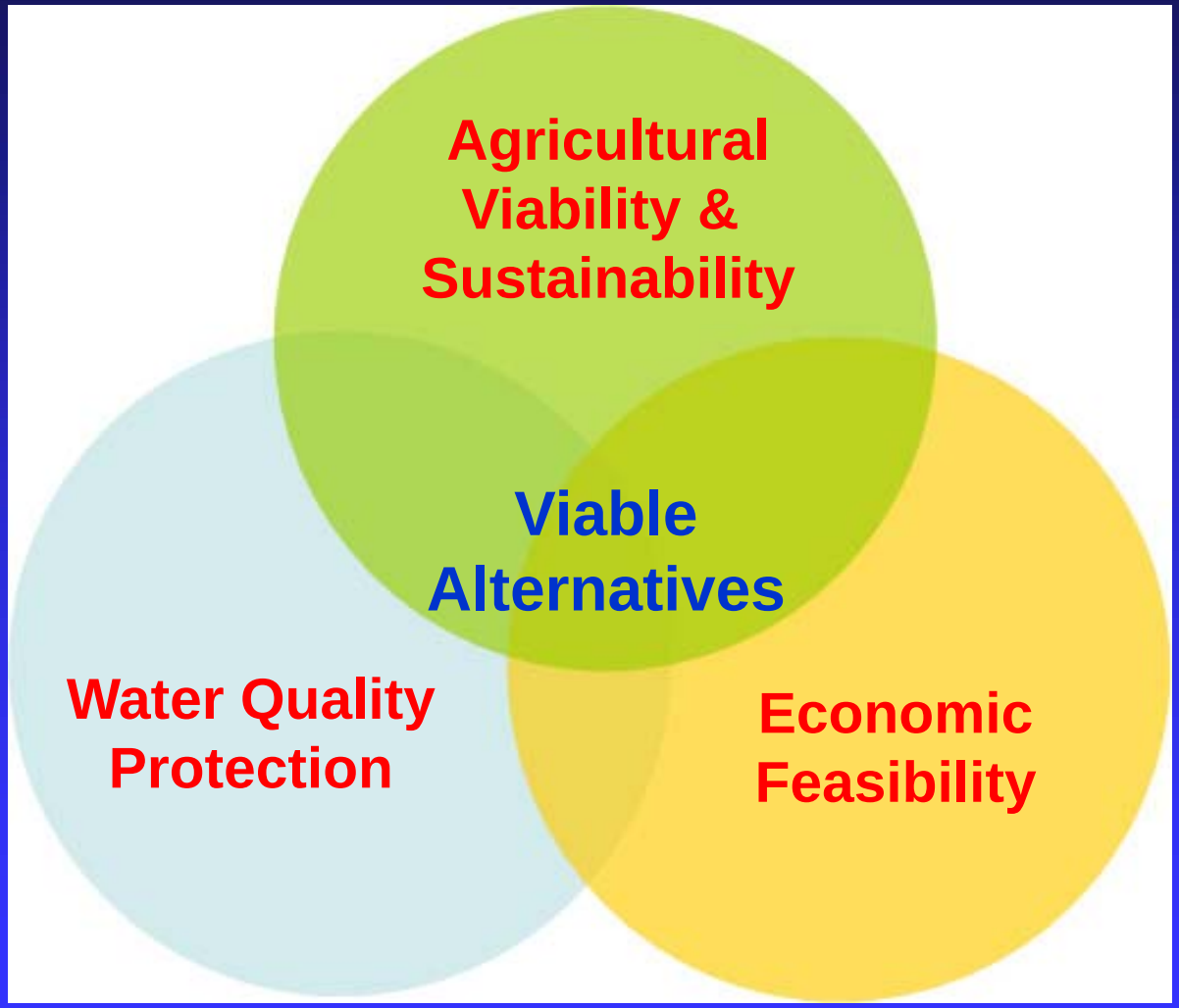
Dane County
Community Manure Digester
Cow Power Project

Dave Merritt
Director of Policy and Program Development
Dane County Department of Administration

March 14, 2012

CLEAR HORIZONS

Dane County's Initial Objectives



Development of Renewable Projects - Issues

- Multiple Players
  - Farmers, Substrate Providers, Financers, Engineers, Technology Vendors, Utility Companies, Neighbors, Regulators (DNR, EPA, Town, County, State), Politicians (County Board, County Exectutive, Senators, Governor), Lawyers, Reporters, Environmentalists

- Project Cost / Financing
- Public Perception

Project Benefits

- Meets Dane County's initial 3 objectives
- 60% - 70% P removal
- 2 MW electric production

  -- Powers 2,500 Dane County homes
- Greenhouse gas emission reduction

  -- Reducing over 29,000 tons/yr CO_2 equivalent by capturing methane
- Allows farms to better manage nutrients

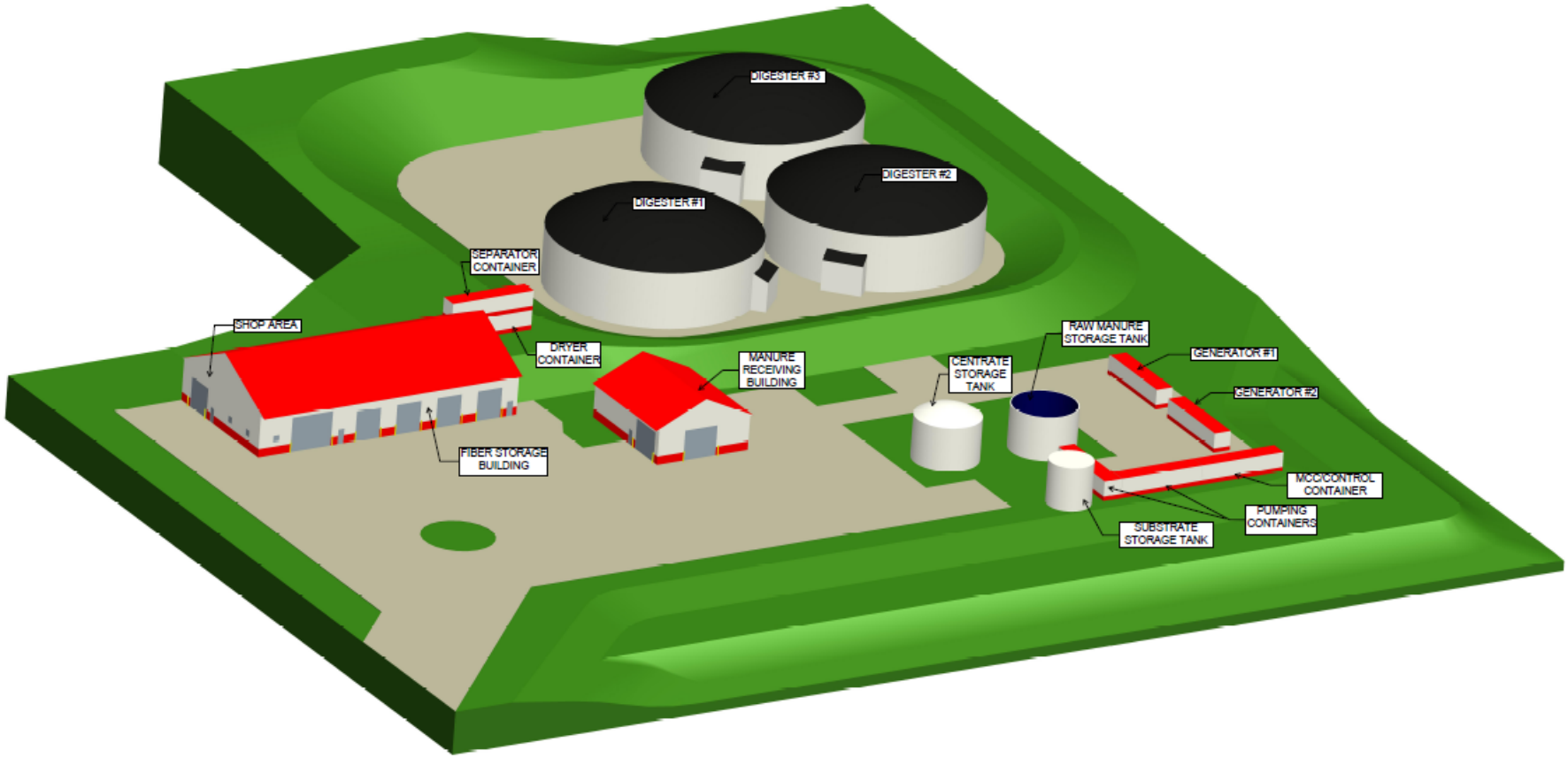
  --Reduced P

  --Less trucking and smaller land base

  --Longer spreading window

AT WORK
CLEARHORIZONS

CLEARHORIZONS®



VOLVO

Overview of the Project

- Located in the Town of Vienna
- Serves three primary dairy farms
- ~2500 cows
- Manure piped to facility
- 10-15% food waste substrate added
- Complete mix digestion, followed by solids separation with a centrifuge

Vendor RFP

- Public RFP
- Ownership Decided
- Clear Horizons LLC Selected
- Project Development Began – Fall 2009
  - Farmers
  - Clear Horizons
  - Dane County
  - State of Wisconsin Grant

Project Development

- Funding
- Land agreements
- Agreements with farmers – manure & solids
- State and County agreements
- Zoning
- Negotiations with utilities
- DNR permits – water & air

Project Financing

$13 million construction cost

- $3.3 million State of Wisconsin grant
- $4.0 million Federal investment tax credit
- $6.7 million Clear Horizons debt financing

15% Projected Return on Investment

How to Encourage Future Projects

- Financial
  - **Electric Buyback Rate**
  - Investment Tax Credit
- Standardization
  - Contracts
  - Utility Requirements
  - Permits and regulations
- Public Awareness

Questions?

Dave Merritt

Director of Policy and Program Development

(608) 261-9792

Merritt@countyofdane.com