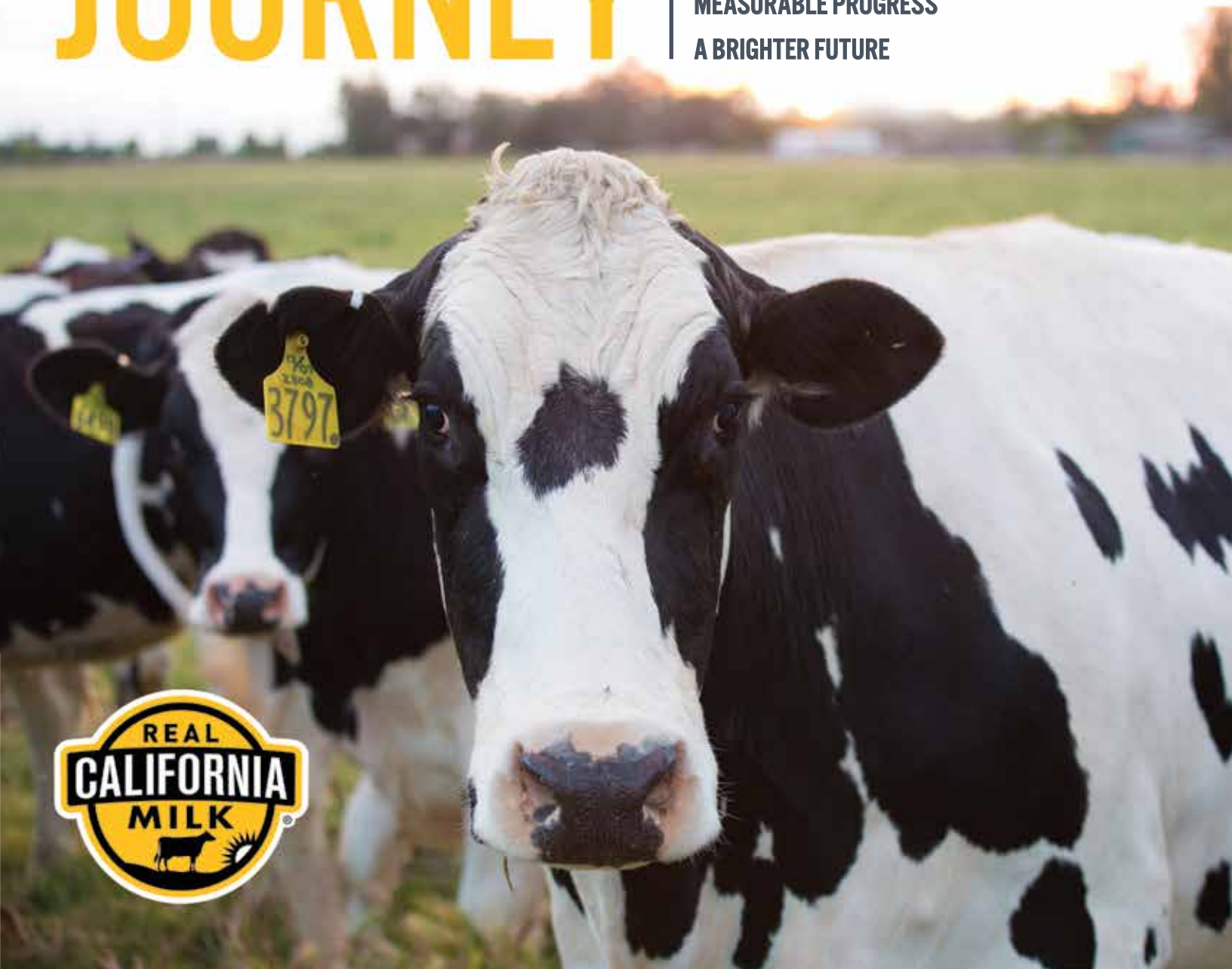
2025

CALIFORNIA DAIRY'S SUSTAINABILITY JOURNEY

WORLD-CLASS LEADERSHIP
MEASURABLE PROGRESS
A BRIGHTER FUTURE



REAL CALIFORNIA MILK

California

As the nation's largest dairy producer since 1993, California now makes nearly 1/5th of all the milk in the United States, nourishing consumers at home and around the world. Every product stamped with the Real California Milk seal is made with wholesome milk from the Golden State, where we believe in real food made by real farm families who are focused on a cleaner, more sustainable future. For California dairy families, sustainability doesn't mean just being good enough – it means being the best and continuing a legacy of producing food that's good for people and the planet, now and for generations to come.

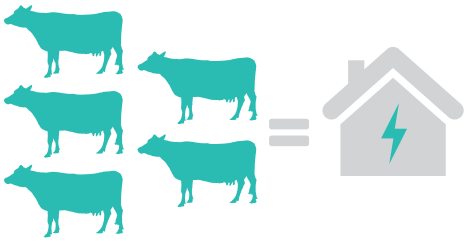
California dairies' carbon footprint has been shrinking for decades – 45% over the past 50 years (1964-2014) – and is among the **smallest carbon footprint per gallon of milk produced in the world**. But dairy farmers aren't resting on their laurels. They continue to **reduce climate emissions** and today are more than two-thirds of the way to achieving a statewide goal of reducing manure methane emissions an **additional 40% by 2030**. Furthermore, a recent UC Davis peer-reviewed report predicts that California dairy farms will reach **"climate neutrality" by 2030** – the point at which no additional warming is added to the atmosphere.

Just how are dairy farmers reducing their carbon footprint? A key strategy involves capturing methane produced by cow manure in a "digester" and converting it into clean energy for vehicles, homes and businesses. This is a win-win for the environment, preventing methane from escaping into the atmosphere while also displacing fossil fuels as an energy source. As long as we have cows, consumers have access to an **abundant, clean, low-carbon, renewable, energy source**.

California dairy digester development is booming – **expanding 14 times in size since 2016**. The **reduction of greenhouse gas emissions** from these projects and other technologies is estimated to be more than 27 million metric tons of CO_2-equivalent over the next 10 years. That's equal to the annual greenhouse gas emissions from more than 6.2 million passenger vehicles, or the emissions from electricity used by 5.6 million homes.

California Dairy DIGESTER DEVELOPMENT

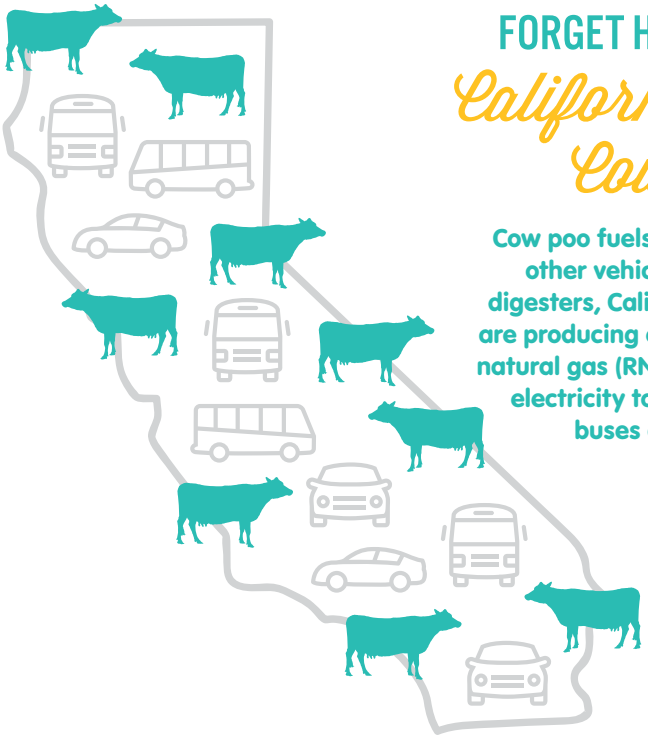
(as of spring 2025)



5 cows can power one house for a year

More than 200 California dairy farms are currently developing projects that will create **carbon-negative transportation fuel** to replace the use of diesel in heavy-duty trucks. These **"barn-to-biogas"** projects are not only helping shrink dairy's carbon footprint to unprecedented levels, they are also helping California transition to clean energy and clean transportation. In addition to filling up vehicles, dairy methane can be used to create electricity for homes and communities. Methane produced by just five cows can power one house for a year, which means that **California dairy farms have the potential to power thousands of homes across California annually**.

Dairies are also using the warm California sun to power their farms. More than **200 California dairy farms generate solar energy,** reducing their use of fossil fuel-based energy and producing more than 350 million kWh of energy annually – enough to meet the **electricity needs of 37,000 homes.**



FORGET HORSEPOWER

California's got Cowpower!

Cow poo fuels 17,000 buses and other vehicles. Through dairy digesters, California dairy farms are producing enough renewable natural gas (RNG) and renewable electricity to fuel 3,706 transit buses and 13,501 electric vehicles annually.

WATER WISE

decrease in water use to produce a unit of milk

The water footprint of a glass of California milk has been shrinking for decades – and not by just a little. The amount of water used to produce a unit of milk has decreased **more than 88%** compared to 50 years ago. Water recycling is commonplace on California dairies, with the **same precious drop of water used up to four times** on the farm. Clean water is used to wash the milking parlor, equipment and to cool milk tanks. This water is then recycled to wash cows and stored in a holding pond, to be reused multiple times to flush manure from barn floors. Water from the holding pond – rich with plant nutrients from natural dairy manure – is then used to fertilize feed crops for cows. This recycling process **substantially reduces the amount of fresh water needed** and **reduces the need for synthetic plant nutrients**, further reducing the carbon footprint of dairy farms by **avoiding some of the greenhouse gas emissions** associated with fertilizer production. Using manure as a fertilizer also builds healthy soils by adding organic matter, just one of many regenerative farming practices dairy farmers use in the stewardship of their farms. **Just a 1% increase in soil organic matter can increase soil's water holding capacity by 3.7%**. The net effect is less water used to grow the same crop.

A growing number of California dairies are experimenting with drip irrigation to grow feed crops for their cows – and results are promising. Early adopting dairy farmers are getting more crop per drop, collectively **saving 2.3 billion gallons of water every year**. That's enough water to meet the annual water needs of 77,000 California residents.

Central Valley dairy farmers are also funding local efforts to protect groundwater quality and provide free drinking water to rural households with impacted water supplies. Since 2021, dairy farmers have invested more than **$4.3 million in these water quality efforts**.

irrigation in action

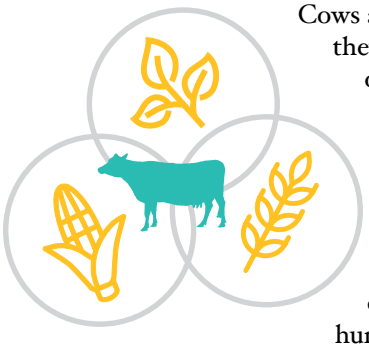
water is delivered right to plant roots

CARING FOR OUR COWS

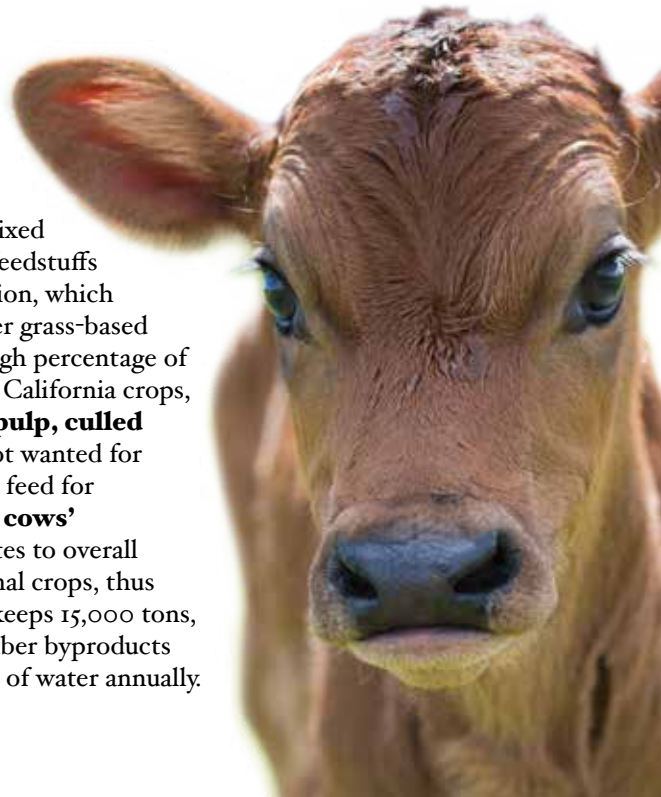
The highest priority for California dairy farmers is the health, comfort and well-being of the animals entrusted to their care.

Cow care on California dairies is built upon the foundation of providing **quality nutrition, comfortable housing, professional veterinary care** and routine **employee training**. Additionally, California dairies support standards and performance transparency through third party evaluation programs like the National Dairy **F**armers **A**ssuring **R**esponsible **M**anagement (FARM) Program or other programs such as Validus or American Humane. Today, more than 99% of the U.S. milk supply comes from participating farms. From the beginning, California has played a leading role in FARM, becoming the first state to adopt the program in 2010.

The FARM Program includes a manual of **best practices** for every cow and calf on the farm. Each dairy farm is assessed through an in-person, on-farm evaluation to ensure that program standards are being met, with annual independent, third-party evaluations used to **ensure program integrity**. For farms that don't meet the standards, a mandatory corrective action plan is issued. In the event issues are not resolved, the sale of milk to FARM-certified processors is no longer allowed.



Cows are great at upcycling plant nutrients, as they create nutritious food for humans. Common on California dairies is the feeding of a total mixed ration or **TMR**. This is a blend of different feedstuffs necessary for optimal cow health and nutrition, which can include alfalfa hay, corn, wheat and other grass-based plants. Unique to California TMRs is the high percentage of byproducts included from the other diverse California crops, such as **almond hulls, citrus** and **tomato pulp, culled carrots** and other similar products that are not wanted for human consumption but make healthy, nutritious feed for cattle. California dairies **meet about 40% of their cows' feed needs** using these byproducts, which contributes to overall cow nutrition, and reduces the need to grow additional crops, thus **saving water, land, energy** and **emissions**. This keeps 15,000 tons, or over 1,000 garbage trucks, of unusable food and fiber byproducts out of landfills every day, and saves 1.3 trillion gallons of water annually.



Real California dairy products live up to the sustainability moniker. In addition to the environmental gains made by California dairy farmers, consumers enjoy the **nutrient-dense qualities** of California dairy to **sustain the health and wellness** of their families at an affordable price. Natural dairy milk is rich in vitamin A, vitamin D, calcium, high-quality protein and nine essential nutrients. Recent research shows that including dairy in the diet may reduce the risk of heart disease, increase bone mineral density and decrease the risk of diabetes.

With **food insecurity afflicting 1 in 5 Californians**, Golden State dairy farmers are stepping up to help those in need. In 2023, California dairy organizations collectively **donated more than 3.6 million pounds of dairy products to local food banks**.

> Milk is central to many Californians – and it's one of the most coveted items sought by food bank visitors. California dairy families' partnership and contributions help source nutritious milk and dairy foods for families facing food insecurity throughout the state. We are grateful to California dairy farmers and the California Milk Advisory Board for their commitment to providing more dairy to those who need it most.

CALIFORNIA ASSOCIATION OF FOOD BANKS

Stacia Levenfeld, CEO
California Association
of Food Banks

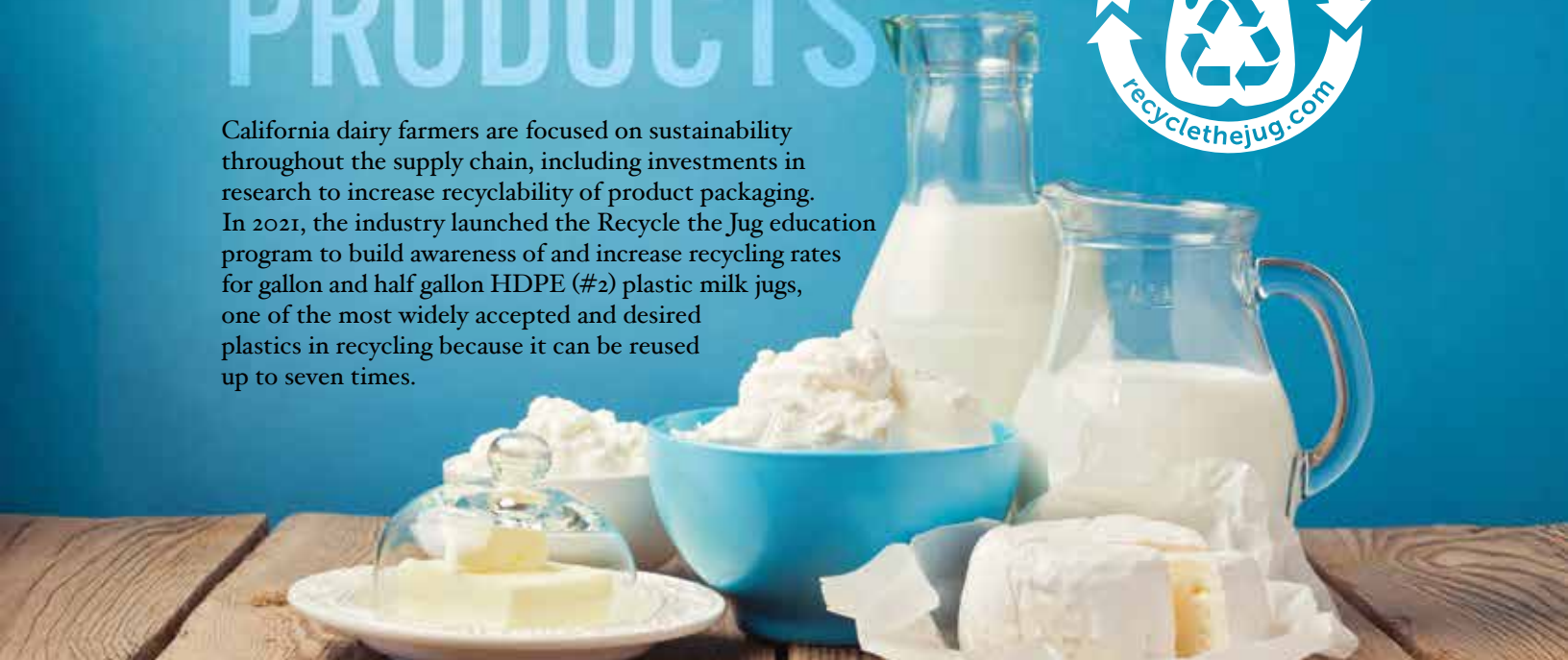
NUTRIENT INFORMATION BASED ON 1 CUP (8 OZ.)	LOW-FAT MILK	SOY	ALMOND	OAT
CALORIES	110	110	60	120
PROTEIN	8g	8g	1g	3g
TOTAL FAT	2.5g	4.5g	2.5g	5g
CARBOHYDRATES	12g	9g	8g	16g
CALCIUM*	30%	45%	45%	25%
PHOSPHORUS*	25%	25%	N/A	20%
POTASSIUM*	10%	10%	1%	8%
RIBOFLAVIN*	25%	30%	30%	45%
VITAMIN B12*	20%	50%	50%	50%
VITAMIN D*	25%	30%	25%	20%
COST PER SERVING**	$0.27	$0.51	$0.44	$0.60
COST PER (G) OF PROTEIN**	$0.03	$0.06	$0.44	$0.20

■ NATURALLY OCCURRING/NOT ADDED *% DAILY VALUE
**CIRCANA 10/05/25 (TOTAL U.S.)
FOR FULL INFORMATION PLEASE VISIT:
CALIFORNIADAIRYPRESSROOM.COM/BEVCOMPARE

WHOLESOME PRODUCTS

California dairy farmers are focused on sustainability throughout the supply chain, including investments in research to increase recyclability of product packaging. In 2021, the industry launched the Recycle the Jug education program to build awareness of and increase recycling rates for gallon and half gallon HDPE (#2) plastic milk jugs, one of the most widely accepted and desired plastics in recycling because it can be reused up to seven times.

WIDELY RECYCLABLE
recyclethejug.com



PROSPEROUS COMMUNITIES

Dairy-Related ECONOMIC ACTIVITY *(2024)*

$69.1 billion = >151,000 jobs

California dairy delivers much more than an important food source – it also **creates jobs** and **economic activity** in local communities throughout the Golden State. In addition to helping consumers prosper with access to affordable, nutrient-dense healthy food choices, the ripple effect of job tax revenue from California dairy **helps fund** K-12 education, public transportation and local health services. Dairy related economic activity in 2024 created jobs throughout California, with the vast majority located in California's bountiful San Joaquin Valley.

A healthy California dairy community also keeps family farmers thriving. Many of these families have raised and cared for cows for multiple generations.

99% family-owned and -operated

REAL CALIFORNIA MILK

LOOK FOR THE SEAL.

RealCaliforniaMilk.com

@realcaliforniamilk

@realcalifmilk

Learn More

CALIFORNIA LEADING THE NATION IN SUSTAINABLE DAIRY

CS25120