



Since our origins in 1994, Straus has bottled family farm certified Organic Cream-Top Milk in reusable glass bottles.

BUILDING A CIRCULAR ZERO WASTE ECONOMY

December 1st, 2020

TASTE THE STRAUS DIFFERENCE

OUR MISSION

Straus Family Creamery is driven by our mission:

To help sustain family farms in Marin and Sonoma Counties by providing high quality, minimally processed organic dairy products.

To support family farming and revitalize rural communities everywhere through advocacy and education.

THE CIRCULAR ZERO WASTE ECONOMY



Albert Straus:

- Organic Dairy Farmer
- CEO
- Circular Economy Trailblazer

ORGANIC FARMING

A set of practices that support the cycling of on-farm resources, promote ecological balance, and conserve biodiversity. -USDA

A NEW WASTE MANAGEMENT FRAMEWORK

All Materials Have Potential Value.

Our actions impact that value.

A NEW WASTE MANAGEMENT FRAMEWORK

Valuing Material Yields Economic Benefits



Our word choices matter.

MATERIALS

At Straus Family Creamery we chose to manage materials, not waste.



DEFINING ZERO WASTE @ STRAUS

Zero Waste...?

- **IN PRINCIPLE:** *“Zero Waste: The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.” - ZWIA*
- **STAUS STRATEGIC APPROACH:** *Working towards only using materials that have actual value in the REconomy and have minimal life cycle environmental impacts. - Joseph*
- **IN PRACTICE:** *90% environment & land fill diversion. Continuous improvement (aka – highest and best use of materials). Multitude of codified material management strategies and efforts. – TRUE Zero Waste*

ZERO WASTE CERTIFICATION



ABOUT TRUE ZERO WASTE

In practice what does ZERO WASTE really mean?

TRUE (Total Resource Use & Efficiency) Zero Waste Certification is an award that recognizes excellence in waste management. The program is administered by GBCI (Green Business Certification Inc.).

To be eligible for TRUE Zero Waste, the applicant must prove their facilities divert at least 90% of waste away from landfill, incineration, and the environment and utilize a variety of best practices in waste management.

****(unsolicited)** - I personally challenge every food manufacturer to pursue TRUE Zero Waste certification. Join us in transforming the waste-first economy into an actual REconomy. Only together can we make this transformation a reality.**



OUR ZERO WASTE FACILITIES

Creamery

Facility Type: dairy manufacturing

Size: 27,000 square feet

Location: Marshall, California

Employees: 75

Diversion Rate: 91.7%

Certification Level: Gold



Warehouse & Office

Facility Type: storage & logistics

Size: 55,750 square feet

Location: Petaluma, California

Employees: 48

Diversion Rate: 95%

Certification Level: Gold

ACCOUNTING

How we measure diversion from landfill:

“Diversion” under the TRUE Zero Waste Framework includes waste that is avoided, reduced, reused, recycling, composted, or converted to bioenergy (not incinerated). Straus Family Creamery tracks materials in 19 categories or “streams” across our two facilities.

Monthly Waste Tracker			All weights				
DIVERSION RATE	TOTAL: LANDFILL	TOTAL: ALTERNATIVE STREAMS	MONTH	CREAMERY COMPOST	CREAMERY RECYCLING	CREAMERY GLASS	CARDBOARD - IC
92.2%	7,164	84,904	Dec-18	1,170	2,008	7,800	13,980
90.6%	7,164	68,764	Nov-18	1,170	2,008	7,800	7,980
92.7%	7,164	90,546	Oct-18	1,170	2,008	7,800	11,240
92.3%	7,164	86,162	Sep-18	1,170	2,008	7,800	9,020
94.0%	7,164	112,480	Aug-18	1,170	2,008	7,800	13,440
92.3%	7,164	85,628	Jul-18	1,170	2,008	7,800	6,940
93.2%	7,164	98,548	Jun-18	1,170	2,008	7,800	9,480
92.6%	7,164	89,751	May-18	1,170	2,008	7,800	5,640
89.9%	7,164	63,955	Apr-18	1,170	2,008	7,800	5,620
91.8%	7,164	80,122	Mar-18	1,170	2,008	7,800	12,420
92.5%	7,164	88,161	Feb-18	80	2,008	7,800	6,280
93.3%	7,164	99,911	Jan-18	80	2,008	7,800	10,260
91.6%	7,324	79,408	Dec-17	-	2,358	7,800	17,200
92.9%	7,324	95,914	Nov-17	-	2,358	7,800	15,720
90.9%	7,324	73,508	Oct-17	-	2,358	7,800	11,500
90.2%	7,324	67,104	Sep-17	-	2,358	7,800	7,080
94.1%	7,324	116,069	Aug-17	-	2,358	7,800	8,600
88.5%	7,324	56,278	Jul-17	-	2,358	7,800	4,700

ACCOUNTING

Also...We “dumpster dive” 4 times per year.



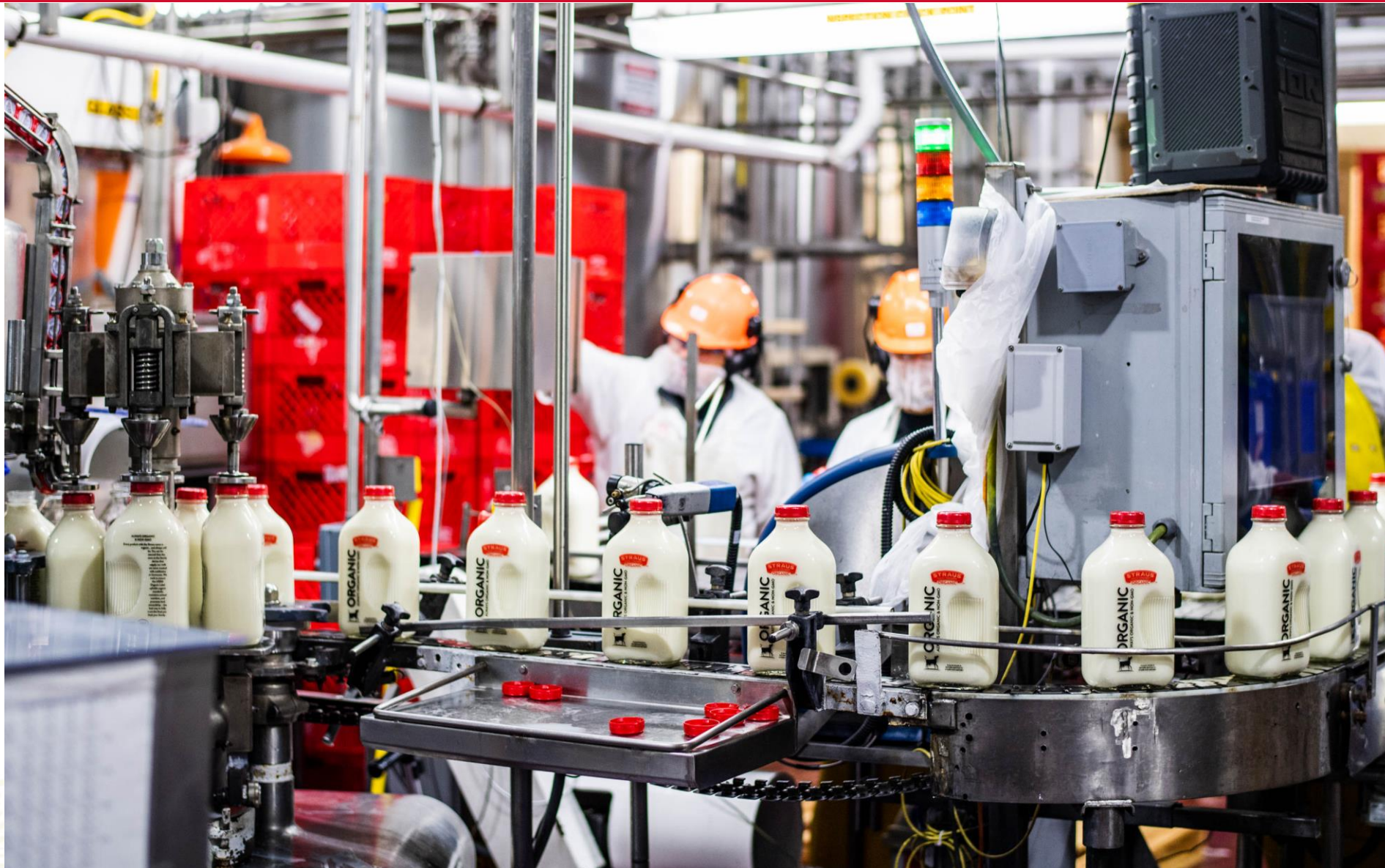
ACCOUNTING

How we measure diversion from landfill & the environment:

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$$\begin{aligned} \text{Diversion Rate} &= \frac{\text{Waste Diverted}}{\text{Total Waste}} \\[1em] \text{2018 Diversion Rate} &= \frac{1.05 \text{ million pounds}}{1.135 \text{ million pounds}} = 92\% \\ &\text{(Company-Wide)} \end{aligned}$$

ZERO WASTE SOLUTIONS



TASTE THE STRAUS DIFFERENCE

ORGANIC WASTE

Converting Organic Waste into Renewable Energy

Straus Family Creamery captures liquid waste from the creamery to use as a feedstock for the methane digester on the Straus Dairy Farm.

We collect this material in tanks at the creamery and transport it by truck to the farm 6 miles away. The digester transforms this organic waste and cow manure into biogas that is used to generate electricity. In 2018, the digester generated 150,000 kWh for use on the farm and exported 180,000 kWh to the grid during periods when generation exceeded farm demand.



CIRCULAR PACKAGING

The Original Circular Package: Glass Milk Bottles

For 25 years, Straus Family Creamery has bottled our retail milk products in reusable glass bottles, preventing millions of pounds of waste from single-use milk cartons and supporting the circular economy for glass.



PACKAGING STRATEGY

Developing the Sustainable Packaging Roadmap

Straus Family Creamery remains deeply concerned about the downstream impacts of our plastic product packaging. We are currently developing a *Sustainable Packaging Roadmap* to guide future packaging decisions for all product families. The *Roadmap* recommends both medium-term sustainability improvements and long-term objectives. The *Roadmap* is a holistic framework that considers the full lifecycle of materials, from sourcing of raw materials to disposal by end consumers.



SOURCE REDUCTION

Reducing Waste at the Source Through Supplier Engagement

Ingredient packaging is a pervasive source of waste at our facilities, which is why we have expanded our waste management strategy to include supplier engagement.

We try to mitigate the waste impacts of our supply chain by asking vendors to use 100% recyclable materials. In 2018, we worked with our egg supplier to eliminate a plastic seal from the egg yolk packaging. We also partnered with a local printing company to implement our first upstream reusable containers.



PURCHASING

Guidelines for Sustainable Purchasing

Straus Family Creamery adopted the *Sustainable Purchasing Policy* in 2019 to codify existing purchasing practices and connect them to our broader mission. The goal of the policy is to equip employees with advice and resources for making the most ethical and environmentally-conscious choices. The policy includes specific guidance in several categories: cleaning supplies, office supplies, paper products, food products, and electronics.

PURCHASE WITH PURPOSE

Buy less and buy better.

Before making a purchase, consider, Do I really need this? The best way to reduce waste is to reduce consumption. Buying less is more efficient, more economical, and more beneficial to the planet. When you do make a purchase, give preference to products that are ethically produced from sustainable materials.

Be resourceful to maximize the useful life of all items and materials.

Consider the utility of an item or material before discarding it. Can it be used again or used for a new purpose? Invest in durable goods that can be used repeatedly instead of disposable ones. Spending more on a durable good usually pays off in the long run.

Consider the waste impacts of your purchase.

Choose products and product packaging that is 100% recyclable and avoid items designed for landfill. Take responsibility for your waste by properly disposing of it in accordance with the Waste Management Policy.

Support local and mission-aligned businesses.

Straus is proud to be a family-owned, farmer-first business. We use our business to drive positive change, and we should use our purchasing power to support other businesses doing the same. Seek out mission-aligned businesses to support and shop local when possible.

RECYCLING

Maximizing Diversion

Straus Family Creamery seeks to maximize both quantity *and* quality of recycled materials. Separating materials helps to preserve quality and increase recyclability.

2018: Recycled **350,000 lbs.** of material.

Mixed Recycling: 190,000 pounds

Corrugate: 116,000 pounds

Milk Caps: 26,000 pounds

Shrink Wrap: 18,000 pounds



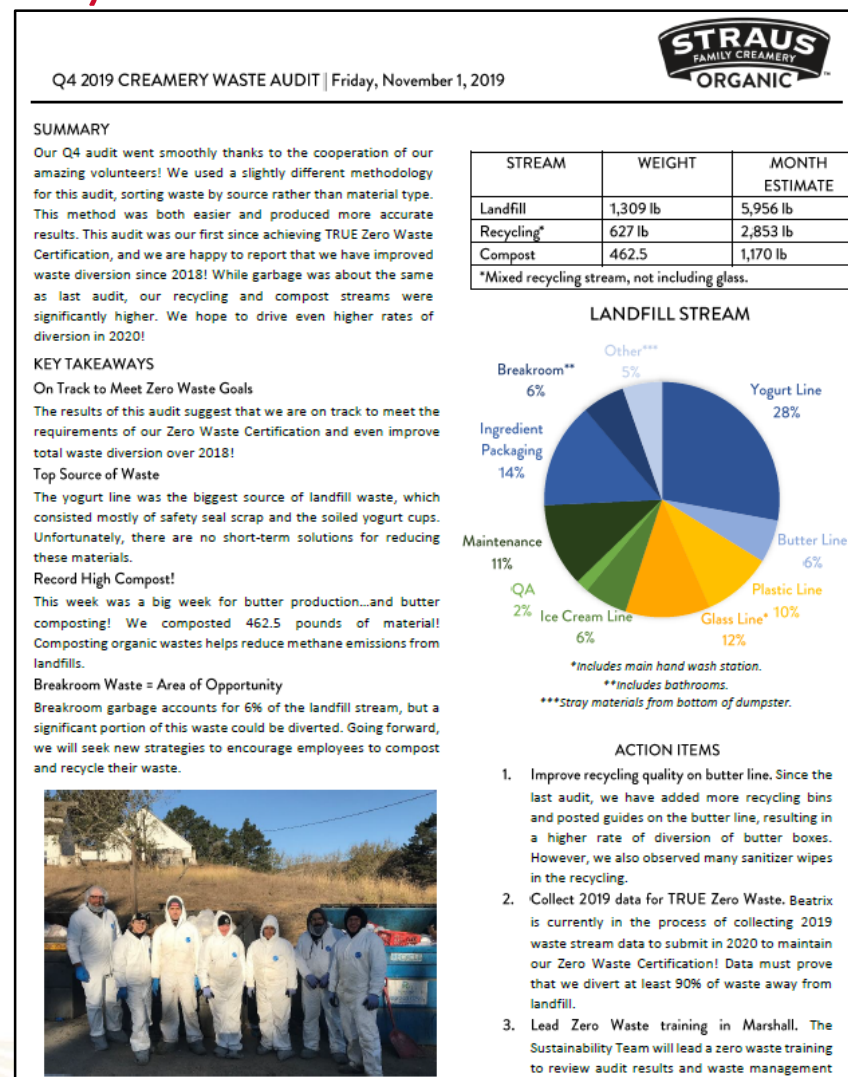
Milk caps are too small to be processed by the MRF (materials recovery facility), so we collect them separately.

ANALYSIS

Conduct Biannual Waste Audits & Analyze Results

Straus Family Creamery conducts biannual waste audits of all garbage, compost, and mixed recycling.

The Sustainability Team leads audits with the assistance of employee volunteers. We remove all materials from the dumpsters, then sort, weigh, and document them. We use this data to estimate annual waste generation. We share this data with operators and leadership teams to correct mistakes, improve processes, and create an innovation mindset.



EMPLOYEES

Employee Engagement Is “Secret Ingredient”

The “secret ingredient” in Straus Family Creamery’s zero waste program is employee engagement across departments.

Sustainability Team determines the direction of zero waste initiatives, but ultimately, operations employees in production & logistics execute them. Often, the best waste management solutions originate from the employees who handle waste everyday.



Alicia leads zero waste efforts in human resources, including paperless waivers and bulk snacks for breakrooms.

BUSINESS CASES



TASTE THE STRAUS DIFFERENCE

BUSINESS CASES

Business Case 1: Reusable Pallet Wraps

Straus Family Creamery reduced waste by replacing disposable shrink wrap with durable pallet wraps.

In 2018, Straus Family Creamery purchased 75 reusable pallet wraps to reduce the amount of shrink wrap used to ship products between our Marshall plant and Petaluma logistics center. Based on sample data on shrink wrap usage, we determined that the pallet wraps would reduce shrink wrap consumption by 15,500 pounds annually, resulting in a payback period of just one year. We estimate that the net benefit will be at least \$13,000 over three years.



Reusable pallet wraps are more efficient and less wasteful than shrink wrap.

BUSINESS CASES

Business Case 2: Reduced Garbage Service

Straus Family Creamery made \$5,000 disappear from annual expenses by right sizing.

Steady improvements in reducing and diverting waste, especially hard-to-recycle materials such as shrink wrap, enabled us to reduce garbage service at our Petaluma facility in 2019. We switched from two pick-ups per week to one – cutting monthly garbage fees from \$956 to \$502, a nearly 50% reduction.



Recycling shrink wrap significantly reduced the volume of landfill waste we generate.

BUSINESS CASES

Business Case 3: Reusable Transport Packaging

Crates, when valued appropriately, help avoid millions of pounds of corrugated demand each year.



Reusable Plastic HDPE Crates

99% Return Rate	600k Circulated in 2017	\$10 Crate Deposit
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Less Plastic. More Trees. Good Economics.

RESOURCES



SOCIAL HANDLES

[strausfamilycreamery.com](https://www.strausfamilycreamery.com)

@strausfamilycreamery

@strausmilk

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SOCIAL HASHTAGS

#Straus25

#TastetheStrausDifference

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