

# Achieving Economic Growth and Welfare Through Green Consumerism

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A volume in the Advances in  
Marketing, Customer Relationship  
Management, and E-Services  
(AMCRMES) Book Series



Published in the United States of America by

IGI Global  
Business Science Reference (an imprint of IGI Global)  
701 E. Chocolate Avenue  
Hershey PA, USA 17033  
Tel: 717-533-8845  
Fax: 717-533-8661  
E-mail: [cust@igi-global.com](mailto:cust@igi-global.com)  
Web site: <http://www.igi-global.com>

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#### Library of Congress Cataloging-in-Publication Data

Names: Sinnappan, Punitha, 1986- editor.

Title: Achieving economic growth and welfare through green consumerism / edited by Punitha Sinnappan.

Description: Hershey, PA : Business Science Reference, [2023] | Includes bibliographical references and index. | Summary: "This book aims to offer a comprehensive analysis of green consumerism, taking into account the diversity of views and debates surrounding the ideology. The diversity of topics and multidisciplinary viewpoints will offer an insightful overview of the nature of green consumerism, its manifestations, issues, and practices. The book will help readers develop an understanding of what constitutes green consumerism and how it has evolved. It will also address both the challenges and opportunities exist within green consumerism across various industries for the betterment of the future. The book concentrates on prior works that have been central or pivotal to the theme of green consumerism. This may include empirical studies or conceptual papers that initiated a line of investigation, changed how problems or questions were framed, introduced new methods or concepts, or engendered important debate"-- Provided by publisher.

Identifiers: LCCN 2023002101 (print) | LCCN 2023002102 (ebook) | ISBN 9781668481400 (hardcover) | ISBN 9781668481417 (paperback) | ISBN 9781668481424 (ebook)

Subjects: LCSH: Green marketing. | Consumer behavior--Environmental aspects. | Consumption (Economics)--Environmental aspects. | Sustainable development.

Classification: LCC HF5413 .A34 2023 (print) | LCC HF5413 (ebook) | DDC 658.8/02--dc23/eng/20230131

LC record available at <https://lcn.loc.gov/2023002101>

LC ebook record available at <https://lcn.loc.gov/2023002102>

This book is published in the IGI Global book series Advances in Marketing, Customer Relationship Management, and E-Services (AMCRMES) (ISSN: 2327-5502; eISSN: 2327-5529)

#### British Cataloguing in Publication Data

A Cataloguing in Publication record for this book is available from the British Library.

All work contributed to this book is new, previously-unpublished material.

The views expressed in this book are those of the authors, but not necessarily of the publisher.

For electronic access to this publication, please contact: [eresources@igi-global.com](mailto:eresources@igi-global.com).



# Advances in Marketing, Customer Relationship Management, and E-Services (AMCRMES) Book Series

ISSN:2327-5502  
EISSN:2327-5529

Editor-in-Chief: Eldon Y. Li, National Chengchi University, Taiwan &  
California Polytechnic State University, USA  
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*D. Preethi, CHRIST University (Deemed), India*

*Krishna Prasath S., CHRIST University (Deemed), India*

Green marketing research is becoming more and more well-liked in academia and business. Both companies and customers today recognize the value of eco-friendly products due to increased awareness of how companies respond to various factors contributing to environmental degradation. One should understand the meaning, opportunities, and threats associated with green marketing to harness the benefits of green marketing. This book chapter aims to explore various aspects of green marketing, including its evolution throughout the years, opportunities, threats, the future of green marketing, etc. To sum up, this chapter aims to gain an in-depth understanding of green marketing and how companies could use it to their advantage. Successful implementation will be possible only if associated threats are carefully analyzed and understood. Therefore, a part of this chapter will be dedicated to understanding the threats associated with green marketing strategies.

## **Chapter 2**

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*Mehvish Riyaz, Islamic University of Science and Technology, India*

*Anisa Jan, Islamic University of Science and Technology, India*

The chapter presents an overview of environmentally responsible consumer behavior by focusing on its core aspects, such as its evolution, significance, influencing factors, and consequences of practicing the behavior on businesses, individuals, and the environment. Second, the chapter explores the numerous theories utilized by scholars to explain and predict this behavior. In addition, the chapter also attempts



to establish a connection between the concept of environmentally responsible consumption behavior and the pursuit of environmental sustainability, which is crucial in today's world, and emphasizes how engaging in this behavior can contribute to the achievement of the United Nations sustainable development goal 12.

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The aim of this chapter is to engage with the concepts of green consumer and green consumerism and to perform a bibliometric analysis of the related publications. To this end, the studies are examined in WoS and Scopus between 1965 and 2023, using the keywords “green consumer” and “green consumerism.” The study imposed certain constraints, resulting in the acquisition of a total of 7238 articles derived from 1728 sources. For this analysis, the Bibliometrix R Package Program was applied. An initial phase of the study was to conduct a descriptive analysis to provide an overview of the data. The subsequent phase involved examining several elements: the number of publications and citations by year; the most published journals on these subjects and their H-index values; the number of publications and H-index values of the authors; productivity of countries; most frequently used words; and collaboration networks of words, countries, and authors. Additionally, a factor analysis was carried out within the scope of the study to facilitate the observation of cluster formations.

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The main purpose of the chapter is to find out the effects of renewable energy on economic growth and household consumption in Nigeria. Renewable energy supply and environmentally sustainable consumption are key ingredients in achieving sustainable economic growth and development all over the world. The chapter aims at highlighting the positive contributions of green energy to sustainable consumption and economic growth. The main methods of analysis for the study are Granger causality tests, VAR impulse response function, and Variance decomposition. The

findings show strong links between renewable electricity supply, economic growth, and household consumption in Nigeria. This was expected a priori, as overwhelming empirical and theoretical literature has attested to the effects of renewable electricity on economic growth of other nations around the world.

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Emerging technological advancements and sustainability concerns have initiated the integration of smart technologies into the transportation infrastructure at major cities and tourist hubs. The rising environmental concerns have called for a shift in focus from conventional methods to innovative green transport initiatives being formulated by DMOs and destination planners. The use of data analytics and artificial intelligence in transportation has been proven to be a reasonable method for sustainable transportation. This study focuses on assessing the value propositions of smart transportation systems in enriching the tourist experience by providing convenient travel solutions. The chapter focuses on understanding the value proposition of smart transport designs at destinations and the long-term prospects of installing such sustainable infrastructure at major tourist hubs. The study also aims to evaluate the tourist experience in using smart transportation services and the potential benefits and challenges involved in the practical implementation of such systems.

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The increase in the human population in the world, the rapid rate of digitization, the support of more services using digital technology during this transformation, and the increase in the number of users lead to the emergence of large volumes of data and information. In the global context, it is one of the most important problems of today to produce sustainable solutions together with the effective and efficient use of all kinds of resources. Regarding their energy usage and effects on the ICT carbon footprint, data centers are regarded as sustainable goods and services. In this study, within the framework of sustainability, data centers were discussed, and basic concepts, global standards, world examples, and suggestions to make data centers more efficient were shared.

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Feasibility of Green Tourism in Small European Emerging Economies ..... 155

*Aleksandra Bradić-Martinović, Institute of Economic Sciences, Serbia*

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*Milena Lazić, Institute of Economic Sciences, Serbia*

Expansion of the tourism sector can lead to environmental deterioration. In response, initiatives for sustainable tourism have emerged, followed by certification schemes to promote sustainable consumption, and align consumer preferences and behavior. However, many destinations struggle to satisfy these standards, particularly in smaller developing countries. This chapter aims to analyze the possibility of certification for a spa destination in Serbia, an emerging economy in South-East Europe, using it as a case study to understand the certification process and draw a conclusion about the capacity of small destinations to meet requirements. The research is focused on green destination standard as the most notable validation of the GSTC criterion in the case of Sokobanja Spa. Although the destination in the case study could not receive certification, the results and examples of successful destinations in the region indicate that certification is achievable with the systematic effort of the destination's management and national-level support, particularly in the infrastructure segment.

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Body and beauty care are considered essential in everyday life of a young adult. This has attracted the attention of the cosmetic industry to respond with products that serve these varying interests. Not only are the youth interested in using cosmetic products, but they also consider the greenness of the cosmetic products. This has forced the corporate world to churn out products that are considered safe for the environment and also engage in practices that are considered green. Drawing on the theory of planned behavior, the chapter assesses how students' exposure to green marketing practices influences their purchase of cosmetic products over time. The chapter uses eco-label, eco-brand, and environmental advertising as predictors of students' purchasing behaviour of cosmetic products. Further, PLS-SEM is used to examine the effect of green marketing tools on students' purchasing decisions. The study's findings suggest that eco-label and environmental advertising influence the purchase of cosmetic products. Implications of the findings are discussed.

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Towards a Sustainable Transportation System: Innovative Measures to Alleviate Road Traffic Congestion .....208

*Sonia Mrad, University of Manouba, Tunisia*

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In modern societies, the need for a high degree of mobility in transportation systems is increasingly evident. Consequently, the establishment of a sustainable transport system that aligns with social needs, economic growth, and environmental concerns becomes paramount. This chapter aims to shed light on the role of transport in sustainable development and the challenges associated with achieving sustainable mobility. A thorough analysis of the primary factors contributing to the growing demand for mobility is provided. Additionally, the chapter examines the key decision-makers involved in shaping transportation systems, with a particular focus on the pivotal role of intelligent transportation systems. These systems are considered a vital component in addressing road congestion and enhancing overall traffic performance, such as reducing congestion and noise levels while promoting sustainable mobility.

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Petri Nets-Based Optimization of Multi-Level Marketing Schemes for the Green Economy .....240

*Girish Rao Salanke, R.V. College of Engineering, India*

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Green economy and its relevant concepts have gained popularity during the last decade to promote and support equitable and sustainable development. Developing countries have deliberately undertaken initiatives that float responsible development, valuing the magnanimity and foresight of these principles despite their barriers to the progress of a developing nation. The repeating idea of placing a tax on the production, use, and emission of carbon by industry has been recognized and implemented by governments worldwide. The principle addressed in this chapter advocates for the implementation of carbon tax measures in a selective and authoritative manner, which historically led to non-conformity, restlessness, and inefficiency. The objective of this article is to utilize Petri Nets to legalize the behavior of a multi-level marketing system to assure an effective carbon tax hierarchy to promote a green economy, to optimize it, and to model it.

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## Preface

Environmental challenges have far-reaching social, economic, and ecological implications. Climate change, for instance, poses risks to food security, water availability, and public health. Biodiversity loss threatens ecosystem stability and resilience. Pollution in various forms negatively impacts air and water quality, affecting human health and ecosystems. A shift towards more sustainable practices is desirable and essential for the long-term well-being of our planet and future generations. Green consumerism has emerged as a response to these challenges, driven by a desire to minimize environmental impact and promote a more sustainable future.

Green consumerism, also known as sustainable or conscious consumption, refers to purchasing decisions that prioritize environmental sustainability and ethical considerations. It is a proactive approach that recognizes the power of consumers to influence market dynamics and drive positive change. By prioritizing sustainable and environmentally friendly products and services, green consumerism can drive economic growth while enhancing the welfare of individuals and communities.

The economic growth is stimulated by creating new market opportunities and innovations. As consumers increasingly demand sustainable products and services, businesses are incentivized to invest in research and development, improve their sustainability practices, integrate eco-friendly manufacturing processes and adopt eco-friendly technologies (i.e., renewable energy solutions, efficient waste management systems and energy-efficient technologies). This innovation leads to the emergence of green industries and the creation of new jobs, which in turn, fosters economic growth.

Moreover, green consumerism often involves opting for healthier or more ethically produced products. For example, choosing organic food, non-toxic materials, eco-friendly personal care products, or sustainably sourced clothing not only reduces exposure to harmful chemicals but also promotes healthier lifestyles. These choices can improve physical health, quality of life, ethical satisfaction, and a greater sense of connectedness to the environment. Engaging in sustainable practices also fosters community and social cohesion through collective actions, such as participating in community recycling programs, supporting local farmers' markets, or advocating

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for environmental policies. These shared endeavors can strengthen social bonds, promote collaboration, and enhance the community's welfare.

It should be emphasized that green consumerism is a collective effort that necessitates the participation and collaboration of all parties involved. It is not solely the responsibility of individuals or consumers, but also requires the engagement of businesses, governments, and non-governmental organizations. Consumers play a crucial role by making conscious and sustainable choices in their purchasing decisions, creating demand for greener alternatives and sending a powerful message to businesses. In turn, companies can drive change by embracing sustainable practices, implementing eco-friendly policies, and offering a more comprehensive range of sustainable options. Governments contribute by creating an enabling environment through policies, regulations, incentives, and investments in sustainable infrastructure. Additionally, organizations and non-governmental entities are vital in raising awareness, advocating for sustainability, and fostering collaboration among businesses, governments and consumers. Through this shared commitment and action, we can achieve lasting positive impacts on both the economy and the well-being of people.

A holistic approach to green consumerism becomes indispensable for a future green world. It means considering sustainability and making conscious choices across all areas of our lives, not just focusing on one aspect in isolation. A truly sustainable and environmentally conscious society requires us to examine and address the environmental impact of our choices in energy, transportation, food, fashion, housing, finance, education, tourism and more. By embracing green consumerism holistically, we can create a synergy of sustainable practices across various sectors, leading to a more interconnected and harmonious relationship with the environment. This holistic approach ensures that our efforts towards a green world are comprehensive, impactful and address the sustainability challenges we face thoroughly.

## **A Description of the Target Audience**

While this book may comprise a limited number of chapters, it serves as a valuable starting point for a wide range of readers seeking to delve into green consumerism. Incorporating the latest empirical and analytical research offers much information for academics, interdisciplinary researchers, policymakers, professionals, and practitioners alike. This insightful resource provides knowledge and practical applications that will empower readers to enhance their understanding of green consumerism and initiate meaningful actions towards achieving economic growth and welfare through sustainable consumption.

## ***Preface***

### **Organization of the Book**

The book is organized into ten chapters, each offering unique insights into different aspects of green consumerism. Here is a brief introduction to each chapter.

Chapter 1 provides an in-depth exploration of green marketing, focusing on its evolution, opportunities, and threats. Businesses can leverage its benefits by gaining a deeper understanding of green marketing. The chapter also emphasizes the importance of carefully analyzing and understanding the potential threats to green marketing strategies for successful implementation.

Chapter 2 focuses on environmentally responsible consumption behavior. It provides a comprehensive overview of this behavior, discussing its evolution, significance, and the factors influencing it. The chapter also explores the consequences of environmentally responsible consumption behavior on businesses, individuals, and the environment. The connection between this behavior, the pursuit of environmental sustainability, and its contribution to the United Nations Sustainable Development Goal 12 are emphasized.

Chapter 3 presents a bibliometric analysis of research trends in green consumerism. Examining studies published between 1965 and 2023 provides insights into the number of publications and citations over the years, the most published journals and authors, the productivity of countries, and the collaboration networks in this field. The analysis aims to identify the key trends and contributions in green consumerism research.

Chapter 4 examines the application of green consumerism in the energy sector, specifically in Nigeria. It analyzes the impact of adopting renewable energy sources on economic growth and household consumption using methods such as Granger causality tests and VAR impulse response functions. The chapter highlights the potential benefits of transitioning to renewable energy, including reduced reliance on fossil fuels and job creation. It also discusses policy frameworks and government initiatives necessary to support renewable energy adoption.

Chapter 5 focuses on sustainable transportation systems. It explores the integration of emerging technologies, such as Artificial Intelligence and Data Analytics, into transportation infrastructure to enhance the efficiency and sustainability of travel. The chapter emphasizes the value propositions of smart transportation systems in improving the tourist experience and providing convenient travel solutions. It also discusses the long-term prospects and challenges of implementing sustainable transportation infrastructure at significant tourist hubs. By examining the intersection of technology, sustainability and tourism, this chapter sheds light on the potential of smart green transportation to contribute to a more sustainable future.

Chapter 6 delves into the significance of data centers in promoting sustainability and green computing practices. It highlights the challenges posed by the increasing

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volumes of data generated worldwide and the need for effective resource utilization. The chapter explores the concept of sustainability in data centers and shares global standards, examples, and recommendations to enhance their efficiency. It provides valuable insights for optimizing data centers and promoting a greener approach to data management and computing.

In the tourism domain, chapter 7 examines the feasibility of implementing green tourism practices in small emerging economies in Europe. Using a case study of a spa destination in Serbia, it analyzes the potential for meeting certification standards and promoting sustainable tourism. The chapter explores the challenges faced by smaller destinations in aligning with sustainable tourism standards and discusses the role of destination management and national-level support in achieving certification.

Chapter 8 explores the impact of green marketing tools on consumer purchasing behavior in the cosmetic industry. It examines the influence of eco-label, eco-brand, and environmental advertising on students' purchasing decisions, in reference to the Theory of Planned Behavior. Through Partial Least Squares Structural Equation Modeling (PLS-SEM), the chapter reveals the significant role of eco-label and environmental advertising in shaping consumer choices. The findings contribute to a better understanding of how green marketing strategies drive sustainable consumption in the cosmetic industry.

Chapter 9 delves into the challenges of road traffic congestion and proposes innovative measures to achieve a sustainable transportation system. It emphasizes the critical role of transport in sustainable development and highlights the growing demand for mobility. The chapter examines vital decision-makers in shaping transportation systems, focusing on intelligent transportation systems. These systems are identified as instrumental in addressing road congestion, reducing noise levels, and promoting sustainable mobility. By exploring the role of intelligent transportation systems, the chapter aims to enhance overall traffic performance and contribute to a more sustainable and efficient transportation infrastructure.

Chapter 10 focuses on the implementation of carbon tax measures, emphasizing the need for a selective and authoritative approach to ensure effectiveness. By introducing Petri Nets, the chapter aims to provide a framework for modeling and optimizing a multi-level marketing system that supports a green economy and facilitates the effective implementation of carbon tax policies.

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