

**List of topics (not limited to)**

**Section A: Artificial Intelligence in Sustainable Energy**

- The Role and Recent Development of AI for Sustainable Energy Systems
- Smart Energy Management in Residential and Commercial Systems
- Role of Machine Learning in Renewable Energy
- AI for Smart and Sustainable Transport
- Efficient Energy Management in Smart Grids
- AI Techniques applied to Photovoltaic and Wind Energy Systems
- Data analytics in Energy Management

**Section B: Blockchain in Sustainable Energy**

- The Role of Blockchain Technology in Renewable Energy
- Recent advancements in blockchain algorithms
- Peer-to-peer sustainable energy trading
- Blockchain for electricity data management
- Energy Trading
- Smart security in power grid
- EVs and security

**Section C: IoT in Sustainable Energy**

- IoT in Future Smart Cities
- IoT and smart solar farms
- Condition monitoring and Fault Diagnosis
- Green energy and Grid modernization
- Edge computing for renewable energy
- EVs and charging station optimization

**Aims & Scope**

*The aim of this book is to provide the latest advancements in AI, blockchain technology and IoT for sustainable energy systems. This book discusses the recent advancements in some of the applications in sustainable energy, e. g. residential and commercial smart grids, EVs, solar farms, wind energy systems, etc. The role of blockchain and IoT in sustainable energy systems can further improve the energy trading aspects having a smart and centralized energy management system. These technologies are also helpful in improving the security between energy transactions between two peers. The book will be a comprehensive guide to academicians, engineers and researchers who are working in sustainable energy system.*

**Last Date of Submission of Chapter: 16<sup>th</sup> August, 2022**



Arpit Jain, PhD  
AI Practitioner  
QpiAI India Pvt. Ltd.



Abhinav Sharma, PhD  
Assistant Professor  
UPES, India



Vibhu Jatley, PhD  
Assistant Professor  
UPES, India



Brain Azzopardi, PhD  
Senior Lecturer  
MCAST, Malta

NOTE: 1.) There is no submission/publication fee. 2.) The book will be sent to SCOPUS for indexing