Green Computing Approach Towards Sustainable Development

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About the Book

Green Computing Approach Towards Sustainable Development explores seminal research in Information Communication Technology (ICT) infrastructure in the dimensions of society, economy and environment. It begins with providing smart solutions with the use of ICT for achieving sustainability in society, environment and then shifts its focus on the measures for achieving sustainable development goals for environment and discuss their impact.

The ICT technologies which can be used to reduce GHG (greenhouse gas) emissions are discussed with the articles of Paris Agreement. The second chapter explains measures taken by India towards reaching the MDGs in various areas. The third chapter focuses on ICT's contribution as smart technology for environment management and protection. It provides insight of the methods to optimize the software which include algorithmic efficiency, resource allocation, virtualisation, terminal servers and their deployment in an efficient way for saving energy. The fourth chapter analyses the impact of Information Technologies and the Internet on sustainable development. It explores different green initiatives for promoting green ICT.

Salient Features

• Focuses on the dimensions of green informatics' contribution to reduction of energy consumption and gas emission.

• Recognizing the sustainable lifestyles and sustainable patterns of consumption and production, with developed countries with the study of Paris Agreement.

• Presents green ecology initiatives that focus on computing equipment that is more energy efficient, environment-friendly and includes programs to extend equipment's life and recycling.

• Evaluates the implementation factors that affect sustainable development.

• Discusses the critical areas and challenging issues towards achieving green computing.

• Explains the approach used by ICT for achieving green computing.

• Explores the sustainable economic development goals with its features.

• Identifies the factors that affect sustainability and its future.

• Highlights the role of urbanisation in sustainable development.

• Provides implementation tools of sustainable developments.

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About the Author

M. Afshar Alam :- is Professor and Head, Department of Computer Science and Engineering, Jamia Hamdard, New Delhi. He has teaching experience of more than 24 years. He has authored 9 books and guided PhD research works. He has more than 130 publications in international journals and conference proceedings. He has delivered special lectures at various academic institutions. He is a member of expert

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