

SAFER Congressional Briefing:
Creating Bioeconomy Jobs in the
South

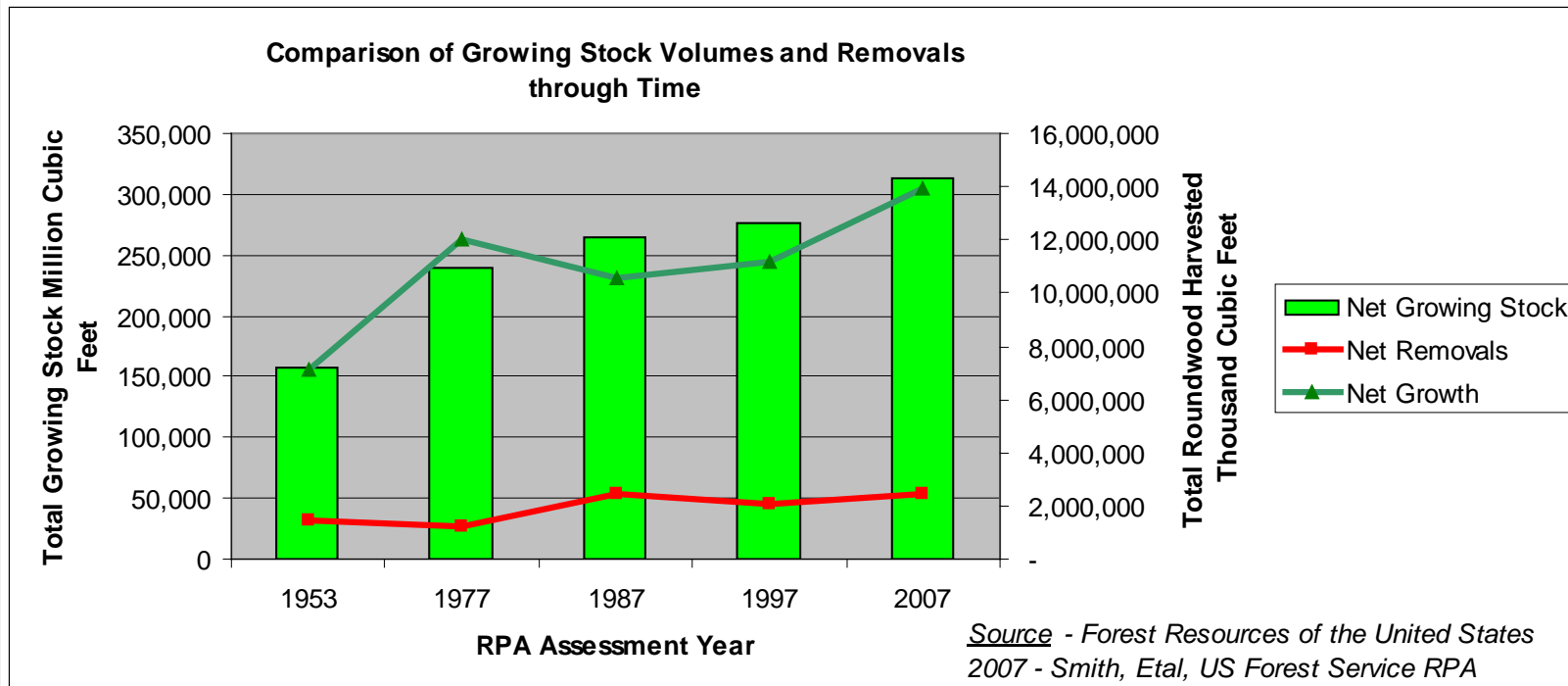
Woody Biomass Definition Project

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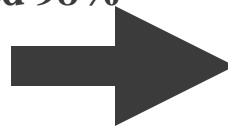
Timber Industry Snapshot

- Historical Low Housing Starts + Sluggish Economic Recovery
 - = Little hope for return to 2004 peak sawtimber markets
- A decade of mill consolidation & efficiency gains + emergence of other global pulpwood suppliers
 - = flat pulp & paper markets
- Timberland ownership shifted away from industry c-corp toward institutional holders and timber REITS
- Private non-industrial individuals still control the majority of the US southern timberlands >60%
- Current timberland owners interested in maximizing return rather than low cost raw material to the mill and are open to new markets

Southern Forest Resource Through Time



- Growing Stock Inventory Increased 98%
- Removals Increased 70%
- Growth Increase 95%



Strong Markets Create Productive Forests

Biomass Markets Will Help Increase Utilization and Expand Markets

Traditional
Expense

Following Harvest



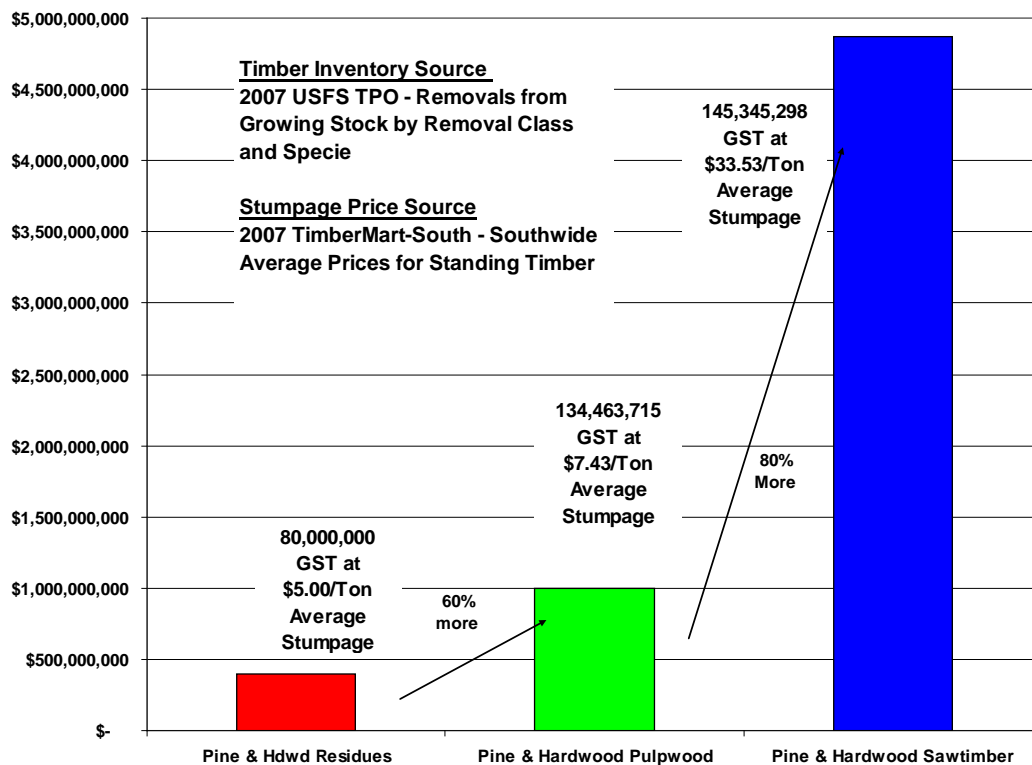
Is Now Income



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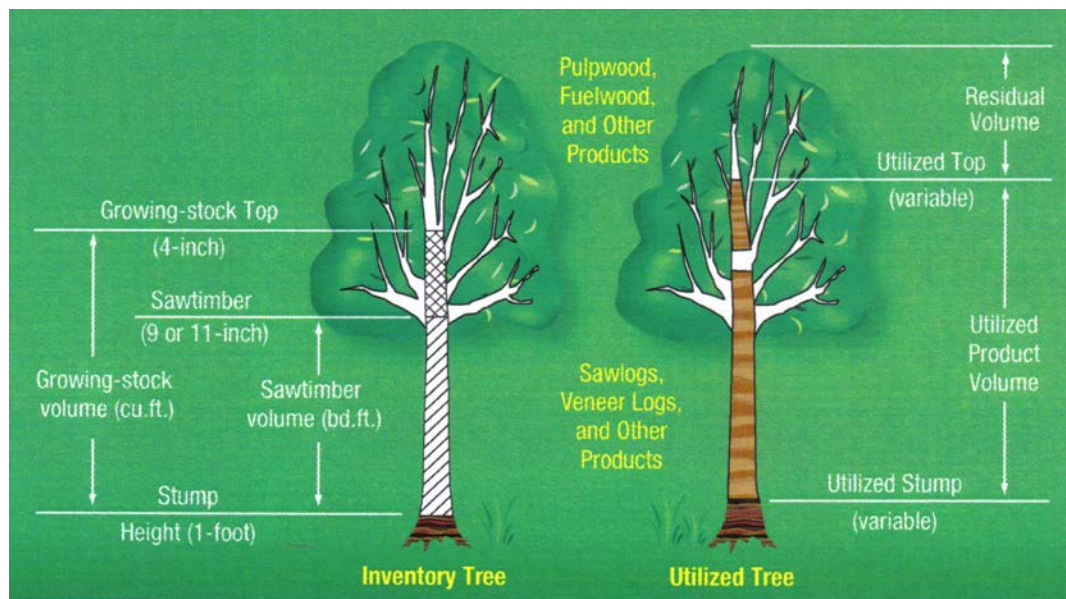


Could Biomass Markets Hurt Traditional Forest Products Markets?



Historically, timber markets have been driven by demand for solid wood products as well as pulp/paper products, which can follow very different business cycles. Depending on local market conditions, timber supply for solid wood products is worth 3-5 times as much as supply for pulp and paper products. It would take a significant step up in value for biomass markets to replace traditional forest products.

How Much Biomass Supply is there?



- Logging residue includes the unmerchantable tops and small branches.

Source: Northeastern Forest Inventory & Analysis Program

Not an easy question,...it depends on the part of the tree, how is it measured and how it is used.

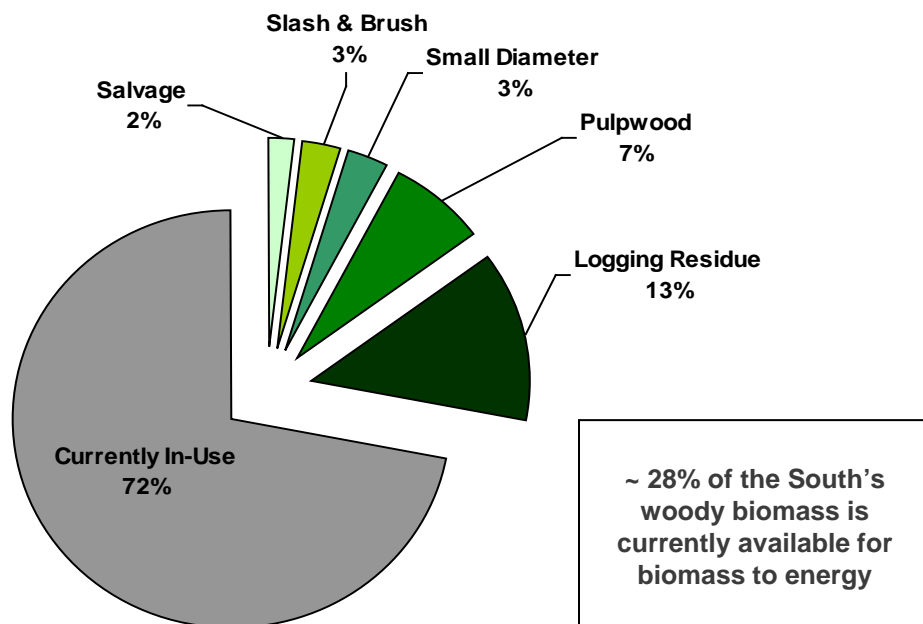
Biomass supply also includes understory trees and shrubs not traditionally harvested or inventoried.

SAFER Biomass Database

- USFS FIA periodic inventory
- FIA Biomass Volume Equations by Tree Components
- FIA Dry Weight Conversions
- FIA Biomass Estimates for Saplings, etc.
- Advantages
 - Comparable across states
 - Can be updated periodically for growth and removals
 - Utilizes the same data to derive traditional growing stock estimates
 - Can be allocated to various supply buckets
 - Can be audited or adjusted as new information is developed
 - Baseline for application of assumptions

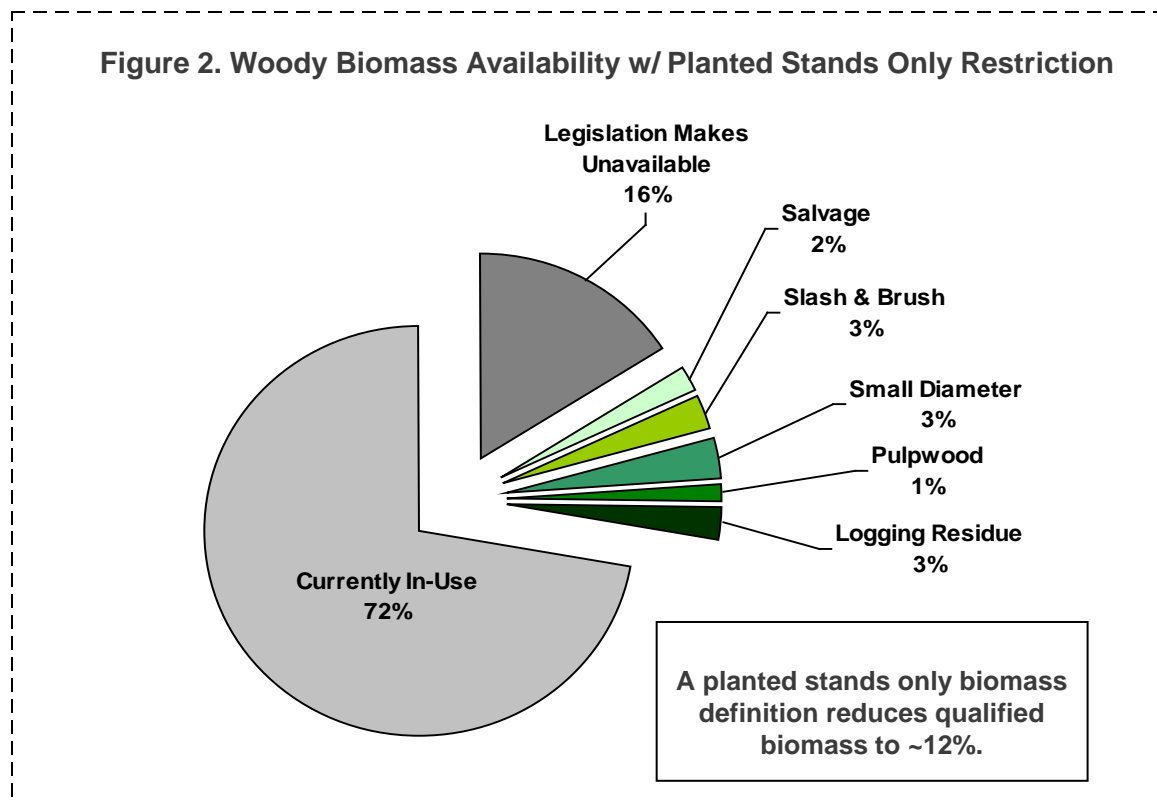
Biomass Supply Estimate Depends on Assumptions of Availability, Utilization and Recovery Rates

Figure 1. Woody Biomass Availability



Source –SAFER Biomass Database utilizing USFS FIA data

Biomass Markets Can be Reduced either by Market or Policy Restrictions



Source –SAFER Biomass Database utilizing USFS FIA data

Biomass Supply and Demand Considerations

- Spatial Market - There can be significant regional variations among supply and demand for timber products, among states and within states
- Emerging Market – advancements in harvesting and utilization techniques could significantly influence its viability and cost
- New Market - the addition of another product to the forest products industry could have a positive effect on overall timber supply and forest health

Thank you

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