



Placer County Biomass Program Overview and EPA Award

Presented to:



The El Dorado County Board Of Supervisors

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South Lake Tahoe, California

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Placer County Biomass Program Foundations

Why embark on this Program ?

- ✓ Need to protect the Forest/ Communities from Catastrophic Fire
- ✓ Provide cleaner air



How did we proceed?

- ✓ Develop a Strategic Plan
- ✓ Work with Public Agencies & Private Business



What will we accomplish?

- ✓ Programs & Projects





Net Results of Placer County Programs

- ✓ **Air Pollution Lowered**
- ✓ **Fire Danger lowered**
- ✓ **Less reliance on fossil fuels**
- ✓ **Improved watershed and water quality**
- ✓ **Healthier forests**
- ✓ **Reduces Greenhouse Gases**
- ✓ **Greater Agency Collaboration**



Lower Insurance rates

Lower fire fighting costs

Improve health



Core Issue: Agency Decisions

Open Pile Burn



***Large amounts
of Air Emissions***

VS.



Grind & Haul Waste

Lower Emissions



Controlled Energy Creation



On-Going Programs & Projects



Community biomass collection



Chipping



Regional biomass collection



Before

- ***Contracts in place***
- ***Material being reclaimed***
- ***Air Pollution saved***
- ***Forest Health increased***

USFS NF biomass removal



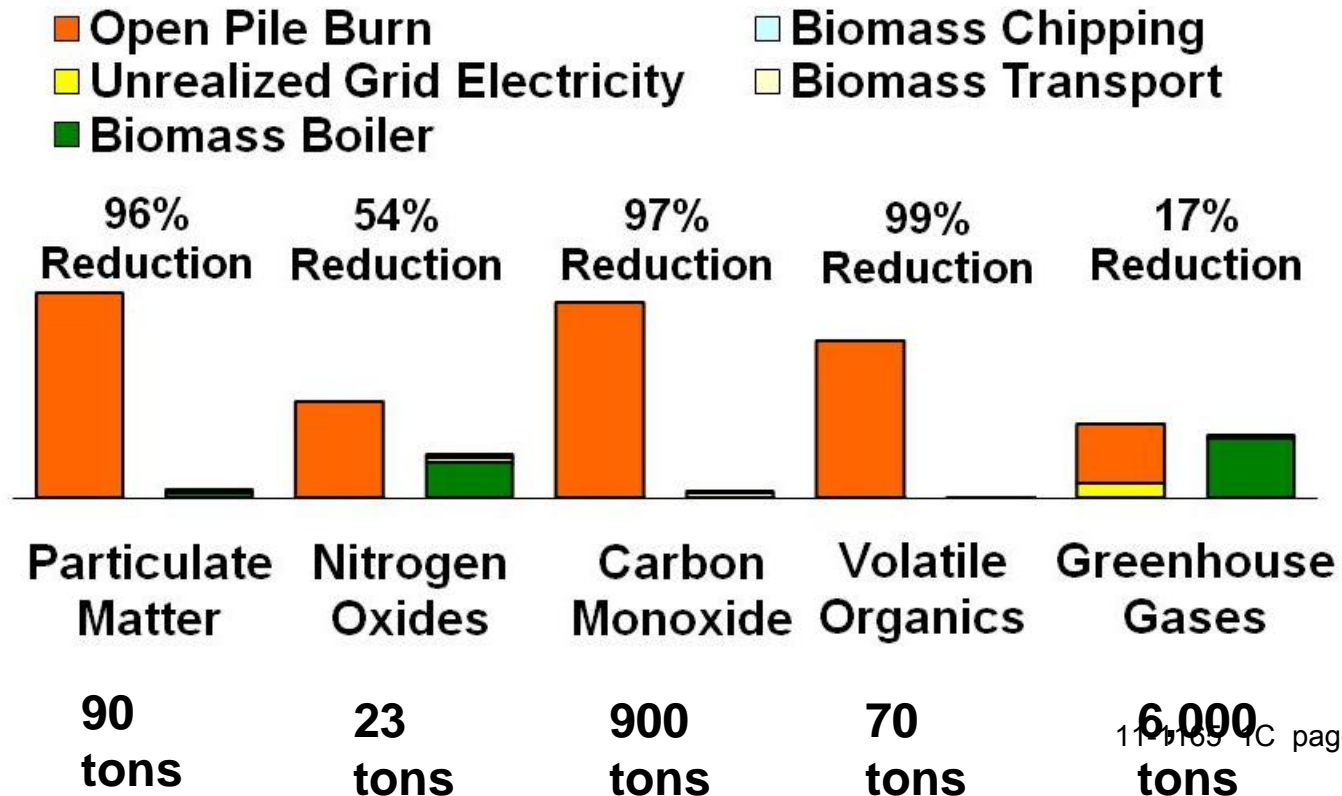
After



Biomass Project Results

Air Quality

*Multiple on-the-ground biomass to energy throughout County
Specific In-forest high fire danger locations*





Environmental Protection Agency Recognition



EPA Award

- US Environmental Protection Agency Recognizes Outstanding & Innovative Efforts to Achieve Cleaner Air
 - 2010 Clean Air Excellence Award for

Forest Resource Sustainability in Placer County

We have processed and transported 15,000 BDT's of waste to biomass energy facilities which has fueled the generation of 15,000 MW hours of renewable electricity, enough to power more than 1,500 homes for one year.

This Project was chosen “for its impact, innovation and replicability”





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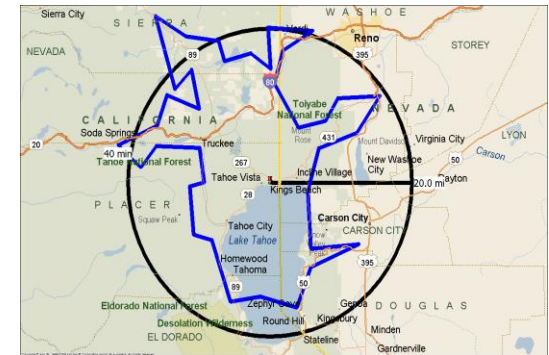
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Placer County Project Facility Development

- ***Public/Private Partnership – DOE, Placer County & Calpeco developing a 2MW Combined Heat & Power facility in Lake Tahoe Region – Cabin Creek***
- ***Solutions to Multiple Issues for the Region***
- ***Technology/Fuel Supply/Logistics /Economics***
- ***Environmental Work to meet all regulations***
 - ***Reduction to Basin's pollution issues***
 - ***No Health Risk (Documented)***
 - ***EIR will be performed (2011/12)***
- ***Decision to Build Based on Technical, Environmental & Economic Factors (2012)***





Placer County Project Technology Development



Creates Syngas

**Gasification Unit
(Nexterra)**



**Internal Combustion Engine
Coupled with a Generator
(GE Jenbacher)**



Future Biomass Related Operations

Biomass Facility in Foresthill Region (above Auburn in TNF)

- Recent grant award by the California Energy Commission to study Biomethane fuel for CNG vehicles

Biomass Protocols – *Value Green House Gas benefits*

- Biomass for energy – Support from BOF, SMUD, USFS, CAL Fire, CAPCOA
 - ARB reviewing for implementation
- Forest Fuel Treatment – Wildfire reduction & Enhance growth

Carbon Market – *Monetize GHG reduction as CEQA Mitigation & offsets*

- Program Designed
- Clients Interested
- Funding goes back into the forest thinning operations



Questions/Comments

<http://www.placer.ca.gov/Departments/CommunityDevelopment/Planning/Biomass.aspx>

