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Nota di contenuto	Part 1: Understanding Net Zero Policies -- 1 State of Net Zero Policies: The Urgency of Net Zero Sustainability and Building a Sustainable Future -- 2. The Impact of Climate Change on Developing Countries -- 3. Economic Growth vs. Digital Sustainability: Striking the Balance -- 4. Socioeconomic Impacts of Net Zero Policies -- 5. Climate Resilience and Adaptation Strategies for Developing Nations -- 6. International Aid and Climate Finance for Developing Economies -- Part 2: Technological Solutions for Net Zero Emissions -- 7. Technological Innovations in Renewable Energy -- 8. Digital Technologies and Climate Action -- 9. Green Infrastructure and Smart Urbanization -- 10. Circular Economy and Waste Reduction Technologies -- 11. Energy Efficiency Technologies for Low-Income Countries -- Part 3: Policy and Governance for Net Zero Transitions -- 12. Global Net Zero Commitments: International Agreements.-13. National Policy Approaches to Net Zero in Developing Countries -- 14. Carbon Pricing

and Financial Incentives -- 15. Public-Private Partnerships for Net Zero Emissions and Climate Action -- 16. Strengthening Legal and Institutional Frameworks for Net Zero Economy -- Part 4: Barriers and Opportunities in Net Zero Implementation -- 17. Barriers to Technology Adoption in Developing Countries -- 18. Political and Social Challenges to Net Zero Policies Action -- 19. Financing the Transition to Net Zero -- 20. Energy Transition: Fossil Fuels vs. Renewables -- 21. Capacity Building for Green Technology -- Part 5: Sectoral Approaches and Future Outlook -- 22. Sustainable Agriculture and Land Use for Emission Reduction -- 23. Low-Carbon Transport and Mobility Solutions -- 24. Decarbonizing Industrial Processes -- 25. Green Technologies for Water Management -- 26. The Future of Net Zero and Digital Sustainability in Developing Regions.

Sommario/riassunto

This book provides a detailed overview of the causes, effects, and solutions to climate change as well as net zero policies in order to harness emerging technologies in order to address global warming and adopt sustainable practices for future generations without damaging the resources of today. It also offers various practical solutions and approaches for addressing global warming and the impact of net zero emissions across a range of sectors in addressing climate change and addressing global warming. The urgency to combat climate change has led to the emergence of innovative technologies that support net-zero policies and sustainability initiatives. This book examines how digital transformation and technological advancements are reshaping industries, governance, and environmental strategies to achieve a carbon-neutral future. This book provides an in-depth exploration of key technologies such as artificial intelligence, machine learning, blockchain, the Internet of Things (IoT), and big data analytics, demonstrating their role in optimizing energy efficiency, reducing carbon footprints, and enhancing environmental monitoring. It also discusses breakthroughs in green hydrogen, battery storage, carbon capture and storage (CCS), and bioengineering, showcasing how these solutions contribute to net-zero ambitions. A key highlight of this book is its focus on use of sustainable technological solutions for various sectors for climate change and net zero economy. From renewable energy breakthroughs to digital innovations such as IoT-based climate monitoring and blockchain-enabled emissions tracking, this section unpacks how technology can drive sustainability at scale. Case studies of successful implementations across different continents illustrate the transformative power of innovation in energy, urban planning, and industrial processes. Focusing on practical applications, the book covers various sectors, including manufacturing, transportation, agriculture, and urban planning. It illustrates how digital twin technology, smart grids, and precision farming can drive sustainability while fostering economic growth.
