BIOMASS POWER, COLORADO
FOREST HEALTH AND WATER RESOURCES

Joint Senate/House Water Resources Review Committee

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THE EAGLE VALLEY PROJECT
Colorado’s First Utility-Scale Biomass Power Project

- 11.5 MW woody biomass CHP
- Located in Gypsum, CO, adjacent to wallboard plant
- Electricity sales to Holy Cross Energy, servicing Parachute to Vail, Glenwood Springs to Aspen
- Woody biomass
  - Forest thinnings, hazardous fuel reductions, deadfall, etc.
  - Not trash
- Construction started Dec 2011; completion late 2013
Eagle Valley Clean Energy, LLC
Gypsum, Colorado
Eagle Valley Plant Layout
33,000 sf; 18 acres
Eagle Valley Clean Energy
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WHY SUPPORT BIOMASS IN COLORADO?
Making a Difference

• Forest health – a CO imperative
  – Clean water

• Renewable base-load power source

• Local jobs and economic stimulus

• Small size - minimal impact

• Reliable technology; 30-50 year tool
Biomass - Unique Forest Health Tool

- **Hazardous Fuels Mitigation**
  - Reliable outlet for hazardous fuel
  - Expands treatment – all species
  - “Waste” of the forest- avoid slash piles

- **Extends Reach of Forest Managers**
  - Stretches budgets; treat more acres
  - White River NF stewardship multiplies acres treated at same cost to USFS
  - Long term planning – 30-40 year tool

- **Doesn’t burden the forest**
  - 2,500 acres p.a./70,000 BDT/11.0 mm bd ft
Promotes healthy forest industry

- Doesn’t compete for higher value timber
  - Targets trimmings, small diameter & POL (product other than logs)
  - Valuable logs go to mills, not bioenergy
- Complements sawmill industry
  - Buys shavings and trimmings
  - Increases profit margin to sawmill process
- Balances forest products industry & jobs
  - Not subject to market volatility
Long Term Local Jobs & Spending

- $46 million capital project
- **Local Jobs**
  - 107 construction jobs
  - 42 stable, well paying jobs
  - Rural development; new families
- **Local Spending**
  - $14.5 million construction
  - $5.0 million/year direct spending
  - Indirect spending multiplier
- **Stimulates more industry & jobs**
HOW TO SUPPORT
BIOMASS IN COLORADO
Uncompahgre Plateau
Before
Uncompahgre Plateau
After
Before
Before
After
After
The End-Game

• **Make bioenergy THE renewable energy focus in Colorado**
  – Recognize value of bioenergy, especially in CO
  – Biomass benefits far outweigh other renewables – forest health, stretch budgets, jobs, stimulus

• **Target 120 MW in new biomass production over 5-7 years (“right-sized” for CO)**
  – 6-8 small facilities strategically placed for forest restoration
  – CHP - energy + thermal to replace carbon

• **The challenge – higher costs**
  – Sensitive forests don’t support large facilities
  – Small facilities cost more
What’s Needed to Develop Bioenergy

- **Customer**
  - Long term purchase agreement; energy/thermal
  - Incentive to pay more

- **Stable, long term fuel supply (critical to financing)**
  - 10-20 year Stewardship agreements
  - Timber sales

- **Financing**
  - Grants
  - Bonds & loan guarantees
How Can the Legislature Help?

Customers

• **Help overcome premium price of bioenergy**
  
  – State must recognize the “returns” from biomass support
  
  – Create biomass “carve out” in state renewable energy standards
  
  – Multiplier for biomass RECs
  
  – Give utilities credit for buying tradeable RECs sourced in CO

• **Encourage utilities to embrace CO biomass**
  
  – Source more renewables from inside CO
  
  – Allow local utilities to buy local biomass (relax restrictions on purchases from outside sellers)
How Can the Legislature Help?
Stable Fuel Supply

• **Legislate and direct Colorado State Forest Service**
  – CSFS is responsible for stewardship of state forests
  – Encourage long term stewardship agreements & timber contracts, emphasize forest treatment in addition to saw log harvesting
  – Re-authorize “good neighbor” cooperation with US Forest Service so CSFS can treat more forest in CO
  – Give CSFS budget and direction to enact aggressive treatment program
  – Focus efforts where there is a need and industry to take care of the need
How Can the Legislature Help?
Financial Support

• **Expand State and OEDIT financial support**
  – Re-create Clean Energy Development Authority bonds to finance new bioenergy projects
  – Authorize grants for new projects’ development phase

• **Create state tax credits**
  – Production tax credits (PTC) or investment tax credits (ITC) to bolster finances of bioenergy facilities

• **Offer biomass utilization grants**
  – Similar to US Forest Service, subsidizes development costs
  – Subsidize beetle kill treatment programs

• **Give some flex for bordering state facilities that help CO forests**
How Can the Legislature Help?

Other

- **Tax friendly classifications**
  - Forestry equipment as agricultural; other?

- **Road permits for biomass carriers**
  - Same weight rules as special use carriers (indivisible load carriers)
  - Make interstate weight limits same as secondary roads
  - Encourage and support federal legislation to increase CO interstate weight limits for bioenergy

- **Other?**
THANK YOU!

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