

Book Review

Wood Energy

Edited by Michel L. Hiser, Ann Arbor Science Publishers Inc., Ann Arbor, Michigan 48106, 1979, 145 pp, Price £ 9.45. (European distribution by John Wiley, Chichester, Gt. Britain.)

This book presents the proceedings of the Governor William G. Milliken's Conference on Wood Energy, held at the University of Michigan in Ann Arbor, November 29, 1977.

The aim of this conference was to discuss wood as an alternative source of energy. Hence, the book contains contributions on: forest resource as energy potential; forest management, fuel definition and analysis; combustion and generation technology; utilization of forest bio mass for electric power generation; energy generation from wood waste, and an example of institutional heating and a wood fired steam plant. On an equal weight basis wood yields fewer Btu than coal or oil, but for a wood-producing state such as Michigan the question of wood as partial energy supplier is quite relevant.

An economic feasibility study compares a large scale coal burning unit with a wood burning plant of 50 MW capacity utilizing waste wood. While the total power supply costs for the coal option are significantly lower than for the wood option, an evaluation based on a 30 year life cycle shows that wood becomes competitive with coal. If wood is going to be used on a large scale, the concept of energy plantations with intensive culture of tree crops should be considered as well. The economic evaluation is, of course, based on the American situation and is oriented towards the forest-rich state of Michigan. Though not all the aspects related to wood as energy source are discussed, the book gives a fair introduction into this field.

W. Visscher
Technische Hogeschool Eindhoven
The Netherlands