

# Wood Energy Potential in Maryland

*...and why it matters to the  
Sustainable Forestry Council*

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# Before I forget...

Current efforts:

- Baltimore County Wood Energy Feasibility
- Wood Energy Coalition
- Biomass Harvesting BMPs
- Pinchot Report

**And forget about BCAP.** If we're going to make this happen, we're going to make it happen ourselves.

# SFA 2009

**(9) FORESTS ARE A RENEWABLE RESOURCE THAT HELP THE STATE MEET ITS RENEWABLE ENERGY GOALS THAT ARE CONSISTENT WITH THE STATE'S:**

- (I) GREEN POWER GOAL FOR STATE FACILITIES;**
- (II) RENEWABLE ENERGY PORTFOLIO STANDARD;**
- (III) HEALTHY AIR ACT; AND**
- (IV) MARYLAND CLEAN ENERGY INCENTIVE ACT OF 2006;**

# SFA 2009

SECTION 8. AND BE IT FURTHER ENACTED,

That Maryland's green power goal for procurement of renewable energy by State government be met, to the extent practicable, *through the provision of financial and other incentives intended to promote in-State production of renewable energy*, with due consideration afforded to biomass-fueled facilities.

# Other Related State Policies

- Renewable Portfolio Standard (20% by 2022)
- Climate Action Plan
- Greenhouse Gas Reduction Act
- Chesapeake Executive Council (biofuels)
- Renewable Fuel Standard
- Renewable Electricity Standard (maybe)



Assumption is that policy and economics will drive energy markets to use wood.

So then the question becomes: *What's sustainable?*

Or: *It's coming. But are we ready for it?*

# FACT

Here's an unavoidable fact...

- 40% of energy pie is thermal.
- **NONE** of the aforementioned policies address thermal.

# The Potential for Sustainable Wood-Based Bioenergy in Maryland

Developing Safeguards for Woody Biomass Harvests and  
Evaluating Wood-Based Bioenergy Markets

*~Pinchot Institute for Conservation, August 2010*

*Examined 3 issues:*

- » *Supply chains & characterization*
- » *Technologies*
- » *Policy Framework*



# Supply

## Existence vs. Availability

A harsh glimpse at reality:

- 85% of landowners <10acres
- 85% plan for NO management
- 80% of private forests are likely off-limits

# Supply

- Forest management – limited by social and biophysical factors (see previous slide)
- Mill residues – small and competitive market
- Urban – perhaps 800k tons/yr. Low cost.
- SRWC – theoretical 800k tons, but not likely to happen

# Supply

- Conclusions?
- Lots of biomass  $\neq$  biomass market
- Supply chain logistics a huge barrier to “traditional” forest residues, *for the moment.*
- Urban wood is low hanging fruit.

# Technologies

- AWC and CHP are highly efficient (80 – 90%)
- Electric only are not (< 25%)
- **THERMAL APPLICATIONS BEST**
  - Scalable
  - Affordable
  - Efficient
  - Permittable
  - Adaptable

# Thermal Applications

- 3,000+ potential sites
- 10 States have Fuels for Schools (so we know this stuff works)
- 5-20yr payback
- Fuel savings leading driver
- Considered best options for MD



# Thermal Applications

2 points worth highlighting:

- Payback periods shrink as fossil fuel costs rise.
- Scalable to local community fuel supply.

# Conclusions

## **Drivers:**

- Policy
- Ample supplies (price stable, affordable, local)
- Clean alternative
- Savings

## **Barriers:**

- Upfront capital sources
- Lack of policy support
- Unfamiliar within support infrastructure

# Recommendations

1. Existing incentive programs should include THERMAL applications, especially those that use wood.
2. Existing “preference” policies should recognize BTUs.
3. AQ regs should de-couple wood from coal and trash.
4. State buildings should lead by example.

**Thank you!**



# Review









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