

1. Record Nr.	UNINA9910298306903321
Titolo	Bioenergy from Wood : Sustainable Production in the Tropics // edited by Thomas Seifert
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2014
ISBN	94-007-7448-6
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (269 p.)
Collana	Managing Forest Ecosystems, , 1568-1319 ; ; 26
Disciplina	333.794
Soggetti	Forest management Renewable energy resources Forests and forestry Materials science Forestry Management Renewable and Green Energy Forestry Materials Science, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Bioenergy from wood in the tropics -- 2. Localisation of biomass potentials -- 3. Modelling and simulation of tree biomass -- 4. Managing Southern African woodlands for biomass production: The potential challenges and opportunities -- 5. Biomass production in intensively managed forests -- 6. Biomass Harvesting and logistics -- 7. Biomass conversion to bioenergy products -- 8. Biomass Quality -- 9 Socio-economic aspects of rural bio-energy production -- 10. Ecological impacts of biomass production at stand and landscape levels -- 11. Determination of the environmental implications of bio-energy production using a life-cycle assessment approach.
Sommario/riassunto	This book is written for scientists and practitioners interested in deepening their knowledge of the sustainable production of bioenergy from wood in tropical and sub-tropical countries. Utilising the value chain concept, this book outlines the necessary aspects for managing sustainable bioenergy production. A wide range of topics is covered including biomass localization, modelling and upscaling, production

management in woodlands and plantations, and transport and logistics. Biomass quality and conversion pathways are examined in order to match the conversion technology with the available biomass. A section is dedicated to issues surrounding sustainability. The issues, covered in a life-cycle assessment of the bioenergy system, include socio-economic challenges, local effects on water, biodiversity, nutrient-sustainability and global impacts. Through this holistic approach and supporting examples from tropical and sub-tropical countries, the reader is guided in designing and implementing a value chain as the main management instrument for sustainable wood.
