Zero Waste Strategies for Gills Onions

Sustainable Innovation and Waste Management

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Gills Onions

Zero Waste

Minimize Material, Water & Energy use

Reduce Reuse Recycle
Gills Onions a lot of Waste!
Motivators

- Economic Realities
- Regulatory Pressures
- Customer Demands
- Environmental Stewardship

Leadership opportunity
Materials used: administrative offices & processing facility
Packaging
Role of Team Onion

- Apply an Integrative Approach
- Establish a Baseline
- Synthesize Data and Evaluate Alternatives
- Recommend Strategies for Zero Waste
- Document Process for Others to Follow
| Materials       | Green Supply Chain Management  
|                | Recycling Options               
|                | Environmental Cost Accounting   |
| Energy         | Process Improvements            
|                | Climate Registry                
|                | Cogeneration                    |
| Water          | Reuse opportunity               
|                | Process improvements            
|                | Water Efficiency Program        |
| Onions         | Onions to Energy                
|                | Environmental Cost Accounting   |
Materials

Audit
• Waste characterization
• Packaging inventory
• Order traceability
• Office inventory

Prioritize and Analyze
• Reduction opportunities
• Recycling Options
• Green Procurement
• Green Supply Chain Management
Energy Audit
- Total consumption
- Consumption by process
- Possible involvement by SCE

Prioritize and Analyze
- Energy efficiency
- Process improvement
- Cogeneration
- Climate Registry
Water

Audit
• Total consumption
• Consumption by process
• Process flow

Prioritize and Analyze
• Water efficiency
• Water reduction opportunities
• Reuse potential
Onions

Audit
• Input and finished goods output
• Yield per process
• Process flow and waste

Prioritize and Analyze
• Onion waste to energy
• Environmental cost accounting
• Efficiency opportunities
Criteria for Recommendations

- Waste reduction
- Feasibility
- Cost-effectiveness
- Environmental impact
- Gills Onions’ preferences
Deliverables

Final Report
- Final baseline information
- Methods and procedures for ongoing monitoring
- Zero waste strategic recommendations

Guidebook
- How to guide
- Methods and procedures for measuring and monitoring
- Gills Onions case study
Milestones

**Spring 09**
- Proposal
- Packaging Analysis

**Summer 09**
- Audits
- Climate Registry
- Recycling Program

**Fall 09**
- Complete Analysis
- Evaluate Feasibility

**Winter 10**
- Document Recommendations
- Create Guidebook

**Spring 10**
- Final Presentation
Team Onion!