



OPPORTUNITIES AND CONSTRAINTS: PRIVATE LANDOWNER PERSPECTIVE

Southeast United States Bioenergy Study Tour

April 10-14, 2016

Oak Ridge National Laboratory

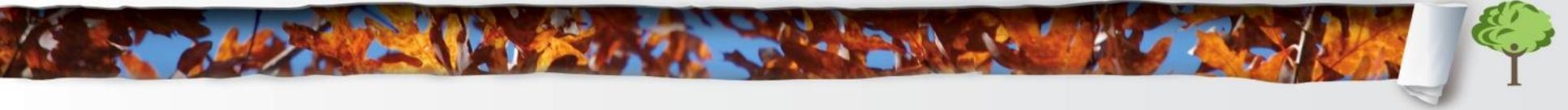
2014

Forest Landowners Association



- Founded in 1941 FLA is leading the discussion in fostering trust and facilitating collaboration among a diverse set of stakeholders to create solutions for ensuring stewardship, market access and generational transfer of private forestlands.
- 45 states
- 50 million acres

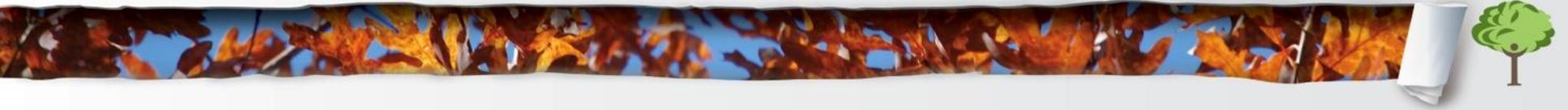
FLA Focus and Priorities



Guiding Principles for FLA:

- 1) Security of Private Property Rights
- 2) Access to Free and Open Markets
- 3) Fair and Certain Taxation

Policy Priorities



Order of operation to understand the issue of biomass and forestry:

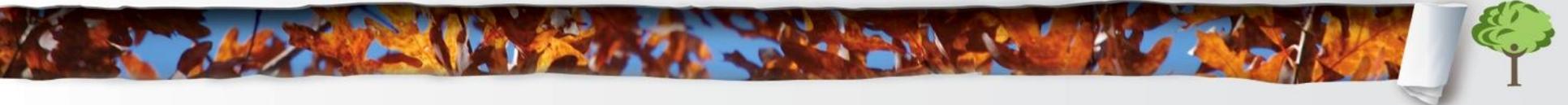
- 1) History of the Climate Change and biomass in Forestry
- 2) Why does it matter
- 3) Major Concern

History of Climate Change



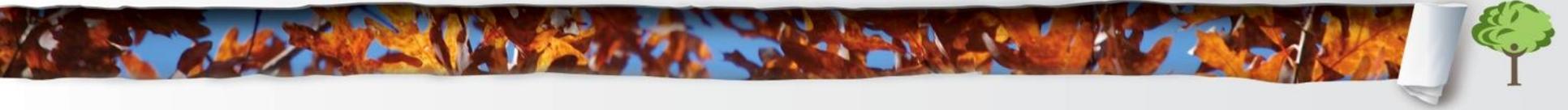
- **1861** – Irish physicist Tyndall shows greenhouse effect
- **1896** – Swedish chemist Arrhenius concludes coal burning will increase greenhouse effect
- **1958** – US scientist Keeling begins atmospheric CO₂ measurements
- **1975** – US scientist Broecker puts “global warming” term in public domain
- **1988** – IPCC formed
- **1997** – Kyoto Protocol

History of Climate Change



- **1998** – El Nino produces warmest year on record
- **2001** – Bush removes US from Kyoto process
- **2008** – Obama pledges to “engage vigorously” with rest of the world on climate change
- **2009** – ClimateGate
- **2009-11** – UN Copenhagen, Durban
- **2015** – UN Climate Change Conference in Paris
 - Binding and universal agreement on climate; resulted in a non binding agreement to “name and encourage” but a general path forward towards climate action

History of Forest and Climate Change

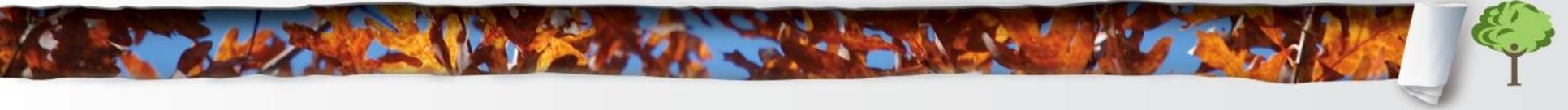


- **UN Conf. on Enviro. & Development 1992**
 - general understanding of forest sustainability

US Policy Initiatives:

- **Renewable Fuel Standard**
 - volumes established in 2005 EPA Act for fuels to blend into gas.
- **Energy Independence Security Act '07: (EISA)**
 - Biomass: Ambiguous language, undefined by statute – “cleared before the passage of this sentence”; “planted”; “pre-commercial thinning”
 - Most restrictive interpretation excludes 88% of private forests
 - **Bottom Line:** Adversely impacts the siting of new facilities

History of Forest and Climate Change



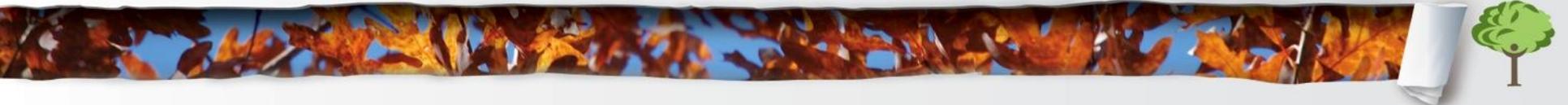
US Policy Continued..

- 2008 Farm Bill
 - ▣ Inclusive definition of biomass

- 2009 Waxman-Markey
 - ▣ Succeeded in inclusive definition of biomass

- 2015 Clean Power Plan (CPP)
 - ▣ SIP's "Qualified sustainably derived biomass"

Defining Sustainability in US

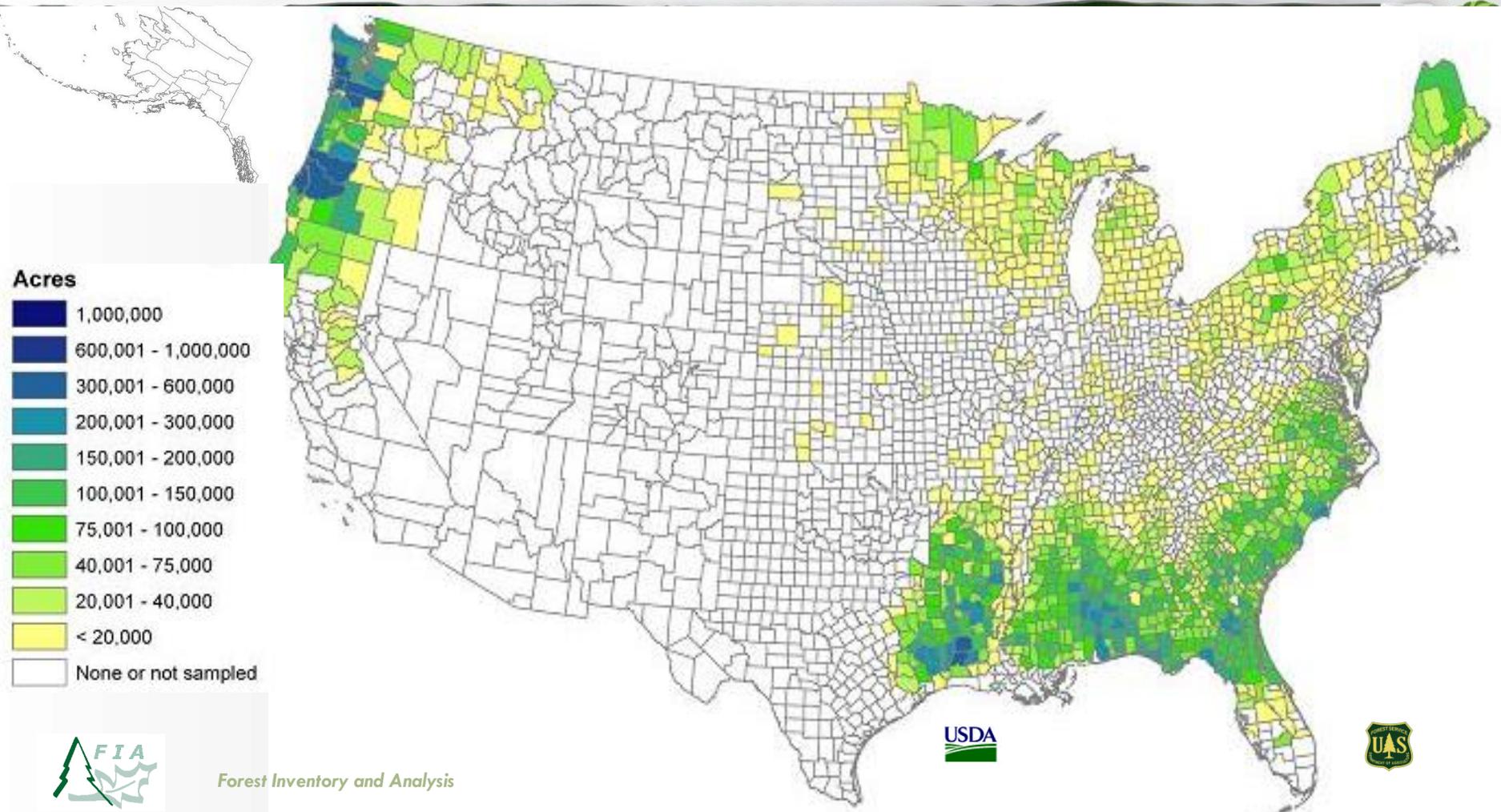


□ Why does it matter?

-restrictive definitions constrain markets

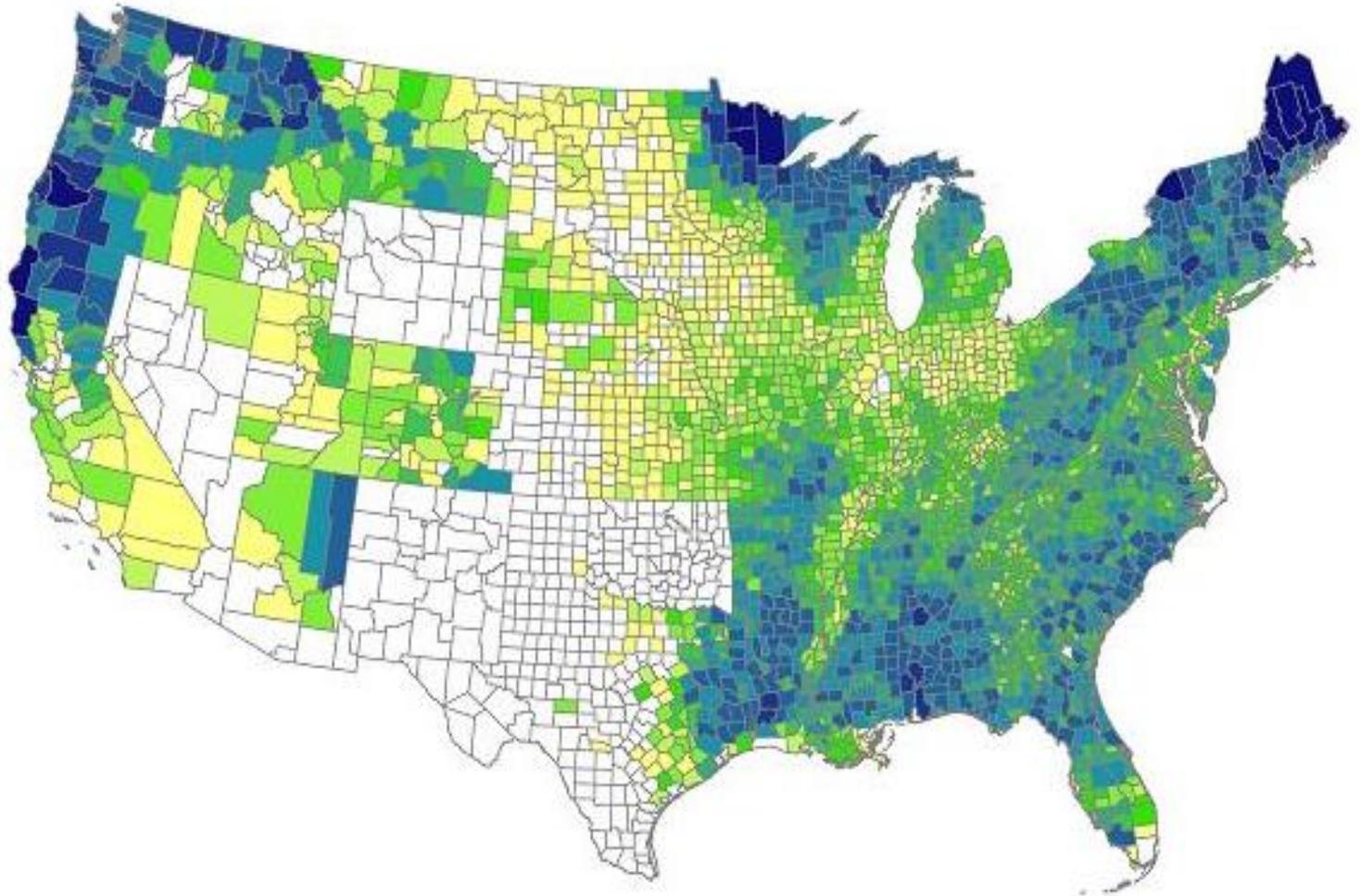
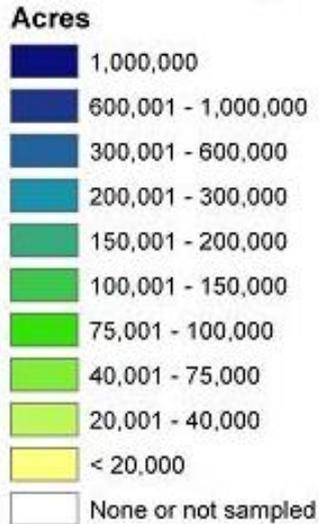
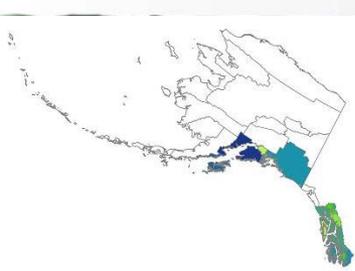
2007 EISA vs. 2008 Farm Bill

Area of Timberland Qualifying Under the 2007 EISA



USDA FOREST SERVICE
Northern Research Station
Forest Inventory and Analysis
Sources: USDA Forest Service, 2009
Visit: <http://www.ncrs2.fs.fed.us/4801/fiacdb/>
Produced April 9, 2009, Author: Barry Wilson

Area of Timberland Qualifying Under the 2008 Farm Bill



Forest Inventory and Analysis

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Defining Sustainability

- 
- Why does it matter?
 - ▣ Globally there are 67 ongoing certification initiatives designed to assure sustainability of bioenergy

Major Concern: Assuring Sustainability

1) Restrictive definitions constrain markets

Adhering to sustainability principles for market entry

2) Restrictive definitions can regulate land use

Sustainability principles dictating management

THE FOREST PRODUCTS INDUSTRY & THE SUSTAINABLE CARBON CYCLE

NATURAL AND MANMADE SOURCES EMIT CARBON

- CO₂ is released into the atmosphere from a variety of sources, including bioenergy, fossil fuels, wildfires and others.



FOREST PRODUCTS CREATE A MARKET FOR TREES

- Forest products markets provide a financial incentive to replant more trees.
- Forest products hold onto carbon, both while in use and when they are recycled.



MANUFACTURING CREATES CARBON-NEUTRAL ENERGY

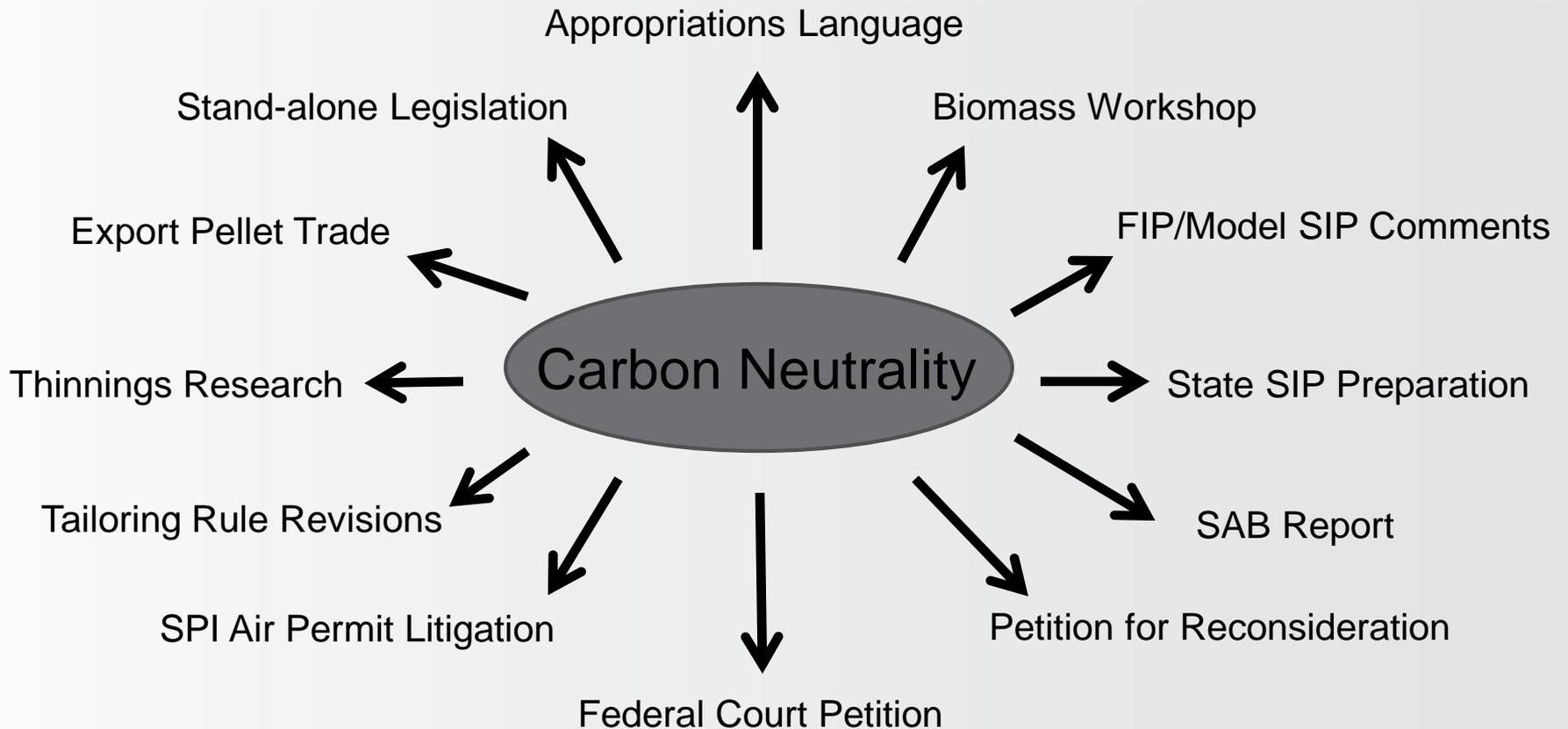
- Energy from forest products operations release CO₂.
- That CO₂ would be released anyway when biomass decomposes.
- The production process converts biomass not used for product into renewable energy.



SUSTAINABLY-MANAGED FORESTS CLEAN THE AIR

- In the U.S., more than twice as much wood is grown than harvested.
- These trees naturally pull CO₂ from the atmosphere.

The Many Spokes of Carbon Neutrality



Major Concern- Assuring Sustainability



Methods of offering assurances:

- 1) Certification programs are the easiest path – FSC, SFI and PEFC
 - Certified Content - Certifying forests where fiber is being harvested
 - Certified Process - Certifying the process by which the fiber is being harvested

Assurances of Sustainability



Methods of offering assurance:

Verification:

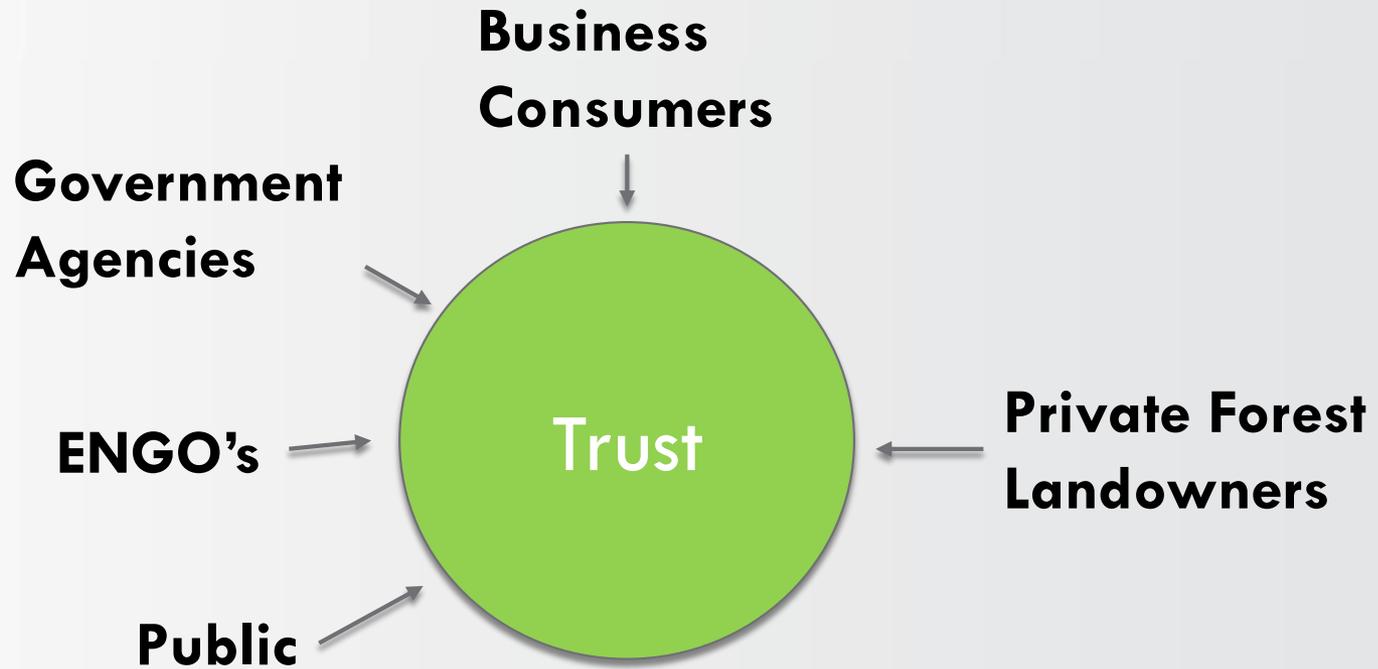
Barriers to Certified Content:

- 1) 89% of forests in the Southeastern US owned by landowners less than 1,000 acres
- 2) Revenue not great enough to justify cost to certify content

Verification:

- 1) UK Timber Standard
- 2) SBP certification
- 3) Dutch
- 4) Other....

TRUST



Create awareness and understanding about private working forests
So we can Keep Working Forests Working

Thank You!

JOIN
the
5,000
others

We don't
let national
policy
uproot the

HERITAGE

To
SUSTAIN
private
forests

we must sustain the people who own them.

Reality: Growth Drain Ratio

Timberland Area and Volume by Survey Year, South

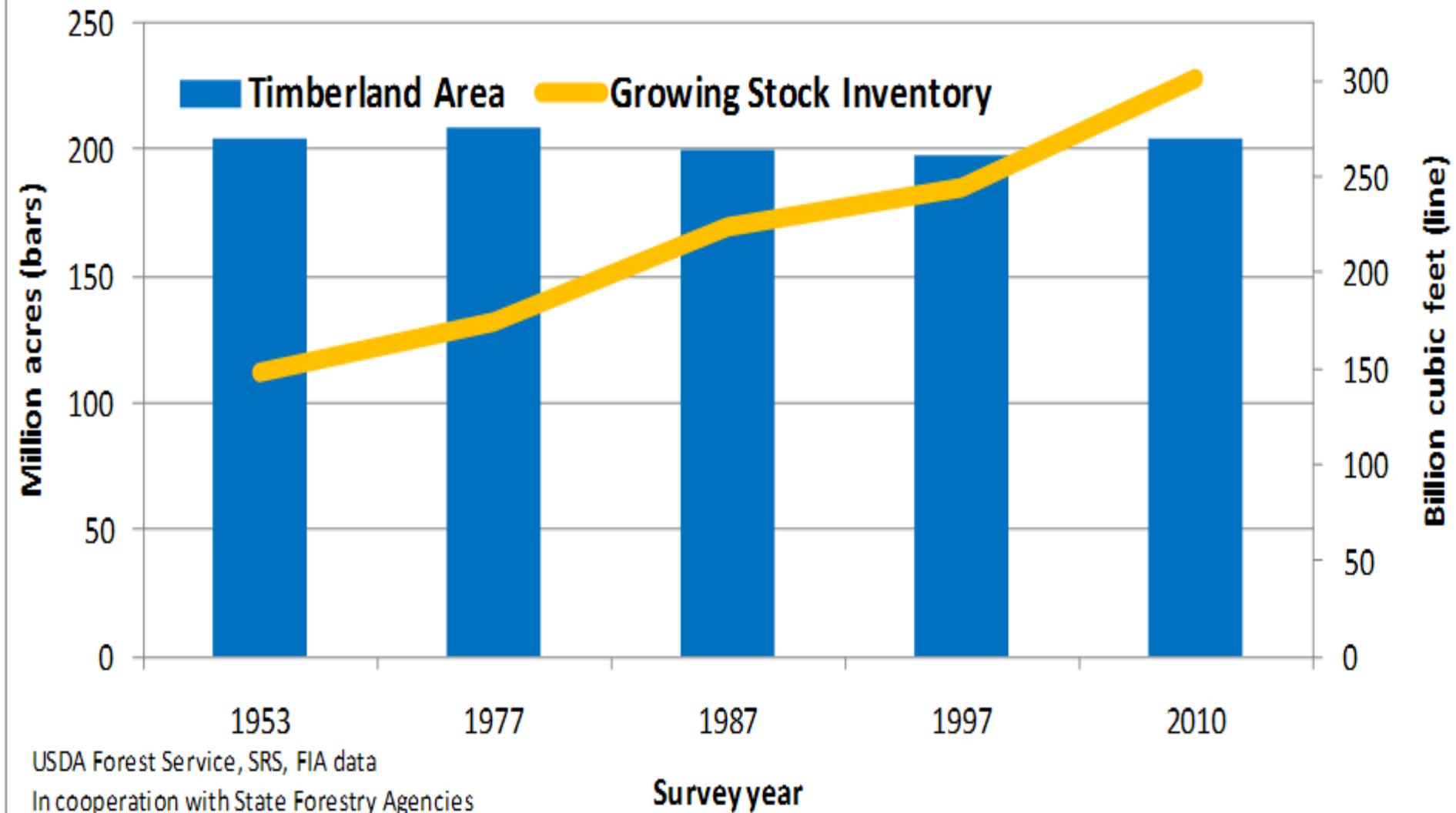
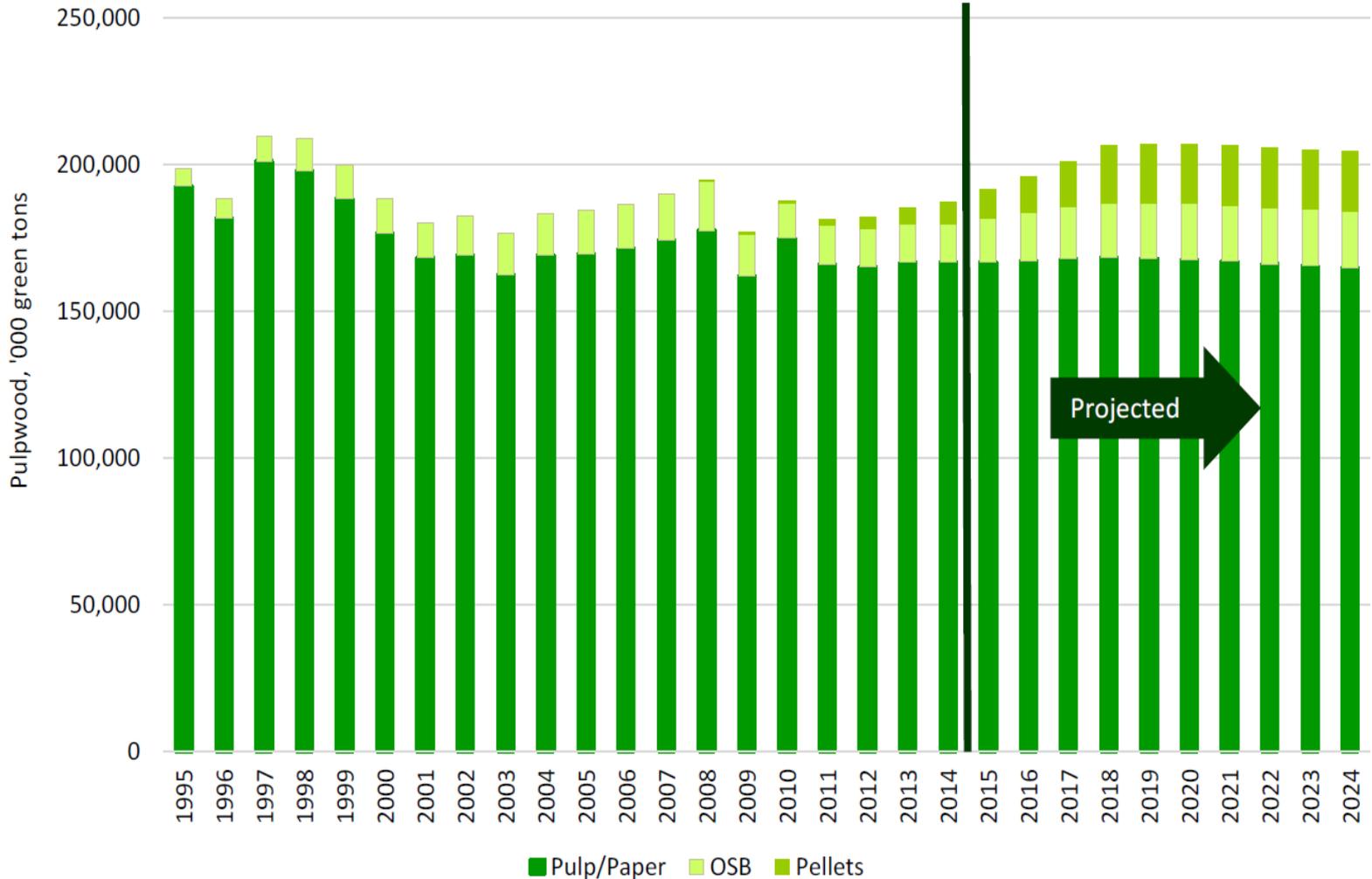


Figure 11. Pulpwood and Chip Demand in the South: Hardwood and Softwood



Environmental groups are Being Heard

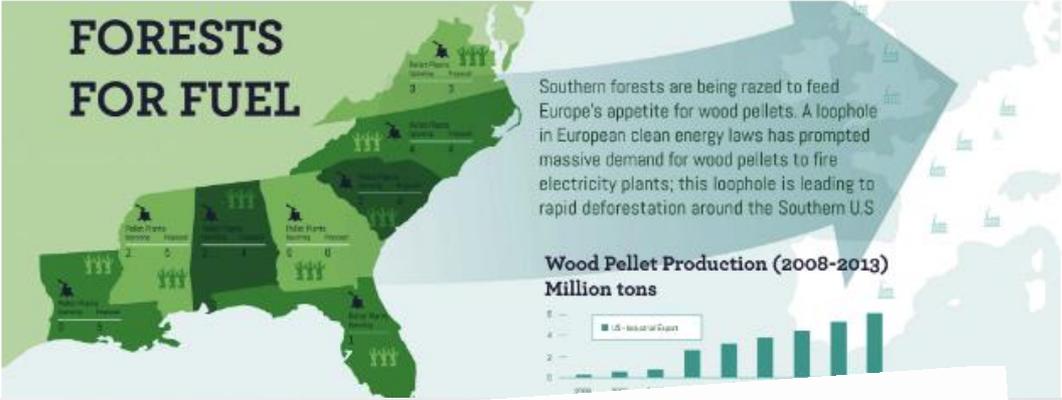


OUR FORESTS. OUR STRENGTH.

- About Us
- Campaigns
- Our Forests
- Media
- Blog
- Act Now
- DONATE

SEE HOW OUR FORESTS FUEL EUROPE.

VIEW & SHARE »



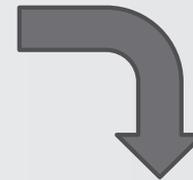
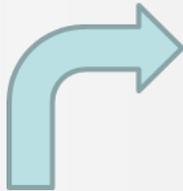
US Forest Service Report Justifies Growing Concerns About the Future of Southern Forests

The Anti-Forest Carbon Cycle



Searchinger

An "Accounting Error"



EPA

Sustainability = Carbon Neutral

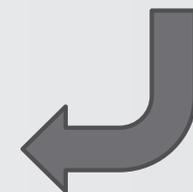
Manomet

Carbon Debt



Cary Institute

Biomass worse than coal



Trust Begins with Private Working Forests



America's Working Forests Are Healthier Than Ever Before

Ensure Their Future

FIND OUT MORE ↘

Private Working Forests. Public Benefits.



Wildlife, Water and



Communities and



Beyond Wood



Caretakers of the

Online and On the Ground



Become a Change Agent



- Harnessing the political muscle of the forest landowner constituency
- Moving from *protecting* to
- *PROMOTING and INFLUENCING*

- www.forestamerica.org





These Private Landowners Choose to Manage Their Lands Responsibly

One Proof of the Success of Sustainable Forest Management is There are More U.S. Forest Lands Today Than 100 Years Ago, Despite an Increase in Population

100
years ago

Today



 [TWITTER STREAM](#) 