

Qualco Energy Bio-Gas Project



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Introduction

- Background
- Description of Project
- Partnership
- Feasibility Study/Business Plan
- Funding
- Creation of Qualco Energy
- Closing



Background

- Land-Use Changes from Agriculture to Other Types of Development
- Skykomish River WQ Problems
 - Bacteria
 - Nutrient Loading
- Relationship Between Tribes and Dairies
- Poor Economy for Dairy Operations



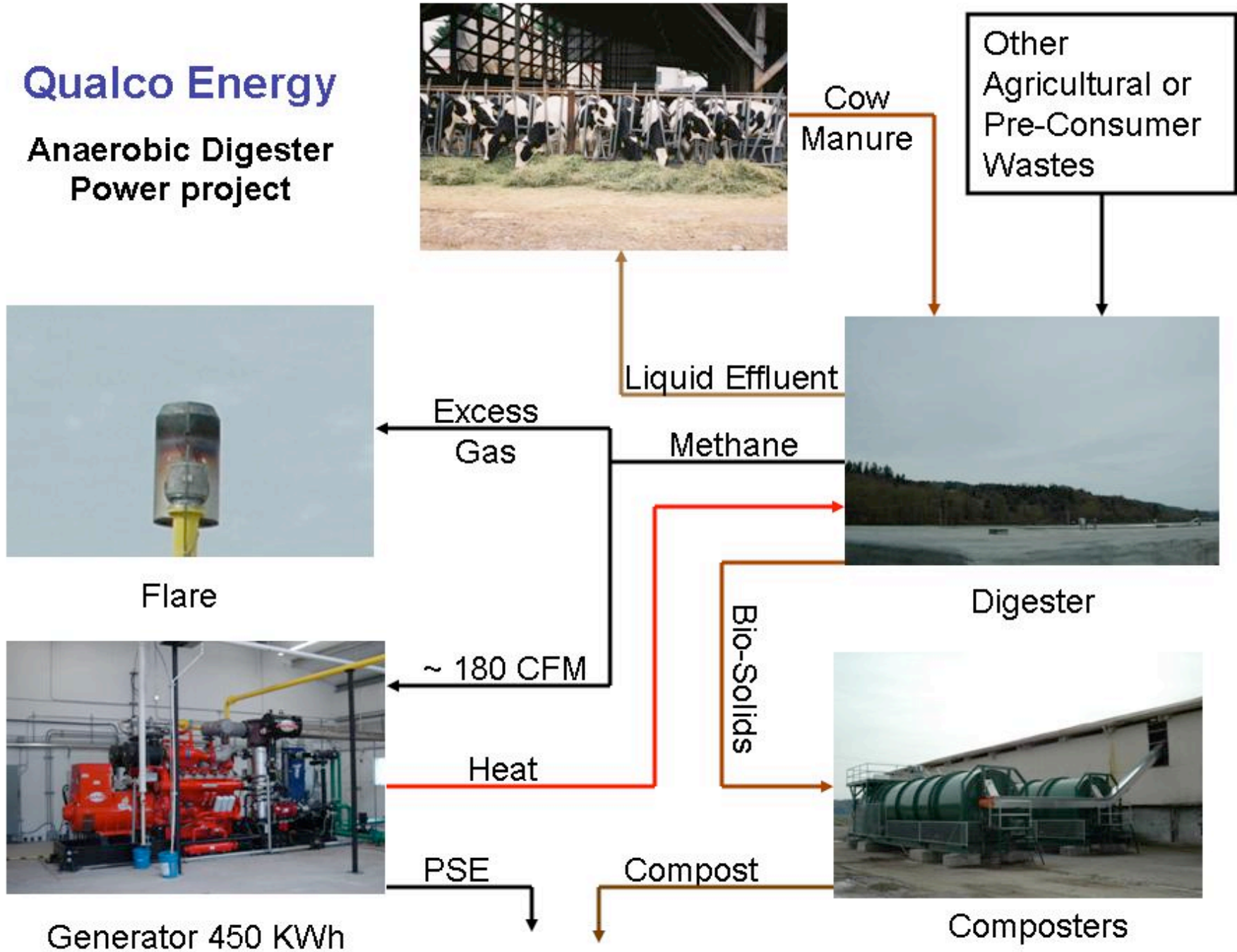
Project Description

- Sewage Treatment for Cow Manure
 - Collect Cow Manure from Dairies
 - Collect Agricultural and Pre-Consumer Waste
 - Pump into Anaerobic Digester
 - Capture Methane Gas
 - Burn Gas to Produce Electricity
 - Compost Bio-solids
 - Return Effluent to Farms
 - Carbon Credits



Qualco Energy

Anaerobic Digester Power project



Partnership

- Snohomish Basin Biogas Partnership
Formed April 2, 2003
 - Lower Skykomish River Habitat Conservation Group
 - Northwest Chinook Recovery
 - Tulalip Tribes
 - Washington State Dairy Federation



Funding

- Department of Energy Grant for Feasibility Study and Business Plan
- Department of Agriculture Grant for Construction
- Department of Agriculture Clean Renewable Energy Bonds
- Tulalip Tribal Funds



Qualco Energy

- Formed as a non-profit organization to manage the Biogas project
- Three-way partnership between the Tulalip Tribes, Sno/Sky Agricultural Alliance and Northwest Chinook Recovery



Closing

- Dairies and Tribes working together
- Improved WQ for Fish and People
- Salmon Habitat Restoration
- Renewable Energy Supply



