OUR COMPANY

MORE THAN 80 YEARS IN THE MAKING...

- Gallo is a fully integrated winery and state-of-the-art distillery.
  - Glass production
  - Bottling facility
  - Package design
OUR BEGINNING
TWO BROTHERS AND A DREAM . . .

• E. & J. Gallo Winery was founded in 1933 by Ernest and Julio Gallo.

• Ernest Gallo managed sales and marketing; Julio Gallo oversaw winemaking and growing.

• Today, E. & J. Gallo Winery is the world’s largest family-owned winery and the largest exporter of California wine.
OUR BRANDS
Our Commitment to Sustainability

Decades ago Julio Gallo started an innovative approach to land conservation in Sonoma County.

- The 50/50 give back program in the coastal regions

Additionally E. & J. Gallo Winery took the lead in developing the Code of Sustainable Wine Growing Practices with the Wine Institute and the California Association of Winegrape Growers.

We are driven by the overriding principle to conduct our business in a manner that will protect and preserve the environment.

- Drive to meet or exceed Federal, State and Local laws and regulations.
- Develop production and agriculture practices that reduce or eliminate our impact on the environment.
- Develop environmental and business strategies that demonstrate our long term commitment to the communities in which we operate.
Gallo Sustainability

From the vineyards, to the cellars, to distribution and beyond, we follow a very clear set of principles: respect for the land; respect for one another; respect for the community where we do business; and continuous improvement.
Modesto-Based Operations

- Bottling
- Processing
- Glass Production
- Headquarters
- Research
- Warehouse and Distribution
Specialized Winery Facilities

- Sunnyside, Washington
- Livingston
- San Miguel
- San Luis Obispo
- Santa Ynez
- Fresno
- Sonoma
- Napa
Energy & Water Team
Mission Statement

We are committed to improve energy efficiency and reduce our carbon/water footprint. This will be accomplished by implementing and integrating energy and water best practices, engaging all levels of the organization and applying lean principles.
Energy & Water Organization

Operations & Supply Chain

Steering Committee

Corporate Energy Team

Corporate Water Initiative

Site Teams

Glass Plant

Fresno

Livingston

Central & North Coast

Modesto Bottling, Cellar & Spirits
Corporate Energy Team Scope

Sites
- Glass Plant
- Fresno
- Livingston
- Central & North Coast
- Modesto Bottling, Cellar & Spirits

Utilities
- Electricity
- Natural Gas
- Air
- Water

Resources
- Projects
- People
- System
- Technology
Energy Project Process

Awareness & Policy

- Idea Generation
- Project Planning
- Rebate Approval

Results Tracking

- Procurement
- Construction
- Verification
Solar Project

Livingston

Fresno
Glass Furnace Rebuild

- Annual energy savings:
  - 5.3MM kWh
  - 990k Therms

Modesto
Wastewater to Energy

Anaerobic/ Aerobic process uses 60-80% less energy than conventional process + Added benefits
Reuse Water Source and Renewable Energy

“Dirty Water”

Biogas Cleanup

Methane + CO₂

Boiler

IC Engine

“Aerobic MBR”

“Clean Water”

- Irrigation
- Utility
- Area wash
- Flush

Anaerobic Digester

“Dirty Water”

Reuse Water Source and Renewable Energy
Historical Energy Savings

<table>
<thead>
<tr>
<th>Year</th>
<th>% of Total Energy Spend</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2%</td>
</tr>
<tr>
<td>2007</td>
<td>2%</td>
</tr>
<tr>
<td>2008</td>
<td>7%</td>
</tr>
<tr>
<td>2009</td>
<td>6%</td>
</tr>
<tr>
<td>2010</td>
<td>4%</td>
</tr>
<tr>
<td>2011</td>
<td>3%</td>
</tr>
<tr>
<td>2012</td>
<td>5%</td>
</tr>
<tr>
<td>2013</td>
<td>5%</td>
</tr>
<tr>
<td>2014</td>
<td>5%</td>
</tr>
<tr>
<td>2015</td>
<td>5%</td>
</tr>
</tbody>
</table>
Gallo’s 2015 Energy Efficiency Impact

- 11MM kilowatt-hours saved
- Saved enough electricity to power over 1,000 single-family homes for one year*
- 1.5MM therms saved
- Over 15K tons of CO2 emissions avoided*

*www.epa.gov Greenhouse Gas Equivalencies Calculator
Where do you Start?

• Identify a Champion
• Investigate utility rebate opportunities
• Create a team across sourcing & operations
• Develop an idea pipeline
  • LED lights? Conference room auto shut off?
  • Air pressure Leaks? Water leaks? Signage? Visual aids?
  • Suggestion boxes? Rewards for ideas?
• Develop clear set of metrics and Communications to Senior Leadership to drive accountability
Thank You

Questions?
Back-Up
2014 Goal: Reduce water use from all sources by 15%

Results: 20% water reduction

2015 Goal: Reduce water use from all sources by 10% from 2014

Results YTD: On track!
Metering & 3 Areas of Improvement

- Metering
- Behavioral changes
- Capital projects
- Process changes
Behavior Changes
Capital Projects
Process Changes

- Using a synthetic dust suppressant instead of good quality potable water
- Revisiting sampling procedures
Strategy

Reduce

Reuse

Recycle
# The Three R’s

<table>
<thead>
<tr>
<th>Technology</th>
<th>Cost</th>
<th>Examples &amp; Applications</th>
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<tbody>
<tr>
<td>Easy</td>
<td>Low</td>
<td>Reduce</td>
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<tr>
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<td>Improve Awareness</td>
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<td>Conservation</td>
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<td>Low Hanging Fruit</td>
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<tr>
<td>Hard</td>
<td>High</td>
<td>Recycle</td>
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<tr>
<td></td>
<td></td>
<td>Advanced Treatment</td>
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<tr>
<td></td>
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<td>Membrane (UV/RO)</td>
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<td>Ion Exchange</td>
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<td>Recycle</td>
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<td>As-Is</td>
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<td>Simple Treatment</td>
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<td>Filter/Segregate</td>
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<td>Cooling Recirculation</td>
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<td>Boiler Condensate Recovery</td>
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<td>Rinse Water</td>
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<td>Rainwater Capture</td>
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<td>Pump Seal Flushes</td>
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<td>Recycle</td>
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<td>Irrigation</td>
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<td>Utility Makeup Source</td>
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<td>CIP First Wash</td>
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<td>Hose Stations</td>
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Understand Your Facility
Water Quality Needs

<table>
<thead>
<tr>
<th>Increasing Value</th>
<th>Potable</th>
<th>Utility</th>
<th>Recovered</th>
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<tbody>
<tr>
<td></td>
<td>Direct User</td>
<td>Cooling Water</td>
<td>Non-Potable Users</td>
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<tr>
<td></td>
<td>Filtered</td>
<td>Boiler Feed Water (softened + chemicals)</td>
<td>- Area Wash Down</td>
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<tr>
<td></td>
<td>Softened</td>
<td>Steam Condensate (heat value + chemicals)</td>
<td>- Irrigation</td>
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<tr>
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<td>Hot Water</td>
<td></td>
<td>- Chemical Make-Down</td>
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<tr>
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<td>Reverse Osmosis (RO)</td>
<td></td>
<td>- Utility Make-Up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Equipment Flush</td>
</tr>
</tbody>
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Evaluate what your process requires
Fit for Purpose