

# Making the Business Case for Green Energy

A case study from Sierra Nevada Brewing Co.



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Sierra Nevada Brewing Co.  
Sustainability Coordinator

SIERRA NEVADA  
BREWING CO.

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Wilderness

Blackwood Canyon

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SIERRA NEVADA  
BREWING CO.  
SUSTAINABILITY  
COORDINATOR  
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APPLIED IN

The image shows the front facade of the Sierra Nevada Brewery building. The structure features a prominent, light-colored horizontal band with the words "SIERRA NEVADA BREWERY" in a dark, serif font. Below this band are two large, arched glass windows. Each window is flanked by a dark, textured vertical pillar. The roof is dark and has three white chimneys. The scene is captured during the "golden hour" of late afternoon, with a warm glow on the building and a clear blue sky with some light clouds. The foreground shows a paved area and a red curb.

SIERRA NEVADA BREWERY



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# SNBC Approach to Sustainability

- Close All Loops
  - What's Coming in & What's Leaving?
- Use all resources efficiently and as many times as possible
- Steps:
  - Auditing/benchmarking
  - Tracking, technology development/deployment
  - Education

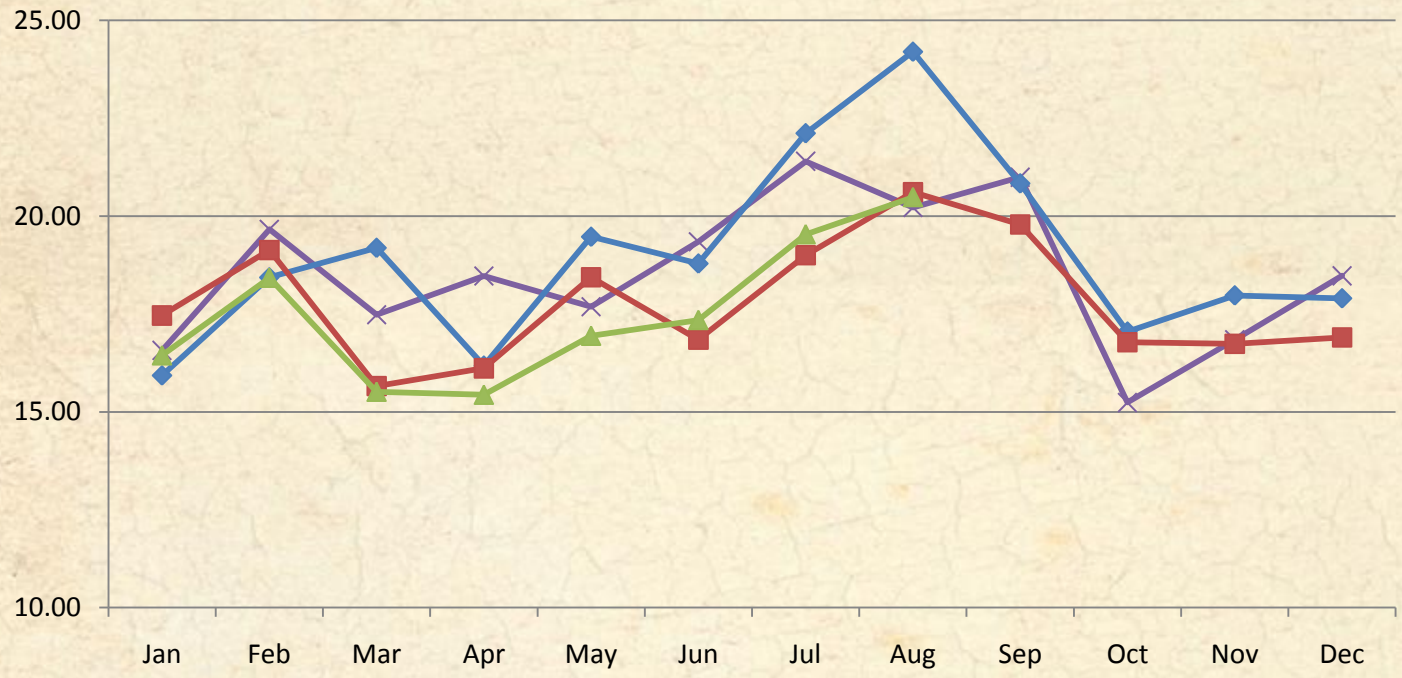


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# Auditing/Tracking Energy Use

kWh Consumer per BBL of Beer Produced

—x— 2007    —◆— 2008    —■— 2009    —▲— 2010



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Blackwood Canyon

# Energy Efficiency

## Heat Recovery

- Boilers
- Fuel Cells
- Kettles
- Heat Exchangers

## Lighting

## Electronics

## Equipment

## Monitoring

## Behaviors



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# Energy Generation

## Co-Generation Fuel Cells – 1.2 MW



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## Solar Panels

503 kW Elevated, Tracking

1.4 MW Roof Top System

14 kW at Rail Spur

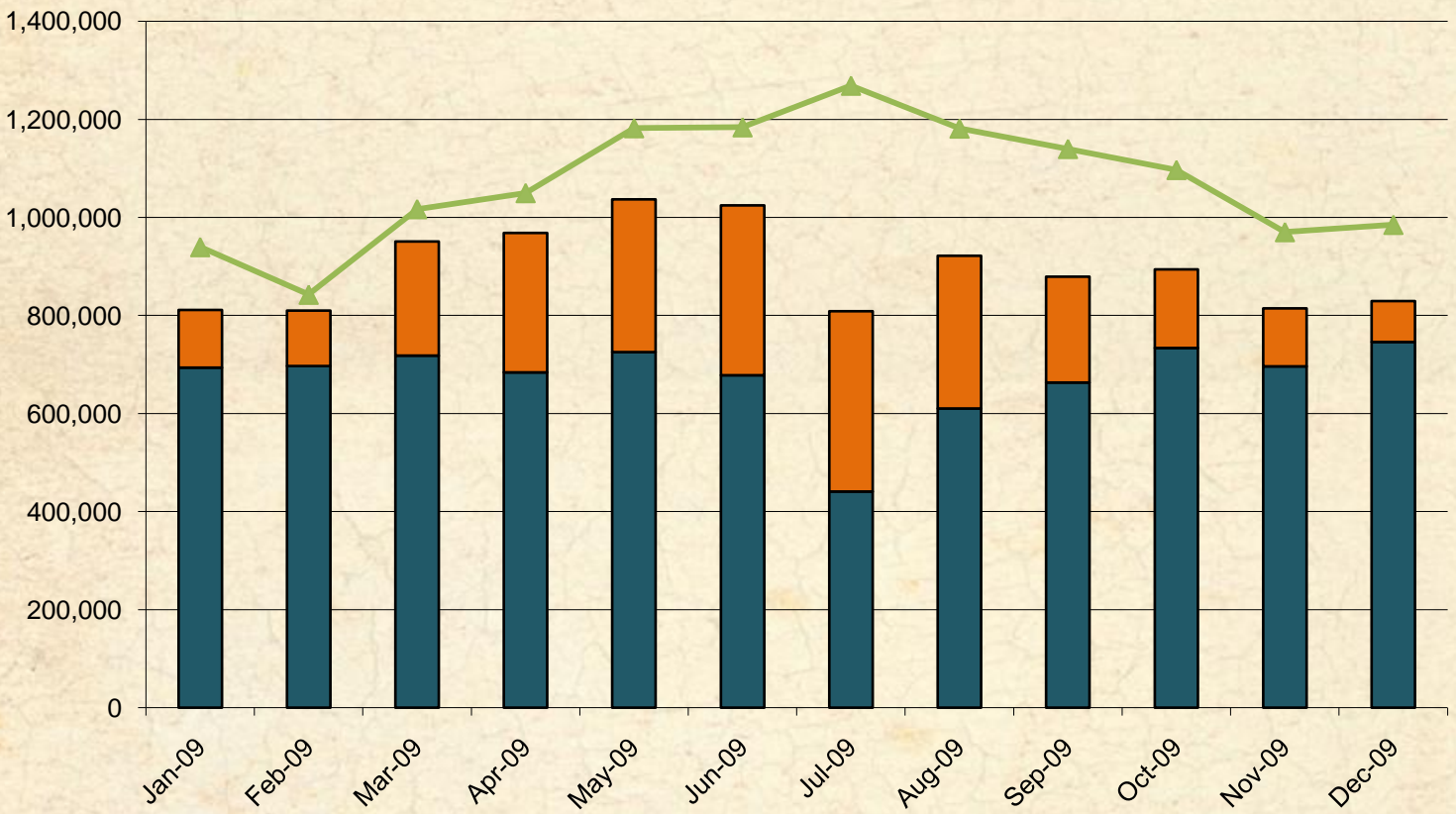
5 kW at Day Care



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## 2009 kWh Generated by Type v. Energy Consumption

■ kWh Generated by Fuel Cells 
 ■ kWh Generated by Solar 
 ▲ Total SNBC kWh Consumed



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**Biogas Recovery/Reuse**



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# Why has SNBC invested in green power?

- The time is right
  - Rebates and incentives are there
- Sustainability
  - Simply that... Sustaining the company
  - Thinking long term
  - The right thing to do
- Utility Cost Reduction
- Greenhouse Gas Reduction
  - 2008 to 2009 - 22% CO2 reduction
- Marketing has been a peripheral benefit



Questions?  
Comments?