



# Wood Pellet Basics

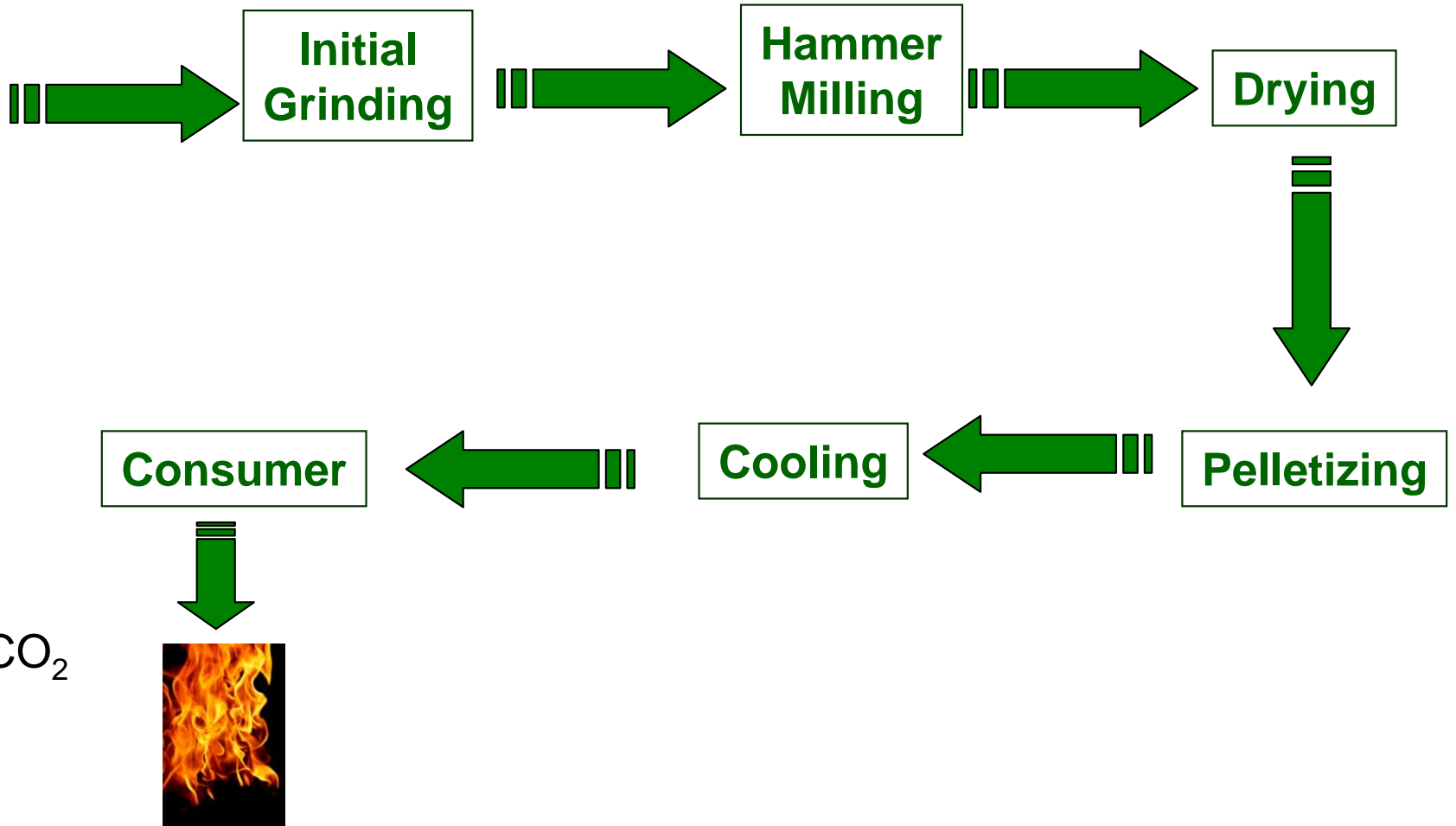


# Wood Pellet Basics

1 Ton Wood Pellets = 2.8 Barrels Oil



BioResource



# Basic Wood Pellet Properties

- Moisture 3.5 – 5.5%
- Ash 0.2 – 0.5 %
- Calorific Value 20.4 GJ/Ton  
Gross-Dry Basis 5.6 Mwh/ton  
8800 Btu/lb
- Bulk Density 600 – 750 kg/m<sup>3</sup>



**2007/2008:** Total Global Production Capacity ~ 10,000,000 tons

## **In 2008**

- ~20% of wood pellet production in US was exported to Europe
- ~ 90% of Canadian pellet exports were to Europe.

*It is estimated that production will double over the next 4-5 years*

*Some forecasts project an annual growth of 25-30% globally over the next ten years*

# Southeastern US Pellet Manufactures

<b>Company</b>	<b>Location</b>
Ace Pellet Company	Reagan, TN
Anderson Hardwood Pellets LLC	Louisville, KY
Bayou Wood Pellets LLC	West Monroe, LA
CKS Energy	Amory, MS
Fiber Resources, Inc.	Pine Bluff, AR
Fram Renewable Fuels, LLC	Savannah, GA
Fulghum Fibrefuels	Augusta, GA
Varn Wood Products,LLC	Hoboken, GA
Hassell & Hughes Lumber Company	Collinwood, TN
Henry County Hardwoods	Paris, TN
Lee Energy Solutions	Crossville, AL
Nature's Earth Pellet Energy	Reform, AL
Nature's Earth Pellet Energy	Laurinburg, NC
Piney Woods Pellets, LLC	Wiggins, MS
Roseburg Forest Products	St. Stephen, SC
Somerset Pellet Fuel	Somerset, KY
Southern Kentucky Hardwood Flooring	Gamaliel, KY

# Recent GA Wood Pellet - Wood Energy Developments

**RWE Innogy:** Plans for an 825,000 ton wood pellet plant in Waycross, GA. The facility is anticipated to use approximately 1.5 million green tons of small diameter pines as feedstock each year.

- RWE Innogy/Germany is the investor
- BMC/Sweden is the project developer.

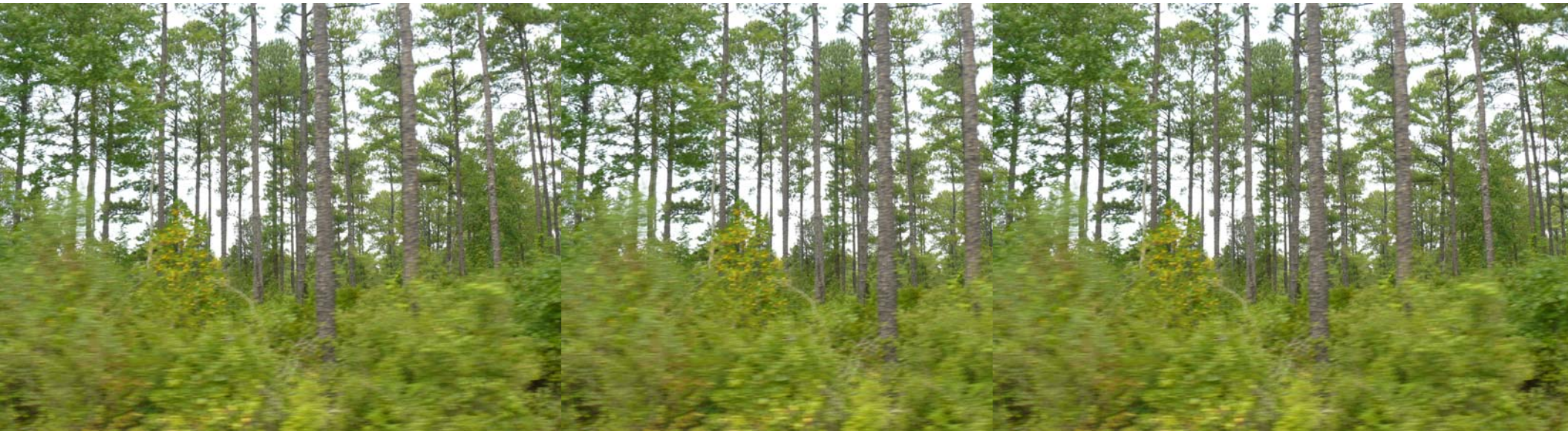
Initial production targeted for 2011 and will be shipped via port of Savannah to power plants in the Netherlands.

**United Biomass, LLC:** Began production of “Greenheat” Firelogs in Nahunta, GA. The plant has an annual production capacity of fire logs and briquettes of 110,000 tons utilizing sawmill residue and wood chips as feedstock.

**Magnolia Power:** Plans for a wood pellet mill and power plant at Waynesville, GA. Pellet production is targeted late 2011 or early 2012. First phase production is projected at 300,000 tons/year with additional pellet production in subsequent phases.

# Recent GA Wood Pellet - Wood Energy Developments

**Oglethorpe Power:** Has purchased sites in Warren and Appling Counties in Georgia to build up to two, 100-megawatt biomass power production facilities. These would be the largest projects to date to tap into Georgia's abundant forest resources to produce renewable power.



# Select Wood Pellet Usage Drivers

Projected Near Term European Wood Pellet Demand: 12 million tonne

- Carbon Credit Considerations
- Investment tax credits
  - Capital Grants
  - Consumer rebates
  - Tax credits
  - Excise tax exemptions
  - Targets and quotas
  - Subsidies for production of green electricity, consumption research