





Special Issue Reprint

# **Energy Development for Sustainability**

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Recently, energy development has received significant attention through the promising results of technology development, experimentation, computational modeling, and validation. However, it remains a persistent challenge to produce the needed energy while significantly reducing the environmental effects, such as the emission of greenhouse gases, which lead to climate change. Moreover, technological and economic limitations may also hinder energy development for sustainability. This book entitled Energy Development for Sustainability covers technologies, products, equipment, and devices as well as energy services based on software and data protected by patents and/or trademarks. This book will serve as a collection of the latest scientific and technological approaches to various energy development initiatives for sustainability encompassing novel sonocatalytic application and integrated algal and sludge-based wastewater treatment system, energy storage, sustainable building, gas absorption, organosolv pretreatment, energy usage and CO<sub>2</sub> emission in transportation, coal regulation for energy, solar photovoltaic system, torrefaction for fuel production, energy management system, clean energy incubator, biofuels from microalgae, and the influence of COVID-19 on climate change. Overall, this book addresses researchers, advanced students, technical consultants, as well as decision-makers in industries and politics. This book contains comprehensive overview and in-depth technical research papers addressing recent progress in the area of energy development for sustainability. We hope the ov this book.

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