

REVIEW

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Trending research topics on carbon footprint and supply chains: a bibliometric analysis based on the Scopus data (2019–2023)

Ismail Abdi Changalima^{1*}, Prisca Pascrates Rutatola² and Goodluck Goldian Ntangeki³

Abstract

This study analyzes the publication trend, most active contributors, most influential publications and trending research topics on the current context of carbon footprint and supply chains. The study conducted a bibliometric analysis of 809 documents retrieved from Scopus, published between 2019 and 2023, to identify trends, contributors, top publications, and trending topics. With the help of Harzing's Publish or Perish and VOSviewer, the study employed performance analysis and keyword co-occurrence analysis. The study reveals an upward trajectory in the number of publications in this research domain. Additionally, the study identifies several themes through keyword co-occurrence analysis, including "the application of regulatory mechanisms and game theory in carbon emission reductions," "strategies and mechanisms for enhancing low-carbon initiatives within supply chains," "the development and optimization of sustainable supply chain systems to reduce carbon emissions," "the use of simulation and optimization models for CO₂ emission reduction in supply chain and logistics operations," "financial legislation and mechanisms for improving carbon emission reductions," "the impact of logistics and supply chain operations on carbon emissions and climate change," and "the carbon footprint in supply chains and cold chain logistics operations." This review emphasizes the need of adopting low-carbon technologies to enhance sustainable practices within supply chains. The study highlights the role of advanced technologies in efforts linked to carbon reduction. The study also advocates for a multifaceted policy approach, including encouraging innovation, and implementing financial mechanisms to reduce carbon emissions, especially in logistics and supply chain operations.

Keywords: Carbon footprint, Carbon emission, Supply chains, Sustainable supply chain, Low-carbon supply chain, Bibliometrics

Introduction

Over the past years, environmentalists, academics, and various stakeholders have increasingly focused on environmental impacts and climate change concerns. This is intriguing as the negative impact on the environment

affect biodiversity and human operations on Earth. It has been reported that carbon emissions account for the largest portion of global emissions [1, 2]. Despite efforts being made to address this issue, academics continue to express concerns. Their concerns show that environmental aspects need to be more focused on with efforts from the government, customers, and businesses [3–10]. This triggers aspect related to carbon footprint, which refers to the overall quantity of greenhouse gases, mainly carbon dioxide, released directly or indirectly through human activities [11]. Measuring and managing carbon emission is crucial for reducing environmental impacts and addressing climate change [12–15].

*Correspondence:
Ismail Abdi Changalima
changalima@gmail.com

¹ The University of Dodoma, Dodoma, United Republic of Tanzania

² The Local Government Training Institute, Dodoma, United Republic of Tanzania

³ College of Business Education, Dar Es Salaam, United Republic of Tanzania

Carbon Footprint Trending

JL Elias



Carbon Footprint Trending:

Carbon Footprint Trending: Bestsellers in 2023 The year 2023 has witnessed a remarkable surge in literary brilliance, with numerous engrossing novels captivating the hearts of readers worldwide. Lets delve into the realm of top-selling books, exploring the fascinating narratives that have charmed audiences this year. The Must-Read : Colleen Hoover "It Ends with Us" This poignant tale of love, loss, and resilience has captivated readers with its raw and emotional exploration of domestic abuse. Hoover expertly weaves a story of hope and healing, reminding us that even in the darkest of times, the human spirit can triumph. Carbon Footprint Trending : Taylor Jenkins Reids "The Seven Husbands of Evelyn Hugo" This captivating historical fiction novel unravels the life of Evelyn Hugo, a Hollywood icon who defies expectations and societal norms to pursue her dreams. Reids captivating storytelling and compelling characters transport readers to a bygone era, immersing them in a world of glamour, ambition, and self-discovery. Carbon Footprint Trending : Delia Owens "Where the Crawdads Sing" This mesmerizing coming-of-age story follows Kya Clark, a young woman who grows up alone in the marshes of North Carolina. Owens crafts a tale of resilience, survival, and the transformative power of nature, captivating readers with its evocative prose and mesmerizing setting. These top-selling novels represent just a fraction of the literary treasures that have emerged in 2023. Whether you seek tales of romance, adventure, or personal growth, the world of literature offers an abundance of engaging stories waiting to be discovered. The novel begins with Richard Papen, a bright but troubled young man, arriving at Hampden College. Richard is immediately drawn to the group of students who call themselves the Classics Club. The club is led by Henry Winter, a brilliant and charismatic young man. Henry is obsessed with Greek mythology and philosophy, and he quickly draws Richard into his world. The other members of the Classics Club are equally as fascinating. Bunny Corcoran is a wealthy and spoiled young man who is always looking for a good time. Charles Tavis is a quiet and reserved young man who is deeply in love with Henry. Camilla Macaulay is a beautiful and intelligent young woman who is drawn to the power and danger of the Classics Club. The students are all deeply in love with Morrow, and they are willing to do anything to please him. Morrow is a complex and mysterious figure, and he seems to be manipulating the students for his own purposes. As the students become more involved with Morrow, they begin to commit increasingly dangerous acts. The Secret History is a masterful and gripping novel that will keep you guessing until the very end. The novel is a cautionary tale about the dangers of obsession and the power of evil.

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