

# Dairy Practices Council

52<sup>nd</sup> Annual Conference

## Sustainability: Impact on Operations and Customer Relations



November 4, 2021

**Chuck Turner**

President, Turner Dairy Farms



# Turner Dairy Farms – about us

Family Owned and Operated since 1930

- Suburban Pittsburgh
- 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> Generations currently running the business
- Stewardship World View

Company Motto:

“Perfect Products

Perfect Service

Treat People Right” - Chas G. Turner,  
Founder



# Chuck Turner – about me

**Company President since 2003**

**Vice President Production 1994-2002**

**Quality Control Director 1986-1994**

**Grew up working on farm and dairy plant**

**Education:**

- **BS Food Science, Penn State**
- **MBA, Katz School of Business at University of Pittsburgh**

**Dairy Industry:**

- **PA Association of Milk Dealers, Board and Exec Committee**
- **PA Center for Dairy Excellence Board**
- **IDFA Fluid Milk Board**



# Welcome to Pittsburgh



# Sustainability

## EPA

Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations.

## Wikipedia

Sustainability has also been described as "meeting the needs of the present generation without compromising the ability of future generations to meet their needs" (Brundtland, 1987).

Sustainability is defined through the interconnected domains of environment, economy and society.



# Net Zero

## EPA

Simply put, Net Zero means consuming only as much energy as produced, achieving a sustainable balance between water availability and demand, and eliminating solid waste sent to landfills.

- Energy
- Water
- Waste



# Wendell Berry

**“We are dealing, then, with an absurdity that is not a quirk or an accident, but is fundamental to our character as a people. The split between what we think and what we do is profound. . .**

**And so we are by no means divided, or readily divisible into environmental saints and sinners.”**

The Unsettling of America

**“Whether we and our politicians know it or not, Nature is party to all our deals and decisions, and she has more votes, a longer memory, and a sterner sense of justice than we do.”**

**“To be interested in food but not in food production is clearly absurd.”**



# Impact on Operations – Processing Plant

## Energy Efficiency

- LED Lights
- Frequency Drives
- HTST Upgrade
- Insulation



# Impact on Operations – Processing Plant

- **Boiler Condensate**
- **Saves water and chemical in addition to energy**
- **CIP system next**
- **Water, chemical, energy and product**
- **Product Shrink!**



# Impact on Operations – Reducing Waste

## Recycling (Upcycling)

- Product returns
- Plastic milk crates
- Pails and Drums
- Corrugated
- Metals – steel, stainless, copper,
- Waste Oil furnaces
- Waste Heat recapture



# Impact on Operations and Customers

**Packaging** – point where Operations intersects with Customers and Consumers

Packaging is key to protecting, distributing and marketing milk

Packaging is visible

Packing will be a major focus of future sustainability efforts

Let's look at the last 100 years or so of milk packaging



# (before) Milk Packaging

**1920s – Bulk  
(raw) milk ladled  
directly into  
consumer  
supplied  
containers**

**Think about the  
advantages to  
sustainability.**

**and  
disadvantages.**



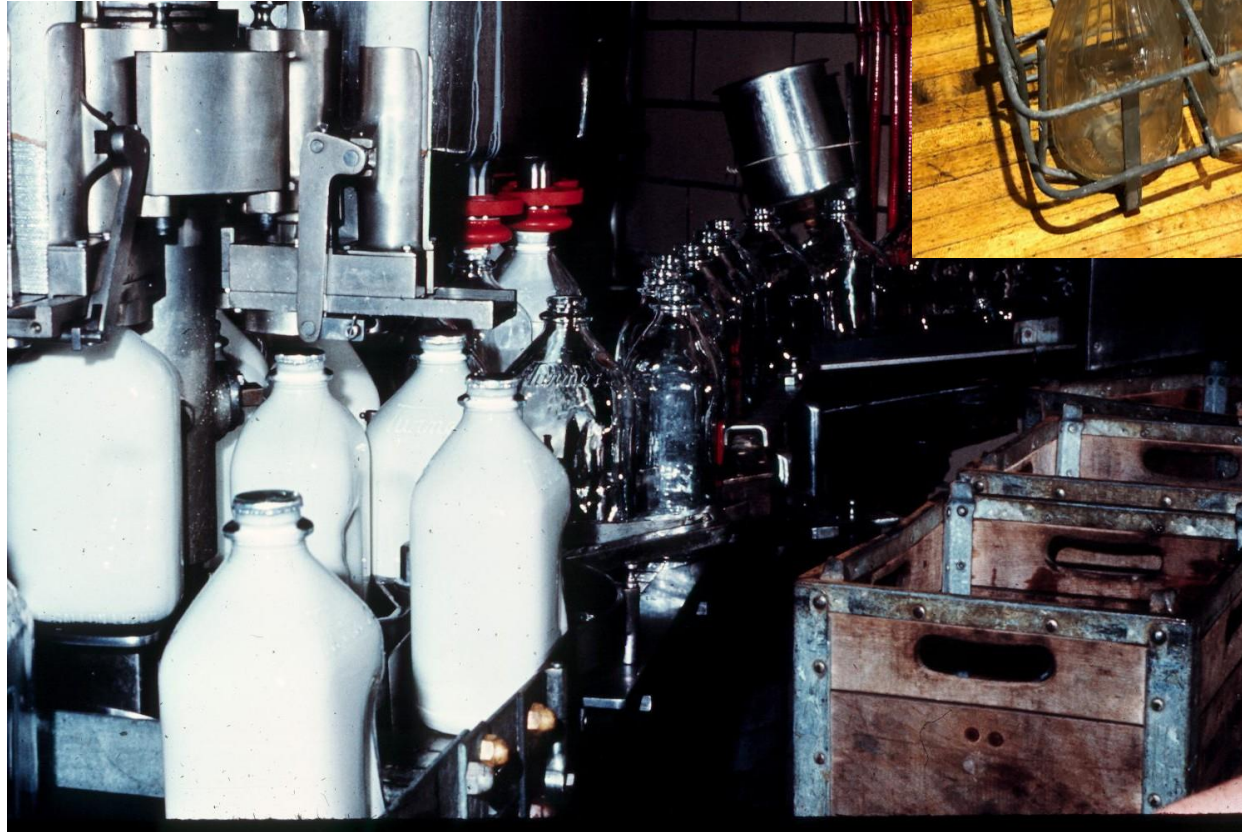
# Milk Packaging – Glass Bottles

## Advantages:

- More sanitary than bulk
- Returnable, reusable
- Convenient, portable
- Recyclable

## Disadvantages:

- Need to be washed
- Attract pests
- Breakable
- Heavy
- Heavy Crates



# Returnable Plastic Bottles

## Advantages:

- Lighter than glass, don't break
- Returnable, reusable
- Convenient, portable
- Standard crate

## Disadvantages:

- Need to be washed
- Attract pests
- Heavy wire crate



# Milk Packaging – Paper Cartons

## Advantages:

- Sanitary
- Lightweight
- Renewable, Recyclable, Compostable

## Disadvantages:

- Disposable
- Not resealable, hard to open



# Milk Packaging – Plastic Bottles

## Advantages:

- Sanitary, convenient
- Recyclable HDPE, PET
- Crate is lightweight, reuseable, recyclable

## Disadvantages:

- Disposable

Appreciate progress and value

Compares favorably to water



# Sustainability – Customer Relations

**What do customers want:**

- **Associate with brands/companies who have a good reputation**
- **Don't want their business and reputation tarnished by bad news about their business partners**
- **Need to check the boxes**
- **Low cost of doing business**



# Sustainability – What Consumers Want

## Hartman Group Findings:

- ✓ **72% willing to pay more to support companies that share their values**
- ✓ **34% say minimal impact on climate change is a most important consideration when deciding which foods and beverages to purchase**
- ✓ **22% can identify a sustainable product**
- ✓ **17% can identify a sustainable company**

**Sustainability closely associated with Healthfulness and Animal Welfare**

**Consumers are looking for brands and companies they can Trust**



# Sustainability – Milk has a Good Story

- **We have continuously reduced our impact on the planet**
  - **Use less energy, other resources to do more**
- **Real Value in return for the resources we use**
  - **Milk delivers health and wellness**
  - **Energy required for pasteurization returns public health**
  - **Packaging protects our delicate, perishable product**
- **We will continue to improve as we've done for 100 years**
- **We need to tell our story!**



# Thank You!

**Chuck Turner**

**[chuck@turnerdairy.net](mailto:chuck@turnerdairy.net)**

