1. Record Nr. UNINA9911006752503321 Autore Bhatia S. C (Environmental consultant) Titolo Advanced renewable energy systems / / S.C. Bhatia Pubbl/distr/stampa New Delhi:,: Woodhead Publishing India Boca Raton, FL:,: CRC Press,, [2014] ©2014 **ISBN** 1-5231-4788-1 0-429-09157-5 93-80308-73-6 Descrizione fisica 1 online resource (2 v.): ill Collana Woodhead Publishing India in energy Disciplina 333.794 Soggetti Renewable energy sources Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto 1. Energy resources and their utilisation; 2. Solar radiations; 3. Solar devices; 4. Solar thermal energy; 5. Solar photovoltaic systems; 6. Energy consuming and converting equipments; 7. Nanotechnology and solar power; 8. Wind energy; 9. Status of wind energy in India; 10. Hydroelectric power; 11. Small hydroelectric plants; 12. Hydropower development in India; 13. Tide, wave and ocean energy; 14. Geothermal power generation; 15. Geothermal energy resources and its potential in India; 16. Biofuels: A review; 17. Biogas; 18. Biomass gasification; 19. Cogeneration: 20. Photosynthesis: 21. Ethanol: 22. Biodiesel: 23. Biohydrogen; 24. Algae fuel for future; 25. Nanotech biofuels and fuel additives; 26. Issues relating to biofuels. Sommario/riassunto Renewable energy is a natural energy which does not have a limited supply - it can be used again and again and will never run out. Renewable energy is derived from natural processes that are replenished constantly. In its various forms, it derives directly from the sun, or from heat generated deep within the earth. Included in the definition is electricity and heat generated from solar, wind, ocean, hydropower, biomass, geothermal resources, and biofuels and hydrogen derived from renewable resources. This two-volume book is a complete treatise on renewable energy sources and also includes

issues relating to biofuels. It serves as a text for the undergraduate and postgraduate students in relevant disciplines and a reference for all the professionals in the related fields.