ENERGY COLLOQUIUM

The Role of Biomass in America's Energy Future



Lee Lynd

Professor of Engineering
Thayer School of Engineering
Dartmouth College, New Hampshire

Thursday,
February 2, 2006
Bartos Theatre
E15-070
One Ames Street, MIT

3:30 pm Reception in Theatre Lobby 4:00 pm Lecture in Bartos Theatre

Reception follows in Lobby

Sponsored by The Energy Research Council and

The Laboratory for Energy and the Environment

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Lee Lynd photo by Douglas Fraser, Dartmouth photographer.

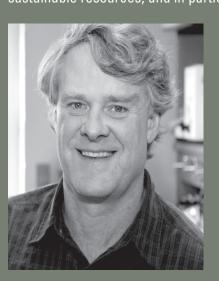
Zymomonas mobilis by National Renewable Energy Lab (NREL).

Corn stover by NREL. New Energy's pilot plant by NREL..

Abstract:

Selected results will be presented from a near-complete, multi-institution project entitled "The Role of Biomass in America's Energy Future," which seeks to identify scenarios in which biomass provides a significant fraction of energy services and to recommend policies that foster this outcome while honoring sustainability and environmental objectives. Working hypotheses will be presented regarding feedstock and product combinations that are - and are not particularly promising from the point of view of various metrics. The sufficiency of biomass resources in relation to meeting needs for large-scale energy services such as transportation will also be addressed in some detail.

Massachus Institute of Technology Professor Lee Rybeck Lynd leads an interdisciplinary research group by enabling and envisioning a transition to a world supported by sustainable resources, and in particular the role of plant biomass



in this context. His pioneering contributions span the science, technology, and policy domains, and include leading research on fundamental and biotechnological aspects of microbial cellulose utilization. Professor Lynd co-leads a large multi-institutional project entitled "The Role of Biomass in America's Energy Future."

Dr. Lynd is Professor of Engineering and Adjunct Prof. of Biology at

Dartmouth College, where he has been on the faculty since 1987, and is Professor Extraordinary of Microbiology at the University of Stellenbosch, South Africa. Dr. Lynd holds a B.S. degree in biology from Bates College, an M.S. degree in bacteriology from the University of Wisconsin, and masters and doctoral degrees in engineering from Dartmouth College. He is a recipient of the National Science Foundation presidential young investor award, and a two time recipient of the Charles A. Lindbergh Award in recognition of his efforts to promote balance between technological development and environmental preservation. He is also associate editor of Biotechnology and Bioengineering, and manager of the Link Foundation Energy Fellowship Program.