Sustainability – Dairy Industry Perspective

Greg Wickham,
Senior VP, Business Development
November 6, 2014
Agenda

- Unique approach by dairy
- How are we doing?
- Specific examples
- Key learnings
Innovation Center for U.S. Dairy

34 CEOs and Chairmen of leading dairy companies and cooperatives
+800 professionals from dairy industry and beyond

- Health and Wellness
- Sustainability
- Globalization
- Food Safety
- Research and Insights
- Consumer Confidence

Pre-competitive Science, Strategy and Insights

Companies and brands incorporate into their business plans

Consumer Marketplace

More Cooperative.
DFA
Dairy Farmers of America
Associations/Government

112 companies & 150 professionals in the Sustainability Council
Leading 8 project teams with over 800 industry members contributing over $6M in kind
Our consumers – through access to safe, nutritious, high-quality products.

Our communities – through contributing, participating, and investing where we live and operate.

Our cows – through animal stewardship.

Our employees – through ensuring a safe and respectful workplace.

Our planet – through the stewardship and responsible use of natural resources.

Our businesses – through a focus on long-term economic vitality.

The U.S. Dairy Industry supports socially responsible, economically viable and environmentally sound dairy food systems that promote the current and future health and well being of:

We commit to these principles through our shared values of honesty, integrity, inclusiveness, and transparency.
Enhancing Consumer Trust

Credibly Enhance Consumer Trust

Stewardship & Sustainability Guide
to track and communicate progress

Share **Best Practices** and case studies
to optimize performance

Use **Smart Tools** to measure what matters

**Science** to establish the baseline

Crop Production  Milk Production  Processing  Packaging  Transport/Distribution  Retail

More Cooperative.  DFA  Dairy Farmers of America
Measure and Communicate Sustainability Through the Value Chain

**Farm Smart™**
An innovative, integrated online management system that empowers continuous environmental, social and economic improvement for dairy producers.

**Fleet Smart™**
A tool to reduce fuel consumption, costs and GHG emissions in the transport and distribution of milk.

**Plant Smart™**
A tool that allows fluid milk processing plants to reduce GHG emissions and energy costs.

Diagram:
- **Field** to **Dairy**
- **Field** to **Dairy**
- **Field** to **Dairy**
- **Milk Cooperative**
- **Transportation**
- **Processing**
- **Retail**
Single Approach from “Grass to Glass”

- **Credible, transparent and industry led.**
  Program that is equal to or exceeds the competition while satisfying the demands of retail customers and dairy consumers

- **Demonstrate progress.**
  Buyers and sellers seek proof that dairy – “from grass to glass” – uses practices that protect natural resources and promote community well-being and economic vitality

- **Mission: one approach.**
  Create a voluntary method to track and communicate stewardship and sustainability progress
Current Reality

- competitors
- NGOs
- consumers
- customers
- government
- investors

More Cooperative. Dairy Farmers of America
Communicating Sustainability: What does the consumer want to know?

Q4 2012 Assessment of Dairy Farmer Performance
% U.S. Adults Rating Dairy Farmer Performance in Each Area

- Using water responsibly: 35% Not familiar enough, 8% Doing poorly, 57% Doing adequately/well/exceptionally
- Protecting air quality: 36% Not familiar enough, 7% Doing poorly, 57% Doing adequately/well/exceptionally
- Handling manure properly: 36% Not familiar enough, 6% Doing poorly, 58% Doing adequately/well/exceptionally
- Protecting water quality: 34% Not familiar enough, 8% Doing poorly, 58% Doing adequately/well/exceptionally
- Using energy responsibly: 33% Not familiar enough, 5% Doing poorly, 62% Doing adequately/well/exceptionally

More Cooperative. Dairy Farmers of America
Key Findings: Carbon Footprint, all products

U.S. Dairy Carbon Footprint — All Products
Total emissions = 137 MMT (2% of total U.S. GHG emissions)

FLUID MILK
26% of total GHG emissions
35 MMT CO₂e 0.5% of US Total

CHEESE & WHEY
39% of total dairy GHG emissions
54 MMT CO₂e 0.75% of US Total

OTHER DAIRY
(estimates)
35% of total dairy GHG emissions
48 MMT CO₂e 0.67% of US Total

Measurement:
Understand business drivers

Carbon footprint of 1 gallon of milk = 17.6 lbs CO₂ e/gallon fluid milk consumed

![Bar chart showing the carbon footprint breakdown by component](chart)
Lead: Combination of Top Down and Bottom Up

32 Dairy industry CEOs and chairpersons committed to...

25% by 2020

GHG reduction for fluid milk

$238 million

Estimated business value across industry
Customers are Setting Sustainable Sourcing Goals

- 2014: 70% of suppliers have an approach
- 2015: 50% of suppliers can provide details
- 2016: Begin purchasing verified sustainable beef
- Shareholder resolution on sustainability reporting
- Commitment to sustainably source dairy using the Guide by 2020
In 2009, the Innovation Center and the U.S. Department of Agriculture (USDA) signed a three-year Memorandum of Understanding as an expression of their joint commitment to improving dairy sustainability. In the first three years of the partnership, thousands of dairy farmers were able to make progress toward their conservation and sustainability goals.

**Innovation Center for U.S. Dairy and USDA Partnership**

**3 YEARS OF PROGRESS**

**working with NATURAL RESOURCES CONSERVATION SERVICE (NRCS)**

- Under the NRCS Environmental Quality Incentives Program, 6,000+ dairy farmers received a total of $287 million to plan and implement conservation practices that improve the sustainability of their working lands.
- NRCS has helped farmers advance their goals and implement environmental improvement projects including:
  - 222 air quality projects
  - 10,247 barn and manure nutrient management projects
  - 13,920 soil quality and fertility projects (grazing, cropland and riparian buffers)

**Investing in RURAL COMMUNITIES**

- Under the Rural Energy for America Program, 180 anaerobic digesters were installed with the help of $53+ million in funding
- In 2012 alone, 52 anaerobic digesters were funded - that is 1 per week!

**focusing on ENERGY EFFICIENCY**

- The two organizations partnered to develop education efficiency programs and resources. As a result:
  - 354 on-farm and in-plant energy audits were conducted
  - $637,000 in cost share grants for energy efficiency equipment implementation resulted in approximately 7,000 metric tons of CO₂e or 1,500 cars off the road for 1 year

**LOOKING AHEAD**

These and thousands of other actions being taken every day - no matter how small - add up. It’s the power one step can have when multiplied by 50,000 dairy farms or 1,200 processing plants.

In April 2013, the Innovation Center for U.S. Dairy and USDA agreed to continue to work together to enable change, one operation at a time, to help the dairy industry achieve its sustainability goals.
Who Do Consumers Trust – Farm and Environmental Topics

SOURCES TRUSTED THE MOST
- Physician
- Dairy Farmer
- Environmental Scientist
- Family Member
- Veterinarian

ORGANIZATIONS TRUSTED THE MOST
- National Geographic
- World Wildlife
- EPA

Source: Dairy Monitor Q4 2013
The Most “Green” Consumers are Highly Influential

Highest concentration: 61% Female

More likely to be college educated, higher income

San Francisco
Washington DC
Boston
Anchorage
Seattle
Denver

Higher concentration among Millennials
Specific Example
rbST-Free Fluid Milk

• Marketing push in the beginning

Conventional  rbST-Free  Organic
rbST-Free Fluid / Result

• Processors paid up-charge
• Retailers / Consumers paid up-charge
• Enough farmers incentivized to switch
rbST – Free / Cheese
rbST-Free / Cheese Result
Key Learnings

• Can’t sell what consumers won’t buy
• Science not enough anymore for many people
• Farmers trusted – but too few anymore to reach consumers without internet help
• Emotions run high – example, GMO’s and animal care
Suggestions re: Strategy & Sustainability

1. A check-the-box effort likely dangerous
   • Need commitment

2. We found good economics in sustainability

3. Get employees engaged ... manufacturing employees love helping solve for how to use less

4. Science not enough ...
   • Try “population growing, using less technology like GMO’s will result in more costly food for all and more hungry people”
Thank you