



ACORE Briefing

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Biomass Thermal Policy and
Legislative Opportunities

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Hearth & Home Technologies

- 1,300 Members
- Sales of \$423.5 Million (2008)
- Produced and shipped over 100,000 biomass direct thermal appliances (2008)
- Enough to offset the thermal energy equivalent of 900,000 barrels of oil
- Carbon footprint reduction of 319,000 tons of carbon dioxide



Renewable vs. Non-renewable

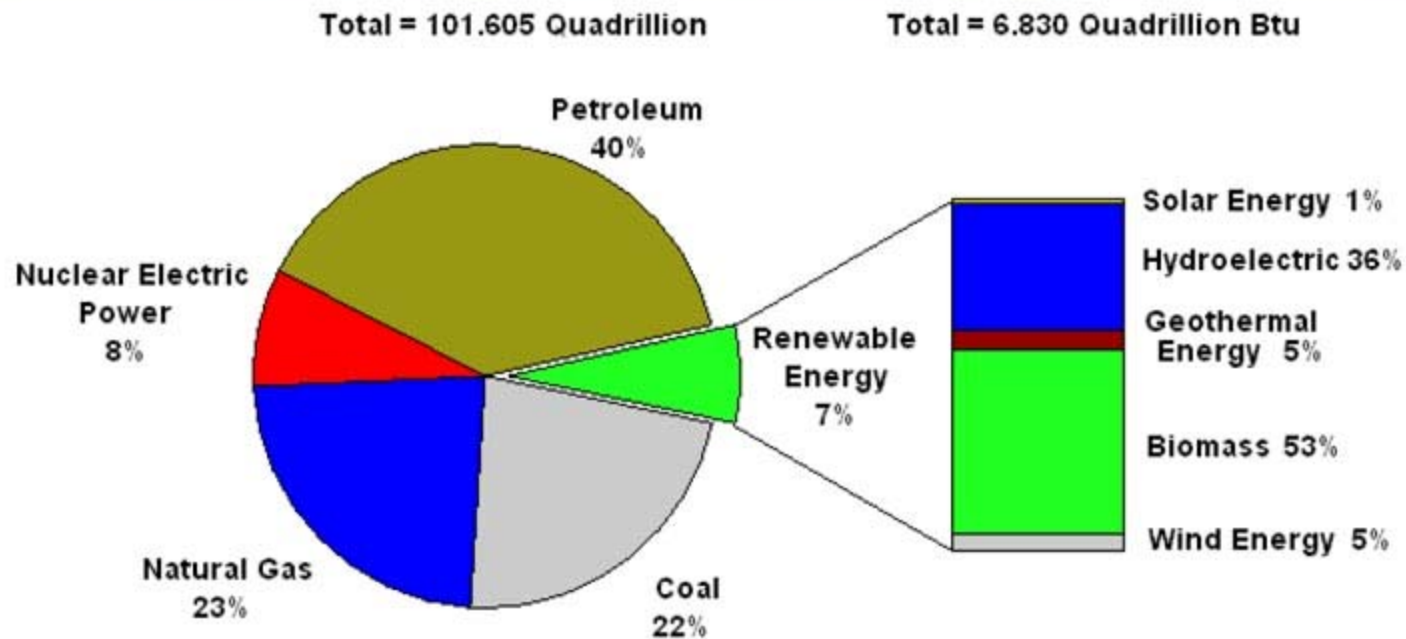
- The 2008 production of Harman & Quadra-Fire EPA certified clean-burning wood stoves, and pellet stoves, boilers and furnaces will save the U.S. 900,000 barrels of oil in energy equivalency, through the use of wood, pellet and densified agricultural by-products

1 ton of pellets =
2.8 barrels of oil



Role of Renewable Energy Consumption

The Role of Renewable Energy Consumption in the Nation's Energy Supply, 2007, from DOE-EIA



6,830,000,000,000,000 btu's or 6,830,000,000 MBTU's

1,500,000 tons * 16 MBTU/ton = 24,000,000 MBTU's

$24,000,000 / 6,830,000,000 = 0.35\%$ of Renewable Energy Market

Or 0.66 % of the Biomass Market or 0.02% of the Total Energy Market

Biomass Heat Uses ALL the Fuel Energy

Total BTU's Consumed To Generate One BTU of Usable Fuel Output



Sources:

Liquid Fuel Data: National Renewable Energy Lab, originally from Wells to Wheels Analysis of Advanced Fuel/Vehicle Systems* by Wang, et al (2005)

Wood Pellets: Based on 15% wood waste firing burner and 6% electricity usage in pelletizing (improves further with cogeneration, which was not assumed.)

Net Energy Return



**Ethanol from
Corn**

1.25 to 1

**Densified Wood
Pellets**

13 to 1

Wood

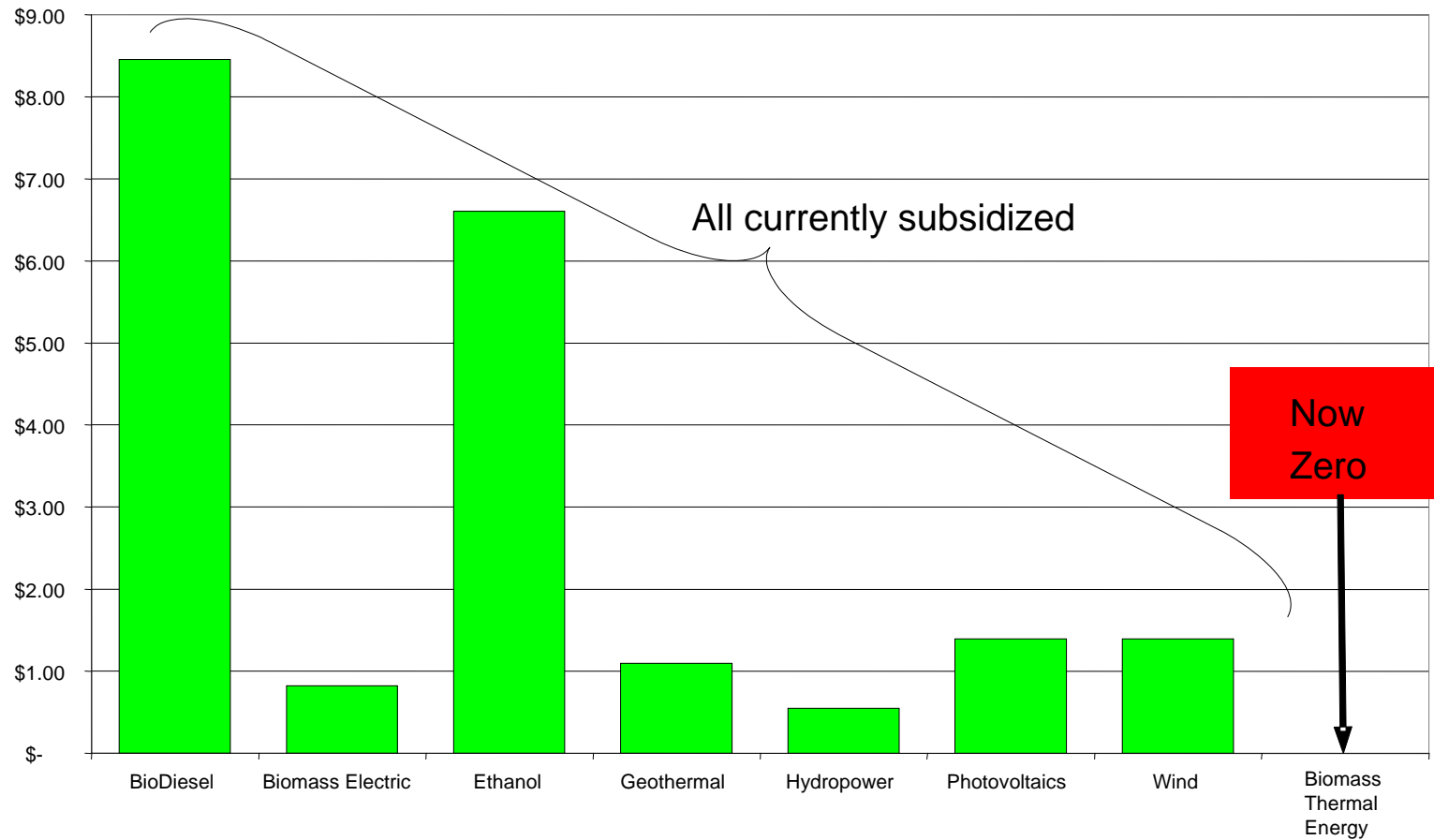
27 to 1

Biomass Thermal Energy

- It is one of the most efficient forms of energy
- It is Carbon Neutral
- It is an affordable form of renewable energy that consumers can install TODAY!
- It cuts our dependence on foreign oil
- SO, WHY ARE WE HERE???

Policy Framework for Biomass Thermal – *more like lack thereof* –

Subsidy Per Million BTUs of Fuel Displaced



Change is Needed

- Most of the federal assistance goes to biomass for electricity and liquid fuel
- Level the playing field
- Grassroots
- Legislative champions
- More exposure for biomass thermal
- Enactment of legislation to benefit the biomass thermal industry

Opportunities in Biomass Thermal

- H.R. 2080, the American Renewable Biomass Heating Act – Sponsored by Representative Paul Hodes (D-NH)
- S. 1094, the Renewable Energy Alternative Production Act (REAP Act) – Sponsored by Senator Ron Wyden (D-OR)
- S. 1643, the Cleaner, Secure, and Affordable Thermal Energy Act – Sponsored by Senator Olympia Snowe (R-ME)
- Legislation regarding a Commercial/Industrial Biomass Heating Tax Credit to be introduced by Senator Jeanne Shaheen (D-NH) and Representative Paul Hodes (D-NH)
- Concentrated Animal Feeding Operations (CAFO) to Fuel Switch

Climate Change/Cap-and-Trade

H.R. 2454, the American Clean Energy and Security Act and S. 1733, the Clean Energy Jobs and American Power Act

- Definition of Biomass
- Certified Stove Program

Agriculture Section

S. 2729, the Clean Energy Partnerships Act – Sen. Stabenow's (D- MI)

- Potential to be an eligible offset project
- Repowering Assistance
- Rural Energy for America

Opportunities in Biomass Thermal

Existing Programs

- Biomass Crop Assistance Program (BCAP)
- Community Wood Energy Program
- Fuels for Schools
- Rural Energy for America Program (REAP)
- Numerous Grants

Opportunities in Biomass Thermal

CURRENT LAW

**American Recovery and Reinvestment Act—
HR 1 – 30% Tax Credit for 75% Efficient
Biomass-Burning Stoves** – 30% consumer
tax credit (up to \$1500) for the purchase and
installation of a 75% efficient biomass-burning
stove. Effective January 1, 2009 – December
31, 2010.

Regulatory Hurdles for Biomass Thermal

- EPA's New Source Performance Standards for Hearth Appliances
- EPA's proposed rulemaking initiative to set MACT and GACT for area source wood-burning boilers and heaters

Outlook for 2010

- Legislative outlook uncertain
- Election year politics
- Jobs, jobs, jobs
- What needs to be done

Grassroots Lobbying

Congresswoman Cathy McMorris-Rodgers

- All politics are local
- Success comes from sincerity and integrity
- Message content
 - National & community opportunities/benefits
 - Energy independence (security)
 - Greenhouse gas reduction
 - Government policies should stimulate technological advances
 - Government policies should stimulate our economy
 - Job creation



Grassroots Lobbying

- 1 million homes heating with densified biomass in U.S.
- Average home consumes 3 tons of pellets annually
- United States USDA/Forest Service
- 368 million bone-dried tons of sustainable annual production of down, diseased and dying trees
- This is enough biomass to thermally heat 100 million homes

Senator Maria Cantwell stopped my presentation and asked “You are heating 1 million homes today and the Healthy Forest Initiative and Fire Mitigation could supply enough biomass to heat 100 million homes?” I answered “Yes.” She responded with “We need to write a bill.” And I said “Thank-you.”





QUESTIONS?

THANK YOU!

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