Threat Assessment

Pellet Mill Growth & the Potential Impact on Existing Wood Fiber Markets



What Sharks Do

Unused Misc 1%

Fiber Products 32%

Wood Residue Market 2006

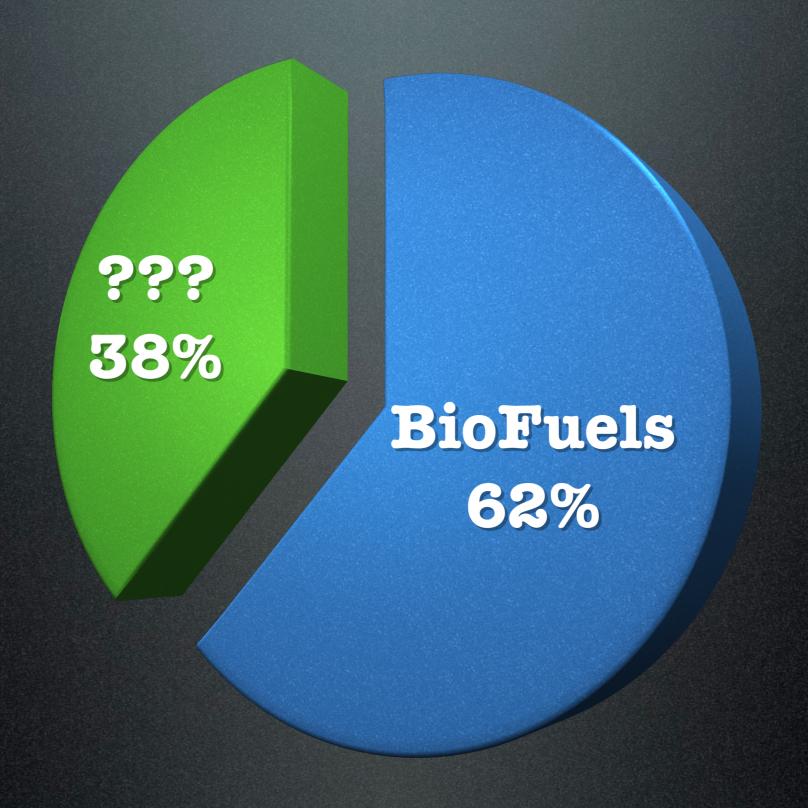
Charcoal/chemical wood
1%

Particleboard 10%

Sawn Products
1%

BioFuels 46%

Current Forest Residuals Utilization



Top 10 States with Existing Pellet Mills

State	# Facilities
PA	11
WI	11
ML	10
OR	10
VA	10
NY	9
	6
GA	5
AL	4
ME	4

Existing Mills = 135 / Capacity >10 million Tons

New Pellet Mill Construction

City	State	Feedstock	Capacity (Tons/Yr)
Selma	AL	HW & SW	303,135
Snowflake	AZ	Softwood	18,000
St Augustine	FL Softwood		132,277
Hazlehurst	GA	Softwood	551,155
Morehouse Parish	LA	Woody Biomass	496,040
La Salle	LA	Softwood	1,100,000
Fulton	MS	Wood waste	440,924
Gloster	MS	HW & SW	500,000
Finley	ND	HW & SW	22,046
Total New Ca	pacity (Sho	ort Tons/Yr)	3,563,577

Proposed Pellet Mill Projects

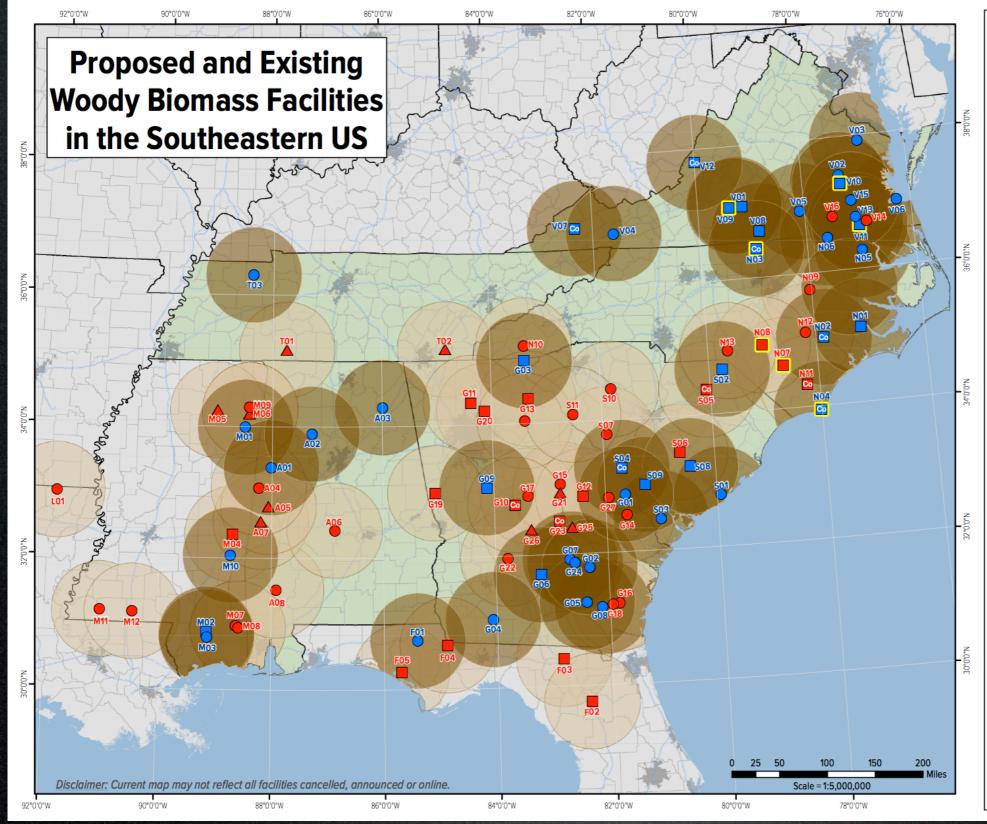
CITY	State	Feedstock	Capacity
	AL	HW & SW	485,016
Hillsborough County.	FL	Biosolids	15,000
Greenville	FL	Woody Biomass	100,000
Gordon	GA	Woody Biomass	545,643
Warrenton	GA	Woody Biomass	545,643
Millen	GA	Woody Biomass	396,832
Sandersville	GA	Softwood	440,000
Waynesville	GA	Softwood	374,785
Oliver	GA	HW & SW	200,000
Evanston	IN	Hardwood	60,000
Lexington	KY	Hardwood	100,000
Baton Rouge	LA	Softwood	1,000,000
West Baldwin	ME	HW & SW	343,921
International Falls	MN	Thinning and low	50,000
Aurora	MO	Alfalfa hay, wood	50,000
George County	MS	Softwood	500,000
Portsmouth	NH	Woody Biomass	110,231
Albuquerque	NM	HW & SW	6,000
Johnston	SC	Softwood	500,000
Allendale	SC	Yellow Pine	Undisclosed
Fair Haven	VT	HW & SW	110,000
Total New Capacity (Short Tons/Yr)			5,933,071

Category	# Facilities	Capacity (Short Tons/Yr)
Proposed Pellet Mills	21	5,933,071
Mills Under Construction	9	3,563,577
Existing Pellet Mills	135	10,441,056
Totals	165	19,937,704

In 2010 U.S. Wood Pellet Demand was <4 million tons/yr.

Mulch & Soil Producers LEGEND Mulch & Soil Plant Locations with 150 mi. Radius

Wood Fiber Market Map



ABOUT THE MAP:

The Proposed and Existing Woody Biomass Facilities in the Southeast map was created based on third party data as a list of proposed and existing woody biomass facilities known to SELC. The list was primarily compiled through internet based research of the companies announcing woody biomass facility proposals, forestry agencies, biomass groups, and state environmental permitting divisions. The map is thought to be accurate, but may still contain errors since it is derived from varied sources. The brown circle surrounding each unit has a 50 mile radius, representative of the sourcing area where wood feedstock will be gathered for each facility. These circles are meant to be illustrative of the potential forestry impacts where many facilities are proposed close together. Some facilities propose a larger sourcing area, up to 200 miles. Actual sourcing areas would also be shaped based on road networks making them more irregular than the illustrative circles shown here, however a similar comprehensive image would emerge.

LEGEND

Type of Wood Biomass Facility

- Fuel Pellet Plant Operating
- Fuel Pellet Plant Proposed
- **Electricity Generation Operating**
- Electricity Generation (converted Coal EGU) Operating
- Electricity Generation Proposed
- Electricity Generation (converted Coal EGU) Proposed
- Cellulosic Ethanol Producer Proposed
- In Legend Combined Heat & Power (color varies)

Approximate Sourcing Area

- Operating Facility
- Proposed Facility

Primary Data Sources:

Georgia Forestry Commission; Biomass Magazine and other industry press; Southern Alliance for Clean Energy (SACE); US Census Bureau (2010); Tele Atlas North America (2011)

Available for download at

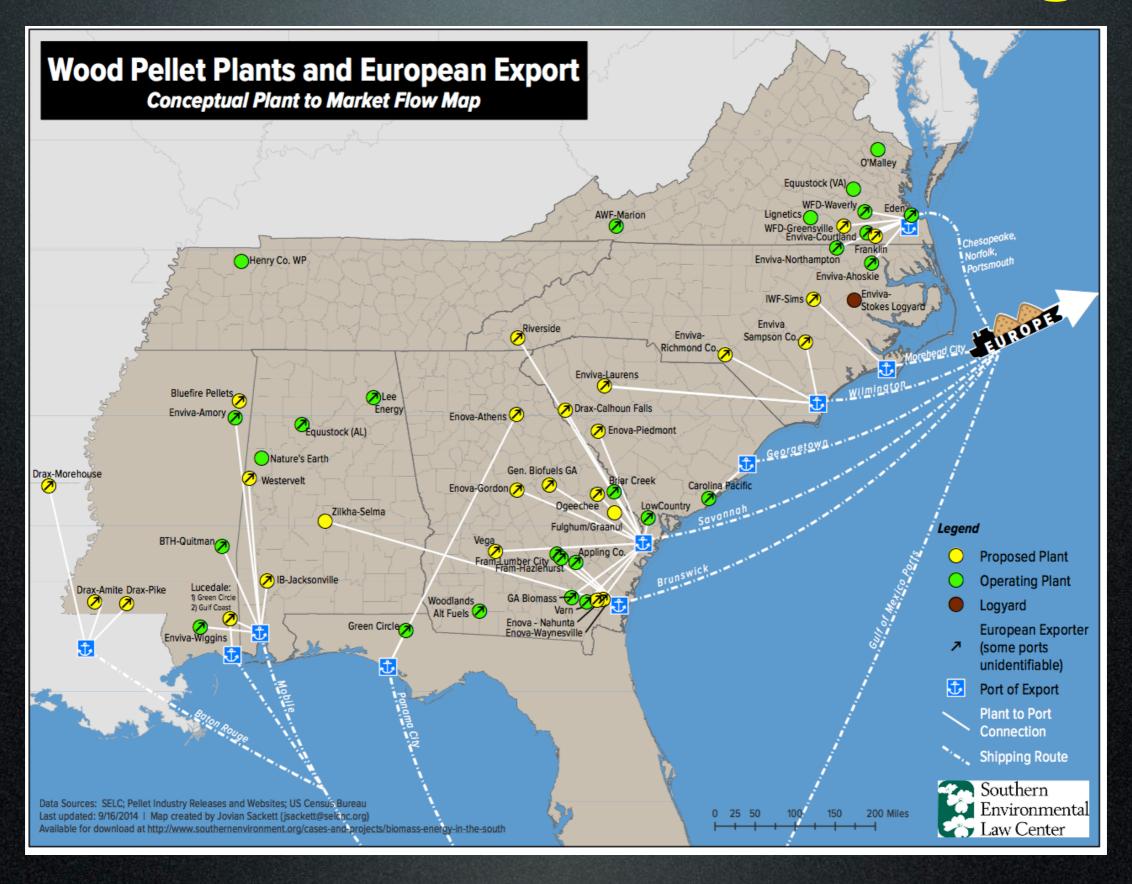
http://www.southernenvironment.org/cases-and-projects/biomass-energy-

Map updated September 16, 2014 Please direct map inquiries to: Jovian Sackett



SE Bioenergy Map

Where Are the Pellets Going?



Why Europe?

- International Agreements on GHG Emissions
- Goal of 20% of energy from bioenergy by 2020
- Ability to subsidize biomass acquisition and pass cost to European energy users & consumers

- Largest importer of biomass from the U.S. Southeast forests is the United Kingdom
- U.S. biomass is ample and cheap
- Exporting to Europe can only happen with heavy EU government subsidies

Wood Fiber Coalition

WOOD FIBER COALITION



Protecting Green Manufacturing Jobs

Sponsoring Organizations

American Home Furnishings Alliance (AHFA)

American Nursery & Landscape Association (ANLA)

The Business and Institutional Furniture Manufacturer's Association (BIFMA)

Composite Panel Association

Kitchen Cabinet Manufacturers Association (KCMA)

Mulch & Soil Council (MSC)

Society of American Florists (SAF)

- The Wood Fiber Coalition (WFC), formed in 2009, is a network of manufacturing and agricultural organizations and companies that depend on a reliable supply of wood fiber for the production of bio-based consumer products in the United States. They include:
 - Composite wood panels
 - Wood-based furniture, cabinets, doors and flooring
 - Wood-based architectural moulding and millwork
 - Landscape plants, trees and other materials
 - Horticultural mulch and consumer potting soils
 - Commercial growing media

WFC Pellet Mill Issues

- Government subsidies disturb existing free markets
- An unsustainable market shift puts existing jobs and capital investment at risk
- Taxpayer money should not subsidize private industry — especially only one segment of an existing market
- Pellet mills claim they don't divert existing wood fiber market materials, but they do

Taking Our Case to States

State	Jobs	Cu Yd	Tons/Yr
North Carolina	139	1,740,000	1,044,000
South Carolina	211	3,047,381	1,828,429
Virginia	349	2,601,000	1,560,600
Georgia	433	3,375,000	2,025,000
REGION TOTALS	1,132	10,763,381	6,458,029

North Carolina Visit

- Departments of Agriculture & Forestry & Economic Development
- Heard "the other side" they would not have considered
- Concerned about long term Ag & Forestry plans

- Windfall landowner profits encourage poor decisions for future
- Need to balance public opinion by telling benefits we provide
- Need to focus on state legislators

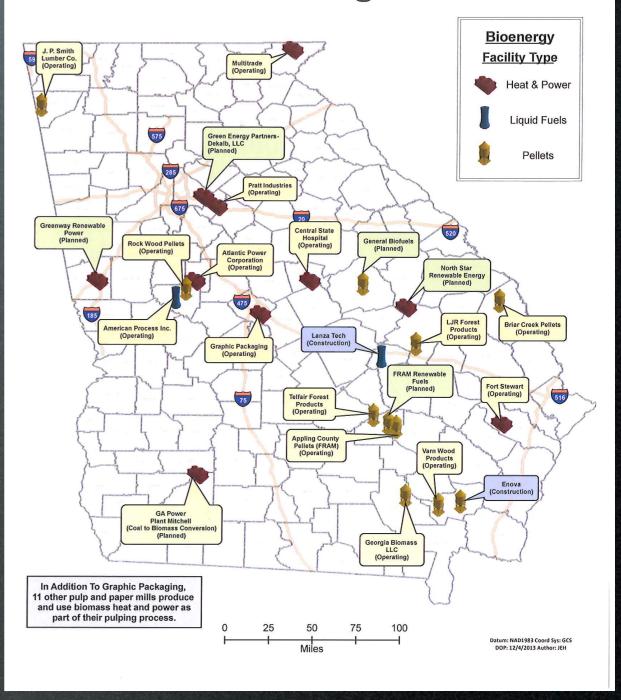
Georgia Visit

- GA Ranks #1 in Pellet Exports Overseas
- 10 GA mills have a capacity of 1.35 million tons/yr
- State offers no incentives but cannot control local tax & other incentives
- Local issue is JOBS in their county



Bioenergy Industry in Georgia





Third Circle — Full Fin

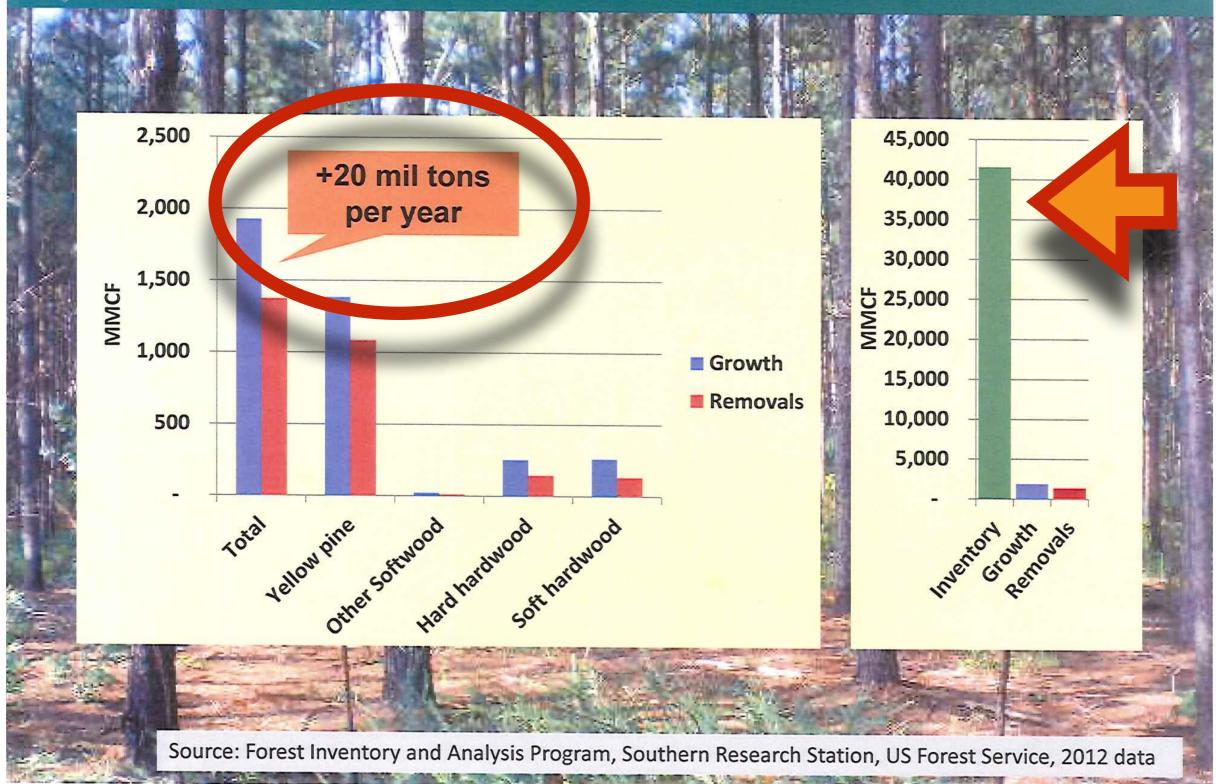
Before the Feeding Frenzy Starts...

Maybe We Are Focusing on the Wrong Question?



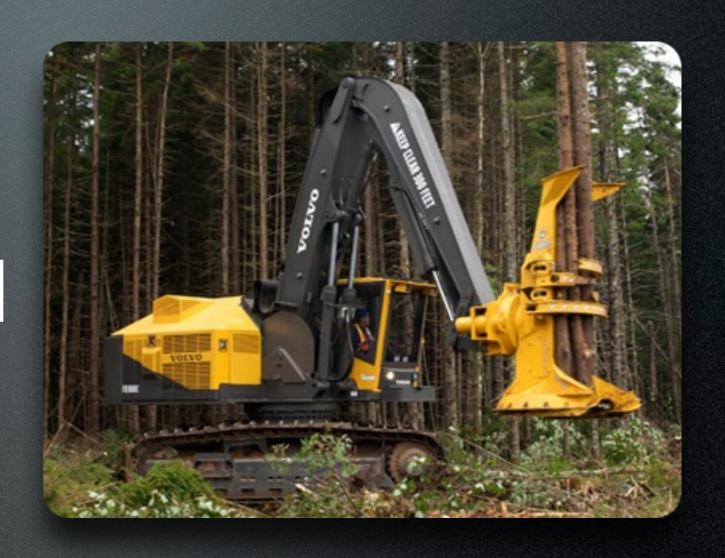


Georgia's Forest



Don't Divert Resources

EXPAND PRODUCTION



Incentives Where They Help



- Increase Forest Production
- Provide Tax Incentives for Loggers
- Increase BMP Overview
- Expand the Market - Don't Divert It!

MSC Requests

Members Should Report:

- Changes in Market Conditions
- Any Government Subsidies
- Any News of New Pellet Mills

Questions?

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