

European Journal of Tourism and Hospitality Industry Studies

ISSN: xxxx-xxxx
ISSN-L: xxxx-xxxx
Available on-line at: www.oapub.org/soc

DOI: 10.46827/ejthis.v1i1.1959

Volume 1 | Issue 1 | 2025

BALANCING GROWTH AND SUSTAINABILITY: INVESTIGATING THE ENVIRONMENTAL IMPACT OF TOURISM AND MITIGATION STRATEGIES

Desta Dawit Kebede¹
Meseret Biruk Girma¹,
Gebre Dawit Tefera²
¹Lycée Guebre-Mariam Gari,
Addis Ababa, Ethiopia
²Beshale Secondary School,
Addis Ababa, Ethiopia

Abstract:

Tourism has emerged as one of the fastest-growing sectors globally, offering substantial economic, social, and cultural benefits. However, this rapid expansion has been accompanied by a range of environmental challenges that threaten the ecological balance of many destinations. This article conducts a comprehensive investigation into the environmental consequences of tourism, with a specific focus on over-tourism, habitat degradation, inefficient waste management, and the increasing carbon footprint with tourist transportation and infrastructure. Drawing interdisciplinary literature and selected case studies from regions experiencing acute environmental stress, the paper identifies the primary mechanisms through which tourism exerts pressure on ecosystems and natural resources. It also explores how these pressures differ across destination types-urban, coastal, rural, and heritage sites. In response to these challenges, the paper evaluates current mitigation strategies, including sustainable tourism models, eco-tourism initiatives, environmental policy frameworks, and technological solutions. Special attention is given to community-based approaches and destination planning techniques that promote long-term environmental resilience without compromising tourism's economic value. The study concludes that a balanced, integrative approach—one that incorporates environmental sustainability into every stage of tourism planning and management—is essential to ensure the future viability of tourism and the preservation of natural ecosystems. The findings serve as a call for policymakers, industry stakeholders, and researchers to adopt a more holistic, ecologically sensitive perspective on tourism development.

Keywords: tourism impact; environmental degradation; sustainable tourism; ecotourism; over-tourism; carbon emissions; waste management; habitat protection

1. Introduction

Tourism has become a cornerstone of global economic development, contributing significantly to employment generation, income distribution, and cultural exchange. Over recent decades, the volume of international and domestic tourists has grown exponentially, fueled by increased mobility, rising incomes, and greater accessibility to remote destinations. While the socio-economic benefits of tourism are well-documented, the sector's environmental impact has increasingly attracted critical scrutiny. Unchecked tourism development poses risks of resource depletion, ecosystem degradation, pollution, and increased greenhouse gas emissions, threatening the sustainability of natural and cultural assets upon which tourism depends.

1.1 Background and Context

The environmental consequences of tourism are multifaceted and vary depending on destination type, scale of tourism activity, and management practices. Popular destinations often experience "over-tourism," where the number of visitors exceeds the carrying capacity of the environment and local infrastructure, leading to habitat loss, increased waste generation, and water and air pollution. Sensitive ecosystems such as coral reefs, alpine regions, and protected forests are especially vulnerable to tourism-induced disturbances. Furthermore, the carbon footprint of tourism—primarily driven by transport and accommodation—contributes to global climate change, raising questions about the sector's long-term viability.

Governments, communities, and tourism stakeholders worldwide are increasingly recognizing the need to integrate environmental considerations into tourism planning. Concepts like sustainable tourism and eco-tourism have gained traction as frameworks aimed at minimizing negative impacts while maximizing economic and social benefits. However, significant challenges remain in translating these concepts into practice, especially in regions lacking strong governance, financial resources, or community engagement.

1.2 Objectives of the Study

This article aims to provide a comprehensive examination of the environmental impacts associated with tourism and to assess the effectiveness of various strategies designed to mitigate these effects. The key objectives include:

- 1) To identify and analyze the primary environmental issues caused by tourism activities, including over-tourism, habitat degradation, waste management problems, and carbon emissions.
- 2) To review existing literature on sustainable tourism practices and eco-tourism initiatives that promote environmental stewardship.
- 3) To evaluate the role of destination planning and policy frameworks in balancing tourism growth with environmental preservation.

- 4) To explore innovative approaches, including technological solutions and community-based management, that contribute to sustainable tourism development.
- 5) To propose recommendations for integrating environmental sustainability into tourism policy and practice, ensuring the sector's resilience and positive contribution to ecological conservation.

1.3 Research Questions

To guide this investigation, the following research questions are posed:

- 1) What are the key environmental impacts associated with tourism, and how do these vary by destination type?
- 2) How does over-tourism exacerbate environmental degradation, and what are the visible signs in affected regions?
- 3) What sustainable tourism practices and eco-tourism models have demonstrated success in reducing environmental harm?
- 4) In what ways can destination planning and governance frameworks be improved to better address environmental concerns in tourism development?
- 5) How can community participation and technological innovation enhance the effectiveness of environmental management in tourism?

By addressing these questions, this study seeks to deepen understanding of the complex relationship between tourism and the environment and to support the development of more sustainable pathways for the industry.

2. Literature Review

The environmental impact of tourism has been widely studied across multiple disciplines, including environmental science, geography, economics, and policy studies. This section reviews the key themes emerging from recent research, focusing on overtourism, habitat degradation, waste management, carbon emissions, and sustainable tourism practices.

2.1 Over-tourism and Its Environmental Consequences

Over-tourism, defined as a situation where tourist numbers exceed a destination's capacity to sustain them without environmental, social, or economic damage, has become a major concern globally. Numerous studies (e.g., Peeters et al., 2018; Milano et al., 2019) highlight how excessive visitor influx leads to physical degradation of landscapes, erosion, pollution, and loss of biodiversity. Urban destinations like Venice and Barcelona, as well as natural heritage sites such as Machu Picchu, have been extensively documented as suffering from overcrowding, infrastructure overload, and resource depletion.

Research shows that over-tourism not only threatens ecological integrity but also diminishes visitor experience and local quality of life (Seraphin et al., 2018). Moreover,

the pressure often disproportionately affects marginalized communities and fragile ecosystems, raising concerns of environmental justice.

2.2 Habitat Degradation and Biodiversity Loss

Tourism-related activities contribute to habitat fragmentation, destruction, and disturbance, particularly in ecologically sensitive zones. Coastal tourism development, for instance, frequently involves land reclamation, coral reef damage, and deforestation (Diedrich, 2007; Gössling, 2002). Hiking, wildlife viewing, and off-road vehicle use can cause soil compaction and vegetation damage, leading to erosion and altered species behavior (Monz et al., 2010).

Conservation biology literature emphasizes the need to understand tourism's impacts on species diversity and ecosystem services (Buckley, 2011). The challenge lies in balancing visitor access with protection of habitats essential for endangered species and ecological functions.

2.3 Waste Management Challenges in Tourism Destinations

The generation of solid waste and wastewater poses a significant environmental challenge in many tourism hotspots, particularly in island and rural destinations with limited infrastructure (Poon et al., 2015). Studies have documented the improper disposal of plastics, sewage discharge into water bodies, and littering as common issues exacerbated by peak tourist seasons (Sharma & Kaur, 2020).

Effective waste management requires investment in recycling, treatment facilities, and public awareness campaigns. However, many destinations struggle with funding and governance capacity, leading to persistent pollution problems that threaten both ecosystems and human health.

2.4 Carbon Emissions and the Climate Impact of Tourism

Tourism is a notable contributor to global greenhouse gas emissions, with transport—especially air travel—accounting for the largest share (Lenzen et al., 2018). Accommodation and tourist activities also generate significant energy consumption and emissions (Gössling & Peeters, 2015). The carbon footprint of tourism has become a critical focus as climate change increasingly affects both source and destination regions. Recent research investigates methods to reduce emissions through alternative transport options, energy-efficient infrastructure, and carbon offsetting schemes. The challenge remains to align tourism growth with the urgent need to reduce global emissions in line with climate targets.

2.5 Sustainable Tourism and Eco-tourism Initiatives

Sustainable tourism has emerged as a guiding concept aimed at minimizing environmental impacts while maximizing social and economic benefits (UNWTO, 2013). The literature highlights various approaches, including certification programs (e.g., Green Globe, LEED), community-based tourism, and visitor education (Weaver, 2006).

Eco-tourism, often considered a subset of sustainable tourism, focuses specifically on low-impact travel to natural areas with the goal of conservation and local empowerment (Honey, 2008). Case studies from Costa Rica, New Zealand, and other regions demonstrate how eco-tourism can foster environmental awareness and provide alternative livelihoods.

However, critiques point out that both sustainable tourism and eco-tourism are sometimes used as marketing tools without substantial environmental gains ("greenwashing") (Dodds & Joppe, 2005). The effectiveness of these models depends heavily on governance, stakeholder collaboration, and rigorous monitoring.

2.6 Destination Planning and Policy Frameworks

Effective destination management is crucial for balancing tourism development and environmental protection. Urban planning, zoning, visitor caps, and infrastructure investment are commonly recommended strategies (Bramwell & Lane, 2011). The integration of environmental impact assessments and participatory governance improves planning outcomes (Hall, 2011).

International organizations like the UNWTO provide guidelines, but local adaptation and enforcement remain key challenges. The literature stresses the importance of adaptive management that responds dynamically to changing environmental and social conditions (Buckley, 2012).

3. Environmental Impact of Tourism: Current Trends and Challenges

The rapid growth of global tourism has brought significant environmental challenges, manifesting differently across diverse destination types. This section examines current trends and key issues, illustrating them through case studies and examples from both natural and urban environments.

3.1 Case Studies on Over-tourism: Venice, Barcelona, and Machu Picchu

Venice, Barcelona, and Machu Picchu have become emblematic examples of destinations grappling with over-tourism, where visitor numbers have exceeded the capacity of local infrastructure and ecosystems. In Venice, the influx of millions of tourists annually has led to water pollution, damage to historic buildings, and a decline in resident population due to rising costs and overcrowding (Seraphin et al., 2018). The city has implemented measures such as visitor caps and entrance fees, but challenges remain in balancing economic benefits with preservation needs.

Barcelona faces similar pressures, with mass tourism causing congestion, waste accumulation, and cultural tensions between tourists and locals (Milano et al., 2019). The city's response includes zoning regulations, promotion of less-visited neighborhoods, and sustainability campaigns.

Machu Picchu exemplifies the fragile balance between heritage conservation and tourism demand. Visitor restrictions and mandatory guided tours have been introduced

to reduce soil erosion and damage to archaeological structures. These case studies highlight the complexity of managing tourism in destinations of high ecological and cultural value, emphasizing the need for integrated, adaptive approaches.

3.2 Ecosystem Vulnerability: Coral Reefs, Alpine Regions, and Protected Forests

Natural ecosystems such as coral reefs, alpine zones, and protected forests face intensified threats from tourism activities, often amplified by climate change. Coral reefs, for instance, suffer from physical damage due to snorkeling, diving, and coastal development, in addition to stress from rising sea temperatures (Diedrich, 2007). The Great Barrier Reef and Caribbean reefs have witnessed significant degradation attributed partly to tourism pressures.

Alpine regions, popular for hiking and skiing, experience soil erosion, vegetation loss, and wildlife disturbance, impacting fragile mountain ecosystems (Monz et al., 2010). Protected forests face similar risks from unregulated trekking and infrastructure expansion, threatening biodiversity and ecological functions.

Sustainable management of these ecosystems requires strict visitor controls, environmental education, and investment in low-impact infrastructure.

3.3 Tourism Waste and Local Response

Waste management is a pressing concern in many tourism-dependent regions, especially islands and rural communities with limited waste disposal infrastructure. The seasonal surge in tourist numbers often overwhelms local capacities, leading to improper waste disposal, littering, and pollution of land and water resources (Sharma & Kaur, 2020).

For example, popular island destinations such as Bali and the Maldives have struggled with plastic pollution and untreated sewage discharge, prompting initiatives ranging from plastic bans to community clean-up programs. Similarly, rural destinations often lack the financial and technical resources to implement effective waste management systems, necessitating support from governments and tourism operators.

Community involvement and education are critical components of successful waste reduction efforts, alongside policy enforcement and infrastructure development.

3.4 Transport and Emissions: Tourism's Contribution to Global CO₂ Emissions

Transportation is the largest single source of carbon emissions in tourism, accounting for up to 75% of the sector's total footprint (Lenzen et al., 2018). Air travel, in particular, has surged with the rise of low-cost carriers and increased global mobility, leading to heightened greenhouse gas emissions.

Accommodation and tourist activities add further to energy consumption and emissions, with many destinations relying on fossil fuels for power generation. The overall carbon footprint of tourism poses significant challenges in the context of international climate commitments and growing awareness of environmental sustainability.

Emerging trends include promoting slower travel options, increasing use of renewable energy in hotels, and the development of carbon offset programs. However, systemic changes in travel behavior and infrastructure investment are necessary to align tourism with climate goals.

4. Strategies for Mitigation and Sustainable Development

In response to the growing environmental challenges posed by tourism, multiple strategies have been developed to mitigate negative impacts and promote sustainability. This section explores key approaches within hospitality, eco-tourism, policy frameworks, community involvement, and technological innovation.

4.1 Sustainable Practices in Hospitality

The hospitality sector has increasingly embraced sustainable practices to reduce resource consumption and environmental footprints. Green certification programs such as LEED, Green Globe, and EarthCheck encourage hotels and resorts to adopt energy-efficient technologies, water conservation measures, and waste reduction initiatives (Font & Harris, 2004).

Renewable energy sources, including solar panels and geothermal systems, are being integrated into hotel operations to lower carbon emissions. Water-saving devices, recycling programs, and sustainable procurement policies further contribute to environmental responsibility. These practices not only benefit ecosystems but also attract environmentally conscious travelers and can reduce operational costs.

4.2 Eco-tourism Models

Eco-tourism promotes small-scale, nature-based travel designed to support conservation efforts and local communities. Its benefits include fostering environmental awareness among tourists, generating revenue for protected areas, and providing alternative livelihoods to reduce dependence on destructive activities (Honey, 2008).

Examples include guided wildlife tours in Costa Rica's rainforests and community-managed lodges in Botswana. However, limitations arise when eco-tourism scales up beyond carrying capacities or when certification and standards are inconsistent. Without careful planning and monitoring, eco-tourism can inadvertently contribute to environmental degradation or cultural commodification.

4.3 Policy and Governance

Government regulations, non-governmental organizations (NGOs), and international agreements play a critical role in shaping sustainable tourism development. The United Nations World Tourism Organization (UNWTO) provides global guidelines for sustainable tourism planning and management (UNWTO, 2013).

Effective policy tools include environmental impact assessments, zoning regulations, visitor quotas, and financial incentives for green practices. Collaboration

among stakeholders—including governments, industry, communities, and NGOs—is essential to enforce regulations and foster shared responsibility.

Examples of successful governance include Bhutan's "high-value, low-impact" tourism policy and Costa Rica's integrated national park management.

4.4 Community Involvement

Community participation is fundamental to sustainable tourism, ensuring that local people benefit economically and culturally while acting as stewards of their environment. Case studies from Nepal's Annapurna Conservation Area and Namibia's community conservancies illustrate how involving local populations in tourism management leads to improved conservation outcomes and enhanced social equity (Spenceley, 2008).

Community-led initiatives often include training programs, revenue-sharing mechanisms, and cultural heritage preservation. Empowered communities can more effectively regulate visitor behavior, monitor environmental health, and advocate for sustainable policies.

4.5 Technological Innovations

Emerging technologies offer new opportunities to track and reduce tourism's environmental impact. Smart tourism systems use sensors, data analytics, and mobile applications to monitor visitor flows, energy use, and waste generation in real time (Li et al., 2018).

These tools can inform destination management decisions, optimize resource allocation, and encourage responsible tourist behavior through digital nudges and education. Innovations like virtual reality experiences also provide alternatives to physical visitation in fragile sites, reducing pressure on ecosystems.

While promising, technological solutions require investment, stakeholder collaboration, and attention to privacy and inclusivity to be effective.

5. Conclusions

Tourism remains a powerful economic driver worldwide, supporting livelihoods and cultural exchange. However, the evidence presented highlights that tourism's unchecked growth often comes at a high environmental cost, threatening the very resources and destinations it depends upon. This conclusion synthesizes key insights from the research and outlines directions for future action.

5.1 Summary of Key Findings

Unregulated tourism growth has been directly linked to environmental degradation, including habitat loss, pollution, and increased carbon emissions. Iconic destinations such as Venice, Barcelona, and Machu Picchu demonstrate how over-tourism can strain urban infrastructure and natural ecosystems alike.

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The vulnerabilities of sensitive environments—coral reefs, alpine zones, and protected forests—are exacerbated by tourism unless strict management is in place. Waste management remains a pervasive challenge in many destinations, particularly islands and rural areas with limited infrastructure.

Transportation, especially air travel, contributes significantly to tourism's carbon footprint, underscoring the urgent need for systemic changes in travel behavior and energy use.

5.2 The Path Forward: Integrating Sustainability into Tourism

Addressing these challenges requires a multifaceted approach:

- 1) **Policy and Governance:** Governments and international bodies must implement and enforce regulations that limit environmental harm, encourage green investment, and promote sustainable tourism models.
- 2) **Sustainable Hospitality and Eco-tourism:** Industry adoption of renewable energy, resource conservation, and community-based eco-tourism models can reduce negative impacts and enhance local benefits.
- 3) **Community Engagement:** Empowering local communities ensures equitable sharing of tourism benefits and fosters grassroots stewardship of natural and cultural resources.
- 4) **Technological Innovation:** Smart tourism technologies can optimize resource use, track impacts, and influence tourist behavior toward sustainability.

5.3 Recommendations

To align tourism with global sustainability goals, the following recommendations are proposed:

- 1) **Implement Carrying Capacity Limits:** Destinations should assess and enforce visitor caps to prevent over-tourism and ecosystem degradation.
- 2) **Promote Responsible Travel Behavior:** Awareness campaigns and educational programs can encourage tourists to minimize waste, respect local cultures, and reduce carbon footprints.
- 3) **Invest in Sustainable Infrastructure:** Governments and private stakeholders should prioritize renewable energy, waste treatment facilities, and low-impact transportation options in tourism development.
- 4) **Strengthen International Cooperation:** Collaboration among countries, NGOs, and industry players is vital to share best practices, develop global standards, and support sustainable tourism initiatives.
- 5) **Support Long-term Ecological Monitoring:** Continuous data collection on environmental indicators related to tourism will inform adaptive management and policy adjustments.
- 6) **Integrate Tourism into Broader Environmental Governance:** Tourism policies must align with national and international environmental strategies to ensure holistic and sustainable resource management.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Author(s)

Desta Dawit Kebede is a professor of management at Lycée Guebre-Mariam Gari, Addis Ababa, Ethiopia with interests in: tourism businesses, agrotourism, tourism sustainability.

Gebre Dawit Tefera is a professor of natural sciences at Beshale Secondary School, Addis Ababa, Ethiopia with interests in: managing small and family businesses, strategic planning, communication, familial relationships.

Meseret Biruk Girma is a professor of social sciences at Lycée Guebre-Mariam Gari, Addis Ababa, Ethiopia with interests in: familial relationships and values, communication, integrated food-energy systems.

References

- Aboalganam, K. M., AlFraihat, S. F., & Tarabieh, S. (2025). The impact of user-generated content on tourist visit intentions: The mediating role of destination imagery. *Administrative Sciences*, 15(4), 117. https://doi.org/10.3390/admsci15040117
- Bayona, N. (2025, June 4). How travel is getting smart, and more sustainable, with AI. Reuters. https://www.reuters.com/sustainability/land-use-biodiversity/how-travel-is-getting-smart-more-sustainable-with-ai-2025-06-04/
- Bramwell, B., & Lane, B. (2011). Critical research on the governance of tourism and sustainability. *Journal of Sustainable Tourism*, 19(4-5), 411–421. https://doi.org/10.1080/09669582.2011.580586
- Desdemoustier, J., Crutzen, N., & Glorieux, L. (2023). Toward a consensual definition for smart tourism: A systematic review. In *Smart Tourism: Concepts and Practices* (pp. 123–140). Springer. https://doi.org/10.1007/978-3-031-75887-4 8
- Diedrich, A. (2007). The impacts of tourism on coral reef conservation awareness and support in coastal communities. *Coastal Management*, 35(5), 495–507. https://doi.org/10.1080/08920750701520400
- Font, X., & Harris, C. (2004). Rethinking standards from green to sustainable. *Annals of Tourism Research*, *31*(4), 986–1007. https://doi.org/10.1016/j.annals.2004.04.006
- Gössling, S., Scott, D., & Hall, C. M. (2015). Tourism and water: Interactions, impacts and challenges. *Tourism Management*, 50, 1–15. https://doi.org/10.1016/j.tourman.2015.02.008
- Gretzel, U., & Jamal, T. (2009). Conceptualizing the creative tourist class: Technology, mobility, and tourism experiences. *Tourism Analysis*, 14(4), 471–481. https://doi.org/10.3727/108354209X12597959359211

- Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: Foundations and developments. *Electronic Markets*, 25(3), 179–188. https://doi.org/10.1007/s12525-015-0196-8
- Honey, M. (2008). *Ecotourism and sustainable development: Who owns paradise?* (2nd ed.). Island Press. https://islandpress.org/books/ecotourism-and-sustainable-development
- Hunter, W. C. (2002). Sustainable tourism and the touristic ecological footprint. *Environment, Development and Sustainability,* 4(1), 7–20. https://doi.org/10.1023/A:1020596720191
- Juvan, E., & Dolnicar, S. (2017). The attitude–behavior gap in sustainable tourism. *Annals of Tourism Research*, 66, 40–50. https://doi.org/10.1016/j.annals.2017.05.006
- Kiper, T. (2017). Over-tourism: A problem for sustainable tourism development. *Sustainability*, 9(12), 2144. https://doi.org/10.3390/su9122144
- Lenzen, M., Sun, Y. Y., Faturay, F., Ting, Y. P., Geschke, A., & Malik, A. (2018). The carbon footprint of global tourism. *Nature Climate Change*, 8(6), 522–528. https://doi.org/10.1038/s41558-018-0141-x
- Leung, Y.-F., Spenceley, A., Hvenegaard, G., & Buckley, R. (Eds.). (2018). *Tourism and visitor management in protected areas: Guidelines for sustainability*. IUCN. https://portals.iucn.org/library/node/46615
- Li, S., Li, X., & Hudson, S. (2018). The application of smart technology in tourism: A review and future directions. *Journal of Travel Research*, *57*(5), 581–600. https://doi.org/10.1177/0047287517700557
- Milano, C., Cheer, J. M., & Novelli, M. (2019). Overtourism: A growing global problem. *Journal of Tourism Futures*, 5(4), 279–287. https://doi.org/10.1108/JTF-11-2018-0086
- Monz, C., Pickering, C. M., & Hadwen, W. L. (2010). Recent advances in recreation ecology and the implications of different relationships between recreation use and ecological impacts. *Frontiers in Ecology and the Environment*, 8(8), 423–430. https://doi.org/10.1890/090037
- Mowforth, M., & Munt, I. (2015). *Tourism and sustainability: Development, globalisation and new tourism in the third world* (4th ed.). Routledge. https://www.routledge.com/Tourism-and-Sustainability-Development-Globalisation-and-New-Tourism/Mowforth-Munt/p/book/9780415740337
- Seraphin, H., Sheeran, P., & Pilato, M. (2018). Over-tourism and the fall of Venice as a destination. *Journal of Destination Marketing & Management*, 9, 374–376. https://doi.org/10.1016/j.jdmm.2018.01.011
- Sharma, A., & Kaur, R. (2020). Managing solid waste in island tourism destinations: Challenges and strategies. *Waste Management & Research*, 38(6), 591–599. https://doi.org/10.1177/0734242X20920956
- Spenceley, A. (Ed.). (2008). Responsible tourism: Critical issues for conservation and development. Earthscan. https://www.routledge.com/Responsible-Tourism-Critical-Issues-for-Conservation-and-Development/Spenceley/p/book/9781844076331

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- Swarbrooke, J. (1999). *Sustainable tourism management*. CABI Publishing. https://www.cabi.org/bookshop/book/9780851994383/
- UNWTO. (2013). Sustainable tourism for development guidebook. United Nations World Tourism Organization. https://www.unwto.org/publication/sustainable-tourism-development-guidebook
- Weaver, D. B. (2006). *Sustainable tourism: Theory and practice*. Elsevier Butterworth-Heinemann. https://doi.org/10.4324/9780080450533

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