

FARMER OWNED SINCE

DOING THINGS RIGHT SINCE



• 2018 • STEWARDSHIP REPORT

OF PROGRESS

Stewardship has been part of our journey from the very beginning. We're excited to share with you our very first Stewardship Report – an opportunity to show you all the ways we're working toward doing dairy right.

Today. Tomorrow. Always.





TCCA farmer-owner drives a tractor around his property, timing his crop fertilization to minimize air emissions.

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66 Tillamook represents generations handed down, and we want it to be around forever. That's why we'll continue to put in the hard work, be good stewards, and sustain our resources."

LEADERSHIP ROOTED IN STEWARDSHIP

It's been said that there's no better place to be a dairy farmer than Tillamook County. And I'd say there's no better way to get wholesome dairy products than through the Tillamook County Creamery Association (TCCA). Our farmer-owned cooperative puts the decision-making power in the sturdy hands of farmers. Together, we're doing dairy right.

While this is our first Stewardship Report, Stewardship is nothing new to us. The only way to stay in business for over one hundred years is to care for the air, land and water that sustain us. The only way to provide the highest quality milk is to care for our cows. These simple tenets are carried out through rigorous processes and practices that require continuous innovation. Sometimes that means reconsidering the way things have always been done. Throw open the barn door and you'll find cows outfitted with technology. Step into our offices and you'll learn how genetics is used for breeding. Look beyond the pasture and you'll find biodigesters capturing methane for energy and converting manure to rich compost.

We honor our heritage at TCCA, but not at the expense of progress. My fellow board members and I recognize what a great thing it is to be a part of TCCA and we work hard to contribute to the cooperative. Our kids see this dedication, and if we can pass that on, they can follow in our footsteps. Because for all of us, farming is more than a job, it's a way of life.

Being a part of the cooperative pays dividends – real, financial ones. At the end of each year, our board determines how much of our earnings will be distributed to our farmer-owners, how much will be reinvested into the business, and how much will be invested in the community. All of our earnings are used in one of these three ways. And that makes TCCA unique, especially at a time when dairy farmers everywhere are facing increased economic challenges.

Beyond monetary dividends, our farmer-owners understand the benefits of being part of a producer cooperative, and we make decisions based on a long view. It's why we made the intentional decision to source milk from suppliers who share our same values, yet operate outside of Tillamook County. And it's why we added a facility in Boardman, Oregon, in order to double our production. This allowed our farmer-owners to continue operating their farms at a scale that works for them within the limited Tillamook landscape, while allowing the cooperative they own to grow. These are just a few examples of how we're placing emphasis on generational returns, not just guarterly ones.

As a farmer-owned, farmer-led cooperative, we own a commercial brand. Not too many farmers can say they're part of the bigger picture in this way. It's a serious responsibility and a motivating force. And it's one we intend to carry forward into the next 110 years.

Sham Lung

Shannon Lourenzo Chairman, TCCA Board of Directors



And a start de

2018 STEWARDSHIP REPORT

OUR **NORTH STAR**

Working to earn your trust. In our products. Our practices. Our promises.

Here at TCCA, quality isn't some old-fashioned word used for marketing. It's a deeply rooted standard we hold ourselves to in everything we do - in the ways we farm, the processes we follow, the products we sell, and the investments we're making in our Stewardship efforts. It's what we like to call Dairy Done Right.®

Doing dairy right starts with trust. From the best cow care to the highest quality cheese, ice cream, yogurt, sour cream and butter, earning your trust has guided decisions across every aspect of our business. Yet, we've never really come out and shared many of the things we're doing to generate positive impact. We just did them, day in and day out.

In 2017, we decided to commit them to paper. First, we evaluated and identified the most material issues to our business. This assessment helped us focus our efforts on the things that matter most. Then, we established a board-approved, third-party reviewed Stewardship Charter that defines our vision and our framework.

Within the Charter are commitments which hold us accountable to our farmers, consumers, suppliers, employees, customers and neighbors. This Charter serves as the anchor for our Stewardship management system. Cascading from the Charter are the policies, procedures, documentation, communication and measurement that guide us. Adopting a management system like this is intentional – it ensures we embed our Stewardship commitments across all business functions, not just within our Stewardship Team. We present qualitative and quantitative information alongside our financials to our leadership team, executive team and board of directors.

READ OUR FULL STEWARDSHIP CHARTER LEARN MORE

Tillamook. **STEWARDSHIP COMMITMENTS**



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.

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



SUSTAINED NATURAL **RESOURCES**

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





HEALTHFUL COWS



Product Excellence means more than quality food. We strive for excellence in our partnerships, sourcing, product design, manufacturing, research, safety, sustainability and traceability.

HELLO

It takes dedicated employees to keep our cooperative going for 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 healthful children.

FARMERS ARE OUR PAST, PRESENT AND

Why 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.

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, providing us with

high-quality milk and governing our business.

With all of the headwinds facing farmers today economic uncertainty, public perception, constant change – farming is challenging. Yet, farmers have the grit and adaptability to overcome those challenges. And we're right there with them, investing in their well-being and their ongoing, intergenerational success.

→ SPOTLIGHT

FARMING SUCCESS, 21st CENTURY STYLE

Like many in the TCCA cooperative, farmerowner Joe Rocha comes from a long family history of dairy farmers. He earned a degree in dairy science from the prestigious California Polytechnic State University before taking over his family business.

Joe knows that, even with generations of first-hand knowledge and the latest science, farming is a challenge. It's not getting any easier either. In fact, he says that "2018 was one of toughest economic times maybe in forever. The United States lost 2,731 licensed dairies from 2017 to 2018. That is a 6.5 percent drop."¹

Farms can and do survive, even thrive, when they adopt the right approach for today – an approach that is different from the nostalgic notion of the farmer from a century ago. "For a farm to thrive, it has to be nimble," he says.

"And change is involved. If you think you can wake up and turn on lights and do the same things you were doing 40 years ago, you're mistaken."

Thriving Farms, such as Joe's, are continually improving through technology, data and scientific practices. They're also looking to the future and aiming for sustainability in every sense of the word – environmental and economic.

"For me, sustainability is important because we have a new generation that's involved now and that wants to continue this on, so we tend to make decisions that are more long-term. We want to see our farm continue, so we do things that are good for business, and that are also good for the environment and community."

UNIQUE PERSPECTIVE FROM

JOE ROCHA

Joe embodies uncompromising quality. It took work, but he learned to adjust his California farming techniques to the wet Tillamook climate.

Our farmers work hard. and we work hard for them.

We have 82 farmer-owners in our cooperative, with 82 ways of doing things. We also have a number of contract farms and cooperatives outside of Tillamook County providing us with high-quality milk. Across all of these farms, we have shared values.

Here are some examples of what we're doing for our farmer-owners:

Paying generous milk prices. As a cooperative, we pay our farmer-owners milk prices that are well above market value, and we pay a premium for milk quality to incentivize continuous improvement.

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 (see graph to the right for details).

Helping them continuously improve. We believe Dairy Done Right means striving for best practices and keeping up with science and technology to optimize productivity. We also believe in consistently helping our farmers discover and address opportunities for improvement, based on objective evaluations. That's why we do:

- Farm evaluations. Using both internal and external evaluators, we help farmers identify opportunities to continuously improve animal welfare, milk quality, environmental practices, and working conditions for their employees.
- Technical assistance programs. Based on regular evaluations, our Farm Services Team helps farmers improve management of their farms. Technical assistance comes in a variety of forms from customized one-to-one sessions to district meetings to bilingual training documents.
- Grant and loan programs. These programs help farmers implement Stewardship projects or purchase new technology that will contribute to their continued success.

Columbia River Dairy, LLC, employees stand in the milking parlor.





2014 2015 2016 2017 2018

GROWING FARMER-OWNER DISTRIBUTIONS

Every year, our board reinvests our earnings in three ways: into farmerowners' pockets, into the business and into the community. It's what makes us unique as a cooperative.

For every dollar American consumers spend on food, U.S. farmers and ranchers earn just 14.6 cents.²





Helping farms span generations.

Farming in Tillamook is traditionally a family business and many of our farmers aspire to continue that tradition into future gene ations. Helping farms span generations has become increasingl critical – for our farmers and for Oregon agriculture in general. According to the United States Department of Agriculture (USDA) the average age of Oregon farmers has risen to 60 years old, and projections show that 64 percent of Oregon agricultural land will change hands in the next 20 years.³

Successfully transitioning across generations requires a successio plan. This goes far beyond a traditional will; it must account for complex business assets, family dispute resolution, and zoning considerations. The crux of intergenerational succession is effective land transfer, which can be a difficult process. If a farm is overleveraged, for example, there might be pressure to sell that land to someone outside the family who is able to pay more.

As part of our commitment to Thriving Farms, we're helping farme address these land transfer challenges. One example is the wor that Sarah Beaubien, our Senior Director of Stewardship, is doing with the Oregon Agricultural Heritage Trust. Together they're exploring setting up what are called "working lands easements," agreements between a landowner and a land trust that allow a farmer to dedicate a small piece of their land for conservation while they continue farming the rest, which can permanently protect its value. These easements allow farmers to finance succession, so that their families can continue to work the land for generations to come.³

The Seals have been farming for multiple generations.



| ny er- gly), | 66 Two-thirds of Oregon's farm lands will change hands in the next 20 years, yet up to 80 percent of farmers don't have succession plans. In this transition, productive land and associated habitat are vulnerable to non-farm development and fragmentation." ³ |
|------------------------|---|
| ng m at | SARAH BEAUBIEN Senior Director of Stewardship, TCCA |
| ers ork er, | 340,000 fell out of agricultural production in Oregon from 2012-2017. ⁴ |



Columbia River Dairy, LLC, employee uses modern machinery to improve cows' access to nutritious feed.

Succeeding at scale.

Nearly every farm, whether belonging to a farmer-owner or among our contract suppliers, does things a bit differently. Some of them are intentionally small and have minimal inputs. Others achieve economies of scale through large-scale operations. Columbia River Dairy, LLC, is one of the latter, with 25,000 cows, 93.000 acres and 300 full-time workers.

Columbia River Dairy uses this scale to its advantage. For example, it allows them to adopt more sustainable practices, such as regular animal welfare training, an advanced irrigation system and cow nutrition data analytics. Its scale also provides opportunities for career advancement, giving workers opportunities to make their way to managerial roles.

Most notably, Columbia River Dairy has been able to achieve a closed-loop farm. All of the waste that's generated is sent to an on-site methane digester that converts waste into energy

to power the dairy farm or into a nutrient to grow feed for their cows. Some of this nutrient is used to grow Organic Certified™ produce on their adjacent farm. It also recycles the water used in its barn seven times. This is yet another example of how a large-scale farm can succeed in many ways – financially, ethically and environmentally.

100%

is the score Columbia River Dairy, LLC, received on their Validus Dairy Animal Welfare Program Audit. The dairy is among a very select few to receive this excellent score.

From down home to high tech.

Step inside today's farms and you'll see state-of-the-art technology alongside old-fashioned shovels and pitchforks. Real-time data collection, automated feed adjustments, robotics - these are increasingly standard around the farm today. As TCCA farmer-owner Taryn Martin says, "There is no doubt that cutting-edge technology, like robotics, is quickly becoming the norm."

Her grandfather Norman Martin is right there with her. "Whenever new technologies come along, I usually get right on them within a short period. It's part my personality, and part surviving in the business world. If you want to stay ahead of the game, you better get on the train quickly."

Another way the Martins stay ahead of the game on their farm is with genetic selection. As with most dairy farmers, they've used it to increase positive traits among their cows - which in turn leads to greater productivity and resistance to disease. This approach is a long-standing tradition for the Martins. "Working with my dad and grandfather to help improve our herd traits is something I have loved since I was a kid," Taryn says.



Using technology, together the Martins divide and conquer the daily tasks of dairy farming.

These days, their dedication to a strong herd includes genomic technology and data. "We genomic test everything," Norman says, "and data analytics influences our decisions more every day. I really believe that. There's always some hesitation when these new things come along, but I'm full bore into it."

The primary objective of their genetic scrutiny is improving cow health. It's their scientific way of increasing productivity, fat and protein – and helping us meet the demand for our world-famous cheese. Their selectiveness also led to the highest genetically ranked Jersey herd in the U.S., according to the America Jersey Cattle Association. As Norman says, "We were just trying to build the best herd of Jersey cows in the U.S."

66 There is no doubt that cutting-edge technology, like robotics, is quickly becoming the norm on dairy farms."

TARYN MARTIN **TCCA** Farmer-owner

HEATHFUL COWS

COWS ARE OUR REASON FOR BEING

Why Healthful Cows?

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

Healthful cows are more productive – and are central to our business and our lives. One way we show our dedication to our cows is by following the internationally accepted "Five Freedoms" of good animal welfare: adequate food and water, comfort and shelter, proper handling, prevention and treatment of disease and injury, and prevention and minimization of fear, stress, and suffering.⁵

66 Cow comfort is a high priority for all dairy farmers. The more comfortable cows are, the more production they have. And, overall, they're healthier."

KATE LOTT, DVM Director of Farm Engagement, TCCA

Holstein cows grazing on pasture. The cows are wearing activity monitors, which provide real-time data to their owners about their health and well-being

Coming through for our cows.

A lot goes into keeping cows healthful. From farm design to day-to-day practices, it's a commitment we keep. Here are a few examples:

- **Best management practices.** Our farmer-owners and their employees focus on humane and conscientious handling of their herd. And our own Farm Services Team and a local team of veterinarians regularly monitor compliance with our policies and industry-wide animal welfare best practices.
- Farm evaluations. Our Director of Farm Engagement, who is an on-staff veterinarian, conducts second-party audits to evaluate animal welfare practices. Additionally, third-party evaluators verify that farmer-owners and supplier farms comply with either the National Milk Producers Federation Farmers Assuring Responsible Management (FARM) Animal Welfare Program⁶ or the Validus Animal Welfare Program. And they do. II
- **Somatic cell count.** We scrutinize the somatic cells in every milk sample from our farmer-owners' farms. Somatic

cells are mostly white blood cells, which increase when there is an immune response from an infection. Our cows have a much lower somatic cell count than the industry average, which means they have less infection and are more healthful. We have some of the lowest counts in the world!

- **Comfort.** Our cow care focuses on minimizing stress in three daily activities: when cows stand to milk, when cows stand to eat and drink, and when cows lie down. Our farmer-owners design their barns and facilities to optimize comfort and cleanliness.
- Ability to express natural behavior. Calm, relaxed cows produce more wholesome milk. Our farmers create a low-stress environment, where cows have ample time to rest, digest and exercise. In fact, cows rest 12-14 hours a day.⁷

\rightarrow SPOTLIGHT

ON CALL 24/7 FOR HIS COWS.

It's 3:22 a.m. and farmer-owner Matt Marti is jolted awake by an alarm. Although it's close to his normal wakeup time, this alarm isn't coming from his clock. It's an alert from a cow monitor telling him that one of his cow's ruminations are off, which might be a sign she's not well.

Matt isn't the only farmer using these electronic activity monitors, or cow "Fitbit[®]" tracker as we like to call them. A lot of our farmer-owners do because it's an easy way to get dependable, real-time data about their cows' well-being. Much like the technology people use to track their physical activity, these devices track a cow's movement. It also tracks other, non-human activities such as rumination, by listening in on the number of chews per hour.

With this data, farmers can provide cows with immediate care that could benefit the entire herd. Like keeping a sick child home from school, a cow can be kept in the hospital pen and given some extra TLC. Farmers also use these high-tech tools to get ahead of an illness and take preventative measures, with vitamins or probiotics for example. Research shows that these collars can pick up health events 36 hours faster than a trained, on-site veterinarian would.⁸ As Matt says, "It's like a person taking medicine at the first sign of sickness instead of waiting three days and going to the emergency room for antibiotics."

UNIQUE PERSPECTIVE FROM

Matt also treats his farm workers as one team, providing safe working conditions and fair pay.

LEARN MORE IN OUR

ANIMAL WELFARE

ISSUE BRIEF





COTTON SEED



66 I care about what, how and when my cows eat because it's key to their health. It's also how we get the best milk possible. And that's something we take pride in."

BLAISE BENNETT TCCA Farmer-owner



GRASS

SILAGE

A truly cow-friendly diet.

Blaise Bennett is part farmer, part businessman and part animal nutritionist. He'll direct you to the feed in his barn and point out that it's not simply grass as many people think, but a mix of high-value agricultural products, such as hay and corn silage, that ensure his cows get the best nutrition available.

His farm, like all of those of our farmer-owners, benefits from the in-depth advice and direction of animal nutritionists, herd health consultants and veterinarians. The result is a diet that improves cow health — and has environmental benefits as well. These experts help Blaise introduce a diet that shifts based on month-to-month changes in the cow. This dynamic approach lessens overfeeding, which benefits the cow and can simultaneously reduce emissions.



SOY MEAL

PURSUING QUALITY,

Why Product Excellence?

Product Excellence means more than quality food. We strive for excellence in our partnerships, sourcing, product design, manufacturing research, safety, sustainability and traceability.

People expect our products to be delicious. Additionally, they expect them to be wholesome and made the right way. We expect all of that, too. That's why our definition of Product Excellence extends from rigor around milk quality to human rights principles. And it's why we're working hard to achieve transparency and accountability across our entire value chain - for every ingredient, component, process, supplier and partner.

A farm employee cleans a cow's teats with an iodine solution prior to milking.



It all starts with the best milk.

Milk, as our primary ingredient, plays a foundational role in Product Excellence. Our farmer-owners are committed to producing the highest quality milk, and we're dedicated to helping them achieve that.

- Top milk quality scores. Milk quality scores quantitatively demonstrate excellence. Our milk-quality scores are high, among the highest in the world. They've been steadily improving for decades and we still keep pushing.
- Third-party evaluations. We hire third-party evaluators to help us manage compliance with farm policies. This independent perspective is extra assurance that our farmer-owners are continually improving their agricultural practices to produce a high-quality product.

grandparents made one."

ERIN KELLEWAY Director of Strategic Sourcing and Procurement, TCCA



• Financial incentives. We offer a financial incentive to our farmer-owners who supply milk above certain quality metrics.

• High-quality hauling. 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. Then, we take samples from every truck at receiving. Every load is tested for microbials and antibiotics, using our own lab that is accredited for microbiologic and pathogen testing.

People tell me over and over again how they love the fact that they can make a grilled cheese sandwich with Tillamook cheese and have it taste the same as it did 40 years ago when their

Research & Development team members assess cheese samples in our lab.



→ SPOTLIGHT

EXCELLENT CONCEPTS, EXCEPTIONAL COMMITMENT.

There's a lot of brainpower in our Research & Development team, with PhDs, food scientists and research chefs. Along with their acumen is their complete commitment to Product Excellence.

Taste is an essential part of that commitment. "Tillamook fans are loyal through and through, but they need variety," says Jill Allen, Director of R&D at TCCA. Jill travels the world looking for dairy products we might not have, and then puts Tillamook's own unique spin on them. That's how our Cape Meares cheddar was created.

Taste is just the beginning of a larger story. "We're dedicated to staying true to the core of Tillamook products – that they're made the right way, that they're products consumers can always trust,"

says Jill. And trust requires every aspect of the product be given careful consideration from the source of its ingredients to the way it's shipped to market.

When the R&D team makes critical decisions around Product Excellence, it often requires weighing trade-offs. An ingredient might be made locally, but it may not be the highest quality or have the lowest environmental impacts. It might be removed from consideration because of our "five nos"-no artificial colors, flavors, preservatives, growth hormones or high fructose corn syrup or, because it doesn't comply with our Product Excellence Ingredients List.

Thorough supplier vetting is key to making the right decisions. "When we're bringing in a new ingredient, we'll first look at who that supplier is," says Steve Marko, Senior Director of R&D. "We'll investigate how that ingredient is produced and manufactured in their facility. We'll also send out quality auditors to research their facility to make sure it's food safe – and that it's someone, quite frankly, we would trust doing business with."

Although the R&D team approaches this work with scientific rigor, they're at TCCA because of a higher purpose. "People might think we're strictly science-minded," says Justin Laabs, R&D Manager. "Yet we all joined Tillamook because we make real food and only do it the right way."

Manufacturing matters.

Manufacturing rigor and precision is another must for Product Excellence. We generally go beyond minimum regulatory compliance standards in manufacturing, and we hold ourselves to the highest standards across our operations and processes.

- Stellar expertise and technologies. We've they're made. But we have to earn it, and always be truthful and empowered a team of engineers to ensure efficiencies across honest about our progress. our manufacturing operations. We also leverage technology. That's why we're working on gaining a clear line of sight into our One example is our high-tech Automated Storage and Retrieval supply chain. Given the complexity of our supply chain, this is System (ASRS), which reduces product damage and energy no simple feat, and 100 percent supply chain transparency and usage in our cheese warehouse. traceability will require time.
- Continuous improvement. We're committed to best practices that encourage improvement, such as allowing decisions to be made as close as possible to where the work is happening across all of our facilities, not just in a corner office. Continuous improvement also includes letting everyone know where we are in our productivity goals, so they can step up and help us meet our objectives. We design for long-term value and we work with partners who share this focus.



R&D team member conducts a sensory test on a cheese sample.

People beyond products.

Our commitment to Product Excellence includes a commitment to Human Rights Principles - not only within our operations, but also across our supply chain. We adhere to the United Nations' Guiding Principles on Business and Human Rights.⁹ As a result, we have policies that require a commitment to identify, prevent and mitigate adverse human rights impacts.

Getting everything out into the open.

- For us, trust is essential trust that we're continuously improving, that we're doing right by consumers, and that our products achieve excellence in everything from their taste to the way

One big step forward was the recent launch of our Stewardship Supplier Engagement Program. The intent of this program is to trace and monitor social, environmental and ethical performance of our supply chain partners - with a partnership-based approach that fosters continuous improvement and ongoing risk reduction.

In the spirit of continuous improvement, we're also looking inward. We've initiated an internal exercise to evaluate the maturity of our overall responsible sourcing program vision and processes. Just as important, it will allow us to identify ways we can better support our suppliers and contract manufacturers in their sustainability performance.

The think tank behind our products.

Product Excellence is a One Team effort. That's why stakeholders from various departments at TCCA meet on a regular basis to discuss new products under consideration for development. This New Product Development (NPD) Team includes folks from category management, R&D, quality, marketing, sales, finance, Stewardship, consumer insights and regulatory affairs, to name a few.

The NPD Team makes key decisions on products based on what we learn from consumer research. To get that critical consumer perspective, they turn to our Consumer Insights Team. Another priority in their decision-making process is the potential for sustainability or Stewardship implications. The process followed by the NPD Team ensures that new products are added to our portfolio only after careful consideration.

VALUE EVERY STEP OF THE WAY



Continuing excellence with like-minded partners.

Our products have been the epitome of Product Excellence for ing, they consider every potential impact. many, many years. In fact, long-time customers tell us that a A key factor they consider is food-packaging interaction that Tillamook grilled cheese sandwich made today tastes the same optimizes shelf-life and prevents food spoilage. The right packas it did many years ago. "We're fanatical about that experience staying consistent and true," says Erin Kelleway, Director of aging can increase the timespan consumers have to consume products safely, which means less food will go to waste. Another Strategic Sourcing and Procurement at TCCA. consideration is packaging weight, since heavier packaging As we've expanded our portfolio, we've extended to outside leads to more fuel consumption during transportation and suppliers. We remain farmer-owned and farmer-led while sourcing increased carbon emissions. Recyclability, biodegradability, some of our milk and ingredients from elsewhere. Working with compostability, renewable materials and sourcing packaging strong, like-minded partners with shared values has allowed us material from responsible suppliers are examples of additional to remain a profitable cooperative – and ensure the economic factors considered – as long as the function, safety and quality viability of our farmer-owners. of our products are not compromised.

No matter what the source or what the ingredient, food safety and quality are critical to delivering Product Excellence – and an integral part of our core principles. We guard our recipes carefully and insist on applying our Dairy Done Right standards in the evaluation of all aspects of our supply chain.

A shared responsibility.

We voluntarily participate in the U.S. Dairy Stewardship Commitment.¹⁰ This demonstrates the firm commitment TCCA, partners and even competitors have to advancing Stewardship across the dairy industry. Because we know we can make a bigger impact if we're all working toward the same goals.



TRANSPORTATION TO AND FROM WAREHOUSE

Packaged safe and sound.

Our R&D Team is just as diligent about packaging as they are about ingredients. And in their quest to create the right packag-

"Packaging matters to Product Excellence in many ways," says Fermin Resurreccion, one of our packaging engineers, who also has several patents on active packaging design. "We consider all of them."



THE ENVIRONMENT SUSTAINS US-AND WE SUSTAIN IT

Through empowering great people and knowing where we use energy and water, we are leveraging technology, innovation and continuous improvement to reduce emissions and our environmental impact."

JACK MULDER Director of Engineering, TCCA

Limiting our footprint, acknowledging our hoofprint.

Milk production, by its nature, creates a footprint. And the vast majority of that footprint comes from cow burps and farts, a natural process. While we cannot change the fact that cows are ruminant animals that produce a good deal of gas, we are working to improve our footprint on farms and in other areas to have a positive impact in as many places as possible. A few examples:

- **Regenerating soil.** Tillamook County is a rich alluvial plain with some of the best soil for producing food. Our farmer-owners recognize that, and many are regenerating soil with intentional management practices – cover cropping, no tilling, nutrient management and riparian buffers – all of which can result in substantial carbon sequestration.
- Increasing building and truck fleet efficiency.

We work hard to make our buildings and processes more efficient. For example, we've installed a heat recovery system in the main dryer of our Boardman whey plant, which significantly reduces energy consumption. We're also using waste steam from the Portland General Electric plant for all the process heating in Boardman. And, by changing out the accelerators in our trucks, we saw a 10 percent reduction in fuel consumption across our truck fleet.

Conducting corporate environmental

footprints. Since 2012, we've collected data on a wide range of key metrics from on-road fuel use to electricity consumption. We follow the GHG Protocol methodology developed by World Resources Institute (WRI) and World Business Council on Sustainable Development (WBCSD).¹¹ TCCA took a sciencebased approach to developing its Stewardship Charter, coupling insights from a traditional materiality assessment with learnings from their corporate footprinting. "This robust, science-based approach ensured that the Charter addresses all factors that affect the cooperative's ability to thrive," says Amanda Pike, Senior Sustainability Consultant, Quantis.

Why Sustained **Natural Resources?**

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.

For generations, our farmer-owners have preserved these resources - their livelihoods depend on it. Yet we know we still have a lot of work to do. We're dedicated to continually improving agricultural practices, leveraging everything from scientific and technological breakthroughs to intergenerational knowledge about the land.

Our commitment to Sustained Natural Resources extends from our farms to our facilities and throughout our supply chain. It also encompasses efforts on many fronts, including waste reduction, water Stewardship, clean energy and fuel efficiency.

>90%



of our farmer-owners practice cover cropping, which can drawdown carbon from the atmosphere.

5.1 MILLION kWh

saved from our energy reduction projects in manufacturing facilities. That is equivalent to 44,147 homes' energy use for one year.¹²

Feed the future.

From farm to facilities to fork, we are hyper-focused on minimizing waste while helping to feed those in need. We strive to send zero waste to the landfill – a goal we have yet to achieve – but we're making progress toward it. We have a three-pronged approach to help feed the future.

Increase farm productivity

Our farmers are adopting new technologies to produce more with less.

Minimize any waste

First, we work hard to prevent waste. Then, we strive to repurpose any waste for best use.

Address food insecurity

We partner with organizations to provide healthful food to community members in need.

%

of the environmental impacts associated with animal products are reduced each year due to breeding technology.¹³

>50%

of our employees are trained in Lean Six Sigma, a method that addresses process flow and waste issues to eliminate errors and defects, reduce costs, and save time in our manufacturing facilities.

\$340k

in excess cheese was donated to local food banks and schools instead of to the landfill.

~30%

of a cow's diet is made up of high-quality agricultural by-products that would have otherwise ended up in the landfill.



A Holstein cow stands in Tillamook County's rich alluvial plain.

There are challenges, then there are misperceptions.

Agriculture and dairy farming, in particular, face unique sustainability challenges. It's a resource-intensive practice that can have substantial impact. Our farmers know this well. But sometimes information about agriculture's sustainability challenges and its impact isn't accurate. It can be skewed, outdated or overhyped – and sometimes all of these.

A famous United Nations study from 2006 reported that livestock produced more greenhouse gas emissions than transportation.¹⁴ In reality, that report failed to consider a number of contributors of greenhouse gas emissions from vehicles and drastically overstated the impact of agriculture.

Since the 1940s, there has been a 41% reduction in the dairy industry's carbon footprint."

Modern milk production requires less resources to produce the same amount of milk, resulting in the use of:18



And thanks to breeding and feeding efficiencies, today, it requires fewer cows to produce more milk overall.

| | 1940s | 2000s | % CHANGE |
|---|---------------|--------------|----------------|
| Milk produced per cow, annually Gallons | 548 | 2,429 | ↑ 343 % |
| Number of cows | 25.6 м | 9.2 м | ↓64 % |
| Total milk production Gallons | 14в | 22 B | ↑ 57 % |

According to USDA research in California, the largest dairy state in the nation, only five percent of the state's carbon footprint comes from dairy methane emissions.¹⁵ Across the U.S., dairy emissions are comparatively lower than anywhere else in the world.¹⁶ That's largely because of science and technology. Thanks to advances in genetics, feed and technology, U.S. dairy farmers have dramatically increased efficiency and productivity, so that fewer cows can deliver a far greater volume of milk.





POOP POWER!

The original circular economy of converting cow waste into energy and by-products has been happening for centuries. Thanks to new technology and cutting-edge equipment, the process is more prevalent and effective than ever.

It starts with piping cow waste into a digester. There, the waste is heated to remove pathogens and the methane is captured and turned into clean biogas. This biogas can be used on the farm to power an electric generator or can be sold for a profit to the local utility. Through a separating process, the remaining liquid is removed, run through a nutrient recovery system, and used as a pathogen-free and odor-free fertilizer. Finally, solids can be used as clean bedding for cows or sold to other farmers as a nutrient-rich peat moss replacement.



Let's clear the water.

Water matters deeply to us and has for generations. Farmers liquid waste so it doesn't have any negative environmental are the first conservationists, with awareness about the impact impact to the wetlands behind our facility. We invested over they have and how they can protect our waterways. Not just \$3 million in a wastewater treatment plant that's bigger than because they like a great fishing hole, but because it's part of the City of Tillamook plant, and we're currently conducting what they do as responsible farmers. a study that will lead to more wastewater investments to repurpose and clean our water.

Much of our farmer-owners' water Stewardship work centers on thoughtful nutrient management processes. By storing manure We also capture liquid whey from the cheese-making process. in tanks, they can prevent contamination of rivers and wetlands Rather than adding it to the waste stream, the liquid whey is dried during storms or flooding events. Many have embarked on into a powder form for use in various products and supplements. riparian restoration projects, installed fencing, or built buffers to During the drying process in Boardman, we capture the excess keep their cows from entering waterways. moisture, convert this into polished water, and reuse this water in our processes. Capturing and reusing this water source allows Our farmer-owners work closely with several local partners to us to reduce our daily water consumption by approximately implement these water Stewardship projects. With the Tillamook 300,000 gallons.

Soil and Water Conservation District, for example, they have focused on fencing all applicable river and stream banks. There's still much more work to be done. We recently worked

TCCA also partners with groups such as the Tillamook Estuaries Partnership, which formed after the Tillamook Bay was established as a Bay of Significance by the federal government. Their reason for being is to protect the Tillamook Bay and the basin that flows into it - and to achieve that, we've helped them plan and implement riparian restoration projects. Working in concert with the Department of Environmental Quality on a citizen science program, we also measured bacteria counts and raised community awareness. The Wilson River was removed from Environmental Protection Agency's list of impaired waters (303d) thanks in part to these efforts.¹⁹

We're working just as hard in our manufacturing operations. Substantial water is used to make that delicious cheddar sitting in your fridge, and we're dedicated to treating the subsequent

66 Agriculture, as a whole, has become more sustainable with a smaller environmental footprint. It's not one individual farmer's story. It's everybody's."

> **DERRICK JOSI TCCA** Farmer-owner

closely with The Freshwater Trust to spatially map and pinpoint challenges related to salmon habitat, stream temperatures, sediment, nutrient and bacteria quantity and wetland healthindicators of water quality - in the Tillamook Bay watershed. Working together, we have identified activities and technologies that can help address each. We have allocated funds for pilot projects and are working closely with Natural Resources Conservation Service and Newtrient, Inc., to match technologies with grants.

\$25,000 is set aside each year for environmental Stewardship grants for our farmer-owners.

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

FULFILLED EMPLOYEES

OUR PEOPLE, OUR PRIORITY

Why Fulfilled Employees?

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

We put tremendous effort into creating conditions where our employees feel like they belong. We sponsor numerous opportunities for our employees to connect and build relationships. These activities range from First Friday Breakfast to cross-functional Culture Committees to employee farm tours. We also are invested in helping our employees be safe and supported, on the job and off. Safety audits ensure that we're staying the course, and abundant learning opportunities raise our employees' game.

\rightarrow SPOTLIGHT

HOW WE HELP A BIG IDEAS GUY GET STUFF DONE.

Meet Pat McHugh, TCCA Logistics Manager and community champion. Thanks in part to Pat's work, our local Tillamook Bay Community College has a new driver-training program. Faced with a shortage of certified commercial drivers and the need for more jobs in our community, Pat brought the problem to our Community Enrichment Committee – along with a solution.

He requested we donate a retired TCCA trailer to the college, explaining it wouldn't just benefit us, but the entire community. We agreed. We also issued a \$15,000 grant to help the college fund a driving simulator so students can practice in all kinds of conditions. Pat's also the guy behind changing the color on our trucks from black to TCCA orange – a color that attracts less heat from the sun, so they use 25 percent less fuel for cooling. The added bonus? Our trucks will look like giant blocks of cheese rolling down Highway 6the main route in and out of Tillamook.

Highway 6 is a curvy mountain road with lots of cellular dead zones. Pat is also working with the Oregon Department of Transportation to make it safer by adding more call boxes and advisory boards. We foster a workplace of Fulfilled Employees like Pat because it allows them to champion important community policies like this. UNIQUE PERSPECTIVE FROM

PAT McHUGH

Pat genuinely cares. As a long-standing member of the Tillamook community, he works hard to ensure his family and friends are safe.

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

We pride ourselves on innovative thinking and believe it is key to achieving our goals. The best way to achieve that is to ensure inclusion is embedded in our culture. Because when it is, diversity and equity follow.

- **Being inclusive.** We're focused on creating an inclusive environment, one that welcomes different perspectives and thinking, encourages employees to bring new ideas to light, and supports people to work together toward the same goals as One Team.
- Welcoming diversity. We're creating pipelines and partnerships to invite diverse talent to come to our organization and become a part of our success. We are reaching out to a wider range of people to interview and hire. And we're holding ourselves accountable to diversity goals reinforced through key performance indicators. II

TCCA employees send cheese along the manufacturing line. All employees receive safety and Good Manufacturing Practices training to ensure they are prepared for the job.



Considering new approaches that

foster access. We provide paid parental leave for both mothers and fathers, and public transportation passes for our Portland employees. This kind of support can help promote our workforce's ability to achieve their full potential – and increase employee retention.

100% of our employees are paid a living wage...I

Card-carrying culture champions.

Our culture is defined by five values that ground us, give us purpose, and help us find meaning in our work. They aren't just lofty goals in a presentation. They're actively lived and put into action. When employees live our values, we call them out, say thanks and recognize their contributions with a culture card. It's our version of a high five - and how we pass our culture on.

We are committed to **UNCOMPROMISING QUALITY**

in our products and to continuously improving the way we do our work.

We PLAY TO WIN

by adopting a challenger mindset, innovating, never backing down and confidently pursuing growth without compromising our values or bold mission.

We work together as ONE TEAM

by keeping commitments to each other, valuing each other's diverse perspectives and collaborating across the organization toward the same goal.

We are GOOD STEWARDS

who choose to do the long-term right thing for our farmer-owners, employees, consumers, communities, environment and our brand.

We GENUINELY CARE

for each other, serving each other with empathy and honesty, helping to keep each other safe and happy in our work and lives and having fun together along the way.

The quality team upholds the food safety and quality standards of all TCCA products. This includes assessment of our suppliers and contract manufacturers.



Stepping up when our line was down.

In 2017, when we were about to start a renovation to our pack-Recently our Tillamook site underwent its first-ever social and aging line, we were faced with an important question: What do ethical compliance audit with Supplier Ethical Data Exchange (SEDEX).²⁰ Companies around the world use the SEDEX platwe do with our 40 employees who temporarily have no line to work on? The answer: Pay them to develop their skills – and pay form to collect data related to treatment of employees, and it forward in our community. they look at us to determine if we have a safe and comfortable work environment.

First, we did some training and team building activities. Then, we launched a Week of Service, paying our employees for a full-week of volunteer time to make a difference in the community. We built school gardens, read alongside elementary school students, led a reorganization of the Habitat for Humanity warehouse, and cared for disabled folks at one of the assisted living facilities.

The effort was such a success that we ran with it. In 2018, we created a formal employee 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 where volunteers are needed, employees can choose where they volunteer. We encourage them to choose organizations that align with our mission of agricultural advocacy, food security and healthful children, but we also want them to do what they're passionate about. 💵

"One of the goals of the Tillamook Cares program is to identify meaningful activities that everyone can enjoy," says Abby Carroll, Total Rewards Manager at TCCA. "For some, it may be hopping in a kayak and heading downriver to pick up trash or bringing kids and the family dog for a day of beach clean-up. For others, it may be making blankets in the comfort of their homes to donate to children's hospitals. There is one common factor across all these activities -TCCA employees love their communities and are eager to support them."

ABBY CARROLL Total Rewards Manager, TCCA

A work environment that gets high scores.

After substantial interaction with employees and in-depth review of documentation related to labor standards and integrity, health and safety, environmental impact, and business ethics, the SEDEX auditor came to the conclusion that our overall performance compared to the top 10 percent of companies he had audited. This provides objective validation of our commitment to Fulfilled Employees - and provides us with a baseline as we continue to improve.

Leading with hearts and minds.

We are making deep investments to develop leaders to inspire their employees and to help them achieve their potential. We want to enable our leaders to unite teams so they function as single, cohesive units, who are then better able to deliver sustainable and meaningful results. In short, we want to equip our leaders with the right mindset, toolset and skillset to help their employees live up to the values we hold.

One of the goals of the Tillamook Cares program is to identify meaningful activities that everyone can enjoy... there is one common factor across all these activities – TCCA employees love their communities..."

WHEN OUR COMMUNITIES ARE STRONG, SO ARE W/E

Why 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 healthful children.

We're committed to enriching our communities where we operate in order to make them better places to work and live. And we firmly believe that agricultural advocacy, food security, and healthful children are integral to community resilience — which is why we've increased our investment in these priorities from 1.7 percent of profits in 2015 to 2.7 percent in 2018. Our target for 2019 is 4 percent, well above many of our peers.

We're not afraid to take on complex social challenges, but we cannot do it alone. That's why we work collectively to achieve more impact. 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.



COMMUNITY INVESTMENT

Our target for 2019 is to invest four percent of our profits back into our communities, well above many of our peers.

\rightarrow SPOTLIGHT

FIGHTING HUNGER WITH A PASSION.

There are more cows than people in Tillamook County, yet 21 percent of children struggle to get enough food. We are passionate about solving this problem, especially our CEO Patrick Criteser. He's been a board member at the Oregon Food Bank and is 100 percent committed to ending hunger in the state. He's definitely walking the walk, sometimes even riding it.

In May 2018, Patrick donned his biking shorts and helmet, and rode 300 grueling miles over three days in Santa Rosa, California, to raise money for No Kid Hungry. He rode with Team Sack Lunch, the local Chef's Cycle Team, whose purpose is to bring chefs and foodies together to fight hunger outside of the kitchen. Our Community Enrichment Committee pledged their support, then turned to Twitter to raise awareness. Our followers were asked to retweet and hashtag #ChefsCycle. When we got 300 retweets —one for each mile he rode — we celebrated by donating \$10,000 to Chef's Cycle.

This is just one example of how we're working on food security. Because, as Patrick recognizes, "We are committed to ensuring that everyone has access to real, wholesome food to feed themselves and their families."

UNIQUE PERSPECTIVE FROM

PATRICK CRITESER

Patrick plays to win. He does not back down, even when it means riding three days straight for what he believes in.

Getting to know what good we do.

The next part of the journey is to work with our partners to assess actual impact. We're currently tracking the amount of money spent and the hours volunteered, but we still lack understanding of whether we're successfully advancing agriculture, ending hunger, and promoting childhood wellness.

That's why we intend to spend 2019 and 2020 working with partners on outcomes-based approaches, using their analyses to guide our future decisions. This will help us to better support causes, more effectively address challenges, and identify new opportunities for impact.

Visitors welcome.

When the new Tillamook Creamery opened in 2018, people from the community and far beyond poured in — and they're still coming. Last year, we hosted close to 1.4 million visitors at our Tillamook Creamery where hands-on exhibits and views of cheese blocks moving through our production line help educate and advocate for modern dairy farming and processing. And as the most popular tourist destination on the Oregon coast and the second most popular in Oregon, The Creamery brings revenue to the local community and state.

It's official – a dozen local and state dignitaries cut the ribbon to officially open the Tillamook Creamery on June 19, 2018.





Oregon Food Bank in 2018.

\$60,000 donated to No Kid Hungry in 2018 through our consumer campaigns.

\$25,000 in agricultural scholarships for colleges and universities in 2018.

Turning a lofty commitment into real-life improvement.

It's not enough to say we're committed to enriching our communities. We have to act on it. In 2017, we formed a cross-functional Community Enrichment Committee with representation from all major departments and farmer-owners. They study, assess and decide on when, how and what to invest in to have the greatest positive impact.

Being there for farmers – and farmers of the future.

Our identity is tied to our communities, and we are as central to the way of life in our communities as their way of life is central to us. Being a farmer is challenging and our communities need generations ahead to carry on the tradition.

#4AMCLUB

We created a campaign to raise awareness around how hard farmers work across the country. We asked consumers to wake up at 4:00 a.m. in solidarity with our farmers, and then post a photo or video with the hashtag #4amclub. For every post, we donated to the Tillamook Future Farmers of America chapter for things like lab materials, agricultural tools, greenhouse equipment and classroom supplies.

LEARN MORE

4-H

Since the 1970s, we've had an ice cream booth at the Tillamook County Fair. In 2010, when the Tillamook 4-H chapter needed financial assistance, we partnered to help raise funds. And as a result for eight years now, our employees have volunteered alongside 4-H kids to scoop ice cream. Together, we have raised a cumulative of \$120,000 for their programs. LEARN MORE

OREGON STATE UNIVERSITY

We've pledged to be a keystone funder to help build a new dairy pilot plant facility within the OSU Department of Food Science and Technology. A primary outcome will be to provide pilot plant facilities that support ongoing development of the regional dairy industry as well as a qualified, educated and trained base of knowledgeable workers to the industry.

GIRL SCOUTS OF OREGON AND SW WASHINGTON

Working with the Girl Scouts of Oregon and Southwest Washington and the Oregon Dairy and Nutrition Council, we developed the "Dairy Patch Program." The program is designed to educate girls about science, tech, engineering and math concepts; farms and food production; and the dairy industry. Our goal is to replicate this badge across different regions, advocating for women, science and dairy across the country. LEARN MORE



Many Tillamook County youths learn about calf-care through their local 4-H Club, including feeding techniques.

Fighting hunger on many fronts.

We are committed to producing wholesome products for families. We know the value of good nutrition, that's why we're partnering And for children in our community to thrive, they need solid with organizations who provide wholesome food to community education and access to healthful activities. members in need. We understand that affordable housing and food security are closely tied when a family is making budgeting **SOCCER CLINIC** decisions. We are working to address housing inequalities across the state to support our commitment to end hunger.

OREGON FOOD BANK

We have a longstanding partnership with the Oregon Food Bank. We donate large volumes of dairy products each year. And our largest fundraiser of the year is the KGW Food Drive, where we donate a portion of every Tillamook purchase made in March. In 2018, we also invested in one full-time position dedicated to understanding the root causes of hunger in Tillamook County and a delivery truck to deliver food to pantries throughout Tillamook County.

LEARN MORE

NO KID HUNGRY

In May of 2018, we grew our partnership with No Kid Hungry through the Chef's Cycle West fundraising bike event. And in November of 2018, for every social media post in our "LoveWhatsLeftOver" post-Thanksgiving campaign, we donated to No Kid Hungry and also raised awareness about food waste. LEARN MORE

TILLAMOOK HOUSING COMMISSION

Our leadership team is represented on the Tillamook Housing Commission. We helped fund both a housing study and a housing needs analysis, providing fundamental information needed to overcome the current lack of affordable housing available in Tillamook County.

CARE

When CARE, a social service agency that serves at-risk people in Tillamook, faced losing its headquarters and its ability to serve the community, we provided some of the funds necessary to help CARE buy their building. This ensures that social services – like emergency assistance, homeless services and support for first-time parents – are all housed within the same building.

OREGON LEGISLATURE

We believe that we must solve the housing crisis through a multi-prong approach that involves awareness, investment and policy advocacy. We advocated for several bills in the Oregon legislature in 2018 designed to address the statewide housing crisis through better policy.

Kick-starting an active lifestyle for our children.

To bring a soccer clinic to the City of Tillamook, we partnered with the professional women's soccer team, the Portland Thorns, and invited the community to participate. We also partnered with the Oregon Coast Futbol Club - a local soccer program and donated funds for new uniforms, new fields, equipment and program fees.

TILLAMOOK COUNTY WELLNESS

Our employees serve on the Task Force and Action Committees of Tillamook County Wellness. The vision of this program is to make Tillamook County a place where individuals feel empowered by their community to engage in healthful lifestyles. The organization won the 2018 Outstanding Organizational Leadership Award from the Oregon Health Authority (OHA) Health Promotion and Chronic Disease Prevention (HPCDP).²¹

66 Tillamook takes a unique approach to problem solving that involves collaboration with key stakeholders, identification of root causes and implementation of socially innovative solutions – an approach that has resulted in tremendous success and serves as an example for the industry."

PETE KENT Executive Director of the **Oregon Dairy and Nutrition Council**

The Innovation Center for U.S. Dairy announced TCCA as the national winner of the 2018 Community Impact Award. LEARN MORE



U.S. Dairy Sustainability Awards novation Center for U.S. Dairy

MEASURING WHAT MATTERS

We present qualitative and quantitative information to the leadership team, executive team and board of directors to communicate our progress. This scorecard captures our 2018 key performance indicators.

| METRIC | EXPLANATION | TARGET | PERFORMANCE | PROGRESS |
|---------------------------------------|--|--------------------------------------|--------------------------|----------|
| HEALTHFUL COWS | | | | |
| FARM/Validus Program Participation | Percent participation among TCCA farmer-owners | 100% participation | 100% | • |
| Somatic Cell Count | Percent of milk Ibs. entering Tillamook and Boardman manufacturing facilities below 200k somatic cell count | 85% milk lbs. below 200k SCC | 71% | • |
| PRODUCT EXCELLENC | E | | | |
| Supplier Traceability | Percent participation among all suppliers | 100% participation | 1% | • |
| SUSTAINED NATURAL | RESOURCES | | | |
| Air Emissions – Ammonia | Percent of milk lbs. entering Tillamook and Boardman manufacturing facilities b/w 8-14 mg/dl Milk Urea Nitrogen (MUN) | 100% milk lbs. b/w 8–14 mg/dl MUN | 97 % | • |
| | Metric tons of CO ₂ -eq emitted as Scope 1, direct emissions/milk pounds received | 4.1% reduction from 2017 | Scope 1 <1% | • |
| GHG Emissions | Metric tons of CO ₂ -eq emitted as Scope 2, purchased electricity/milk pounds received | 4.1% reduction from 2017 | Scope 2 <1% | • |
| - | Metric tons of CO ₂ -eq emitted as Scope 3, indirect emissions/milk pounds received | 4.1% reduction from 2017 | Scope 3 <1% | • |
| Energy Use | Total MMBtu of energy used/milk pounds received | 1% reduction from 2017 | <1% | • |
| Waste Diversion | Total pounds of waste diverted from landfill/total pounds of waste generated | 27% increase from 2017 | 15% | • |
| Water Consumption | Total gallons of water consumed/milk pounds received | 1% reduction from 2017 | 3% | • |
| FULFILLED EMPLOYEES | 5 | | | |
| Employee Benefits | Percent of employees utilizing benefits | 72% utilization | 93% | |
| Employee Opportunities | Percent of employees internally promoted | 10% promotion | 18% | • |
| Employee Retention | Percent employee retention | 70% retention | 79 % | |
| Gender Balance | Percent male/female at Manager level and above | 50%/50% @ Manager + | 56%/44% | |
| Living Wage | Percent of employees who are paid a living wage | 100% of employees | 100% | |
| Overall Employee Engagement | Overall employee engagement score, based on results of annual survey | 70% score | 75% | • |
| Workforce Diversity | Percent of employees of color/racially and ethnically diverse | 30% of employees | 24% | |
| ENRICHED COMMUNI | TIES | | | |
| Community Investment | Total monetary / product donations and scholarships | 3.5% of NI | 2.7% | |
| Employee Volunteer Hours | Number of hours volunteered | 3,000 hours | 2,310 hours | • |

70-100% of target 30-69% of target 0-29% of target

For more explanation, see Issue Briefs on adjacent page.

WHAT'S NEXT

We're aiming to activate stakeholders and achieve the following by 2025.

Carbon Conscious

Reduce greenhouse gas emissions through biodigester production of Renewable Natural Gas (RNG), new feed supplements, soil carbon sequestration, and facility energy efficiency.

Waste Not, Want Not

Minimize organic waste to landfill through continuous improvement, diversion and strategic donations to benefit food security in Tillamook County.

Water Wise

Improve water quality through use of biodigesters, manure tank covers, riparian restoration and wastewater treatment plant management.

ISSUE BRIEFS

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

- Economic Performance
- Animal Welfare
- Food Safety and Product Quality
- Procurement Practices
- Waste

- Our Culture



• Energy, Emissions and Climate Change <u>Water and Effluents</u> Occupational Health and Safety Community Enrichment

GRI CONTENT INDEX

| INDICATOR | INDICATOR DESCRIPTION | LOCATION |
|------------------|--|--|
| MANAGEMENT | r | |
| GRI 102: General | Disclosures 2016 | |
| 102-1 | Name of organization | 2018 Comprehensive GRI Data, pg. 2 |
| 102-2 | Activities, brands, products, and services | 2018 Comprehensive GRI Data, pg. 2 |
| 102-3 | Location of headquarters | 2018 Comprehensive GRI Data, pg. 2 |
| 102-4 | Location of operations | 2018 Comprehensive GRI Data, pg. 2 |
| 102-5 | Ownership and legal form | 2018 Comprehensive GRI Data, pg. 2 |
| 102-6 | Markets served | 2018 Comprehensive GRI Data, pg. 2 |
| 102-7 | Scale of the organization | Net sales and total capitalization classify as legal in- formation, confidential to TCCA, and therefore cannot be disclosed. All remaining information can be found in our <u>22018 Comprehensive GRI Data, pg. 2</u> . |
| 102-8 | Information on employees and other workers | 2018 Comprehensive GRI Data, pg. 2 |
| 102-9 | Supply chain | 2018 Comprehensive GRI Data, pg. 3 |
| 102-10 | Significant changes to the organization and its supply chain | 2018 Comprehensive GRI Data, pg. 4 |
| 102-11 | Precautionary Principle or approach | 2018 Comprehensive GRI Data, pg. 4 |
| 102-12 | External initiatives | 2018 Comprehensive GRI Data, pg. 4 |
| 102-13 | Membership of associations | 2018 Comprehensive GRI Data, pg. 5 |
| 102-14 | Statement from senior decision-maker | 2018 Comprehensive GRI Data, pg. 6 |
| 102-16 | Values, principles, standards, and norms of behavior | 2018 Comprehensive GRI Data, pg. 6 |
| 102-18 | Governance structure | 2018 Comprehensive GRI Data, pg. 6 |
| 102-40 | List of stakeholder groups | 2018 Comprehensive GRI Data, pg. 6 |
| 102-41 | Collective bargaining agreements | 2018 Comprehensive GRI Data, pg. 6 |
| 102-42 | Identifying and selecting stakeholders | 2018 Comprehensive GRI Data, pg. 6 |
| 102-43 | Approach to stakeholder engagement | 2018 Comprehensive GRI Data, pg. 7 |
| 102-44 | Key topics and concerns raised | 2018 Comprehensive GRI Data, pg. 7 |
| 102-45 | Entities included in the consolidated financial statements | 2018 Comprehensive GRI Data, pg. 8 |
| 102-46 | Defining report content and topic Boundaries | 2018 Comprehensive GRI Data, pg. 8 |
| 102-47 | List of material topics | 2018 Comprehensive GRI Data, pg. 8 |
| 102-48 | Restatements of information | 2018 Comprehensive GRI Data, pg. 8 |
| 102-49 | Changes in reporting | 2018 Comprehensive GRI Data, pg. 8 |
| 102-50 | Reporting period | 2018 Comprehensive GRI Data, pg. 8 |
| 102-51 | Date of most recent report | 2018 Comprehensive GRI Data, pg. 8 |
| 102-52 | Reporting cycle | 2018 Comprehensive GRI Data, pg. 8 |
| 102-53 | Contact point for questions regarding the report | 2018 Comprehensive GRI Data, pg. 8 |
| 102-54 | Claims of reporting in accordance with the GRI Standards | 2018 Comprehensive GRI Data, pg. 9 |
| 102-55 | GRI Content Index | 2018 Comprehensive GRI Data, pg. 9 |
| 102-56 | External assurance | 2018 Comprehensive GRI Data, pg. 9 |

| INDICATOR | INDICATOR DESCRIPTION | LOCATION |
|-------------------|--|---|
| ANIMAL WELF | ARE | |
| 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 |
| Note | TCCA is not using a GRI Standard to report on this topic. We follow the internat welfare, inspired by the World Organization for Animal Health, the Farmers Ass or equivalent (Validus) and the Dairy Sustainability Framework animal care crite | uring Responsible Management™ (FARM) program |
| COMMUNITY | ENRICHMENT | |
| GRI 413: Local Co | ommunities 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 |
| 413-1 | Operations with local community engagement, impact assessments, and development programs | 2018 Comprehensive GRI Data, pg. 9 |
| ECONOMIC P | ERFORMANCE | |
| GRI 201: Economi | ic 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 |
| ENERGY, EMIS | SIONS AND CLIMATE CHANGE | |
| 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 |
| 302-1 | Energy consumption within the organization | 2018 Comprehensive GRI Data, pg. 9 |
| GRI 305: Emissio | ns 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 |
| 305-1 | Direct (Scope 1) GHG emissions | 2018 Comprehensive GRI Data, pg. 9 |

INDICATOR INDICATOR DESCRIPTION LOCATION 305-2 Energy indirect (Scope 2) GHG emissions 305-3 Other indirect (Scope 3) GHG emissions

2018 Comprehensive GRI Data, pg. 10

2018 Comprehensive GRI Data, pg. 10

| OUR CULTURE | | | |
|--------------------------|--|--------------------|--|
| GRI 401: Employment 2016 | | | |
| 103-1 | Explanation of the material topic and its boundary | <u>Our Culture</u> | |
| 103-2 | The management approach and its components | Our Culture | |
| 103-3 | Evaluation of the management approach | Our Culture | |
| 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | <u>Our Culture</u> | |

FOOD SAFETY AND PRODUCT QUALITY

| 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 |

OCCUPATIONAL HEALTH AND SAFETY

| GRI 403: Occupati | onal 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 |
| PROCUREMEN | T PRACTICES | |
| | ant Drastices 2016 | |

GRI 204: Procurement Practices 2016

| 103-1 | Explanation of the material topic and its boundary |
|-------|--|
| 103-2 | The management approach and its components |

Procurement Practices

Procurement Practices

| INDICATOR | INDICATOR DESCRIPTION | LOCATION |
|-------------------|--|---|
| 103-3 | Evaluation of the management approach | Procurement Practices |
| 204-1 | Proportion of spending on local suppliers | The recent launch of our Stewardship Supplier En- gagement Program will help us to gain traceability and transparency into our supply chain. It is our goal to report on this information in 2020. |
| WASTE | | |
| GRI 306: Effluent | ts 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 |
| 306-2 | Waste by type and disposal method | 2018 Comprehensive GRI Data, pg. 11 |
| GRI 307: Environ | mental 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 | <u>Waste</u> |
| 307-1 | Non-compliance with environmental laws and regulations | <u>Waste</u> |
| WATER AND E | FFLUENTS | |
| GRI 303: Water a | ind 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 |
| 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 materi- al to us. In Tillamook County, average precipitation is 87.99 inches per year. |
| GRI 307: Environ | mental 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 |
|-------------------|--|---|
| 103-3 | Evaluation of the management approach | Procurement Practices |
| 204-1 | Proportion of spending on local suppliers | The recent launch of our Stewardship Supplier En- gagement Program will help us to gain traceability and transparency into our supply chain. It is our goal to report on this information in 2020. |
| WASTE | | |
| GRI 306: Effluent | ts 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 |
| 306-2 | Waste by type and disposal method | 2018 Comprehensive GRI Data, pg. 11 |
| GRI 307: Environ | mental 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 | <u>Waste</u> |
| 307-1 | Non-compliance with environmental laws and regulations | <u>Waste</u> |
| WATER AND E | FFLUENTS | |
| GRI 303: Water a | ind 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 |
| 303-1 | Interactions with water as a shared resource | Water and Effluents |
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| 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 |
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| 103-1 | Explanation of the material topic and its boundary | Waste |
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| WATER AND E | FFLUENTS | |
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| 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 |
| | | |

Our 2018 Stewardship Report has been prepared in accordance with the GRI Standards: Core option.

END NOTES

- USDA Census of Agriculture https://www.nass.usda.gov/Publications/ AgCensus/2017/Full_Report/Volume_1,_Chapter_1_US/usv1.pdf
- 2 A Revised and Expanded Food Dollar Series. A Better Understanding of Our Food Costs <u>https://www.ers.usda.gov/webdocs/publications/44825/7759_err114.pdf?v=0</u>
- 3 The Future of Oregon's Agricultural Land <u>https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1148&context=metropolitian-studies</u>
- USDA Census of Agriculture <u>https://www.nass.usda.gov/Publications/</u> <u>AgCensus/2017/Full_Report/Volume_1._Chapter_1_US/usv1.pdf</u>
- 5 World Organization for Animal Health <u>http://www.oie.int/en/ani-mal-welfare/animal-welfare-at-a-glance/</u>
- National Milk Producers Federation Farmers Assuring Responsible Management (FARM) <u>https://nationaldairyfarm.com/dairy-farm-standards/ animal-care/</u>. Validus Animal Welfare Program <u>http://www.validusservices.com/animal-care-audits/on-farm-animal-welfare-audits/</u>.
- 7 Cow Comfort: Resting. <u>http://www.milkproduction.com/Library/Scien-tific-articles/Housing/Cow-comfort-9/</u>
- Recent Advances in Wearable Sensors for Animal Health Management <u>https://www.sciencedirect.com/science/article/pii/S2214180416301350</u>
- Guiding Principles on Business and Human Rights <u>https://www.ohchr.</u> org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf
- 10 U.S. Dairy Stewardship Commitment http://commitment.usdairy.com/
- ¹¹ Source of emission factors: Greenhouse Gas (GHG) Protocol. Emission Factors from Cross-Sector Tools. Version April 2014. Table 10. CO2 Emission Factors by Fuel, <u>http://www.ghgprotocol.org/calcula-</u><u>tion-tools/all-tools</u>, IPCC (2007) Intergovernmental Panel on Climate Change's Fourth Assessment Report. http://www.ipcc.ch/publications_ and_data/ar4/wg1/en/ch2s2-10-2.html., and IMPACT 2002+ El v3.3 (IPCC 2013, 100a).
- 12 Greenhouse Gases Equivalencies Calculator <u>https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calcula-tions-and-references</u>

- 13 The Contribution of Breeding to Reducing Environmental Impact of Animal Production <u>https://library.wur.nl/WebQuery/wurpubs/549934</u>
- 14 Livestock's Long Shadow http://www.fao.org/3/a-a0701e.pdf
- ¹⁵ Chapter One: Clearing the Air: Livestock's Contribution to Climate Change <u>https://www.sciencedirect.com/science/article/pii/</u> <u>S0065211309030016#!</u>
- 16 Livestock's Contributions to Climate Change: Facts and Fiction. <u>http://</u> <u>live-ccms.pantheonsite.io/sites/default/files/livestocks_contribution_</u> to_climate_change_facts_and_fiction.pdf
- 17 Charting New York's Milky Way <u>https://cals.cornell.edu/news/periodicals/charting-new-yorks-milky-way/</u>
- 18 Calculations were based upon 1 billion kilograms of milk.
- 19 Conservation Effectiveness Partnership Pulling Together to Improve Natural Resource Investments in Oregon <u>https://www.oregon.gov/oweb/Documents/CEP-WilsonRiver.pdf</u>
- 20 SEDEX https://www.sedexglobal.com/
- ²¹ Organizational Leadership Award from the Oregon Health Authority (OHA) Health Promotion and Chronic Disease Prevention (HPCDP) <u>https://www.tillamookheadlightherald.com/community/tilla-</u> <u>mook-county-wellness-wins-oregon-leadership-award/article_50e1bf-</u> <u>fa-e796-11e8-8a37-7fda79ff613b.html</u>
- ²² As defined by Doerr, John. Measure What Matters How Google, Bono, and the Gates Foundation Rock the World with OKRs. Portfolio Penguin, 2018.