



FUTURE FOCUSED



2019 STEWARDSHIP REPORT

PURPOSEFUL GROWTH, SHARED VALUES

You expect our products to be delicious. You also expect them to be made the right way. Our **six Stewardship Commitments** not only ground us, they guide us as we grow. That’s why we’re putting even more care and hard work into upholding our values as we move forward. Now and for generations to come.



CONTENTS

04 MESSAGE FROM OUR CHAIRMAN

OUR STEWARDSHIP COMMITMENTS

06 THRIVING FARMS

10 HEALTHFUL COWS

14 INSPIRED CONSUMERS

18 ENDURING ECOSYSTEMS

22 FULFILLED EMPLOYEES

26 ENRICHED COMMUNITIES

30 SCORECARD

31 WHAT’S NEXT

32 GLOBAL REPORTING INITIATIVE (GRI) CONTENT INDEX

We measure our performance with a number of Key Performance Indicators (KPIs) that can be found in our [Scorecard](#).



OUR SIX STEWARDSHIP COMMITMENTS

In 2017, our Board of Directors adopted a Stewardship Charter that holds us accountable to our farmers, consumers, suppliers, employees, customers and neighbors. These commitments guide us and ensure that everything we do is underpinned by our values.

>> [READ OUR FULL STEWARDSHIP CHARTER](#)

We're looking toward the future while preserving our past.

Today you can find Tillamook products in more places than ever, being enjoyed by more people than ever. We're growing with purpose, on purpose. While some farms across the country are struggling, we've been able to help our farmer-owners thrive and, at the same time, build a national brand. Sure, we've dealt with challenges over our 110+ years as a cooperative, perhaps none quite as daunting as the current COVID-19 pandemic all of us are facing. It has disrupted everyone and everything we care about most, and it's a challenge we'll confront the same way we do any other — by leading with our values. From the tools and technology we use to the strategic partnerships and materials we choose, we're committed to growing while making sure our values are embedded in our culture, processes and everything we do. Just as we've done for the generations before us, and just as we'll continue to do for generations moving forward.

Ultimately, the question isn't *whether* to grow. It's *how* to grow. How do we expand with intent and purpose? While our story began in a small community, it was written by people who care deeply about the products they make — and how they're made.

Writing the next chapter means building our business with a long-term outlook that takes thoughtful, meticulous investments today to ensure farms are here for generations to come. We're also guided by a systematic approach to running our cooperative where financial capital, human capital and natural capital are all balanced. While making these decisions isn't always easy, it's always been part of who we are and how we've operated.

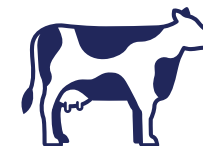
As we've become bigger over the past year, we like to think we've become better, too. Better because we're finding new ways to do more with less. Better because we're putting technology to work. Better because we're making a product more people can enjoy and we can be proud of.

Shannon Lourenzo
Farmer-owner and Chairman,
TCCA Board of Directors



THRIVING FARMS

Thriving Farms are essential to our future. Not only for our cooperative, but for our community and our food system. We're helping farmers to be more efficient, economically sound and viable for generations.



HEALTHFUL COWS

From working with herd health experts to adopting new technology that monitors a cow's well-being, we're committed to keeping cows healthy, comfortable and productive.



INSPIRED CONSUMERS

Every bite of our products should represent everything we stand for. When we strive for a higher standard of excellence across our value chain, the result is great-tasting products that consumers are proud to enjoy and inspired to share with others.



ENDURING ECOSYSTEMS

As an agricultural cooperative, we protect the resources that sustain us. We focus on conserving air, land and water, while reducing energy and waste — at the farms, in our facilities and across our truck fleet.



FULFILLED EMPLOYEES

It takes dedicated employees to keep our cooperative going for over 110 years. We're committed to helping them thrive by fostering a culture that is enriching and fulfilling.



ENRICHED COMMUNITIES

Our work and our people are intricately connected to our communities. We look for ways to strengthen them — focusing on agricultural advocacy, food security and healthy children.



Thriving Farms are essential to our future. Not only for our cooperative but for our community and our food system. We’re helping farmers be more efficient, economically sound and viable for generations. It’s no surprise we’re committed to farms. We were founded by a collection of farmers, and they continue to be at the heart of all we do, setting the standards for our high-quality milk supply and governing our business. Today, dairy farmers are facing challenges: economic uncertainty, more scrutiny and constant change, to name just a few. While farming is a challenging industry, Tillamook County Creamery Association (TCCA) is right there with our farmer-owners, providing the support and resources they need to not only survive, but thrive.

OUR 2019 FOCUS + HIGHLIGHTS

- ▶ Providing financial support and incentives for our farmer-owners.
- ▶ Supporting our farmer-owners and milk suppliers with technical assistance programs.
- ▶ Focusing on succession planning to preserve farmland.

41%
INCREASE IN PROFIT
DISTRIBUTIONS TO
FARMER-OWNERS
(FROM 2015-2019)

12
EDUCATION
SEMINARS
FOR FARMER-OWNERS

Banking on farming
for today and forever.

Farming has always been our livelihood. And we intend to keep it that way for years to come by providing financial support to our farmer-owners in a variety of ways.



PAYING GENEROUS MILK PRICES

As a cooperative, we pay our farmer-owners milk prices above market value. It’s a premium for quality that incentivizes continuous improvement across all our farmer-owner farms.



SHARING ANNUAL EARNINGS

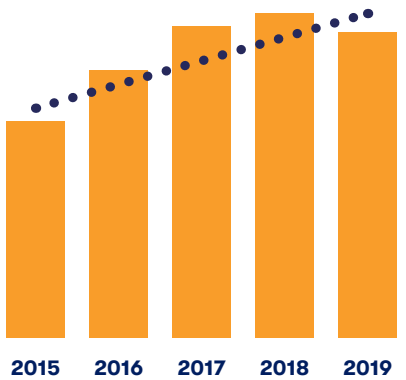
Each year, we make farmer-owner distributions based on our earnings. This means that, regardless of market conditions, business earnings go back into farmers’ pockets.



GRANT AND LOAN PROGRAMS

These programs help our farmer-owners implement environmental stewardship projects, like streamside fencing, that contribute to their farms’ overall success.

▲ We provide technical assistance to our farmer-owners and milk suppliers, including Threemile Canyon Farms in Boardman, Oregon.



FARMER-OWNER DISTRIBUTIONS

Our farmer-owners choose to flex distributions based on annual business performance. Since 2015, we have increased distributions by 41 percent.



LEARN MORE IN OUR
ECONOMIC PERFORMANCE
GRI ISSUE BRIEF

Always on call for improvement.

While a healthy business leads to more profits, it takes more than financial support to generate economic viability on the farm. Just like any other industry, farms need to change and adapt so they can grow. The technical support we provide helps them do just that.

We help farmers identify opportunities for continuous improvement in four key areas:

- animal welfare
- environmental stewardship
- milk quality and food safety
- worker welfare

And, our Farm Services Team provides 24/7 on-call assistance, daily milk quality data evaluation, oversight of milk hauling, on-farm troubleshooting and discussions of best management practices with benchmarking. If farmers need advice or guidance, they can call our Director of Farm Engagement, Kate Lott, DVM.

“Recently a farmer-owner contacted me about higher-than-usual bacteria counts in their milk and some cows with mastitis (infections in their udder), so my team helped troubleshoot,” says Lott. They evaluated potential causes, from bedding to water. After sending samples to the lab, the cause was identified to be damp towels used to clean a cow’s teats before milking, which were allowing more bacteria growth between uses.

“Now, the farmer-owner has implemented a protocol to ensure towels are completely dry prior to milking. Their milk quality scores have returned to normal levels and fewer cows have mastitis.”

Farmer-owner Joe Jenck agrees that this access to expertise makes all the difference.

“

Sure, we get help financing equipment, but it’s the daily things that make the biggest difference. Bacteria counts, animal welfare support, technical advice — you don’t think of these things as financial support, but we’ve got access to the Farm Services Team’s knowledge and time, and that’s a big deal.”

JOE JENCK, FARMER-OWNER AND BOARD MEMBER, TCCA



◀ TCCA Board of Directors member Amy Seymour is a fifth generation farmer. Her perspective helps guide the long-term vision for TCCA farmer-owners.

“

The decisions we make on the TCCA Board of Directors always come back to doing what’s best for farmer-owners long term — giving them the stability and support they need. It’s a business as well as a way of life. We want to make sure they can evolve and stay in business as the market changes.”

AMY SEYMOUR, FARMER-OWNER AND BOARD MEMBER, TCCA

Stronger for tomorrow.

Running a farm comes with its fair share of daily challenges, but preparing to pass farms down to the next generation might be the biggest. Successfully transitioning farms requires a succession plan that accounts for complex business assets, family dispute resolution and zoning considerations. Without an effective land transfer, the pressure to sell the land to a higher bidder outside the family can become immense.

For farmers like Joe Jenck, their farms represent a hard-won retirement income down the road. Few, however, are financially prepared to pass on their legacy to future generations due to slim operating margins and fluctuating market prices over the years. For Joe, planning for the future has meant taking a few risks, investing in new technology and thinking outside the box.

“As a farmer, you’re dealing with such slim margins,” says Jenck. “However, being part of the cooperative gives us the support we need to look at things in the long term and take some risks. This year we’re going to make a big investment even though our profits are going to be slim. And we hope it’s going to be the best decision we ever make. Not a lot of farms can operate like this. It sets us apart.”

64%

OF FARM LAND WILL CHANGE OWNERSHIP IN THE NEXT 20 YEARS¹ SO, WE DONATED...



\$10,000

TO THE OREGON AGRICULTURAL TRUST

The Oregon Agricultural Trust provides succession planning assistance to Oregon farmers.





HEALTHFUL COWS

Animal care is a responsibility we take extremely seriously, and excellent cow care is an expectation of everyone we work with. Whether a farm has 200 or 20,000 cows, our standards are rigorous, our expectations are clear and our philosophy is straightforward: **healthful cows always come first.**

OUR 2019 FOCUS + HIGHLIGHTS

- ▶ Providing expert cow care with highly trained professionals.
- ▶ Raising the bar higher by participating in the national Farmers Assuring Responsible Management (FARM) program.
- ▶ Establishing consistent animal care across our entire milk supply.

71%
**OF MILK ENTERING
TILLAMOOK AND BOARDMAN
FACILITIES MAINTAINS A SOMATIC CELL COUNT
BELOW THE U.S. AVERAGE,²
INDICATING HEALTHY COWS
AND HIGH-QUALITY MILK**

95%
**OF RAW MILK USED IN
TILLAMOOK PRODUCTS
COMES FROM FARMERS WHO ADHERE
TO THE NATIONAL FARM PROGRAM,
WITH THE GOAL TO REACH 100% IN 2020**

Setting the standard. Raising the bar.

We're working to adopt national cow care standards across all our milk suppliers. Launched in 2009, FARM works with dairy farmers, cooperatives, processors and industry partners to show consumers that the dairy industry holds itself to the highest standards. FARM also helps earn the public's trust by ensuring safe, wholesome milk, high standards of environmental stewardship and exceptional work environments through:

- 1**
On-farm best management practices
- 2**
Standards for second-party on-farm evaluations
- 3**
Third-party verification to guarantee rigor and integrity



WE WORK WITH FARMS
OF ALL SIZES

200
COW FARMS

OR

20,000
COW FARMS

No matter the size or style of farming, our farmer-owners and our milk suppliers treat their animals with the same level of care that we expect of all farmers who supply milk to Tillamook.



>> [Learn more about FARM](#) and how we're holding ourselves and our milk suppliers to higher standards of cow care.

 [LEARN MORE IN OUR ANIMAL WELFARE GRI ISSUE BRIEF](#)

Better milk starts with healthier cows.

Simply put, healthful cows produce the highest quality milk. And producing high-quality milk is how dairy farmers earn their living. For these farmers, caring for dairy cows is an around-the-clock job and their life’s work.

At TCCA, animal care is a serious responsibility. We require that all cows supplying milk for Tillamook products are treated humanely and managed in healthful, comfortable environments. This is our standard no matter the size of the farm. **No exceptions. Here’s what we’re doing about it.**

Increasing cow comfort

Cows have three primary activities: standing to milk, standing to eat and lying down to rest. Our goal is to keep them comfortable.

Since cows spend 12-14 hours a day resting³, dairy farmers provide them with soft bedding to lie in. This can include mattresses made from foam or recycled material, water beds, or at least 6-12 inches of comfortable material like sand, fiber, wood shavings or straw.



Providing a healthy diet

Dairy farmers work closely with animal nutritionists to optimize cow nutrition. While each herd may have different nutritional requirements, every cow’s diet consists of forages and grains to promote good health and milk production. Cows are treated like high-performance athletes!



Cows eat a mix of high-value agricultural products, such as hay and corn silage, to ensure that they get the best nutrition available.



Adopting the best management practices

We require industry-wide animal welfare best practices along with our own policies to set a high bar for how every cow and every herd is treated.

THE FIVE FREEDOMS OF GOOD ANIMAL WELFARE⁴

These globally recognized standards ensure a humane environment for all cows supplying milk to Tillamook.

- ☒ Adequate food and water
- ☒ Comfort and shelter
- ☒ Proper handling
- ☒ Prevention and treatment of disease and injury
- ☒ Minimization of fear, stress and suffering

The soul and science of cow care.

Growing has allowed us to expand our scientific capabilities and technical support in caring for cows. Along with checking every milk load and providing data back to farmers so they can improve, our Farm Services Team provides farmer-owners and suppliers with a mix of expertise, science and technology. Here are some of the ways we’re stepping up for cows.

We scrutinize somatic cell counts

Somatic cells are mostly white blood cells, which increase when there is an immune response from an infection. The cows that provide milk to our Tillamook and Boardman facilities have some of the lowest counts in the country, which means they have less infection and are more healthful.

We monitor protein

Maintaining the right range of milk urea nitrogen (MUN) ensures that cows are getting the protein they need for better overall health. By keeping MUNs in the right range, we’re making sure cows get the protein they need without creating unnecessary ammonia air emissions.

We haul our milk with care

Our vigilance continues along the milk’s route to our manufacturing facilities. Our milk haulers are certified by the state and trained to take samples when they pick milk up at the dairy. Additional testing for microbials and antibiotics at our own lab further ensures safety and quality.



“Here at the lab, we take milk samples from every truck, every day at receiving, and analyze the data to ensure our quality standards are met — no exceptions. This rigor allows us to provide timely feedback to our farmer-owners so they can address herd health quickly.”

AMY SPENCE, PH.D.,
CORPORATE LAB MANAGER, TCCA

Technology is making day-to-day dairy farming faster, safer and more accurate.



When our consumers take a bite of Tillamook products, it should represent everything we stand for. That’s why we strive for a higher standard of excellence across our value chain, starting with the highest quality ingredients and every step along the way to your perfectly melted grilled cheese. Since our founding over a century ago, the expectation remains the same: delicious products made the right way. When every step of the process aligns with our values, the result is great-tasting products that people are proud to enjoy and inspired to share with others.

Quality. One ingredient at a time.

We don’t just have loyal customers. We have deeply passionate fans and we strive to give them inspiring food choices every day. From our cheese to our ice cream, there’s something a little extra delicious in our products. We know it takes better to taste better — that’s why we put more into choosing the ingredients we use.

Our recipe is simple: high-quality, real ingredients. Strawberries you can actually taste. Award-winning cheese. Products that taste exactly how dairy should. Getting products that taste great from the farm to your home starts with asking the right questions about each ingredient. Is it an ingredient we can stand behind? Does it serve a purpose? Where does it come from? How do we sustainably source it? What are the trade-offs of not using it? Our answers lead to better choices. Those choices, in turn, lead to more sustainable solutions without sacrificing delicious products for our customers.

For example, in 2019 we wanted to create our new Farmstyle Cream Cheese Spread without gums, fillers or preservatives that many other cream cheese products on the market use. Because those types of ingredients don’t align with our values, we found an alternative, natural way to keep our cream cheese spread creamy without having to rely on fillers. The result is a clean-eating experience that’s full of real cheese flavor, the way cream cheese spread was meant to taste.



OUR 2019 FOCUS + HIGHLIGHTS

- ▶ Sourcing the highest quality, real ingredients.
- ▶ Seeking suppliers and contract manufacturers who share our values.
- ▶ Advancing our commitment to sustainable packaging.

ONLY
4
 INGREDIENTS ARE USED IN
 OUR NEW ORIGINAL FARMSTYLE
 CREAM CHEESE SPREAD

30%
 PLASTIC MATERIALS REDUCTION
 IN OUR CHEESEBOARD SNACK TRAY
 AND 20% REDUCTION
 IN PLASTIC FILM

Choosing suppliers who share our values.

Growth at this scale requires collaboration. So we're teaming up with suppliers and contract manufacturers who share our values. We start with looking beyond what these companies make and into who they are. Do they share our values? Do they consider their community impact and where their materials come from? With processes in place, we're continuously improving how we evaluate, select and work with our suppliers.

1 Higher expectations

Our suppliers must adhere to our quality requirements and the California Supply Chain Transparency Act. Additionally, they are expected to participate in our Stewardship Supplier Engagement Program and agree to a robust Supplier Code of Conduct and Expectations Manual.

2 Selection process

Choosing whom we work with is an in-depth process that encompasses capabilities, infrastructure and reputation. It also may include a hands-on product development and manufacturing facility trial with our R&D Team as part of the overall assessment.

3 Performance measurement

To track and monitor commitment across all our suppliers, we launched a Stewardship Supplier Engagement Program that measures performance, improvements and transparency.

4 Traceability

Milk supply chains are complicated. Moving ahead, we're working to achieve 100 percent traceability with everything we produce and deliver alongside our suppliers. One way we're doing this is through in-person visits from our Director of Farm Engagement when we consider new milk suppliers, to verify that raw materials, data and practices meet our standards and ensure quality down the line.

QUALITY IN, QUALITY OUT

Today, consumers can find our products in stores across the country, and we want them to be confident that every bite they take represents everything we stand for.

From the marionberries in our Oregon Marionberry Greek 2% Yogurt to the chocolate in our Mint Chocolate Chip Ice Cream, we rely on like-minded companies to supply high-quality ingredients to a growing number of consumers.

Putting less into our packaging. And expecting more out of it, too.

Big impacts often come down to small decisions. That's why we're putting our packaging under a microscope, weighing each decision and considering every trade-off when it comes to materials and how we choose to source them.

Conducting Life Cycle Analyses (LCAs)

In 2019 and moving into 2020, our Stewardship and R&D Teams are using LCAs to explore the best, sustainable packaging options for several of our product lines.

Participating in the Sustainable Packaging Coalition

As a member of the Sustainable Packaging Coalition, we're able to get trends and updates on sustainable packaging and connect with like-minded suppliers who can help us identify and source materials with less impact.



LEARN MORE IN OUR
PROCUREMENT PRACTICES
GRI ISSUE BRIEF



While consumers loved our Tillamook Cheeseboards, they wanted to see less packaging. Using that feedback, our team worked hard and responded quickly with a new and improved version. The result: 30 percent plastic materials reduction in our Cheeseboard snack tray and 20 percent reduction in plastic film.





Reaching more people in more places means sourcing more milk. It also means using more natural resources and partnering with more suppliers and contract manufacturers. As our reach grows, so does our responsibility to protecting our ecosystems.

We understand that there’s no silver bullet solution to climate change. To do our part, we’re thinking big, using new technology to develop a systematic approach instead of one-offs, and adopting a number of agricultural practices and resource reduction programs at our facilities. This effort starts at home, where we’re setting higher standards for ourselves and those we work with. We’re working harder than ever to make sure waste reduction, water stewardship, clean energy use and fuel efficiency improve.

Sustainability: from farms to facilities.

We’re working hard to protect our resources beyond the farm. That includes making everything — from our processes to facilities — leaner and greener.

Facilities that work harder and smarter

In 2019, we increased our renewable energy efforts across our facilities. We’re adopting a rehab-and-reuse approach to our facilities that’s making them smarter and more resilient. In Boardman, a heat recovery system is already significantly reducing energy consumption. We also use steam directly from the Portland General Electric Coyote Springs electrical generating station, decreasing the energy required for process heating at our Boardman facility.

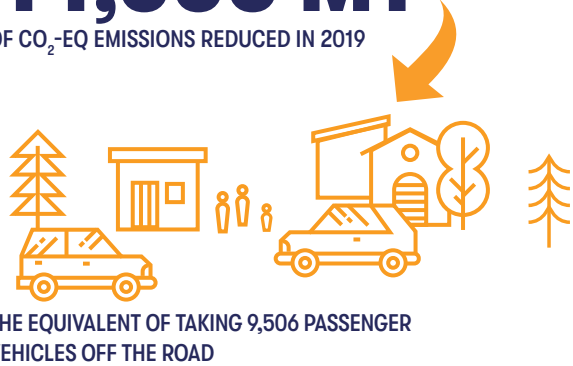
In Tillamook, we have joined the local Public Utility District’s (PUD) Green Power Program and pay a premium to support this and other projects and ensure that 100 percent of our electricity use at The Creamery visitors center is sourced from renewable energy. We also implemented energy reduction projects such as lighting and refrigeration upgrades and motor controls that will save an estimated 1,770,680 kWh each year. This is equivalent to an annual savings of 144 homes’ energy use for one year.⁵ We have also improved our product distribution routes, reducing total miles to deliver our products. In total, in 2019 we reduced our CO₂-eq emissions by 44,000 MT, the equivalent of taking 9,506 passenger vehicles off the road!⁶

We are also proud of our seismic resiliency program. We restored two parts of our Tillamook facility: our packaging materials warehouse and ice cream storage freezer. This means that we extended the lives of these buildings, rather than rebuilding from the ground up. We improved insulation and lighting, and we re-used more than 90 percent of our existing buildings while reducing future energy consumption in the process.

LEARN MORE IN OUR ENERGY, EMISSIONS, AND CLIMATE CHANGE GRI ISSUE BRIEF

87M kWh
OF RENEWABLE ENERGY USED IN 2019

44,000 MT
OF CO₂-EQ EMISSIONS REDUCED IN 2019



OUR 2019 FOCUS + HIGHLIGHTS

- ▶ Reducing the environmental impact of our facilities.
- ▶ Participating in the local digesters to help generate power for our communities.
- ▶ Getting smart about our impact on local rivers and aquatic life.

\$25K
IN GRANTS PROVIDED FOR PROJECTS ADDRESSING WATER QUALITY IN TILLAMOOK COUNTY

100%
RENEWABLE ENERGY USED AT OUR VISITORS CENTER, THE CREAMERY

Closed-Loop Systems

When it comes to the environment, good is never good enough.

Today, U.S. cows are producing more milk with less environmental impact thanks to widespread adoption of innovative practices and careful management on the part of dairy farmers.⁷ A closed-loop system, where a dairy farmer recycles all nutrients and organic matter back into

the soil that it grew in, is one we're working hard to support and promote. We're starting here at home in Tillamook County, where we have the best visibility and we can learn from others, like Threemile Canyon Farms, who have successfully implemented a closed-loop system.

FEED ADDITIVES



Using science to reduce methane

We are using feed additives, like ionophores, and other farming practices to reduce methane and emissions overall. We are also following international research to understand new opportunities to reduce emissions. In 2019, for example, we participated in an enteric emissions workshop hosted by the World Wildlife Fund. Our number one priority is that animal welfare comes first.

WATER QUALITY

Tapping into conservation

In 2019, we collaborated with The Freshwater Trust — the largest restoration-focused organization in the Pacific Northwest — to help us identify hotspots where water systems have compromised quality and take action to protect our waterways.

BIODIGESTERS

Getting more out of manure

A collection of our farmer-owners send their manure to two local digesters, which helps create power for the Tillamook PUD Green Power Program. Biodigesters use innovative technology to convert waste into energy, fertilizer and bedding, a practice many of our farmer-owners and milk suppliers are adopting.

1,000+

**HOMES IN TILLAMOOK COUNTY
ARE SUPPLIED BY ENERGY
FROM TWO BIODIGESTERS IN
TILLAMOOK COUNTY**



AIR EMISSIONS ASSESSMENTS

Clearing the air

We collaborated with Nichole Embertson, Ph.D., Nutrient Management and Air Quality Specialist, to develop The Voluntary Air Emissions Program for our farmer-owners. Nichole uses a proactive approach to assess and address air quality on individual farms, while also educating and inspiring change. These assessments help farmers identify challenges and improve their air quality across nine key areas.

“

TCCA is working on a larger scale to adopt a systems approach to air quality improvements. It means looking at the impact and trade-offs of decisions being made on every aspect of the farm. Even a simple change like adjusting the timing of manure application doesn't just retain more nitrogen and keep it out of the air, it has a ripple effect of benefits: reduction in potential water quality runoff issues, increased soil health, improved water retention, and better feed for the cows. It's a win-win.”

NICHOLE EMBERTSON, PH.D., NUTRIENT MANAGEMENT AND AIR QUALITY SPECIALIST

REGENERATIVE AG PRACTICES



Grounding carbon emissions

Regenerative approaches such as no-till and cover cropping are helping with carbon drawdown. Cover crops not only promote soil health and prevent wind erosion, but they can also be used as feed.

Modeling sustainability for an entire industry.

Threemile Canyon Farms, one of our milk suppliers for more than 20 years in Boardman, Oregon, is nationally recognized for its sustainable agriculture practices.⁸ With over 35,000 dairy cows, Threemile Canyon Farms is showing the dairy industry how to use large scale to create a smaller footprint. To do it, they're using an innovative closed-loop system that turns farm waste into renewable energy.

Along with converting the methane cows produce into renewable natural gas, Threemile Canyon Farms uses a sophisticated low-pressure irrigation system that monitors water use and minimizes water loss through evaporation. In addition, the farm strictly adheres to a zero-discharge requirement, so dairy waste never enters streams or groundwater sources.

The Innovation Center for U.S. Dairy has honored Threemile Canyon Farms with the 2019 National Dairy Sustainability Award.⁹ Winners are leaders in socially responsible, economically viable, and environmentally sound dairy production and exemplify a longstanding commitment to continuous improvement.



 **LEARN MORE IN OUR WATER AND EFFLUENTS GRI ISSUE BRIEF**

 **LEARN MORE IN OUR WASTE GRI ISSUE BRIEF**



FULFILLED EMPLOYEES

 LEARN MORE IN OUR
CULTURE ISSUE BRIEF

It takes dedicated employees to keep a company going for over 110 years. We're committed to helping our employees prosper by fostering a culture that is enriching and fulfilling, and creating conditions where they feel like they belong. We sponsor opportunities for our employees to connect and build relationships — from new hire welcomes to cross-functional Culture Committees and employee farm tours. We're also invested in helping our employees be safe and supported on the job and off. Additionally, abundant learning opportunities are helping raise our employees' game. Committing to these efforts is more important than ever as we grow nationally and have employees all around the country.

OUR 2019 FOCUS + HIGHLIGHTS

- ▶ Creating an enriching and fulfilling experience for all employees with opportunities to learn and develop.
- ▶ Living our shared values every day.
- ▶ Fostering a climate of inclusion where all our employees can feel a sense of belonging.

14%
OF TILLAMOOK EMPLOYEES
WERE PROMOTED
(IN 2019)

45%
OF EMPLOYEES WITH
MANAGER AND ABOVE TITLES
ARE FEMALE



TILLAMOOK SHARED VALUES

- ✔ One Team
- ✔ Good Stewards
- ✔ Uncompromising Quality
- ✔ Play To Win
- ✔ Genuinely Care

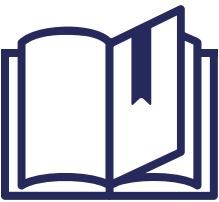
Human investment is personal.

For Sara Rogers, TCCA’s Learning and Development Manager, creating an environment where people feel valued, cared for and challenged matters even more as the company grows. That’s why she’s redefining the processes and programs that cultivate the heart and soul of the cooperative.

“Through permission-less learning, we’re giving employees more accountability and control over their careers,” Rogers says.

We see development as a unique opportunity to grow, not simply a career track. To help, we’re investing in individuals — and a culture of continuous learning — where employees can choose how and when they want to learn. With our leadership development program, we’re creating a new way for our leaders to learn and connect across the whole company. In 2019, we gave all our employees access to LinkedIn Learning so they can acquire new skills on their own terms.

According to Rogers, our learning and development programs are bringing people from different functions together. We have weekly leadership dialogue sessions where leaders talk in small groups, developing a common language for tackling challenges and collaborating better.



100 EMPLOYEES PARTICIPATED IN OUR ANNUAL LEADERSHIP DEVELOPMENT TRAINING PROGRAM

“

We’re creating an atmosphere of learning by removing roadblocks to development. Whether it is through online just-in-time training or having the right tools at their fingertips, we want employees to have more resources so they don’t have to wait to develop their careers.”

SARA ROGERS, LEARNING AND DEVELOPMENT MANAGER, TCCA



▲ TCCA employees meeting in our Portland office. Collaboration has become more important than ever as we grow.

Serving our community together.

With growth comes the responsibility to lift up our communities. Tillamook Cares is our volunteer program that offers all full-time, non-union employees eight hours of paid volunteer time each year. While we provide a calendar of events, employees can also choose where they volunteer. We encourage them to choose organizations that align with our Community Enrichment focus areas of agricultural advocacy, food security and healthful children, but we also want them to do what they’re passionate about.

Through our Tillamook Cares volunteer program, employees volunteered for SOLVE to clean up Portland’s riverside. We partnered with Habitat for Humanity to repair and rebuild structures for single parents and veterans. And we worked with the community in Boardman to rehabilitate green spaces and construct playing fields.



Inclusion and diversity in who we are and the ways we think.

We’re constantly differentiating and challenging ourselves to think creatively, work collaboratively and leverage different perspectives. We rely on diverse thoughts, backgrounds and cultures to fuel our innovation and growth.

In 2019, as part of our inclusion and diversity initiatives, our Portland employees participated in CEO Action’s Check Your Blind Spots unconscious bias tour. This highly interactive mobile tour used virtual reality and gaming technology to help our team understand and recognize our own unconscious biases and start a meaningful conversation about how to be more inclusive at work and in the community.



LEARN MORE IN OUR OCCUPATIONAL HEALTH AND SAFETY GRI ISSUE BRIEF

ENRICHED COMMUNITIES

Communities connect people. That’s why we look for ways to strengthen the places where we operate and live — focusing specifically on agricultural advocacy, food security and healthful children — three areas that are integral to community resilience. Now, as we expand into new communities, our responsibility to nurture them becomes greater.

We’re not afraid to take on complex social challenges, but we cannot do it alone. We partner with those doing the hard work on the ground and support their efforts. We actively engage with organizations to assess their needs, brainstorm solutions and provide the most appropriate support. We volunteer with them and join in as board members. And we unite in our efforts to improve the places we call home.



◀ Our new Creamery visitors center promotes agricultural advocacy to almost 1.4 million annual visitors from all over the country.

🔍 LEARN MORE IN OUR COMMUNITY ENRICHMENT GRI ISSUE BRIEF

Impact is our ROI.

We amplify our community enrichment efforts by partnering with strong, local organizations and people who live and work in the same communities we serve. This way, resources end up in the hands, homes and lives of the people who need them most. Then we work together to enrich communities with a purpose, a plan and a sleeves-rolled-up approach.

OUR 2019 FOCUS + HIGHLIGHTS

- ▶ Building stronger communities through strategic partnerships.
- ▶ Focusing on agricultural advocacy, food security and healthful children in all our communities.
- ▶ Giving back to our communities through company-sponsored volunteer activities.

4%

OF OUR EARNINGS WERE REINVESTED INTO OUR COMMUNITIES UP FROM 2.7% IN 2018

3,155

EMPLOYEE VOLUNTEER HOURS SPENT WITH COMMUNITY ORGANIZATIONS



Our recipe for Enriched Communities.

We're acting on our commitment to enrich communities with a three-pronged approach that focuses our efforts around the changes we want to make—and the needs of our communities.

Agricultural advocacy

Providing opportunities for youth participation in agriculture is vital not only to our communities but the future of farming. We've provided scholarships for students studying agriculture, and through employee support of 4-H Clubs and Future Farmers of America, we've raised funds and created awareness for these organizations.

Food security

Good nutrition shouldn't be a luxury. That's why we're increasing our efforts to end hunger in our state. Together with the Oregon Food Bank, Food Roots, Community Action Resource Enterprises and Habitat for Humanity, we're distributing wholesome food and supporting affordable housing that so often contributes to food security.

700,000+

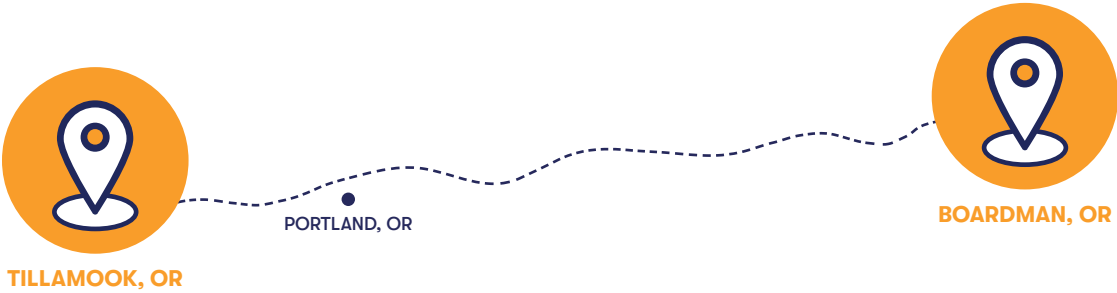
POUNDS OF FOOD DONATED TO THE OREGON FOOD BANK SINCE 2009, UPHOLDING OUR COMMITMENT TO ERADICATING HUNGER

Healthful children

Healthy, active kids grow up to be the backbone of the community. In 2019, we invested in the Boardman community by building a new high-school track and providing musical instruments to a local elementary school. In addition, we donated \$25,000 in scholarship money for students to pursue a path of their choice. Moving forward, we're finding new ways to give kids more access to nutritious food and wellness.



2019 OUTSTANDING PHILANTHROPY AWARD
FROM THE ASSOCIATION FOR FUNDRAISING PROFESSIONALS



Tillamook values, Boardman style.

While Boardman, Oregon, lies over 200 miles from Tillamook County, the community became part of our family 20 years ago with the addition of our second TCCA manufacturing facility. As we've grown, a bond has been created by shared values that extend beyond the county that shares our name.

“Our employees are super proud of what TCCA is doing here in Boardman,” says Michael Graham, Director of Plant Operations in Boardman. “We’re working hard to build a culture where we genuinely care for each other, do right by our consumers and community, and work together. When our internal values meet community needs, incredible things happen.”

In 2019, we took a grassroots approach to our community enrichment efforts in Boardman, repairing the greenway, funding new classroom chairs for students with disabilities and distributing brand new winter coats. We also helped decorate the city for the holidays and participated in the local parades. Along the way, we haven’t forgotten that Boardman isn’t just where we work. It’s also our home.

A look back at our 2019 community enrichment efforts in Boardman:

\$120,000
DONATED ACROSS 67 DIFFERENT ORGANIZATIONS

8,000
POUNDS OF DONATED FOOD

100
NEW COATS DONATED TO LOCAL FOSTER CHILDREN

SCORECARD



METRIC	EXPLANATION	2018 PERFORMANCE	2019 PERFORMANCE	TARGET	RESULTS
HEALTHFUL COWS					
FARM/Validus Program Participation	Percent participation among TCCA farmer-owners	100%	100%	100%	●
Somatic Cell Count	Percent of milk pounds entering Tillamook and Boardman manufacturing facilities below 200k somatic cell count	71%	71%	85%	●
INSPIRED CONSUMERS					
Supplier Traceability	Percent participation in Stewardship Supplier Engagement Program among all suppliers	1%	4%	100%	●
ENDURING ECOSYSTEMS					
Air Emissions — Ammonia	Percent of milk pounds entering Tillamook and Boardman facilities between 8-14 mg/dl Milk Urea Nitrogen (MUN)	97%	93%	100%	●
GHG Emissions ¹⁰	Scope 1 emissions: Percent YoY change in total metric tons of CO ₂ -eq emitted	+14.3%	-4.2%	-4.1%	●
	Scope 2 emissions: Percent YoY change in total metric tons of CO ₂ -eq emitted	0.0%	0.0%	-4.1%	●
	Scope 3 emissions: Percent YoY change in total metric tons of CO ₂ -eq emitted	+1.9%	-2.8%	-4.1%	●
Energy Use	Percent YoY change in total MMBtu of energy used, normalized by milk pounds received	+0.4%	-0.4%	-1%	●
Waste Diversion	Percent of waste diverted from landfill	16%	18%	90%	●
Water Consumption	Percent YoY change in total gallons of water consumed, normalized by milk pounds received	+4%	+8%	-1%	●
FULFILLED EMPLOYEES					
Employee Benefits	Percent of employees utilizing benefits	93%	95%	80%	●
	Percent of employees participating in 401(k) plan with safe harbor match	95%	94%	90%	●
	Percent of employees participating in 401(k) plan with safe harbor match (under age 35)	91%	93%	90%	●
Employee Opportunities	Percent of employees internally promoted	18%	14%	13%	●
Employee Retention	Percent employee retention	79%	79%	75%-85%	●
Gender Balance	Percent female/male at Manager level and above	44%/56%	45%/55%	50%/50%	●
Living Wage	Percent of employees who are paid a living wage	100%	100%	100%	●
Overall Employee Engagement	Overall employee engagement score, based on results of annual survey	75%	75%	75%	●
Workforce Diversity	Percent of employees of color, racially or ethnically diverse	24%	25%	30%	●
ENRICHED COMMUNITIES					
Community Investment	Percent of our earnings invested in our communities	2.7%	4%	4%	●
Employee Volunteer Hours	Number of hours volunteered in our communities	2,310	3,155	3,500	●

For more details, see our [2019 Comprehensive GRI Data](#) document

TCCA is committed to large-scale sustainability initiatives at the regional, national and global levels. Our Key Performance Indicators are aligned with and inspired by the United Nations Sustainable Development Goals, the Dairy Sustainability Framework Global Criteria, the Innovation Center for U.S. Dairy Stewardship Commitment and the National Milk Producers Federation FARM program.

WHAT’S NEXT

As we reflect back on our 2019 progress and look ahead to our 2020 goals, we’re in the middle of a global pandemic. While our business remains strong, many people in the communities where we operate and across the country are hurting. That’s why our farmer-owners committed a \$4 million relief plan to help our employees, communities and industry partners respond to and recover from the COVID-19 crisis. Together, we will persevere and press on as we remain focused on achieving our Stewardship goals.

Reaching our targets

Progressing toward our goals requires innovative solutions to some complicated challenges. In the spirit of continuous improvement, we’re addressing the areas of our Scorecard that need more work, and we’re outlining our plan for progress.

WATER USE

For every gallon of milk received, we aim to use only one gallon of water to make our dairy products, an ambitious 1:1 goal that is aligned with industry best practices. That said, our manufacturing facilities are in areas of low water risk.¹¹ For these reasons, we have chosen to focus our water stewardship efforts on water quality over water consumption, and this is not accounted for in our Scorecard. We are currently partnering with community stakeholders to apply for grants that would support water quality initiatives in Tillamook County.

SUPPLY CHAIN TRACEABILITY

Achieving 100 percent traceability into our supply chain will take years and a great deal of data collection. We are committed to the process while taking a stepwise approach to improve traceability, encouraging more suppliers to participate in our Stewardship Supplier Engagement Program each year.

WASTE DIVERSION

Each year, 1.4 million people visit The Creamery and enjoy a snack or lunch, invariably increasing our waste footprint. Unfortunately, opportunities to recycle paper, plastics and compost organic materials are limited in Tillamook County. That’s why we’re engaging in conversations with local and regional government and organizations to find new opportunities to limit waste to landfill. Between 2018 and 2019, we did reduce our hazardous waste generation by 34 percent.

GHG EMISSIONS

The bulk of our GHG emissions are not from our operations (Scopes 1 and 2), they are emissions associated with the dairy farms where we source milk (Scope 3). Currently and in the past, we use national data sets to calculate our Scope 3 emissions. We have begun a project to more directly measure our Scope 3 emissions from our farmer-owners and everyone who supplies milk for Tillamook products. In tandem with this measurement work, we continue to explore, pilot and implement projects in our operations and on farms, such as using soil sequestration tactics, feed additives and energy from renewable sources.

GRI ISSUE BRIEFS

For a more detailed approach to what matters most to us, see our GRI Issue Briefs:

- [Economic Performance](#)
 - [Animal Welfare](#)
 - [Food Safety and Product Quality](#)
 - [Procurement Practices](#)
 - [Energy, Emissions, and Climate Change](#)
- [Water and Effluents](#)
 - [Waste](#)
 - [Our Culture](#)
 - [Occupational Health and Safety](#)
 - [Community Enrichment](#)

GRI CONTENT INDEX

INDICATOR	INDICATOR DESCRIPTION	LOCATION
MANAGEMENT		
GRI 102: General Disclosures 2016		
102-1	Name of the organization	2019 Comprehensive GRI Data
102-2	Activities, brands, products, and services	2019 Comprehensive GRI Data
102-3	Location of headquarters	2019 Comprehensive GRI Data
102-4	Location of operations	2019 Comprehensive GRI Data
102-5	Ownership and legal form	2019 Comprehensive GRI Data
102-6	Markets served	2019 Comprehensive GRI Data
102-7	Scale of the organization	Net sales and total capitalization classify as legal information, confidential to TCCA, and therefore cannot be disclosed. All remaining information can be found in our 2019 Comprehensive GRI Data .
102-8	Information on employees and other workers	2019 Comprehensive GRI Data
102-9	Supply chain	2019 Comprehensive GRI Data
102-10	Significant changes to the organization and its supply chain	2019 Comprehensive GRI Data
102-11	Precautionary Principle or approach	2019 Comprehensive GRI Data
102-12	External initiatives	2019 Comprehensive GRI Data
102-13	Membership of associations	2019 Comprehensive GRI Data
102-14	Statement from senior decision-maker	2019 Comprehensive GRI Data
102-16	Values, principles, standards, and norms of behavior	2019 Comprehensive GRI Data
102-18	Governance structure	2019 Comprehensive GRI Data
102-40	List of stakeholder groups	2019 Comprehensive GRI Data
102-41	Collective bargaining agreements	2019 Comprehensive GRI Data
102-42	Identifying and selecting stakeholders	2019 Comprehensive GRI Data
102-43	Approach to stakeholder engagement	2019 Comprehensive GRI Data
102-44	Key topics and concerns raised	2019 Comprehensive GRI Data
102-45	Entities included in the consolidated financial statements	2019 Comprehensive GRI Data
102-46	Defining report content and topic Boundaries	2019 Comprehensive GRI Data
102-47	List of material topics	2019 Comprehensive GRI Data
102-48	Restatements of information	2019 Comprehensive GRI Data
102-49	Changes in reporting	2019 Comprehensive GRI Data
102-50	Reporting period	2019 Comprehensive GRI Data
102-51	Date of most recent report	2019 Comprehensive GRI Data
102-52	Reporting cycle	2019 Comprehensive GRI Data
102-53	Contact point for questions regarding the report	2019 Comprehensive GRI Data
102-54	Claims of reporting in accordance with the GRI Standards	2019 Comprehensive GRI Data
102-55	GRI Content Index	2019 Comprehensive GRI Data
102-56	External assurance	2019 Comprehensive GRI Data

INDICATOR	INDICATOR DESCRIPTION	LOCATION
ECONOMIC PERFORMANCE		
GRI 201: Economic Performance 2016		
103-1	Explanation of the material topic and its boundary	Economic Performance
103-2	The management approach and its components	Economic Performance
103-3	Evaluation of the management approach	Economic Performance
201-1	Direct economic value generated and distributed	As a privately-held cooperative, we have chosen to maintain confidentiality and omit the disclosure of any financial goals and performance metrics.
201-2	Financial implications and other risks and opportunities due to climate change	Economic Performance
HEALTHFUL COWS		
N/A (see Note)		
103-1	Explanation of the material topic and its boundary	Animal Welfare
103-2	The management approach and its components	Animal Welfare
103-3	Evaluation of the management approach	Animal Welfare
TCCA KPI	FARM/Validus Program Participation: Percent participation among TCCA farmer-owners	Scorecard
TCCA KPI	Somatic Cell Count: Percent of milk pounds entering Tillamook and Boardman manufacturing facilities below 200k somatic cell count	Scorecard
Note	TCCA is not using a GRI Standard to report on this topic. We follow the internationally accepted “Five Freedoms” of good animal welfare, inspired by the World Organisation for Animal Health, the Farmers Assuring Responsible Management™ (FARM) program or equivalent (Validus) and the Dairy Sustainability Framework animal care criteria.	
INSPIRED CONSUMERS		
GRI 204: Procurement Practices 2016		
103-1	Explanation of the material topic and its boundary	Procurement Practices
103-2	The management approach and its components	Procurement Practices
103-3	Evaluation of the management approach	Procurement Practices
TCCA KPI	Supplier Traceability: Percent participation in Stewardship Supplier Engagement Program among all suppliers	Scorecard
204-1	Proportion of spending on local suppliers	The recent launch of our Stewardship Supplier Engagement Program will help us to gain traceability and transparency into our supply chain. It is our goal to report on this information in the near future.
GRI 416: Customer Health and Safety 2016		
103-1	Explanation of the material topic and its boundary	Food Safety and Product Quality
103-2	The management approach and its components	Food Safety and Product Quality
103-3	Evaluation of the management approach	Food Safety and Product Quality
416-1	Assessment of the health and safety impacts of product and service categories	Food Safety and Product Quality
ENDURING ECOSYSTEMS		
GRI 302: Energy 2016		
103-1	Explanation of the material topic and its boundary	Energy, Emissions, and Climate Change
103-2	The management approach and its components	Energy, Emissions, and Climate Change
103-3	Evaluation of the management approach	Energy, Emissions, and Climate Change
TCCA KPI	Energy Use: Percent YoY change in total MMBtu of energy used, normalized by milk pounds received	Scorecard
302-1	Energy consumption within the organization	2019 Comprehensive GRI Data

INDICATOR	INDICATOR DESCRIPTION	LOCATION
GRI 305: Emissions 2016		
103-1	Explanation of the material topic and its boundary	Energy, Emissions, and Climate Change
103-2	The management approach and its components	Energy, Emissions, and Climate Change
103-3	Evaluation of the management approach	Energy, Emissions, and Climate Change
TCCA KPI	Scope 1 emissions: Percent YoY change in total metric tons of CO ₂ -eq emitted	Scorecard
TCCA KPI	Scope 2 emissions: Percent YoY change in total metric tons of CO ₂ -eq emitted	Scorecard
TCCA KPI	Scope 3 emissions: Percent YoY change in total metric tons of CO ₂ -eq emitted	Scorecard
TCCA KPI	Air Emissions — Ammonia: Percent of milk pounds entering Tillamook and Boardman facilities between 8-14 mg/dl Milk Urea Nitrogen (MUN)	Scorecard
305-1	Direct (Scope 1) GHG emissions	2019 Comprehensive GRI Data
305-2	Energy indirect (Scope 2) GHG emissions	2019 Comprehensive GRI Data
305-3	Other indirect (Scope 3) GHG emissions	2019 Comprehensive GRI Data
GRI 306: Effluents and Waste 2016		
103-1	Explanation of the material topic and its boundary	Waste
103-2	The management approach and its components	Waste
103-3	Evaluation of the management approach	Waste
TCCA KPI	Waste Diversion: Percent of waste diverted from landfill	Scorecard
306-2	Waste by type and disposal method	2019 Comprehensive GRI Data
GRI 307: Environmental Compliance 2016		
103-1	Explanation of the material topic and its boundary	Waste
103-2	The management approach and its components	Waste
103-3	Evaluation of the management approach	Waste
307-1	Non-compliance with environmental laws and regulations	Waste
GRI 303: Water and Effluents 2016		
103-1	Explanation of the material topic and its boundary	Water and Effluents
103-2	The management approach and its components	Water and Effluents
103-3	Evaluation of the management approach	Water and Effluents
TCCA KPI	Water Consumption: Percent YoY change in total gallons of water consumed, normalized by milk pounds received	Scorecard
303-1	Interactions with water as a shared resource	Water and Effluents
303-2	Management of water discharge-related impacts	Water and Effluents
303-3	Water withdrawal	We do not currently measure water withdrawal on farmer-owners’ farms because this issue is not material to us.
GRI 307: Environmental Compliance 2016		
103-1	Explanation of the material topic and its boundary	Water and Effluents
103-2	The management approach and its components	Water and Effluents
103-3	Evaluation of the management approach	Water and Effluents
307-1	Non-compliance with environmental laws and regulations	Water and Effluents

INDICATOR	INDICATOR DESCRIPTION	LOCATION
FULFILLED EMPLOYEES		
GRI 401: Employment 2016		
103-1	Explanation of the material topic and its boundary	Our Culture
103-2	The management approach and its components	Our Culture
103-3	Evaluation of the management approach	Our Culture
TCCA KPI	Employee Benefits: Percent of employees utilizing benefits	Scorecard
TCCA KPI	Employee Benefits: Percent of employees participating in 401(k) plan with safe harbor match	Scorecard
TCCA KPI	Employee Benefits: Percent of employees participating in 401(k) plan with safe harbor match (under age 35)	Scorecard
TCCA KPI	Employee Opportunities: Percent of employees internally promoted	Scorecard
TCCA KPI	Employee Retention: Percent employee retention	Scorecard
TCCA KPI	Gender Balance: Percent female/male at Manager level and above	Scorecard
TCCA KPI	Living Wage: Percent of employees who are paid a living wage	Scorecard
TCCA KPI	Overall Employee Engagement: Overall employee engagement score, based on results of annual survey	Scorecard
TCCA KPI	Workforce Diversity: Percent of employees of color, racially or ethnically diverse	Scorecard
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Our Culture
GRI 403: Occupational Health and Safety 2018		
103-1	Explanation of the material topic and its boundary	Occupational Health and Safety
103-2	The management approach and its components	Occupational Health and Safety
103-3	Evaluation of the management approach	Occupational Health and Safety
403-1	Occupational health and safety management system	Occupational Health and Safety
403-2	Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety
403-3	Occupational health services	Occupational Health and Safety
403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Health and Safety
403-5	Worker training on occupational health and safety	Occupational Health and Safety
403-6	Promotion of worker health	Occupational Health and Safety
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health and Safety
403-8	Workers covered by an occupational health and safety management system	Occupational Health and Safety
ENRICHED COMMUNITIES		
GRI 413: Local Communities 2016		
103-1	Explanation of the material topic and its boundary	Community Enrichment
103-2	The management approach and its components	Community Enrichment
103-3	Evaluation of the management approach	Community Enrichment
TCCA KPI	Community Investment: Percent of our earnings invested in our communities	Scorecard
TCCA KPI	Employee Volunteer Hours: Number of hours volunteered in our communities	Scorecard
413-1	Operations with local community engagement, impact assessments and development programs	2019 Comprehensive GRI Data

Our 2019 Stewardship Report has been prepared in accordance with the GRI Standards: **Core option**.

ENDNOTES

1. Brekken, C., Gwin, L., Horst, M., McAdams, N., Martin, S., & Stephenson, G. (2016, September 29). The Future of Oregon's Agricultural Land. *Institute of Portland Metropolitan Studies Publications*, paper 148.
2. Norman, H. D., Guinan, F.L., Walton, L.M., & Dürr, João. (2019). Somatic Cell Counts of Milk from Dairy Herd Improvement Herds during 2019. *The Council of Dairy Cattle Breeding*, SCC21, 2-20.

2019 U.S. average for SCC is 187,000 based on DHI records. At TCCA, our goal is to have 85 percent of milk entering our Tillamook and Boardman manufacturing facilities to report below 200,000 cells per milliliter — far below (or better) than the global average.
3. DeLaval International AB. (2007, March 18). Cow Comfort: Resting. Milk Production.
4. The World Organisation for Animal Health. (2020). Animal Welfare. OIE The World Organisation for Animal Health.
5. United States Environmental Protection Agency. (2020, March). Greenhouse Gas Equivalencies Calculator.
6. Ibid.
7. Naranjo, A., Johnson, A., Rossow, H., & Kebreab, E. (2020). Greenhouse Gas, Water, and Land Footprint per Unit of Production of the California Dairy Industry over 50 Years. *Journal of Dairy Science*, Vol. 103 No. 4.
8. Three Mile Canyon Farms. (2020). Sustainability.
9. U.S. Dairy. (2020). U.S. Dairy Sustainability Awards.
10. In 2018, we presented GHG emissions that were normalized based on pounds of milk received (MT CO₂-eq/milk pounds received) as a way to account for increases or decreases in production. Although this is a standard practice in GHG accounting, the fact is that globally, businesses must decrease our absolute emissions to limit damage to our planet. We also felt it is more interesting and transparent for our readers if we simply list our year-over-year change in GHG emissions in absolute terms (MT CO₂-eq), rather than using a normalization factor. Therefore, if you read last and this year's Reports, the percentages for 2018 will be different.
11. Aqueduct. (2020). Aqueduct Water Risk Atlas. World Resources Institute.

