Wood Fuels & Wood Pellets in Europe
----- and ----- 
Implications for the US South Forestry

John F. Colquitt, President
Harold L. Arnold, Vice President
Forces Driving Green Fuels

- Kyoto Treaty
  - Kyoto Protocol
  - The European Union
- Carbon Credits
  - Wood is “CO₂ Neutral”
- Public opinion
  - 930 Hits on Google /24hours
- Global economic and political instability caused by dependence on fossil fuels
  - Wood pellets are a good alternative that can be produced many places in the world

The Kyoto Protocol: Treaty

- “Negotiated” in Kyoto, Japan – December 1997
- 169 countries and other governmental entities have ratified the agreement
- Objective: The stabilization of greenhouse gas concentrations in the atmosphere
Green countries have ratified Kyoto

A Hint of the Future?

“Imperative Energy; Not Alternative Energy”

Hillary Clinton
Kyoto as a Treaty

- November 18, 2004: Ratified by Russia
- February 16, 2005: Became effective

Pellet Prices in Sweden
Constant SEK
Delivered to "Fireside"
Green and other Energy Sources in the European Union

Data: EUROSTAT, 2003

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Green Energy Sources in the European Union
**Why Pellets instead of Chips?**

- **Transport**
  - Density: 61% > Wood Chips
  - Heat “Density” per Cu ft: 113% > Wood chips

- **Storage**
  - Space advantage because of “heat density”
  - No fungal deterioration

- **Compatibility** with Pulverized Coal burners
  - Handling Ease
  - Particles sized in preparation for burning in suspension

- **Pest problems eliminated**

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**SO!**

What does this mean in our woods?

Harold Arnold, VP
Fram Renewable Fuels
What’s happening in the Global Fiber Market?
What Can be Done with Biomass?
What’s happening in our Fiber Market?

John Colquitt, President
Harold Arnold, Vice President
How can we Harvest this Fiber?
US Biomass Potential

Figure 1: Annual biomass resource potential from forest and agricultural resources

John Colquitt, President
Harold Arnold, Vice President
Potential Available Resources

- 181 million dry tons per year of unused or new raw material

- That’s 90.5 million tons of wood pellets that could be produced!

- Source: USDA and Department of Energy April 2005 report

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