AHB: Renewable Fuels for the Pacific Northwest

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AHB is researching a system for locally-grown fuels in the PNW.

Purpose grown hybrid poplars

Drop-in replacement transportation fuels
AHB is one of seven USDA AFRI “CAP” projects around the U.S.
AHB is organized into five teams.

- Feedstock
- Conversion
- Sustainability
- Education
- Extension
Researching all aspects of feedstock development

- Growing and harvesting technologies
- Clone selection
- Quantifying yields
- Production costs and logistics
Four demonstration sites have been established.
Zeachem’s demonstration plant is located in Boardman, OR.
Acetic acid and cellulosic ethanol have been produced so far.
Environmental, economical, and social sustainability?

- Life cycle analysis
- Soil, water, and wildlife.
- Biorefinery location and logistics
- Community perceptions and potential impacts
Challenges ahead
Developing new markets presents a “chicken and egg” problem.
10,000 - 18,000 acres of land would be needed for a biorefinery.
Growers have concerns based on negative experiences with poplar.
It may be difficult to compete with fossil fuel prices.
High-value bioproducts present short-term economic opportunities.
Visit us online for more information.

The Carbon Balance of Biofuel Production

The Sustainability Team is conducting a life cycle assessment (LCA) to determine total carbon emissions associated with the production and use of hardwood biofuels.

http://hardwoodbiofuels.org