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Descrizione fisica	1 online resource (222 pages)
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Soggetti	Energy policy Energy and state Renewable energy sources Energy harvesting Sustainability Energy Policy, Economics and Management Renewable Energy Energy Harvesting
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Development of a Novel Drag-Based Vertical-Axis Wind Rotor Inspired from Orange Sea-Pen -- Study Of Gas-Liquid Flow In A Curved Microchannel For Sustainable Energy Application.-Design Of A Microreactor For Biodiesel Synthesis -- Development Of Reforming Catalyst For Hydrogen Production And Its Suitability For Proton Exchange Membrane Fuel Cell -- Mechanistic Aspects Of Enhanced Kinetics In Sonoenzymatic Processes Using Three Simultaneous Approaches.
Sommario/riassunto	As India progresses fast in the 21st century, we also face daunting challenges of energy security and climate change. Tremendous development in various sectors like industry, agriculture, transport has resulted in huge rise in demand for energy. Fulfilling these demands through conventional fossil fuel based energy generation has given rise

to significant emissions (both gaseous and liquids) that have caused pollution to atmosphere and aquatic eco-systems. Use of sustainable and green (or renewable) resources and technologies offers a viable and promising solutions to these issues. Last two decades have witnessed intense research activities in Indian academic institutions on renewable energy resources. These include biofuels (both liquid and gaseous) through thermochemical and biochemical conversion of biomass, solar energy through thermal and photo-voltaic routes, wind energy and hydroelectric energy. North-East Research Conclave (NERC) – 2022 was organized by Indian Institute of Technology Guwahati with aim of bringing together researchers in diverse fields of science and technology and provide a knowledge-sharing platform to achieve sustainable development goals. This monograph contains papers presented in the session on Sustainable Energy Generation and Storage in NERC. A total of 16 papers in this monograph cover wide areas in renewable energy. The contents of this monograph will of interest to students and researchers in academic institutions as well as industry.

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