

Clark County Waste to Energy



REGIONAL WASTE MEETING

FEBRUARY 4, 2010

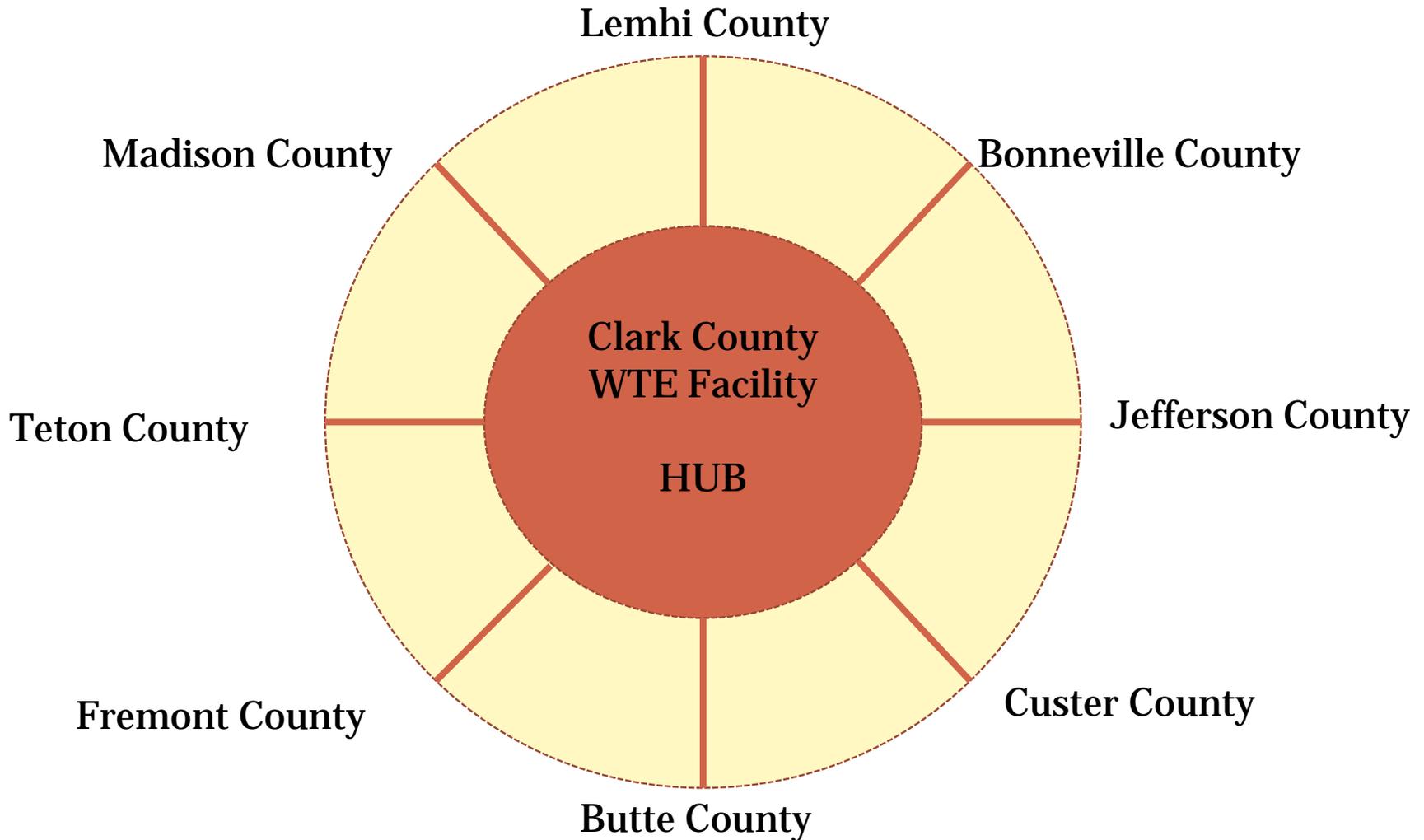
Clark County Economic Development



- ***Clark County is economically depressed!***
 - Closure of Idaho Potato Plant – loss of 60% of private employment
 - Loss of 17% of County Property Tax Revenue
 - Loss of local businesses
- **Maintain Existing Business/Employment**
- **Economic Development Activities**
 - Creation of an Energy Park
 - ✦ Propane Dealership – owned by Mudlake Telephone Coop
 - ✦ Waste to Energy Facility – County Owned Enterprise
 - ✦ Produce Green Houses – Privately Owned

Waste to Energy Enterprise

Clark County's Vision "*Hub and Spoke*"



Clark County Waste to Energy Enterprise



- 250 Ton Per Day
- 12-14 MWH
- Total Cost of Plant and Transportation System
~\$35M
- Job Creation In County –
 - 5 Professional/Salaried \$50,000 – \$85,000 Range
 - 30 Average Hourly Pay \$20.15
 - With Benefits
- Job Creation out of County –
 - 3 Professional and 6 Hourly

Clark County Waste to Energy Enterprise



- **Funded with a \$35M Revenue Bond**
 - 20 Year Maturity
 - Benefit Cost Ratio – 6 years
- **Annual Waste Tonnage – 100,000**
- **Annual Revenue - \$14.5M**
- **Annual Expenses - \$11.6M**
 - Includes Bond Payment of \$3,009,000

Clark County Waste to Energy Enterprise



- **County Benefits**
 - Creation of 35 New Jobs
 - Annual Employee Compensation - \$1.5 M
 - Employee Compensation 25 years - \$51.6M
 - Revenue Infusion into County, City, and Schools
- **Region Benefits**
 - Reduce Disposal Costs
 - Diversion of All Waste Types
 - ✦ MSW, Tires, Sewer Sludge, Electronic Waste
 - Reduce or eliminate land filling of waste
 - 25 Year Economic Benefits to Region \$975.7M
 - Over 25 Years indirect job Creation – 162 jobs

Artist depiction of potential plant layout



The Plant

Dynamis Energy LLC

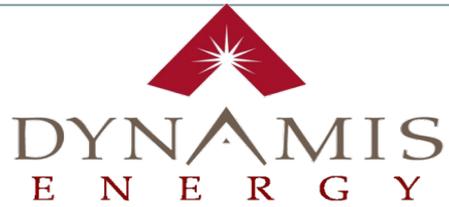
Collection and Transport

Clean Mountain Energy LLC

Next Steps



- **Determine Participants – Initial ~100,00 TPY**
- **Examine Waste Collection Facilities and Processes**
 - Types of Waste
 - Recycling
 - Transfer Stations
 - Drop Off Points
 - Distance to Dubois/Transportation System
- **Execute Waste Diversion Agreements**
 - # of Tons per Year
 - Tipping Fees
 - Renewal Options



Clark County Project Timeline

	Pre Construction Timeline						Construction Timeline											Post Construction Timeline			
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21
Negotiate Power Purchase Agreement	WM	WM	WM	WM	WM	WM															
Secure Waste Stream	WM	WM	WM	WM	WM	WM															
Finalize Contract				CC	CC	CC															
Local Permit	WM	WM	WM	WM	WM	WM															
State Permit	WM	WM	WM	WM	WM	WM															
Project Financing	CC	CC	CC																		
Building and Land Acquisition		CC	CC		CC																
Secure Rail Spur Rights					CC	CC	CC														
Order and Secure Permanent Utilities				CC	CC	CC															
Order and Secure Construction Utilities				CC	CC	CC															
Final Site Inspection							CC	CC													
Preliminary Design and Pricing	WM	WM																			
Detail Design and Engineering				CC	CC	CC															
Finalize Project Cost							CC														
Owner Approval							CC														
Foundation Work Begin							CC	CC													
Construction Begins							CC	CC													
Order Long Lead Turbine				CC	CC																
Order Long Lead Boiler				CC	CC																
Equipment Selection and Procurement				CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC
Building Construction Begins							CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC
Electrical Installation									CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC
Finish Building and Utilities										CC	CC	CC	CC								
Mfg Primaries and Secondaries									CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC	CC
Install Primaries and Secondaries										CC	CC	CC	CC								
Install Ash Handling/Reclaim Equipment													CC	CC	CC	CC	CC	CC	CC	CC	CC
Install Boilers and Controls														CC	CC	CC	CC	CC	CC	CC	CC
Install Turbines and Controls															CC	CC	CC	CC	CC	CC	CC
Construct Water Storage and Cooling Tower																CC	CC	CC	CC	CC	CC
Construct Vaporizer and Building																	CC	CC	CC	CC	CC
Install Stack and Emission Equipment																		CC	CC	CC	CC
Install and Test Control System																			CC	CC	CC
Install Sprinkler and Fire Suppression																				CC	CC
Install Fencing and Security																					CC
Function Checkouts																					CC
Author Operating Manual																					CC
Plant Start Up																					CC
Outside Independent Testing and Cert																					CC
Final Permitting Approval																					CC
Commercial Operation, Testing and Training																					CC

Total Time Elapse by Month

Status



- **Status**

- Preliminary Engineering – **Done**
- Select Plant Site – **Selected (Negotiation)**
- Neighboring County Waste Diversion Contracts – **Underway**
- Waste Diversion Contract Authorized by Vote – **May 25, 2010**
- Pacific Corp Power Purchase Agreement- **Underway**
- County Approval of Revenue Bond – **May 25, 2010**
- Complete Design
- Begin Construction
- Begin Waste Diversion
- Begin Processing