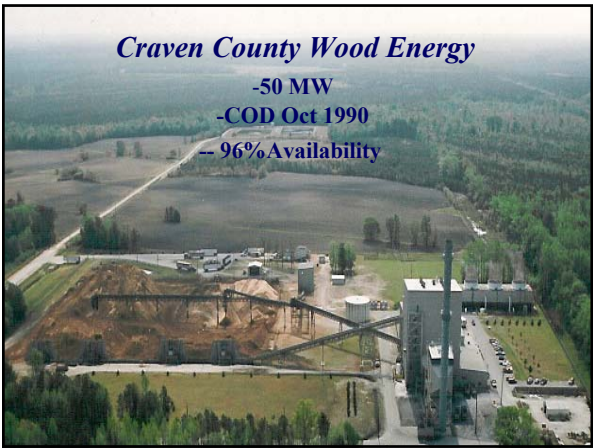





Craven County Wood Energy
New Bern, North Carolina




*Presentation to the Energy from Wood
Conference
March 14, 2006
Wade Bennett*

Craven County Wood Energy

- Conventional direct combustion steam power plant
- Zurn Energy 423,000 lb/hr boiler rated at 1700 PSI MAWP and 955 Degrees F
- Mitsubishi 50 MW 3600 RPM Steam Turbine
- Brush Electrical Machines Air Cooled Generator
- Zurn Multi Cyclone Mechanical Dust Collector
- Research Cottrell Electrostatic Precipitator

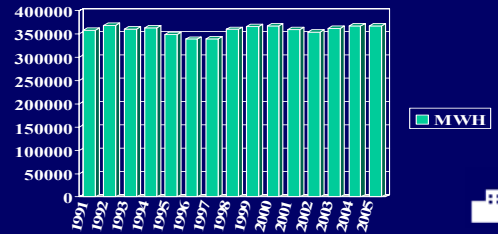
**Environmental Benefits
Craven County Wood Energy**

- Renewable - uses an existing waste stream
- Reduced SO₂ emissions
- CO₂ balance
- Low particulate emissions
- Flyash used by farmers
- Prolonged landfill life

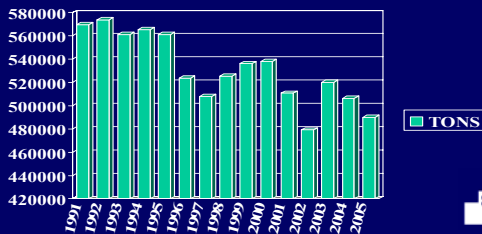
Economic Benefits Craven County Wood Energy

- Domestic energy source
- Fuel indigenous to NC
- Fully dispatchable 24/7
- Property taxes
- Jobs
- Economic benefit to farmers

Craven County Wood Energy Annual Production



Craven County Wood Energy Annual Fuel Consumption




Fuel Sources Craven County Wood Energy

- | | |
|--|--|
| <ul style="list-style-type: none"> ■ BARK ■ SAWDUST ■ CHIPS <ul style="list-style-type: none"> -sawmills -forest residuals -pre-commercial thinnings | <ul style="list-style-type: none"> ■ WASTEWOODS <ul style="list-style-type: none"> -pallets -clean wood from landfills -hurricane debris -land clearing debris -tree trimmings -plywood trimmings/particle board waste -brooder house poultry waste -railroad ties -cotton gin waste |
|--|--|

Current Attractiveness of Wood to Electrical Energy Projects

- Rising Energy Costs
- Production Tax Credit for Open Loop Biomass (Jobs Creation Act of 2004)
- North Carolina Renewable Energy Tax Credits
- Renewable Energy Credits
- Less Fuel Price Volatility



Disincentives

- Avoided Cost rates are too low to build a profitable project
- Short term power contracts make financing difficult
- Increasing competition for biofuels is driving up cost
- Increasing transportation costs
- Economy of scale vs. fuel supply