

### The Sustainable Development of U.S. Dairy

Driving solutions for nutrition security, climate, and more





## Contributions to the Sustainable Development Goals

U.S. dairy contributes to all 17 Sustainable Development Goals, particularly:





# Supporting healthy diets & nutrition security

According to the FAO, **milk is among foods that are "crucial sources of much-needed nutrients which cannot easily be obtained from plant-based foods."** 

- 2-3 full fat dairy servings per day are associated with decreased risk of colorectal cancer & heart disease<sup>2</sup>
- High concentrations of bioavailable nutrients<sup>2</sup>

### Milk alone provides:

- 10% of global protein requirements
- 49% of global calcium requirements<sup>3</sup>

Sources: 1 FAO. 2023. Contribution of terrestrial animal source food to healthy diets for improved nutrition and health outcomes – An evidence and policy overview on the state of knowledge and gaps. Rome.; 2 World Cancer Research Fund/American Institute for Cancer Research. Diet, Nutrition, Physical Activity and Cancer: a Global Perspective. Continuous Update Project Expert Report 2018

3 Smith NW, Fletcher AJ, Hill JP, McNabb WC. Modeling the Contribution of Milk to Global Nutrition. Front Nutr. 2022 Jan 13;8:716100.



### • 2nd

Global consumers rank climate issues second to the economy as requiring urgent attention.<sup>1</sup>

• **18**%

Taste and price remain king, but 18% of consumers rate sustainability as a top consideration when making F&B purchases.<sup>2</sup>

• 75%

**65**%

of global consumers agree that sustainability is a key issue in the world today that is important to them personally.<sup>2</sup>

of consumers want to make the right spending choices to live a healthier and more sustainable life.<sup>3</sup>

### Meeting global consumers' evolving expectations

Sources:1 Kantar Global Issues Barometer, September 2022, conducted in 19 countries in Asia, Latin America, Middle East, Africa, Europe and USA; 2 USDEC Sustainability Omnibus Study, December 2022, conducted in 15 U.S. dairy export markets within: Asia, Latin America, Middle East and United Kingdom (excluded USA & EU); 3 World Economic Forum



# U.S. Dairy: diverse, highly efficient, sustainable

11% of global milk supply

(102.6 metric tons)<sup>1</sup>

**3% of the world's cows** 

(9,448,000 dairy cows)<sup>1</sup>

Most productive dairy industry in the world

(2022: 10.9 metric tons of milk/cow)<sup>1</sup>

World's lowest GHG intensity

(Emissions per gallon of milk produced)<sup>2</sup>

Sources: 1 USDA Milk Production Report 2021; 2 USDA Ag Census 2017 analysis; FAO and GDP Climate change and the global dairy cattle sector – The role of the dairy sector in a low-carbon future.



# **U.S. Dairy supplies a sustainable source of nutrition**

#### Legacy of progress

Compared to 2007, in 2017 U.S. milk was produced using: **30%** less water **21%** less land **19%** less greenhouse gas (GHG) emissions

#### **Efficient production**

While leading the world in cow's milk production with ample growth potential, the U.S. dairy community contributes just 2% of total U.S. GHG emissions

#### **Continuous improvement**

U.S. Dairy has embraced a bold commitment to **GHG neutrality by 2050** to support sustainable food systems

Sources: Capper JL, Cady RA. The effects of improved performance in the U.S. dairy cattle industry on environmental impacts between 2007 and 2017.; International Dairy Journal, "Greenhouse gas emissions from milk production and consumption in the United States: A cradle-to-grave life cycle assessment circa 2008", (2013).

### Meeting global demand

Demand for global milk solids U.S. forecasted production rates

U.S. dairy opportunity to meet export demands Ambitious goals & databased reporting







# 2050 environmental stewardship goals

- Achieve GHG neutrality
- Optimize water use while maximizing recycling
- Improve water quality by optimizing utilization of manure/nutrients

Supportive of global standards and goals:







#### For field and farm

#### **U.S. Dairy Net Zero initiative**

Collaboration to advance research, on-farm practices, and new market development.



Estimated GHG contribution of each "print" to the total\*

#### For manufacturing

#### **Processor working group**

- Develops industry guidance and best practices on GHGs, waste, and water
- Conducting packaging assessment and developing metrics





## **Pioneering industry-wide efforts**

\* Adapted from Thoma 2013, Regional Analysis of greenhouse gas emissions from USA dairy farms. A cradle to farm-gate assessment of the American dairy industry, circa 2008

## Putting ambition into action

### Processors





### U.S. Dairy Stewardship Commitment



#### COMMITMENT ADOPTER HIGHLIGHTS\*

75% OF U.S.MILK PRODUCTION REPRESENTED

**100%** COMMITTED TO ENVIRONMENTAL MEASUREMENT AND REPORTING

100%
PARTICIPATE
AND/OR
SOURCE FROM
FARM
ANIMAL CARE
ENROLLED FARMS

>95% WASTE FROM PROCESSORS DIVERTED TO BENEFICIAL REUSE

COMMUNITY CONTRIBUTIONS

12.7 MILLION POUNDS

P R O C E S S O R S RETURN MORE WATER THAN THEY WITHDRAW

## Putting ambition into action

### On farm





### Dairy on-farm research projects

#### Dairy scale for good pilot farms

On-farm pilots that implement economically viable technology and best practices.

#### Dairy feed in focus

To incentivize and implement best practices in feed/forage production and feed efficiency through on-farm pilots and scaling adoption.

#### Greener cattle initiative

An industry-oriented research consortium that supports development of commerciallyfeasible solutions to reduce methane emissions from dairy and beef cattle.

#### Dairy, soil & water regeneration project

6-year data collection to track GHG footprint and soil health following adoption of soil health management practices and use of new manure-based products.

Delivering global solutions



### Delivering progress & catalyzing sustainability efforts



#### U.S. dairy is:

- Advancing adoption of climate-smart practices on-farm & in dairy plants
- Measuring, reporting progress toward targets and goals
- Supporting continuous improvement, innovation and knowledge sharing
- Supplying the world with responsibly produced, sustainable nutrition

### Thank you

