

### Biomass Program Update

#### Presented to

# Placer County Board of Supervisors

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### Placer County Air Pollution Control District Clean Air Grants (Tahoe Region) Progress

Progress was slowed due to Loyalton & Carson City facility shut downs in 2010

- > California State Parks project
- > North Tahoe FPD projects
- >\$35,000 APCD Clean Air Grant
- > County owned urban parcels











## Department Of Energy Grant Progress

- ➤ Fuel Procurement Plan Understanding where biomass will come from over long term
- ➤ Logistics Plan Documenting how the material will be acquired, moved and stored
- ➤ Siting Analysis for Small-Scale CHP in the Lake Tahoe Basin Evaluating the economics and other benefits of several sites
- ➤ Air/Water Emissions and Carbon Credits/Emissions Offsets
  Analyses Report Analyses determining the ability of the facility
  technology to meet local, state and federal regulations



#### **Biomass Fuel**

# Where will it come from? (mostly new sources)







Boiler Steam technology

Tahoe Basin = 80%

Cabin Creek = 20%

Gasification technology

Tahoe Basin = 100%



= 20 mile radius

= 40 minute drive time

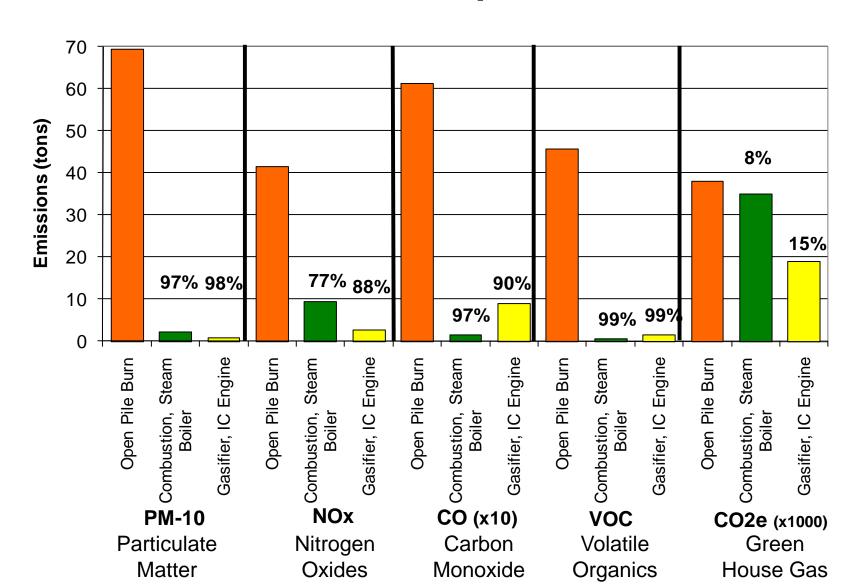


#### **Biomass Economics**

- Local biomass (within 20 miles) reduced cost
- Cost Sharing agreements with all agencies
- Optimized logistics for operations and hauling
- Lower cost & Sustainable Operations
- Green energy requirement for power company
- Private partner agreements
- Goal of 9 10 cents/Kwh, (typically is 13 15 cents)
- 2 MW electricity serves 1,000 homes in Tahoe Basin continuously



# Air Pollutant Emissions Comparison



# Planned Projects in the Tahoe Region 2011

- U.S Forest Service /Placer County Biomass removal at multiple sites, possible demonstration project near Spooner on steep slopes
- Placer County/California State Parks Biomass removal at Sugar Pine Point and Burton Creek State Parks
- Placer County/California Tahoe Conservancy Biomass removal on several urban lots
- Placer County & NTFPD Chipping program hauling, Pine Needle removal and other WUI projects
- Other Biomass removal support for Meeks Bay, more urban County lots



## Environmental Protection Agency Recognition



#### **U.S. EPA Award**

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

#### Forest Resource Sustainability in Placer County

15k biomass waste removed and not burned; Reductions of 90 tons PM, 23 tons nitrogen oxides, 70 tons VOC's, 900 tons carbon monoxide and 6,000 tons of GHG's

This Project was chosen "for its impact, innovation and replicability"











#### **Questions/Comments**

Website is now operational

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

