste reduction is relevant in all manufacturing facilities and impacts the environmental and financial performance of those facilities. In addition, this topic allowed USRSB to avoid potential conflicts or concerns regarding financial or proprietary information. Reducing waste at a manufacturing facility improves environmental performance, lowers costs of materials, lowers cost of labor, lowers costs of disposal, and results in a more efficient operation.

The USRSB will measure success by assessing increases in the number of facilities that adopt the U.S. Beef Industry Sustainability Framework metrics for efficiency and yield.

ANIMAL HEALTH AND WELL-BEING

LEVEL 1

Packer: Does the company have a comprehensive animal welfare program including third-party verification?

Processor: Does the company have a documented animal welfare policy (or equivalent) and encourage the adoption of the Framework’s Animal Health and Well-being Metrics?

LEVEL 2

Packer: What is your company’s total number of USDA non-compliance animal welfare violations per 100,000 head processed in the previous calendar year?

Packer: What percentage of cattle come under a third-party audit? What percentage pass on first audit?

Processor: Does the company use second-or-third party animal welfare audits, such as the North American Meat Institute’s (NAMI) Animal Handling Guidelines and Audit Guide to verify policy compliance to at least the packer level?

LEVEL 3

Does the company track animal health and well-being overtime and set goals for continued improvement?

Does the company engage its suppliers or participate in partnerships, initiatives or programs and/or engage its suppliers to advance continuous improvement regarding animal health and well-being in the beef value chain?

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Packers and processors, as all sectors of the beef value chain, have a responsibility to ensure the health and well-being of animals under their control are prioritized. Also, from an economic sustainability view, stressful handling of cattle during loading and unloading can decrease carcass quality and yield. Ensuring that cattle health and well-being is prioritized is crucial so that injuries of cattle on site are avoided. Additionally, improper handling of cattle can result in team member health and safety concerns.

The USRSB will measure success by assessing the increases in the number of facilities/companies that adopt U.S. Beef Industry Sustainability Framework metrics for animal health and well-being.

EMPLOYEE SAFETY AND WELL-BEING

LEVEL 1

Does the company have a documented employee safety and well-being program that engages front-line employees and leadership?

LEVEL 2

Does the company track Total Recordable Incident Rates (TRIR)?

LEVEL 3

Does the company track trends on TRIR and reference rates against the NAICS industry standard rate to set goals for the upcoming year?

Does the company participate in partnerships, initiatives or programs to further advance employee safety and well-being?



Why did USRSB choose this metric and how does it continuously improve beef sustainability?

The continued improvement of employee safety and well-being is a critical component to a sustainable packer and processor operation. While the industry has worked diligently to provide safe working conditions and reduce injury rates, there is still opportunity for improvement. Providing a safe workplace has rewards for both the employee and the employer and can be seen in improved morale, increased productivity, reduced costs, and less absenteeism. The well-being of all people within the beef value chain is important, within the packer processor sector it is especially critical due to the nature of the work and potential hazards.

The USRSB will measure success by assessing increases in the number of facilities implementing and utilizing formal safety programs, reducing their TRIR and evaluating overall safety strategies and programs.





RETAIL AND FOOD SERVICE SECTOR SUMMARY

The Retail and Food Service Sector represents food retailers including grocery stores, mass merchandisers, hotels, restaurants, convenience stores, food service companies, and food delivery companies. This sector is an important member of the USRSB and the beef value chain as they distribute, sell, and serve beef directly to consumers.

The breadth of operations and ownership models within the Retail and Food Service Sector means there are not “one-size fits all” solutions or tools. Each business is a unique operation, and implementation of the USRSB metrics may need to be tailored accordingly.

WATER RESOURCES

LEVEL 1

Has the company assessed the water risk of its operations and locations?

LEVEL 2

Does the company have a plan for water resource and risk management including both quantity and quality impacts?

Has the company assessed the water risk of its direct beef suppliers?

Does the company engage suppliers and encourage adoption of USRSB water resource metrics in its beef value chain?

LEVEL 3

Is the company participating in a credible system for reporting water stewardship?

Has the company set water targets based on its assessments?

Can the company demonstrate progress towards these targets?

Does the company track performance on water stewardship in its beef value chain?

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Of the water used for U.S. commercial and industrial purposes, 15percent is consumed by restaurants primarily for dish washing and restroom facilities. Utilizing water conservation practices can decrease operating costs over 10 percent and reduce water and energy use. Wasted water comes with a cost; retail and food service organizations that strategically invest in water management and reduction solutions will reap the financial benefits while also improving water resources sustainability outcomes. Reduced water use and improved water quality are key impact areas that are critical to the continuous improvement of the beef value chain.

The USRSB will measure success by assessing increases in the number of companies that adopt and encourage adoption of U.S. Beef Industry Sustainability Framework water resources metrics in the beef value chain.



LAND RESOURCES

LEVEL 1

Has the company assessed the deforestation risk to its beef value chain?

LEVEL 2

Is the retail/food service company working with organizations to support U.S. farmers and ranchers in developing and implementing grazing management plans?

Does the company have a no net deforestation policy for its beef value chain?

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Recognizing that retail and food service providers seldom have direct influence on significant land resource impacts through their operations, the Retail and Food Service Sector's land resources metrics focuses on a company's ability to influence in its value chain. The Retail and Food Service Sector recognizes the importance of maintaining intact grasslands and supports the adoption of grazing management plans as described in the USRSB Cow-Calf Sector metrics. Recognition of cattle as "up-cyclers" utilizing forage to produce protein and maintain habitat for grassland species in the U.S. will help mitigate land impacts. However, deforestation has been identified as a material risk for companies sourcing international beef. Therefore, this metric only applies to companies sourcing both domestic and international beef.

The USRSB will measure success by assessing increases in the number of companies that adopt U.S. Beef Industry Sustainability Framework land resources metrics.

AIR AND GREENHOUSE GAS EMISSIONS

LEVEL 1

Has the company assessed its Scope 1 and 2 GHG emissions?

LEVEL 2

Does the company have a plan to reduce its Scope 1 and 2 GHG emissions?

Has the company assessed the Scope 3 GHG emissions of its beef value chain?

Does the company engage suppliers and encourage adoption of USRSB Air and GHG metrics in its beef value chain?

LEVEL 3

Is the company participating in a credible external system reporting for GHG emissions?

Has the company set credible GHG emissions targets?

Can the company demonstrate progress towards these targets?

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Retailers and food service are able to identify GHG emissions in their own operations, particularly from the main drivers which include energy use, water use, coolant leakage, and food waste. Finding cost-effective means to reduce these drivers will reduce GHG emissions and operational costs for the sector. These metrics will provide retail and food service providers with key milestones for measuring progress across the spectrum of continuous improvement.

The USRSB will measure success by assessing increases in the number of companies adopting the U.S. Beef Industry Sustainability Framework metrics in the value chain leading to increased tracking and assessment of progress on air and GHG emissions.

EFFICIENCY AND YIELD

LEVEL 1

Has the company assessed food waste in its own operations?

LEVEL 2

**Does the company have programs focused on reducing food waste in its operations, including beef waste?
Does the company have policies that encourage adoption of USRSB metrics and enable suppliers to find alternative uses for safe, wholesome, surplus products (beef, in particular)?**

LEVEL 3

**Does the company set targets and track performance of its food waste reduction programs, including beef?
Does the company engage its direct suppliers and track performance on food waste reduction in its beef value chain?**

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Food waste reduction has lasting impacts on various indicators of the beef value chain. Approximately 41.2 million Americans live in food insecure households, up to one-fifth of cropland, fertilizer, and water used for agriculture is wasted to grow food that is never eaten, and as the number one contributor to landfills (by weight) wasted food accounts for 2.6 percent of U.S. GHG emissions. Given the diversity of operations within the Retail and Food Service Sector, it is important to collaborate on solutions and recommendations being developed to continually improve on reducing food waste and improve efficiency and yield.

The USRSB will measure success by assessing increases in the number of companies that have adopted the U.S. Beef Industry Sustainability Framework metrics to result in continuous improvement of the efficiency and yield sustainability outcomes.

ANIMAL HEALTH AND WELL-BEING

LEVEL 1

**Does the company have a documented and publicly available animal care and handling policy?
Does the company encourage the adoption of USRSB metrics in its beef value chain?**

LEVEL 2

**Does the company verify compliance with its policy at least to the packer level?
Does the company have a policy for audit failures?**

LEVEL 3

**Does the company engage its suppliers on continuous improvement and emerging issues regarding animal health and well-being in its beef supply chain?
Does the company track and assess progress on animal health and well-being outcomes that align with its policy?**

Why did USRSB choose these metrics and how do they continuously improve beef sustainability?

Animal health and well-being is one of the top sustainability concerns across different retail and food service stakeholder groups including consumers, shareholders, and advocacy groups. Although the Retail and Food Service Sector does not directly interact with live animals, their health and well-being play an important role in being a responsible business, delivering consistent, quality products and meeting consumer and other stakeholder expectations. The Retail and Food Service Sector take this responsibility seriously and is committed to engaging both its customers and suppliers to continuously improve the health and well-being of the animals in its value chain.

The USRSB will measure success by assessing increases in the number of sector companies that adopt the U.S. Beef Industry Sustainability Framework metrics for Animal Health and Well-being.



EMPLOYEE SAFETY AND WELL-BEING

LEVEL 1

Does the company have clearly documented policies and procedures around employee workplace safety and training programs?

Does the company require training on food safety and handling techniques for beef?

LEVEL 2

Does the company have a supplier code of conduct (or equivalent) that includes employee health and safety policies and have a system for tracking compliance of its beef suppliers?

LEVEL 3

Does the company track the number of direct company employees (not value chain) completing safety and training programs?

Why did USRSB choose this metric and how does it continuously improve beef sustainability?

A safe work environment is essential to accomplish day-to-day business operations and ensure the well-being of employees. Sustainable organizations strive to balance the triple bottom line of people, planet, and profit to achieve long-term success and viability. This means that organizations cannot be sustainable for long-term success without protecting the safety, health, and well-being of their most vital resource: employees.

The USRSB will measure success by assessing increases in the number of companies that adopt the employee safety and well-being U.S. Beef Industry Sustainability Framework metrics.



ADDITIONAL RESOURCES:

THE U.S. BEEF INDUSTRY SUSTAINABILITY FRAMEWORK

This document is a summary of the U.S. Beef Industry Sustainability Framework. View the full version of the Framework online at www.BeefSustainability.us.

THE U.S. ROUNDTABLE FOR SUSTAINABLE BEEF

The U.S. Beef Industry Sustainability Framework is a product of the U.S. Roundtable for Sustainable Beef, a non-profit organization formed in 2015. Learn more about the USRSB at www.usrsb.org

