

BIO FUELS TECHNOLOGIES II
Monday, January 30
3:15 – 4:15 PM

**OVERVIEW OF WASTE-BASED SYSTEMS AND CROP AND FOREST
PRODUCTS-BASED SYSTEMS**

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Introduction

Energy produced from biologically-based sources - including agricultural crops, crop residues, wood, and waste products - can be used to meet the Alternative Energy Portfolio Standard Tier I requirements. This second of two panels on Bio-Fuels Technologies will focus on the challenges and opportunities for significant energy being produced from the woody biomass resources in the Pennsylvania.

Woody Biomass

According to various estimates, the over sixteen million acres of Pennsylvania forest land may contain as much as 200-300 million tons of woody biomass available for consumption as a source of alternative energy¹. In October of 2004, the Pennsylvania Secretary of Agriculture, Dennis C. Wolff, recognizing the need to develop a comprehensive plan for the large and growing component of low-use Pennsylvania hardwood resource, commissioned a Hardwoods Blue Ribbon Task Force to determine options for identifying and developing economic opportunities for this resource. While the initial and primary thrust of this Task Force was on identifying potential “value-added” or secondary hardwood product opportunities, a committee was commissioned within the task force to study and report on the potential for development of alternative energy products from available woody biomass resources. The chairman of that committee, Mr. Frank Judd, marketing manager for The Rainforest Alliance and director of the Pennsylvania Certified Products Alliance, will share with us the findings to date of that committee.

Woody biomass is also being developed as an energy “crop” for direct-fired applications. Dr. James T. Cobb, Associate Professor Emeritus at the University of Pittsburgh Department of Chemical and Petroleum Engineering, will introduce and differentiate between current efforts to develop switchgrass, hybrid willow, and hybrid poplar as energy crops in the northern tier of the United States and specifically in Pennsylvania.

As an alternative to direct-fired applications, biomass gasification has attracted a lot of national interest. Dr. Cobb will summarize gasification efforts in the Commonwealth, and will also report on the status of the Pennsylvania Biomass Working Group.

Some progress has already been made in the private sector to capture woody biomass streams for generation of electricity. Mr. John Karakash, Fuel Manager for the Suez Energy Northumberland Cogeneration Facility, will discuss with us the current state of woody biomass cogeneration and its progress in establishing a foothold for this industry.

¹ 2005 US Forest Service Forest Inventory Analysis for Pennsylvania