

**MILK  
SPECIALTIES  
GLOBAL**



# **SOCIAL RESPONSIBILITY REPORT 2024**

**MADE  
FOR  
MORE.**



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We acknowledge the environmental and community impacts of our operations. Consequently, we make it a priority to conduct ourselves responsibly. Our commitment extends to integrating sustainability into our core business practices. This Corporate Social Responsibility report highlights our current initiatives, outlines our future plans, and provides a detailed account of our annual metrics. In this report, we transparently share the outcomes of our efforts to mitigate our impact on the environment and improve the lives of the people around us.



# WHAT'S NEW? ESTABLISHING OUR CARBON EMISSIONS BASELINE

Over the past year, we successfully achieved our goal of comprehensively measuring our carbon footprint. This involved conducting an extensive analysis that meticulously covered our Scope 1, Scope 2, and Scope 3 emissions.

1

## SCOPE 1

These are direct greenhouse gas (GHG) emissions from our own activities. This includes emissions from our plants and the fuel burned in our company vehicles.

2

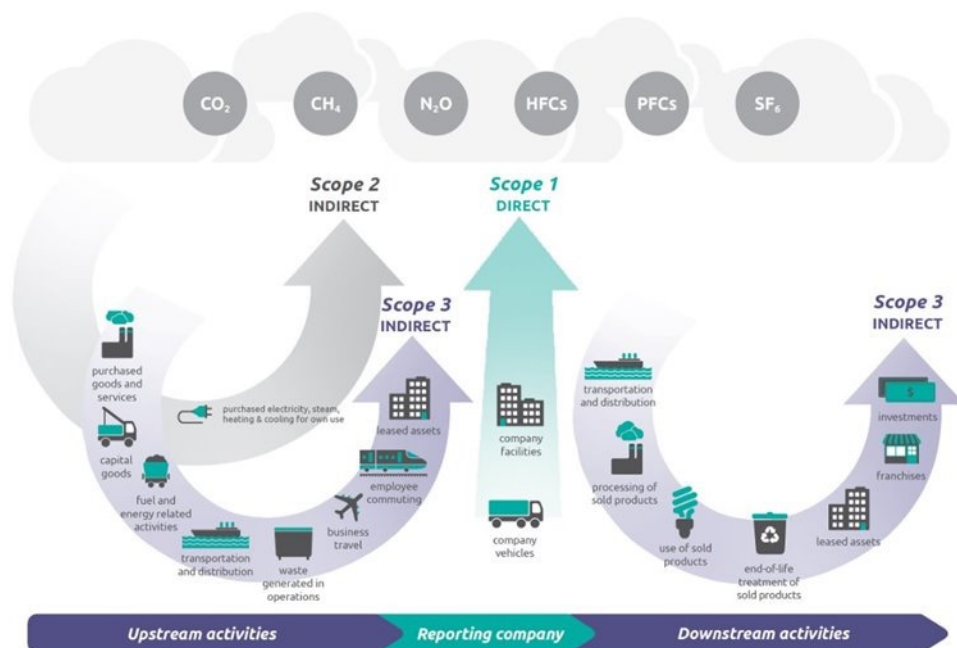
## SCOPE 2

These are indirect emissions from the energy we purchase, such as electricity and heating.

3

## SCOPE 3

These cover all other indirect emissions from our value chain, including those from our suppliers, transportation, and farms. Notably, over 90% of our emissions fall under Scope 3, with the majority originating from the farm level.



By analyzing our carbon footprint across these three scopes, we have gained valuable insights into the primary areas contributing to our emissions. This comprehensive understanding enables us to target our reduction efforts more effectively and work towards meaningful sustainability goals.



This past year, we embarked on a significant journey to footprint the farms in our network. This comprehensive data collection included detailed information such as herd data, acreage data, nutrient management practices, and regenerative agriculture methods. Our farmers are already implementing impressive sustainability practices, and by identifying and showcasing these efforts, we aim to attract new customers and reward the farmers excelling in their environmental initiatives. Our goal is to create a robust framework to measure and manage emissions across our entire value chain, ensuring that our data is bulletproof, supported by source evidence, and fully auditable. This emphasis on creating primary farm-level data is a key component of our Scope 3 program.

## QUALITY CONTROLS AROUND DATA

We have implemented strict quality controls around data collection and reporting to ensure the accuracy and reliability of our emissions data. Through our analysis, we discovered that much of the existing data lacked credible sources, making it unreliable. Our program addresses this issue by ensuring that all collected data is auditable and backed by credible sources. Identifying the key areas with the most significant impact has been a crucial outcome of this partnership. This commitment to data integrity not only strengthens our sustainability efforts but also builds trust with our stakeholders and customers.

By collaborating with our dedicated farmers, we continue to drive meaningful progress in our sustainability initiatives, setting a high standard for environmental responsibility and transparency in the industry.

**This is just the beginning.** We are proud of the progress we've made and looking forward to the progress we will be making in the next 12 months.



# WHAT'S NEW? COMMITMENTS

Milk Specialties is proud to have made the US Dairy Stewardship Commitment in 2021 which aims to meet three industry-wide goals by 2050.



**ACHIEVE GREENHOUSE  
GAS NEUTRALITY**



**OPTIMIZE WATER USE  
WHILE MAXIMIZING  
RECYCLING**



**IMPROVE WATER  
QUALITY BY OPTIMIZING  
UTILIZATION OF MANURE  
& NUTRIENTS**

In 2023, a significant milestone was achieved as we embraced the implementation of global Environmental, Social, Governance (ESG) frameworks and standards. We set internal goals and targets aligned with the United Nations Sustainable Development Goals. Now, as we move forward into 2024, we've updated our goals to continue challenging and pushing ourselves to be our best.

UNSDG 8: Committed to promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. We prioritize fair labor practices and equal opportunities, ensuring safe and healthy working conditions for our employees. We support local communities through job creation and by contributing to economic growth initiatives, ensuring our operations have a positive and lasting impact on society.

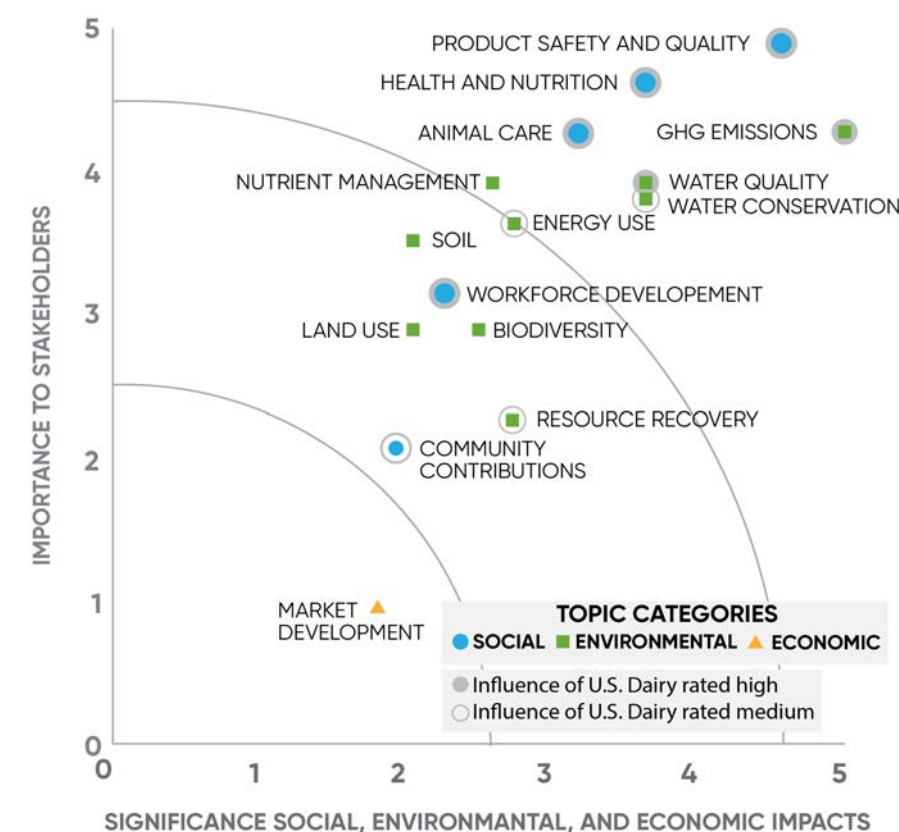
UNSDG 12: With a focus on Responsible Consumption and Production, Milk Specialties Global (MSG) is dedicated to minimizing waste and optimizing resource utilization across its operations. This includes maximizing recycling of supplier byproducts and implementing water reuse strategies.

UNSDG 13: In pursuit of Climate Action, the company actively seeks to optimize sustainability efforts. This involves conducting a baseline assessment of its GHG footprint, regular updates of farm data, strategic improvements in the milk supply chain, and adherence to GHG protocol guidance.



In May, we proudly joined the Sustainability Dairy Partnership (SDP), aiming to make dairy production greener and more sustainable. Our success in the next year will depend on adopting eco-friendly practices, like reducing emissions, optimizing resource use, and using renewable energy. It's all about teamwork, tracking our progress, and sharing our journey. By staying committed, we can lead the way to a more sustainable future for dairy.

## U.S. DAIRY MATERIALITY MATRIX



As we kick off 2024, MSG proudly announces the commencement of our Benefit Corporation journey. Embracing the principles of a Benefit Corporation (B-Corp) underscores our commitment to prioritize purpose alongside profit, aligning our business objectives with societal and environmental well-being. By pursuing B-Corp certification, we seek to demonstrate transparency, accountability, and a dedication to positive impact beyond financial returns. The B-Lab assessment process, integral to achieving B-Corp status, involves rigorous evaluation of our social and environmental performance, governance structure, and overall impact. This journey not only reflects our values but also serves as a catalyst for continuous improvement and meaningful contributions to a more sustainable future.





## A MESSAGE FROM OUR CEO



Lenzmeier grew up on a dairy farm in Kimball, Minn., beginning his career in quality/operations/business development for First District Association in Litchfield, one of the first North American producers of whey protein. In 1999, he co-founded Protient, a manufacturer of specialty whey protein for use in baby formula, processed foods and dietary supplements. He sold the company and joined Milk Specialties Global in 2008 as president of their newly formed food division. In 2011, he became CEO of the entire company. The division he started became the biggest part of Milk Specialties' business helping the company grow from four locations in the Midwest to over 1,000 employees at 12 locations across the nation.



At our Clara City facility, 18% of the overall electricity usage in 2023 came from the cleanest and most abundant renewable energy source available, solar energy.

*Et parisciis aut faccusa*

## WHAT WE STAND FOR

Milk Specialties Global was founded on the principle of upcycling – turning something considered waste into something of value – and we believe wholeheartedly in doing right for the environment. As a food ingredients company with deep ties to agriculture and dairy, we affirm to the family farm mantra of creating a better situation for the generations to come.

### Tracking and Understanding Our Environmental Impact

Milk Specialties actively tracks a range of metrics, including greenhouse gas emissions and water usage, to measure our impact. Throughout this report, we will share data that we collect and provide transparent analysis.

### Continuous Improvement

Whether it is the amount of diesel fuel we utilize in our equipment, or the kilowatt hours of energy required to make one pound of our product, we expect a gradual improvement in the areas where we make the largest impact on the environment.

### Transparency as a Solution

With deep ties to the dairy industry, we believe that dairy can be a sustainability solution. With widespread adoption of new technologies, such as methane digesters, dairy farms have the ability to power our homes and vehicles while providing high-density nutrition with less land. Scientific advances in dairy nutrition and waste management lead us to be confident that dairy can be an environmental solution.

### Working with Partners

No single entity will ensure food processing and associated supply chains become carbon neutral. It will require partnerships built on trust. We believe in setting competitions aside when it comes to making environmental improvements. That includes consulting with competitors on how we implemented environmental improvements or reaching out to competitors when a solution can be achieved by working together.

# S.E.C.R.I.T.S



Our S.E.C.R.I.T.S. program allows our employees to recognize their fellow coworkers whom they have observed going above and beyond while demonstrating one or more of the following principles critical to our company's success.

## SAFETY

Our first consideration is the health and safety of our workers, the animals in the supply chain and all the products we produce are safe for their intended use.

## ENTREPRENEURIAL

We start with "yes," approaching challenges and opportunities with the belief that we can get the job done.

## CONTINUOUS IMPROVEMENT

We work together with all stakeholders to ensure MSG is constantly evolving and enhancing to achieve excellence every day.

## RESULTS DRIVEN

We expect passion and strong work ethic of each other and view the outcomes of our work as the key measure of success

## INTEGRITY

Our business is built on trusting relationships; doing right by suppliers, partners and each other is non-negotiable.

## THRIVE & GROW

We strive to create a workplace environment where all employees can develop, thrive and grow.

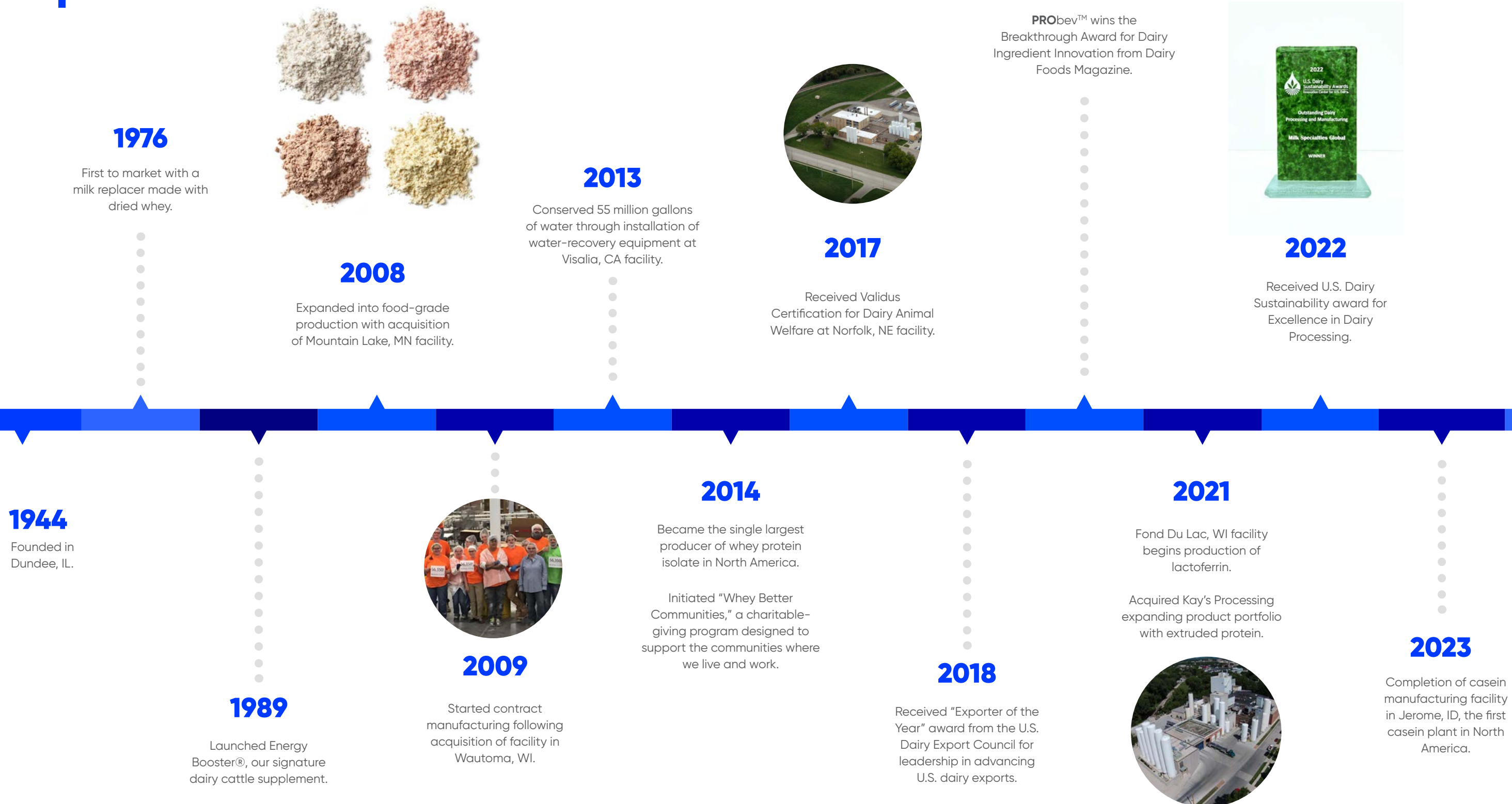
## SUSTAINABILITY

We encourage everyone to share new ideas and establish protocols that lead to positive environmental outcomes and efficiencies in energy, water, waste and GHG emissions.

We are excited to introduce **sustainability** as a new core value within our company. By incorporating sustainability into SECRITS, we recognize the importance of understanding our environmental impact and promoting long-term improvements in all areas of our operations.



# A HISTORY OF ALWAYS MOVING FORWARD





# A BRAND BUILT ON UPCYCLING

**UPCYCLING** *verb* • Reuse (discarded objects or material) in such a way as to create a product of higher quality or value.

**SUSTAINABILITY** *noun* • Preserving and protecting natural resources and ecosystems to ensure their availability and health for current and future generations

Before becoming a leading global manufacturer of protein and food ingredients, Milk Specialties Global (MSG) was founded on the principal of upcycling. Midwest Dried Milk Company, as Milk Specialties Global was known in 1944, began as an animal feed company that reclaimed leftover whey from the cheesemaking process. The nutrients in the whey were captured, dried and used in milk replacer and other animal feed products – a novel idea at the time that ultimately led to MSG being an early pioneer in milk replacer manufacturing.

Today, Milk Specialties Global is the largest purchaser and upcycler of whey in the world. We supply protein and ingredients to some of the top food brands and there is a strong likelihood you have some of our ingredients in your pantry or refrigerator right now without realizing it. While our product portfolio has expanded and diversified since our founding, our goal remains the same: **to capture every last gram of nutrition in milk and other products we process to help feed the world.**

“

Milk Specialties co-founder, the late Merle Nesbit, described to the Chicago Tribune in 1993 how whey was perceived around the time the company was founded.

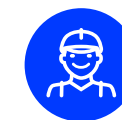
*“Back then, whey was a problem for the cheese manufacturers to get rid of it. They were dumping it in streams, and it would pollute the stream and kill the fish.”*

**-Merle Nesbit Co-Founder, Milk Specialties**



## MANUFACTURING

12 facilities in California, Idaho, Illinois, Minnesota, Nebraska and Wisconsin



## WORKFORCE

2020 – 841 employees  
2021 – 1,015 employees  
2022 – 1,151 employees  
2023 – 1,205 employees



## DISTRIBUTION

Products reach 44 countries across six continents

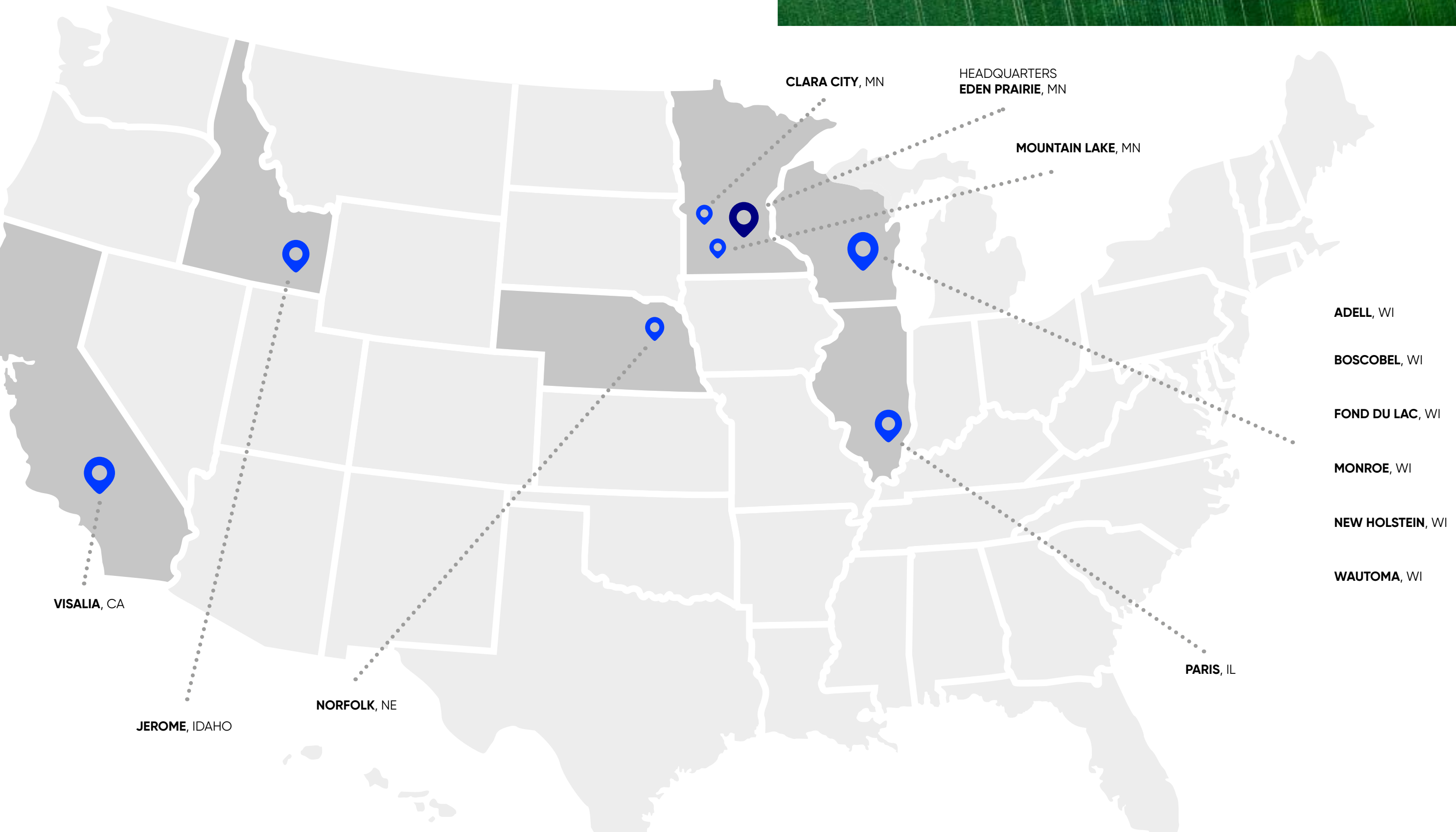




# CENTERED IN EPICENTERS OF THE SUPPLY CHAIN



Our facilities are strategically centered in the epicenters of the US dairy supply chain.





# CIRCULAR BUSINESS MODEL

Our full circle model shows how both sides of our business support the agricultural supply chain. We produce animal nutrition products to help grow and maintain generations of dairy cattle. While our human nutrition business supports the farmer's milk check by acquiring milk and whey components, then converting them into high value ingredients for consumer products.





# TRANSPORTATION EFFICIENCY

To enhance energy efficiency, we focus on optimizing our transportation system. We have adopted intermodal transportation, combining rail and truck shipments to leverage the strengths of both modes. This approach reduces costs and minimizes our environmental impact. Additionally, we have invested in modern logistics technologies to streamline route planning and increase load efficiency. We use tank cars and hopper cars to transport products by rail, which is more efficient and eco-friendly than trucking. By prioritizing transportation efficiency and resource conservation, we ensure the responsible and efficient delivery of our products while continuously seeking innovative solutions to further reduce our carbon footprint.



We made **344** intermodal shipments in 2023.

This is equivalent to avoiding **2,824,560** truck miles.

In 2023, we shipped **127** hopper cars worth of product.

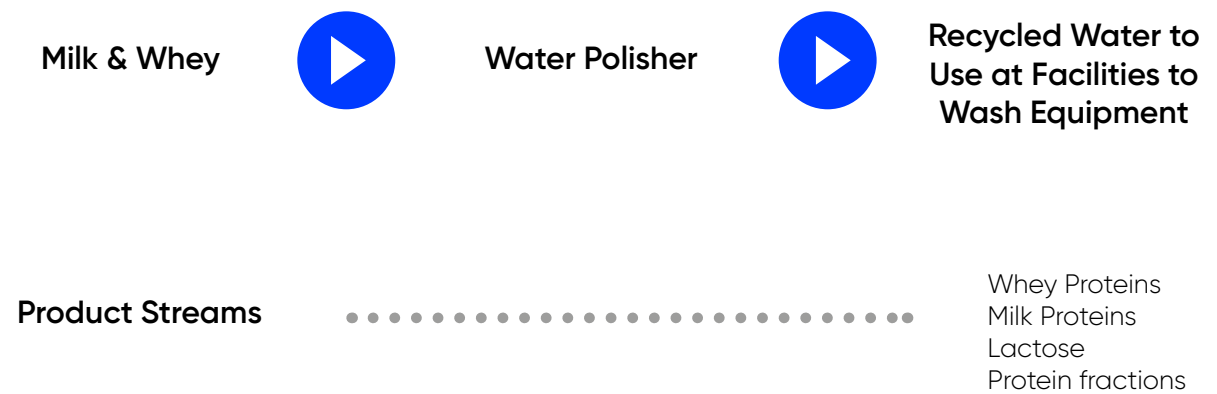
This is the equivalent of taking **520** truck shipments off our highways.



# WATER

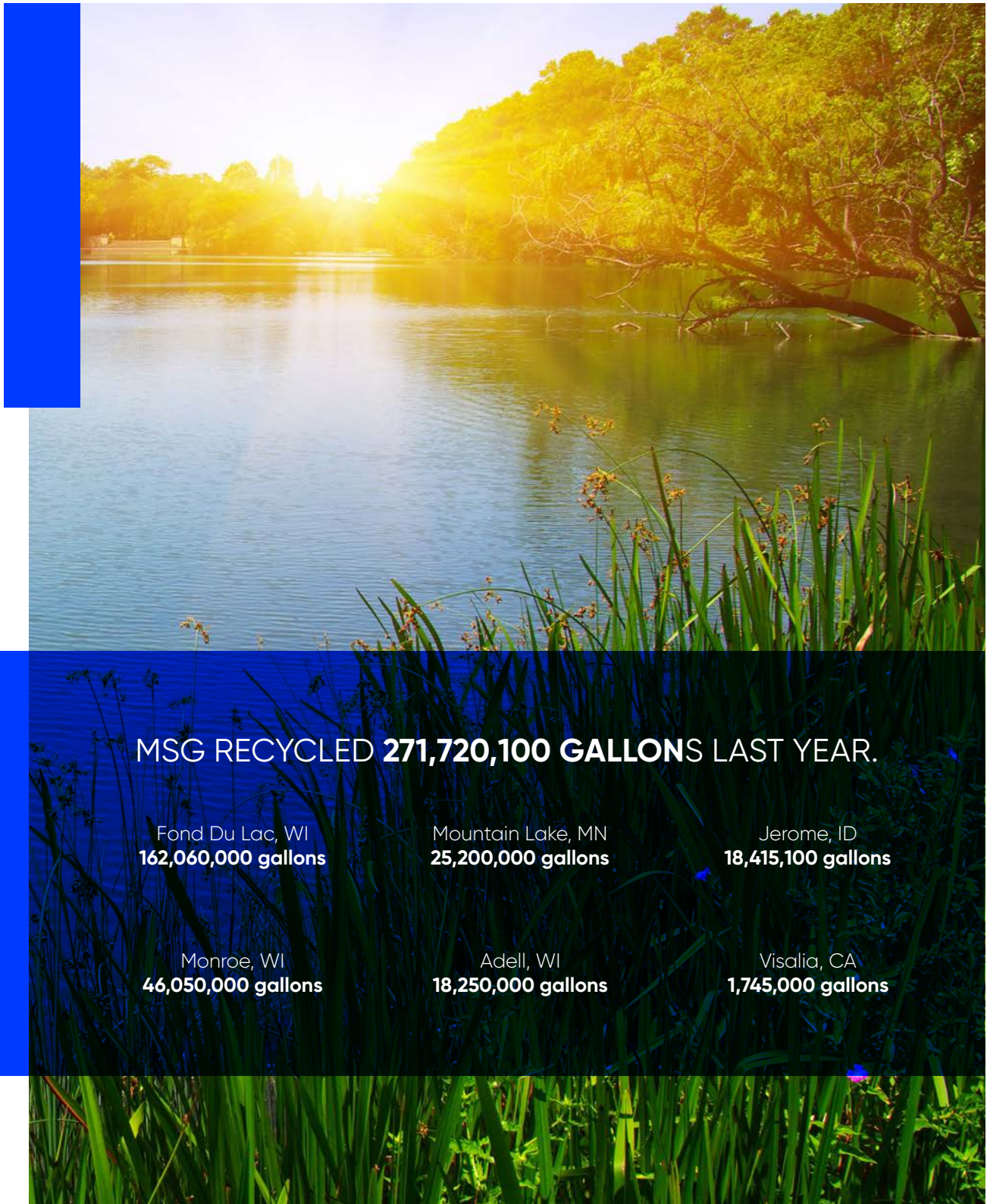
While most of Milk Specialties’ facilities are not in areas considered to be water stressed, we make it a point to conserve this precious resource. We continue to focus on water reclamation and water purification by leveraging the latest technology to capture “waste” water and clean it using reverse osmosis filtration.

We have made significant investments in our facilities over the past decade to clean and recycle the water we use. Milk Specialties Global continues to look to processing technology and water use reduction, and coupling these efforts to the Clean Water Act initiatives, to ensure that we continue to be stewards of this valuable resource.



Our Jerome, ID facility creates an annual water surplus of **32,378,391 gallons** that gets returned to the city’s water supply

MSG’s dairy processing operations recover significant volumes of clean water (polished water leftover from milk processing), which is then used for cleaning or returned to nature. These volumes significantly offset our demand for fresh water.



## MSG RECYCLED 271,720,100 GALLONS LAST YEAR.

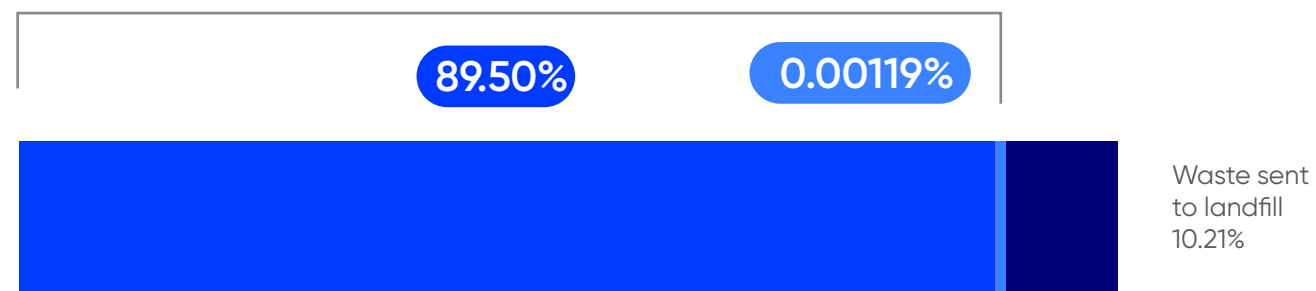
Fond Du Lac, WI 162,060,000 gallons	Mountain Lake, MN 25,200,000 gallons	Jerome, ID 18,415,100 gallons
Monroe, WI 46,050,000 gallons	Adell, WI 18,250,000 gallons	Visalia, CA 1,745,000 gallons



# KEEPING WASTE OUT OF LANDFILLS



89.50% of resources put to beneficial use

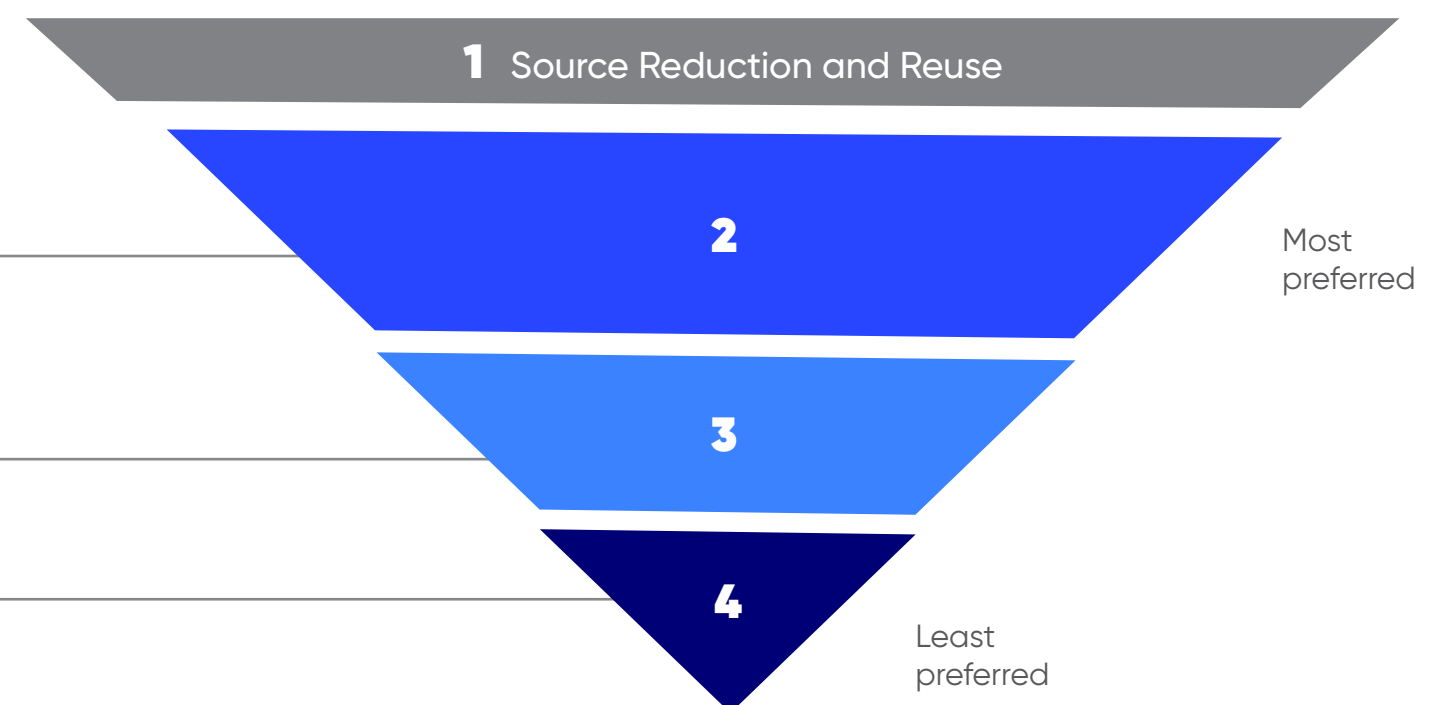


Metric (waste stream per total waste stream in pounds)

	2023
<div></div> Food/organics donated or repurposed as animal feed and non-food recycled or composted	0.8950
<div></div> Food/organics repurposed for industrial uses or compost and non-food repurposed for energy recovery	0.0000119
<div></div> Waste sent to landfill or incineration without recapturing energy	0.1021

# FOOD RECOVERY

The Food Recovery Hierarchy was created by the EPA. The goal was to prioritize actions organizations can take to prevent and divert waste. The top levels of the hierarchy are the best ways to prevent and divert wasted food because they create the most benefits for the environment, society and the economy.



# NOT ALL PROTEIN IS CREATED EQUAL

Consumer demand for protein-packed products is surging. As consumers focus on their overall health and nutrition more than ever, one aspect of protein that is often overlooked is protein quality. While protein can be derived from a wide range of animal and plant sources, only a few protein sources can be considered "complete."

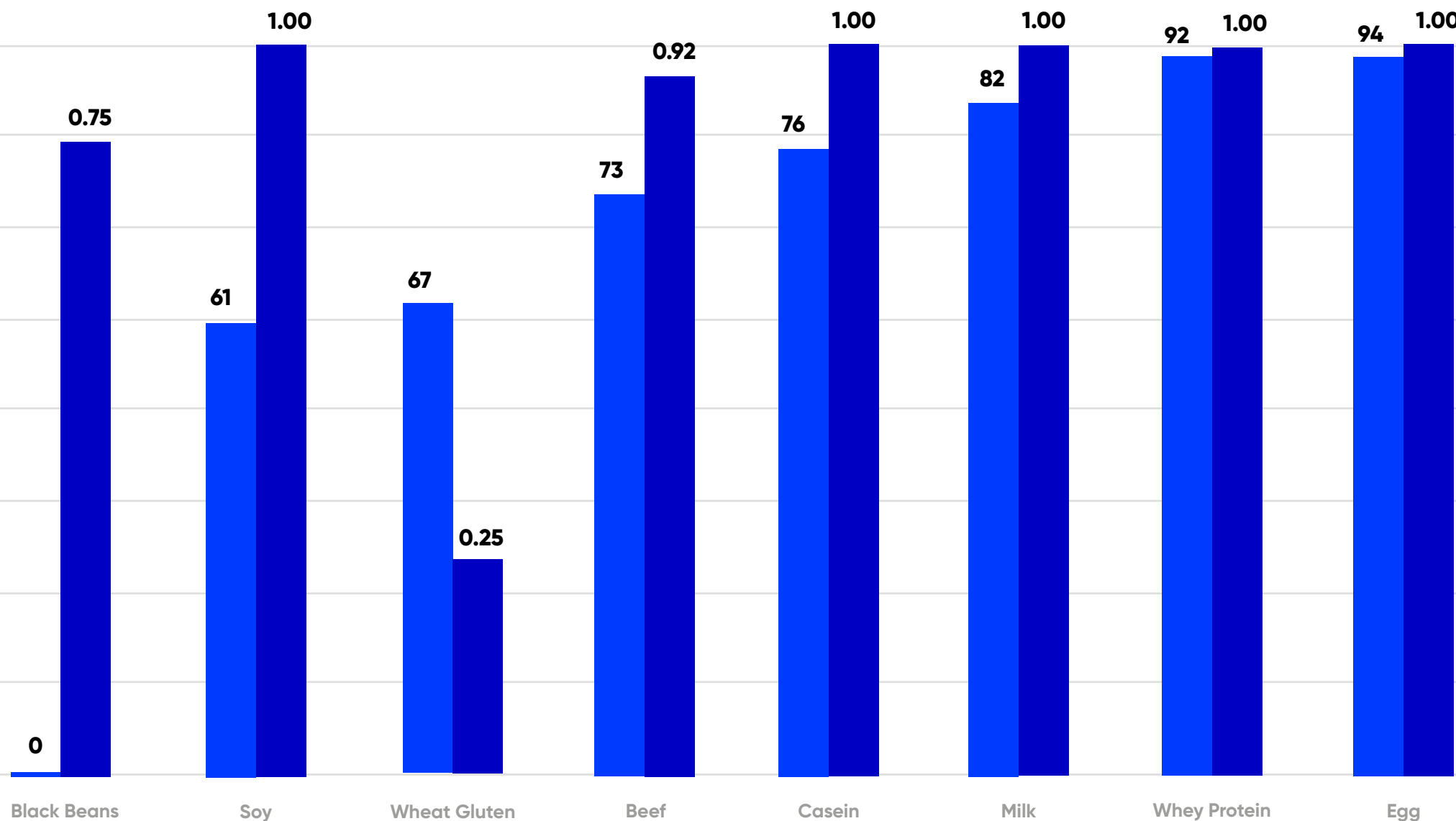
Protein is made up of 20 amino acids, 11 of which are produced by the human body. The remaining nine amino acids are known as essential amino acids, derived from the food we eat, such as protein. Protein sources that provide all nine essential amino acids are complete proteins.



Net Protein Utilization



Protein Digestibility Corrected Amino Acid Score



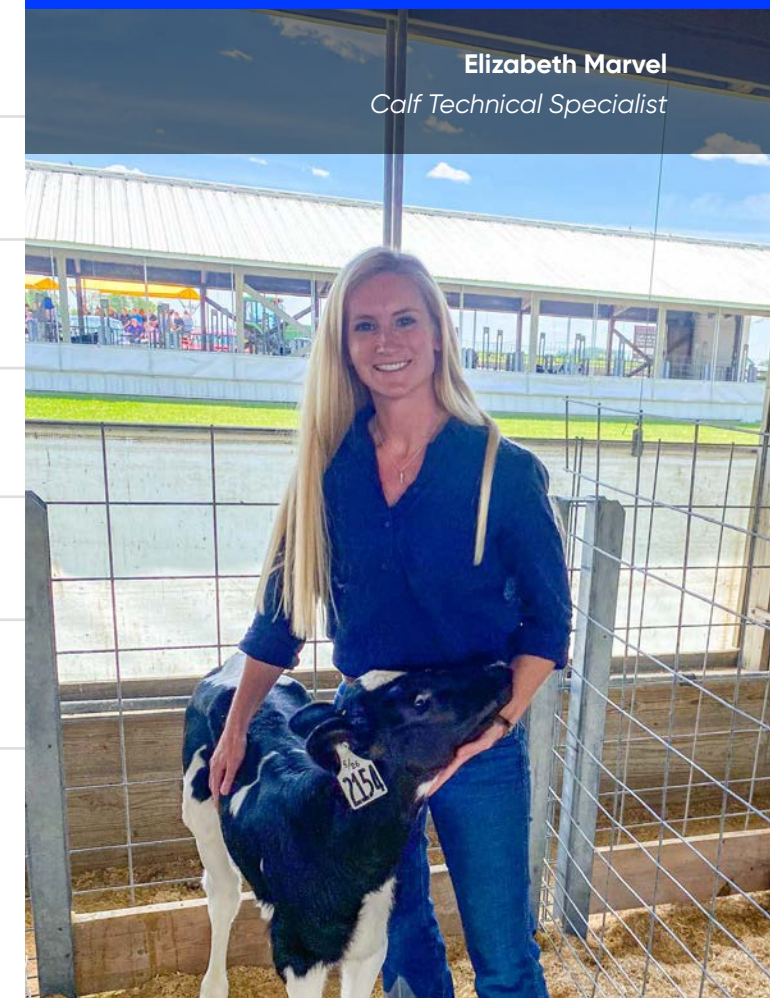
Adapted from: U.S Dairy Export Council, Reference Manual for U.S. Whey Products 2nd Edition, 1999 and Sarwar, 1997

# ANIMAL WELFARE

More than 99 percent of the nation's milk supply comes from dairy operations participating in the FARM animal care program. While MSG does not source milk directly from farms, we believe that strong animal welfare practices need to be a top priority for all dairy operations.

As a value-added service for dairy farmers and suppliers, Milk Specialties provides resources to help ensure their animals are raised humanely. MSG has a full-time employee on staff who is a member of the Dairy Cattle Welfare Council and certified in:

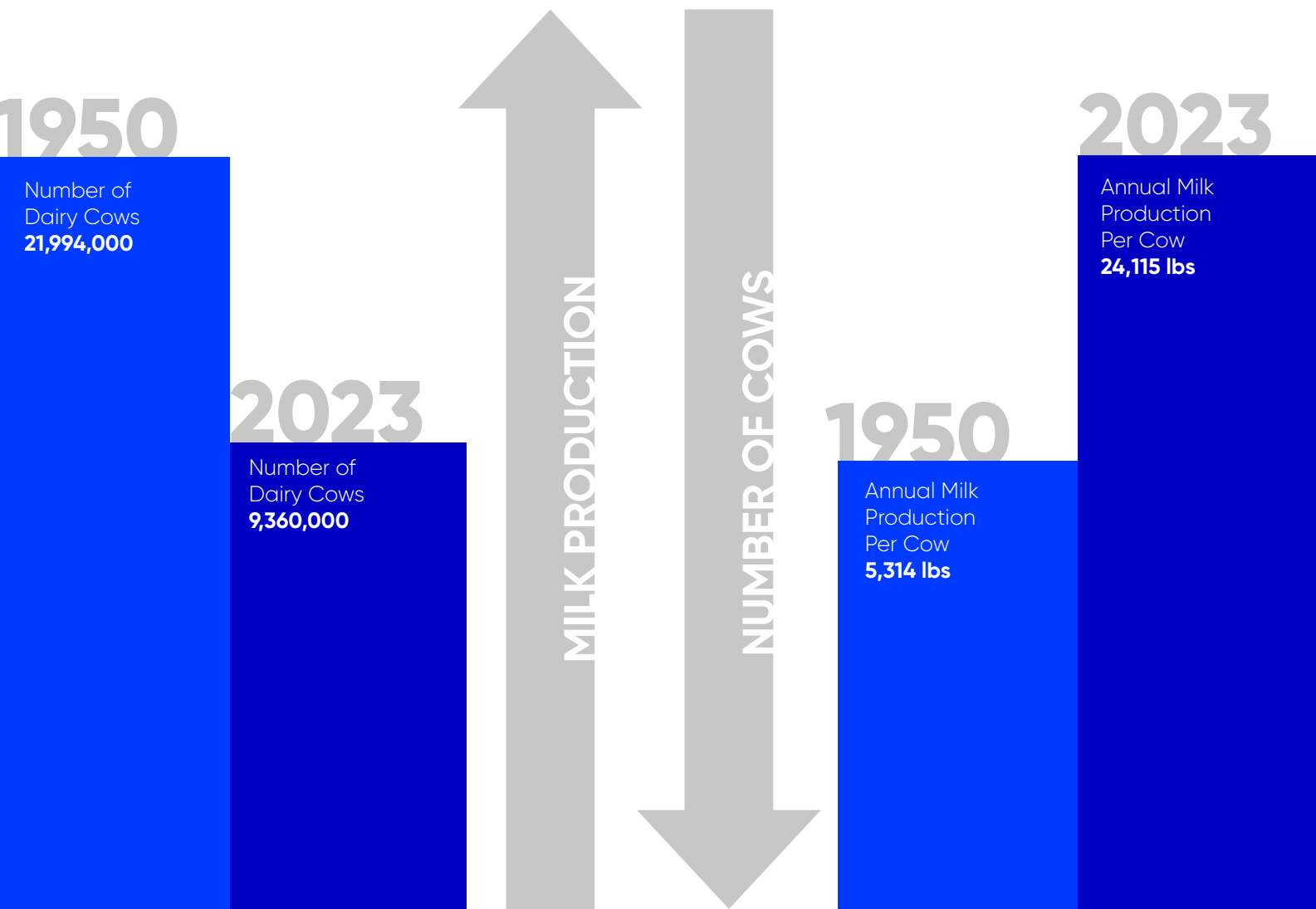
- FARM Animal Care Program
- PAACO (Professional Animal Auditor Certification Organization)
- Calf Care Quality Assurance Program





# REDUCING METHANE EMISSIONS FROM DAIRY COWS

Agriculture has seen an incredible increase in production in the United States over the past century thanks to technological breakthroughs. In the dairy sector, advancements in nutrition and genetics have more than quadrupled the average milk production per cow since the 1950s. Subsequently, today there is more than 12 million fewer dairy cows in the U.S. when compared to 1950. According to USDA statistics, dairy cows account for about one quarter of all cows living in the U.S.



One of the key strategies farmers are utilizing to reduce greenhouse gases emitted by dairy cows is to focus on the nutrition going into them. The feed going into the cows can impact the amount of the emissions coming out. One strategy becoming widely accepted in reducing methane (CH<sub>4</sub>) emissions is to supplement the cow's diet with a fat supplement that can withstand the conditions in the cow's rumen.

In 2008, the dairy industry's total greenhouse gas contributions were measured at **1.9 percent of the U.S. emissions overall**. While the dairy industries' environmental footprint is small compared to the oil and gas industries, reducing methane (CH<sub>4</sub>) emissions from dairy cows continues to be a focal point within the dairy sector.



The proportion of dairy cows consuming Energy Booster® resulted in an overall **reduction of 6% in methane emissions**.

For every 1,000,000 cows fed Energy Booster®, methane emissions are **reduced by more than 12.5 million pounds annually**. That is the greenhouse gas equivalent to **CO<sub>2</sub> emissions from 13,968,684 gallons of diesel burned**.

Based on calculations provided by NASEM and assuming a 0.30 kg/day feeding rate per cow, feeding Energy Booster® can reduce methane emissions by nearly six percent in the average U.S. dairy herd.



# PROUD OF WHAT WE DO

Despite having a deep-rooted history in upcycling, 2024 was a landmark year for MSG in terms of receiving recognition for decades of environmental efforts. In November 2022, Milk Specialties was honored with one of the most prestigious sustainability awards in the dairy industry: the U.S. Dairy Sustainability Award for Outstanding Dairy Processing and Manufacturing Sustainability. MSG was recognized for its initiatives to improve transportation efficiency and for its efforts in cleaning and recycling wastewater.



Erin Huls, MSG's first full-time Sustainability Specialist, accepting the **2022 U.S. Dairy Sustainability Award**.

- 2023 BEST IN CLASS**
- Instantized Whey Protein Concentrate
  - Whey Protein Isolate

- 2022 BEST IN CLASS**
- Whey Protein Concentrate



Ducan Jochimsen, MSG's Vice President of Dairy Procurement, accepting the **2023 Best In Class Awards**.



# MEMBERSHIPS



AMERICAN  
**Dairy Products**  
INSTITUTE



**AMERICAN DAIRY  
SCIENCE ASSOCIATION®**



**WISCONSIN  
CHEESE MAKERS  
ASSOCIATION**  
EST. 1891



**IDFA**  
International  
Dairy Foods Association



**WHEY**  
PROTEIN RESEARCH  
CONSORTIUM



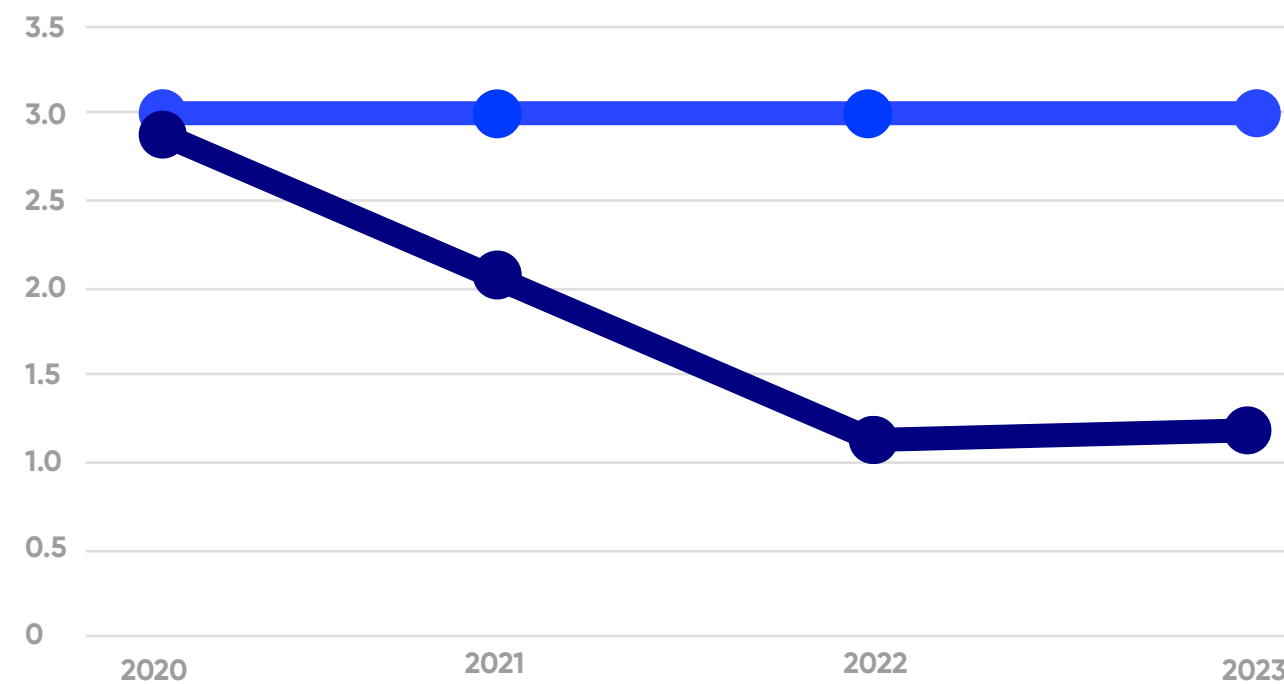
**AAFCO**  
Association of American Feed Control Officials





# HEALTH & SAFETY & WELLBEING OF EMPLOYEES

Every Monday morning when the Milk Specialties' management team meets, the first topic on the agenda is always safety. We believe that safety is not just a priority, but a core value that guides our operations and decision-making. Our commitment to employee safety is unwavering because safe, healthy people produce the best products. This extends beyond our employees to include contractors, customers, and visitors to our facilities.



Bureau of Labor Statistics Industry Average



Milk Specialties Global

We take employee safety very seriously at Milk Specialties, and the commitment to excellence by our teams is showing. MSG closed out 2023 with a Total Recordable Incident Rate (TRIR) nearly a full point below the industry average.



# TRAINING & INVESTING IN PEOPLE

Our Emerging Leaders Program allows employees to receive job-specific training the first day they walk through our doors. Progress is an expectation at every level, and we know we can't grow as a company if we aren't growing as professionals.



## MAINTENANCE & APPRENTICESHIP

Provides production employees the opportunity to train with the maintenance team through a 250-hour program focused on plant-specific operations. Upon successful completion of the program, employees are compensated for their time, class expenses and they earn a financial bonus.



## SAFETY

Production employees receive OSHA 10 & 30 and LECO instruction to ensure the operational efficiency and safety at our manufacturing facilities.



## ON THE JOB TRAINING

Non-exempt employees receive on-the-job training to enhance skills and professional potential, allowing Milk Specialties Global to hire and promote from within the organization whenever possible.



## OSHA & LECO

New employees receive safety training from EHS leadership on protocols and procedures. Participation in additional health and safety programs—such as emergency response, first aid and vehicle safety—is required for all employees throughout the year.

“

This program gave me an opportunity to connect with other people at the company who I would not normally cross paths with. I gained a lot of perspective about how other departments function and how we can work more collaboratively.



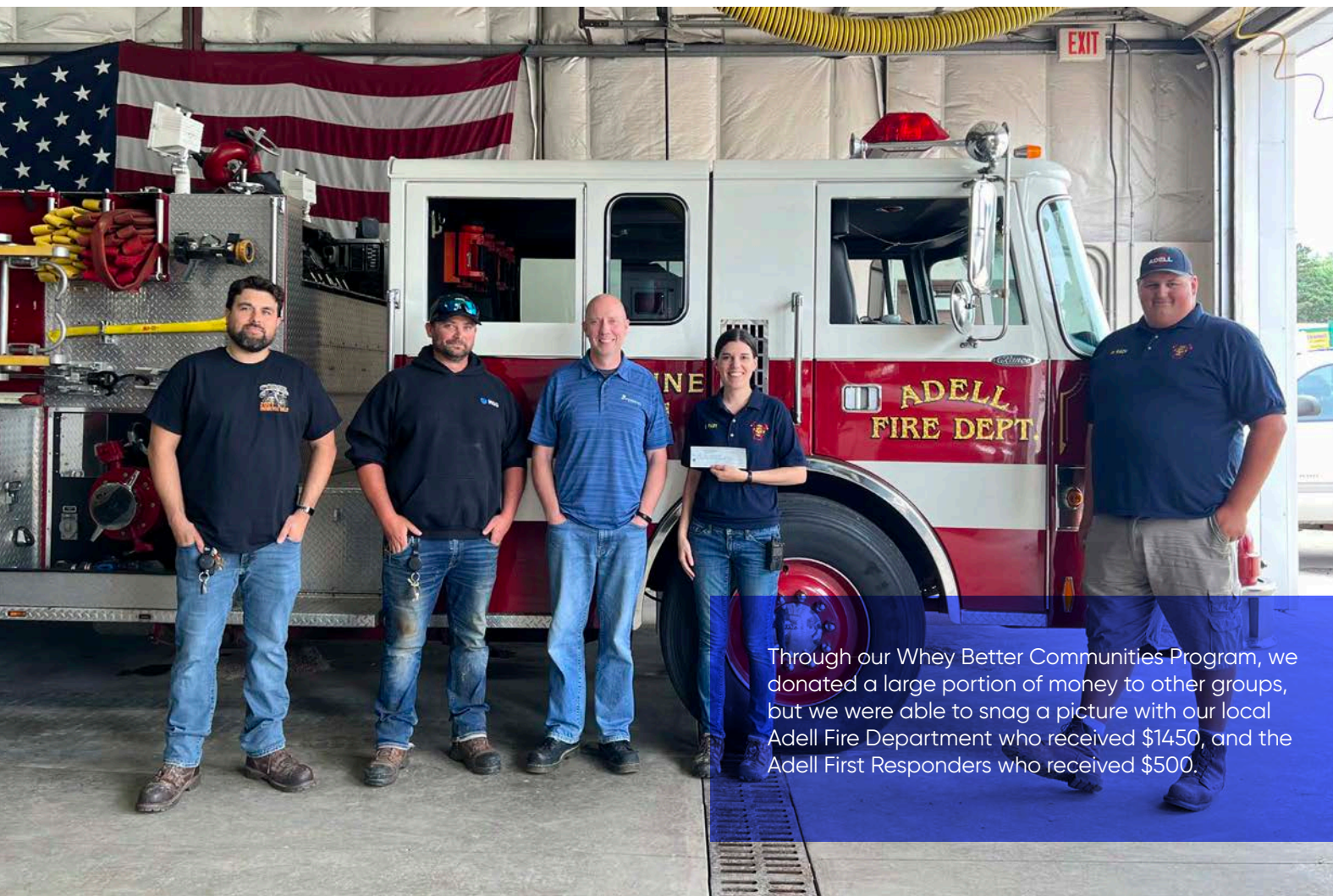
**Jacquie Gidley**  
Manager of Business  
Development and Sales  
Optimization





# WHEY BETTER COMMUNITIES

From our supply chain that originates on farms to our processing facilities rooted in rural communities, MSG has a commitment to giving back to the communities that support our business. Our Whey Better Communities program enables employees to nominate local non-profit organizations that have a direct impact on their local communities. Since the program's 2014 inception, Milk Specialties has distributed more than **\$422,000 in charitable contributions** to the local communities in which we live and work. This is a **12.2% increase in donations** from the previous year.



Through our Whey Better Communities Program, we donated a large portion of money to other groups, but we were able to snag a picture with our local Adell Fire Department who received \$1450, and the Adell First Responders who received \$500.

# CREATING A STRONGER FUTURE THROUGH EDUCATION

To help pave a better future for our people and communities, MSG annually awards five scholarships to its full-time employees or their children. In order to qualify, the applicant simply must be employed full-time or they have to be a dependent of a full-time employee. The scholarships can be used towards full-time, part-time or vocational school programs.

In addition to offering scholarships, Milk Specialties actively encourages its employees to develop their skills and professional competencies. Subsequently, education reimbursement programs are available to all full-time employees.



**Kaycee Hunter**

Attending Ridgewater College.  
Majoring to become a Vet Technician.  
(Child of Karlene Hunter, Mountain Lake, MN)



**Mitchell Woodman**

Attending the University of Wisconsin-Platteville. Majoring in Elementary Education. (Child of Michelle Woodman, Home Based, WI)



**Kylee Compton**

Attending Northeast Community College. Majoring in Business Management. (Child of Wacey Compton, Norfolk, NE)



**Gabby Lenzmeier**

Attending Cornell University.  
Majoring in Agricultural Business.  
(Child of Dave Lenzmeier, Eden Prairie, MN)



**Jackson Scott**

Attending Iowa State University.  
Majoring in Criminal Justice.  
(Child of Mark Scott, Eden Prairie, MN)