GREEN ECONOMY POLICIES AS A TOOL FOR ACHIEVING SUSTAINABLE TOURISM DEVELOPMENT IN THE RED SEA DESTINATION

MOSTAFA FARGHALY
FACULTY OF TOURISM AND HOTELS, LUXOR UNIVERSITY, EGYPT
TOKA MAHROUS FAHMY
FACULTY OF TOURISM AND HOTELS, SADAT CITY UNIVERSITY, EGYPT
KHALED SOLIMAN ABD ELHALEM
FACULTY OF TOURISM AND HOTELS, LUXOR UNIVERSITY, EGYPT

ABSTRACT

A green economy is a sustainable economic system designed to balance environmental preservation, social equity, and economic growth. it emphasizes reducing environmental risks, efficiently utilizing natural resources, and promoting human well-being. Key focus areas include investments in renewable energy, low-carbon transportation, and clean technologies, all contributing to sustainable development. this research aims to examine the potential of transitioning to a green economy within the Egyptian tourism sector to achieve sustainable tourism development, with a focus on the Red Sea destination. the research population included tourists visiting the red sea destination. a total of 400 questionnaires were distributed among tourists, with 366 valid responses analyzed after excluding 34 invalid ones. the research results indicate that natural beauty such as beaches, marine life, and coral reefs is the primary motivator for tourists choosing the red sea as their destination. the findings reveal strong support for measures encouraging the transition to a green economy, particularly those focused on raising public awareness, government investments, and policy implementation. furthermore, the results demonstrate a significant and positive correlation between green economy policies and all dimensions of sustainable tourism development. based on these findings, the research recommends developing policies and regulations to support the implementation of green economy principles.

KEYWORDS: Green Economy, Sustainable Tourism, Red Sea, Environmental Risks.

INTRODUCTION

The trends in global economic models over the last few decades have demonstrated an increase in social inequities, environmental degradation, and escalating societal tensions, putting pressure on each country's prospects for future development and prosperity (Newton, 2011). At the Rio+20 Conference on Sustainable Development in June 2012, the Green Economy (GE) was promoted as one of the most important tools for achieving sustainable development, improving human well-being, and reducing environmental risk (Droste et al., 2016; UN, 2011). The green economy is a fundamental element in SDGS because Greenhouse Gas emissions (GHG) pose a significant threat to global environmental sustainability in the post-2015 development agenda (Akinyemi et al., 2018). A green economy is one in which the economy and the environment interact together while satisfying human needs and acknowledging the value of the planet's resources. According to Yahya and Nasrulloh (2022), establishing a GE emphasizes dealing with climate change and reducing GHG emissions. Additionally, the green economy promotes a way of life that does not exploit the environment and protects it for future generations.

RESEARCH AIM AND OBJECTIVES

The research aims to identify the ability of the transition to a green economy in the Red Sea Destination to achieve sustainable tourism development. to achieve this research aim, the current research specifically seeks to achieve the following research objectives:

1. Discuss the relationship between the green economy and sustainable tourism development.
2. Determine the main motives for tourists choosing the Red Sea as a tourist destination.
3. Identify the impact of the green economy on sustainable tourism development.

RESEARCH QUESTIONS

1. What are the requirements for transitioning to a green economy?
2. What is the relationship between the green economy and the economic dimension?
3. What is the relationship between the green economy and the environmental dimension?
4. What is the relationship between the green economy and the social dimension?

GREEN ECONOMY

A green economy is an ideal concept that balances the economy, environment, and human society to ensure the sustainable continuation of life on Earth. The concept of GE plays an important role in addressing the three major challenges of environment, society, economy, and achieving sustainable development (Pangarso et al., 2022). In this discourse, GE is described as an economy that aims to reduce environmental risks and ecological scarcity and is essentially sustainable development without damaging the environment. The process of social transformation towards a green economy will bring about a more ecological lifestyle, indirectly creating ecological and autonomous settlements, or, in other words, revolutionary changes (Fagliani, 2023). The term green economy was first used in a report published in 1989 that showed how economics could be a driving force in addressing issues such as environmental policies and resource depletion in developing countries (Gasparatos et al., 2017). A GE is mentioned as improving human well-being and social justice while significantly reducing environmental risks and ecological scarcity (UNEP, 2011). The green economy is an extension of the standard economic strategy that includes the goals of fair distribution and environmental quality. In addition, the concept of GE is stated as investing in economic sectors that promote natural resources, such as renewable energy, low-carbon transportation and energy-efficient buildings, clean technologies, better waste management, improved access to clean water, agriculture, forestry, and natural resources on the earth, and reduced environmental risks (Masdar et al., 2022).

OBJECTIVES OF THE GREEN ECONOMY

The green economy arises as a means for ensuring sustainable development. Countries can achieve economic growth by making full use of their natural resources. The GE tries to reduce pollution and carbon emissions by improving resource efficiency and energy use. The green economy also aims to increase income and job prospects, which will require both public and private investment. These investments must be fostered and supported through targeted public spending, policy reform, and regulatory changes (Ismail, 2014). The green economy attempts to significantly decrease environmental risk and lack of resources. As a result, low carbon emissions, resource efficiency, and social integration can be implemented. In this setting, GE can make use of new possibilities, such as wind energy. Wind energy can provide 47% of electricity, 25% for heating, and 22% for transportation. The primary goal of transitioning to a GE is to promote economic growth and development while simultaneously improving

environmental quality and emphasizing the social dimension (Ziegler et al., 2024). Premović et al. (2016) suggest that reaching this goal requires developing factors for public and private investment inflows, as well as incorporating social and ecological concerns into investment decisions. Kanianska (2017) mentioned additional aims, like:

1. Protect, preserve, and restore the natural environment.
2. Protect public health.
3. Promote social justice through green economics.
4. Promote local companies and institutions.
5. Reduce poverty by establishing green- collar jobs.

GREEN ECONOMY AND SUSTAINABLE TOURISM DEVELOPMENT

There is increasing pressure on economies and communities around the world to develop sustainably. Due to insecure resource use that harms the environment (Erdogan et al., 2022). According to Ahmed et al. (2022), environmental factors have become one of the most significant barriers to the green economy in many countries, particularly those with large and stable economies but little potential for long-term green development. Indeed, the terms green economy and sustainable development are frequently used interchangeably, with the shared goal of preserving environmental resources for future generations. Thus, the transition to a GE is widely acknowledged as a critical undertaking for bridging the gap between economic aims and environmental concerns (Aubertin, 2012).

The GE refers to an economic paradigm that is both sustainable and environmentally friendly. It seeks to limit the environmental impact of human activities and promote the efficient use of natural resources, while also promoting economic growth and social well-being (Bara & Baar, 2024). Environmental sustainability and economic growth are compatible. A GE is critical to sustainable development because it improves social fairness, human well-being, and reduces ecological scarcity and environmental dangers (Yuldashevna, 2024). The GE promotes sustainable development by replacing the social and environmental costs of the current economic model, which has reached its limitations in terms of greenhouse gas emissions, natural resource consumption, water, land, forests, and so on (Ferguson, 2015). Furthermore, the GE is one of the tools used to achieve the SDGs of ending poverty, hunger, and food security, improving health and well-being, education, gender equality, and women's empowerment, water and sanitation, energy, economic growth, infrastructure, industrialization, inequality, cities, sustainable consumption and production, climate change, oceans, biodiversity, partnerships, and so on (Vargas-Hernández, 2020).

Planning for sustainable development begins with shifting away from the use of fossil fuels and toward more environmentally friendly and sustainable approaches. For many countries, green development is the only way to achieve sustainable growth. Green growth is typically achieved through global transfers based on market instruments and regulatory frameworks, as well as scientific and industrial breakthroughs **(**Ririhena et al., 2024). A GE can help to achieve sustainable development by supporting economic progress while protecting the environment and conserving natural resources for future generations (Xu et al., 2023). Sustainable development seeks to strike a balance between economic progress, environmental protection, and social equality. In other words, sustainable development seeks to ensure that economic growth and development are socially inclusive, environmentally responsible, and economically viable in the long run. One of the most important parts of sustainable development is the integration of economic, social, and environmental factors. This implies that social justice and the environment shouldn't be sacrificed for economic development, and that environmental preservation shouldn't stand in the way of each other. A participatory approach is also necessary for sustainable development, wherein individuals, corporations, governments, and civil society participate in decision-making processes (Sun & Zhang, 2022).

GREEN ECONOMY POLICY IN EGYPT

Presenting the "Sustainable Development Strategy (SDS): Egypt Vision 2030," the Ministry of Planning, Monitoring, and Administrative Reform tackles the obstacles facing Egypt's growth process. These challenges include the depletion of natural resources (energy, water, and agricultural land), the lack of systems that encourage creativity and innovation, the inadequate governance system, and the population, health, and educational resources of human development. The plan also lays out a number of objectives and targets to change these components from significant obstacles to incentives for development (Kühlert et al., 2024). Egypt has integrated the international GE concepts and goals into its GE transition strategy. This plan seeks to expand the scope of objectives for particular industries within the authority of the Ministry of Environment, which has given careful consideration to both the preservation and restoration of the environment and natural resources. The creation of policies aimed at establishing a green economy involves multiple stakeholders. It is the responsibility of these parties to carry out the aims of sustainable development concerning energy, transportation, industry, agriculture, and institutional measures (Khawaga et al., 2021).

The Egyptian government has given a special focus on establishing the green economy strategy while taking the country's social, economic, and

environmental development into account, as outlined in its new SDS, "Egypt Vision 2030." To develop a logical national GE policy, the Egyptian government created a broad framework that included a policy modification. With this new approach, the government is demonstrating its commitment to fair opportunity for all citizens by making sure that resources are used effectively and efficiently to ensure that the rights reserved for future generations which include the three pillars of economic, social, and environmental development are upheld. Egypt wants to have a competitive, knowledge-based, diversified, and balanced economy by 2030 (El Dessouky, 2023). There is strong social and economic logic behind the shift to a green economy. Egypt is promoting the GE as a result of five crucial areas of the Egyptian economy: waste management, energy, water, tourism, and agriculture. Owing to the cross-cutting character of tourism and its tight ties to many other industries both domestically and internationally, even modest steps toward increased sustainability will have a big influence on the transition to cleaner, low-carbon, and more sustainable economic growth (OECD, 2012).

METHODOLOGY

In this research, a quantitative approach was employed. Data were collected through questionnaire designed based on a review of related literature, with its validity checked prior to distribution. Descriptive and inferential statistical methods were used to analyze the collected data. The analysis was conducted using SPSS version 25 to extract frequencies, percentages, means, standard deviations, variance, ANOVA, t-tests, Pearson correlation, regression, and reliability measures. The research population consisted of tourists visiting the Red Sea destination. A total of 400 questionnaires were distributed, of which 34 were deemed invalid, leaving 366 valid responses for analysis. Cochran's formula was applied to determine a statistically representative sample size for an unknown population (Chaokromthong & Sintao, 2021). Additionally, pilot study involving 40 questionnaires was conducted to assess community variance (Kotrlik & Higgins, 2001).

$$n = \frac{Z^2 \sigma^2}{e^2}$$

Where:

σ: standard deviation (.47)

Z: Standard degree (1.96 at significant level of 0.05)

e: Maximum allowed error (0.05 at significant level of 0.05)

Applying these values to Cochran's formula reveals that the appropriate sample size for this research is 338 participants. However, the researcher distributed 400 questionnaires, and the valid number is 366.

RESULTS AND DISCUSSION

RELIABILITY OF RESEARCH TOOLS

Table (1) Reliability Statistics of the Questionnaire

Dimension		No. Statement	Cronbach's Alpha
Green Economy policies		7	.946
Sustainable Tourism Development	Economic Dimension	4	.854
	Environmental Dimension	4	.724
	Social Dimension	4	.851
Transition Requirements for a Green Economy		5	.900

Most dimensions demonstrate excellent internal consistency, with Cronbach's Alpha values above 0.8. This indicates that the questionnaire is well-designed for measuring the respective constructs.

Table (2) Personal Data of tourists

Nationality	Frequency	Percent
Egyptian	125	34.2%
European tourist	108	29.5%
American tourist	62	16.9%
Asian	42	11.5%
Other	29	7.9%
Total	366	100%
Gender	**Frequency**	**Percent**
Male	219	59.8%
Female	147	40.2%
Total	366	100%
Age	**Frequency**	**Percent**
Below 30 years old	105	28.7%
30 - 45 years old	158	43.2%
Above 45 years old	103	28.1%
Total	366	100%

Educational level	Frequency	Percent
High school	54	14.8%
Bachelor's degree	244	66.7%
master	58	15.8%
PhD	10	2.7%
Total	366	100%
What are your motives for choosing the Red Sea destination?		
	Frequency	**Percent**
Natural beauty such as beaches, marine life, coral reefs	174	47.5%
Cultural attractions	42	11.5%
Eco-friendly tourism options	56	15.3%
Adventure and outdoor activities	79	21.6%
other	15	4.1%
Total	366	100%

Analysis from table (2):

- Egyptian tourists account for the largest share of visitors, comprising 34.2% of the total, followed by European tourists at 29.5%. This highlights the destination's strong appeal within the domestic market, demonstrating its popularity among local tourists. The significant proportion of European tourists reflects the region's international appeal, which may be attributed to factors such as proximity, affordability, or the effectiveness of targeted marketing campaigns.
- The largest group of tourists visiting the Red Sea destination falls within the 30-45 age range, accounting for 43.2% of all visitors. This indicates the destination's strong appeal among adults in their prime working years, who likely seek a balance between relaxation and adventure during their travels.
- A significant majority of tourists visiting the Red Sea destination hold a bachelor's degree (66.7%). This suggests that highly educated tourists may be more inclined toward eco-friendly tourism practices, possibly due to increased awareness of environmental issues.
- Natural beauty, including beaches, marine life, and coral reefs (47.5%), is the most common motive for tourists choosing the Red Sea as a destination. The region's reputation for pristine beaches, diverse marine life, and vibrant coral reefs serves as its biggest attraction. This emphasizes the importance of prioritizing the conservation and management of these natural assets to maintain their appeal.

Table (3) Descriptive Statistics of Green Economy Policies

Green Economy policies	Mean	Std.D	Rank
1. Green economy policies aim to transition the Red Sea destination to clean, renewable energy.	4.19	.88	5
2. Green economy policies focus on reducing carbon emissions that threaten the sustainability of the Red Sea destination.	4.20	.79	4
3. Green economy policies focus on protecting biodiversity.	4.21	.71	3
4. Green economy policies contribute to mitigating climate change in the Red Sea destination.	4.14	.79	7
5. Green economy policies strive to preserve and protect natural environmental resources.	4.29	.69	1
6. Green economy policies support initiatives for waste reduction and recycling in the Red Sea destination.	4.15	.77	6
7. Green economy policies encourage the use of eco-friendly transportation means.	4.24	.75	2
Overall	**4.20**	**.672**	

As shown in table (3):

- The first rank of Green Economy Policies is “Green economy policies strive to preserve and protect natural environmental resources” with a mean of (**4.29**) and a standard deviation of (**.69**). This policy received the highest mean reflecting the strongest agreement among respondents that the preservation and protection of natural resources are essential for the Red Sea destination's green economy.
- The second rank of Green Economy Policies is “Green economy policies encourage the use of eco-friendly transportation means”. with a mean of (**4.24**) and a standard deviation of (**.75**). indicating that respondents acknowledge the importance of promoting sustainable transportation options, such as electric vehicles and public transit, as part of the green economy.
- The third rank of Green Economy Policies is “Green economy policies focus on protecting biodiversity”. with a mean of (**4.21**) and a standard deviation of (**.71**). demonstrates strong support for biodiversity conservation, emphasizing the importance of preserving the region's diverse ecosystems as part of sustainable tourism development.
- The fourth rank of Green Economy Policies is “Green economy policies focus on reducing carbon emissions that threaten the sustainability of the Red Sea destination”. with a mean of (**4.20**) and a standard deviation of

(.**79**). indicating that respondents recognize the threat posed by emissions to the region's sustainability.

- The fifth rank of Green Economy Policies is "Green economy policies aim to transition the Red Sea destination to clean, renewable energy ". with a mean of (**4.19**) and a standard deviation of (.**88**).
- The sixth rank of Green Economy Policies is "Green economy policies support initiatives for waste reduction and recycling in the Red Sea destination ". with a mean of (**4.15**) and a standard deviation of (.**77**). this policy emphasizes the importance of waste management, though it is viewed as slightly less critical compared to other green economy aspects. This may suggest that while waste reduction and recycling are important, they are not perceived as urgent as measures such as carbon reduction and resource preservation.
- The seventh rank of Green Economy Policies is "Green economy policies contribute to mitigating climate change in the Red Sea destination ". with a mean of (**4.14**) and a standard deviation of (.**79**). While this policy has a relatively strong mean score of 4.14, it ranks the lowest, suggesting that although respondents recognize the importance of addressing climate change, it is not viewed as the top priority compared to issues like biodiversity conservation or renewable energy adoption.

Overall: The green economy policies in this dataset are generally well-supported, with the highest consensus around resource preservation and biodiversity protection. While there is strong agreement on most policies, slight variations in responses suggest areas where stakeholders may have differing opinions, particularly regarding climate change mitigation and energy transition strategies. The overall mean of 4.20 with a standard deviation of 0.672 indicates a general positive outlook towards green economy initiatives in the Red Sea destination.

Table (4) Descriptive Statistics of Economic Dimension

Economic Dimension	Mean	Std.D	Rank
1. Tourism helps eliminate poverty and creates job opportunities for the local community in the Red Sea destination.	4.34	.75	1
2. Tourism contributes to achieving economic balance among members of the Red Sea destination.	4.22	.70	3
3. Tourism supports and drives economic growth through various activities in the Red Sea destination.	4.32	.71	2
4. Revenue generated from tourism is reinvested into the local community and infrastructure.	4.04	.82	4
Overall	**4.23**	**.62**	

As shown in table (4):

- The first rank of Economic Dimension is "Tourism helps eliminate poverty and creates job opportunities for the local community in the Red Sea destination" with a mean of (**4.34**) and a standard deviation of (**.75**). suggesting that respondents strongly agree with the idea that tourism plays a vital role in poverty reduction and job creation in the region.
- The second rank of Economic Dimension is "Tourism supports and drives economic growth through various activities in the Red Sea destination" with a mean of (**4.32**) and a standard deviation of (**.71**). highlighting the perception that tourism is a key driver of economic growth in the region.
- The third rank of Economic Dimension is "Tourism contributes to achieving economic balance among members of the Red Sea destination" with a mean of (**4.22**) and a standard deviation of (.**70**). This suggests that tourism is seen as a tool for balancing economic inequalities but may not be as highly perceived as directly impactful as poverty reduction or growth stimulation.
- The fourth rank of Economic Dimension is "Revenue generated from tourism is reinvested into the local community and infrastructure" with a mean of (**4.04**) and a standard deviation of (.**82**). suggest that while respondents generally believe tourism revenue is reinvested, there may be some reservations or less certainty about how effectively this is done.
- **Overall**, the responses indicate strong support for the idea that tourism has a positive economic impact on the Red Sea destination, particularly in terms of poverty alleviation, job creation, and economic growth. However, there is slightly less confidence in the reinvestment of tourism revenue, which could be an area of concern or a point for future development. The general consensus is that tourism plays a critical role in the region's economic development, but there may be opportunities for greater clarity or improvement in how the economic benefits are distributed and reinvested.

Table (5) Descriptive Statistics of Environmental Dimension

Environmental Dimension	Mean	Std.D	Rank
1. Ensuring the optimal utilization of environmental resources in the Red Sea destination.	4.25	.74	4
2. Addressing environmental challenges caused by tourism activities in the Red Sea destination.	4.27	.68	3
3. Protecting the Red Sea destination from degradation and pollution.	4.36	.66	1

4. Promoting the conservation and sustainable use of natural resources in the Red Sea destination.	4.33	.62	2
Overall	**4.30**	**.58**	

As shown in table (5):

- The first rank of Environmental Dimension is "Protecting the Red Sea destination from degradation and pollution" with a mean of (**4.36**) and a standard deviation of (.**66**).It suggests a high level of concern for the region's environmental health and sustainability.
- The second rank of Environmental Dimension is "Promoting the conservation and sustainable use of natural resources in the Red Sea destination" with a mean of (**4.33**) and a standard deviation of (.**62**). indicating a strong belief in the importance of promoting conservation and sustainable practices for natural resources in the region.
- The third rank of Environmental Dimension is "Addressing environmental challenges caused by tourism activities in the Red Sea destination" with a mean of (**4.27**) and a standard deviation of (.**68**). This highlights recognition of the challenges tourism poses to the environment, and the need to address these issues.
- The fourth rank of Environmental Dimension is "Ensuring the optimal utilization of environmental resources in the Red Sea destination" with a mean of (**4.25**) and a standard deviation of (.**74**). reflects a strong belief in the importance of using environmental resources wisely. However, it ranks the lowest of the four, suggesting it may not be perceived as the most urgent environmental concern compared to protecting the destination from degradation.
- **Overall**: The data shows a strong consensus among respondents that environmental sustainability is a top priority for the Red Sea destination, especially in terms of **pollution prevention, conservation,** and **sustainable resource management**. While all aspects of environmental protection are viewed positively, there is a slight emphasis on safeguarding the destination from degradation and pollution, reflecting the pressing concerns regarding environmental preservation. Moving forward, it may be beneficial for tourism policies to prioritize these environmental challenges and ensure effective measures are in place to manage the region's ecological health.

Table (6) Descriptive Statistics of Social Dimension

Social Dimension	Mean	Std.D	Rank
1. Sustainable tourism development enhances community welfare.	4.23	.70	2
2. Sustainable tourism initiatives help reduce unemployment in the Red Sea destination.	4.27	.72	1
3. Promoting social and cultural exchange between the local community and visitors.	4.22	.71	3
4. Sustainable tourism development encourages local communities to actively participate in tourism planning and decision-making.	4.10	.75	4
Overall	**4.20**	**.60**	

As shown in table (6):

- The first rank of social Dimension is "Sustainable tourism initiatives help reduce unemployment in the Red Sea destination" with a mean of (**4.27**) and a standard deviation of (.**72**), indicating the strongest agreement among respondents that sustainable tourism initiatives play a crucial role in reducing unemployment in the region. This highlights the importance of job creation through sustainable tourism practices.
- The second rank of social Dimension is "Sustainable tourism development enhances community welfare" with a mean of (**4.23**) and a standard deviation of (.**70**), suggesting that respondents believe sustainable tourism significantly improves the welfare of local communities, contributing to their well-being and prosperity.
- The third rank of social Dimension is "Promoting social and cultural exchange between the local community and visitors" with a mean of (**4.22**) and a standard deviation of (.**71**), reflects the value placed on social and cultural interactions between locals and tourists, which can enrich both groups' experiences and promote mutual understanding.
- The fourth rank of social Dimension is "Sustainable tourism development encourages local communities to actively participate in tourism planning and decision-making" with a mean of (**4.10**) and a standard deviation of (.**75**), It suggests that while participation in tourism planning is considered important, it may not be as universally emphasized as the other factors, such as reducing unemployment or enhancing community welfare.
- **Overall**: The data indicates that job creation and enhancing community welfare are the top priorities in the social dimension of sustainable tourism development. Respondents strongly support the idea that sustainable tourism can provide economic benefits to local communities while

fostering social and cultural exchange. Community participation in planning and decision-making is still important, but it appears to be ranked lower in comparison to more immediate social benefits like employment and welfare.

Table (7) Descriptive Statistics of Transition Requirements for a Green Economy

Transition Requirements for a Green Economy	Mean	Std.D	Rank
1. Requiring tourist establishments to obtain accreditation for green practices.	4.26	.71	5
2. Implementing legislation and policies to facilitate the transition to a green economy.	4.28	.70	4
3. Raising public awareness about the importance of transitioning to a green economy.	4.38	.63	1
4. Adopting policies to promote the production of environmentally friendly materials.	4.31	.66	3
5. Expanding government investments in green initiatives, such as public transportation, renewable energy, and eco-friendly hotels.	4.37	.72	2
Overall	**4.32**	**.58**	

As shown in table (7):

- The first rank of Transition Requirements for a Green Economy is "Raising public awareness about the importance of transitioning to a green economy" with a mean of (**4.38**) and a standard deviation of (**.63**), indicating the strongest agreement among respondents that public awareness is crucial for the success of the green economy transition.
- The second rank of Transition Requirements for a Green Economy is "Expanding government investments in green initiatives, such as public transportation, renewable energy, and eco-friendly hotels" with a mean of (**4.37**) and a standard deviation of (**.72**), emphasizes the need for significant government investment in green initiatives, which is seen as a crucial step for the region's green transition.
- The third rank of Transition Requirements for a Green Economy is "Adopting policies to promote the production of environmentally friendly materials" with a mean of (**4.31**) and a standard deviation of (**.66**), suggesting that respondents recognize the importance of fostering the production of sustainable materials as part of the green economy shift.
- The fourth rank of Transition Requirements for a Green Economy is "Implementing legislation and policies to facilitate the transition to a green

economy" with a mean of (**4.28**) and a standard deviation of (**.70**), suggesting that legislation alone may not be sufficient without complementary actions.

- The fifth rank of Transition Requirements for a Green Economy is "Requiring tourist establishments to obtain accreditation for green practices" with a mean of (**4.26**) and a standard deviation of (**.71**), The idea of requiring green certifications for tourist establishments is considered important, but respondents may view it as a more specific requirement compared to broader actions like public awareness and government investment.
- **Overall**: The data reveals strong support for measures that encourage the transition to a green economy, particularly those that focus on raising public awareness, government investment, and policy adoption. These are seen as foundational elements in achieving a sustainable, green economy for the Red Sea destination. The need for tourist establishment certifications is also recognized but ranked slightly lower, suggesting it may be a secondary priority once more general, structural changes are made.

Table (8) the Relation between Green Economy Policies and Sustainable Tourism Development

Variables		Economic Dimension	Environmental Dimension	Social Dimension	Sustainable Tourism Development
Green Economy policies	Pearson Correlation	.634**	.654**	.562**	.717**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	366	366	366	366
**. Correlation is significant at the 0.01 level (2-tailed).					

Green Economy Policies and Economic Dimension:
There is a strong, positive, and statistically significant correlation between green economy policies and the economic dimension, with a Pearson correlation coefficient of $R = 0.634$ ($p < 0.01$). This indicates that implementing green economy policies has a positive impact on the economic aspects of sustainable tourism development.

Green Economy Policies and Environmental Dimension:
The correlation is strong and positive, with a Pearson correlation coefficient of $R = 0.654$ ($p < 0.01$), indicating that green economy policies have a

significant positive impact on the environmental dimension of sustainable tourism.

Green Economy Policies and Social Dimension:

A moderate positive correlation exists between green economy policies and the social dimension, with a Pearson correlation coefficient of $R = 0.562$ ($p < 0.01$). This indicates that green economy policies contribute to the social aspects of sustainable tourism development, though to a slightly lesser extent than the economic and environmental dimensions.

Green Economy Policies and Sustainable Tourism Development (Overall):

There is a very strong positive correlation between green economy policies and overall sustainable tourism development, with a Pearson correlation coefficient of $R = 0.717$ ($p < 0.01$). This highlights the critical role that green economy policies play in advancing sustainable tourism holistically.

The results indicate that Green Economy Policies are significantly and positively correlated with all dimensions of Sustainable Tourism Development (economic, environmental, and social), with the strongest overall impact observed on sustainable tourism as a whole (R=0.717). These findings highlight the importance of adopting green economy strategies to foster sustainable tourism practices. These results emphasize the importance of implementing green policies to ensure the balanced and sustainable growth of the tourism sector.

Table (9) the Impact of Green Economy Policies on Sustainable Tourism Development

Model	R	R2	Beta	f	Sig.	t	Sig.
(Constant)	.717	.515	1.924	385.9	.000	16.052	.000
Sustainable Tourism Development			.553			19.645	.000
a. Predictors: (Constant) Green Economy policies b. Dependent Sustainable Tourism Development							

The regression analysis demonstrates that green economy policies significantly and positively impact sustainable tourism development. Approximately 51.5% of the variation in sustainable tourism development can be explained by these policies, as indicated by R2=0.515. The F-value and T-value further confirm the strength and statistical significance of this relationship. These findings highlight the critical importance of promoting and implementing green economy policies to advance sustainability in the tourism industry. Such policies play a pivotal role in fostering a balanced approach to economic, environmental, and social sustainability within the

sector. "In this regard, achieving Objective 3 involves identifying the impact of the green economy on sustainable tourism development."

Table (10) Difference Between Tourists' Educational Levels Regarding Green Economy Policies

Green Economy policies					
Educational level	**N**	**Mean**	**Std. D**	**F**	**Sig.**
High school	54	3.82	.856	8.300	.000
Bachelor's degree	244	4.24	.639		
Master	58	4.40	.518		
PhD	10	4.17	.291		
Total	366	4.20	.672		

This table presents the ANOVA results for the perceptions of Green Economy policies based on educational level. The dependent variable is the perception of Green Economy policies, and the groups are categorized by educational level: High school, Bachelor's degree, Master's degree, and PhD. F-value of 8.300 suggests that there are substantial differences between the educational levels in their perception of Green Economy policies. p-value is less than 0.05 (0.000), which indicates that the differences in perceptions of Green Economy policies across educational levels are statistically significant. Suggesting**,** There is a significant difference in how people with different educational levels perceive Green Economy policies. Specifically, individuals with a Master's degree have the highest mean (4.40), indicating a more favorable perception of Green Economy policies compared to other groups. On the other hand, high school graduates have the lowest mean (3.82), suggesting a less favorable perception.

Table (11) Differences Between Tourists' Ages Regarding Green Economy Policies

Green Economy policies					
Age	**N**	**Mean**	**Std. D**	**F**	**Sig.**
Below 30 years old	105	4.04	.712	5.676	.004
30 - 45 years old	158	4.32	.593		
Above 45 years old	103	4.19	.714		
Total	366	4.20	.672		

The table presents the ANOVA results for the perceptions of Green Economy policies across different age groups. The analysis compares three age groups: Below 30 years old, 30-45 years old, and Above 45 years old-value of 5.676 indicates that there is variability in the perceptions of Green Economy policies between the different age groups compared to within-group variability. p-value is 0.004, which is less than 0.05. This means that the differences in perceptions of Green Economy policies across age groups are statistically significant. indicating, there is a significant difference in how different age groups perceive Green Economy policies. The 30-45 years old group has the highest mean (4.32), indicating a more favorable perception of Green Economy policies. The below 30 years old group has the lowest mean (4.04), suggesting a less favorable perception compared to the other groups. The above 45 years old group has a mean of 4.19, which is higher than the below 30 years old group but lower than the 30-45 years old group. "In this regard, achieving question 3 which asked: Are there differences between green economy policies and tourists' age?

CONCLUSION

A green economy can be comprehensively described as a sustainable economic system that aims to balance environmental preservation, social equity, and economic growth. It focuses on reducing environmental risks, efficiently utilizing natural resources, and promoting human well-being. Key areas include investing in renewable energy, low-carbon transportation, and clean technologies, all supporting sustainable development. The green economy fosters economic opportunities aligned with environmental goals, ensuring long-term ecological and social progress. This research aims to examine the potential of transitioning to a green economy in the Egyptian tourism sector to achieve sustainable tourism development, with a focus on the Red Sea region. The selection of the Red Sea region as the research area for implementing green economy practices in the tourism sector is based on several factors. The region boasts unique tourism resources, including vibrant coral reefs, mangroves, golden beaches, clear blue waters, sunny and warm weather, and well-developed tourist facilities. The research population consisted of tourists visiting the Red Sea destination. The statistical analysis of the research variables illustrates that Natural beauty, including beaches, marine life, and coral reefs is the most common motive for tourists choosing the Red Sea as a destination. The data reveals strong support for measures that encourage the transition to a green economy, particularly those that focus on raising public awareness, government investment, and policy adoption. These are seen as foundational elements in achieving a sustainable, green economy for the Red Sea destination. The results indicate that Green Economy Policies are significantly and positively correlated with all

dimensions of Sustainable Tourism Development (economic, environmental, and social), with the strongest overall impact observed on sustainable tourism as a whole (R=0.717). These findings highlight the importance of adopting green economy strategies to foster sustainable tourism practices.

RECOMMENDATIONS FOR THE MINISTRY OF TOURISM AND ANTIQUITIES

Here are some key recommendations for the Ministry of Tourism and Antiquities to help integrate green economy policies into the tourism sector:

1. Developing policies and regulations supporting the green economy.
2. Developing Plans to Protect Marine Life and Beaches from Pollution.
3. Using Technology to Monitor the Environmental Impact of Tourism Activities.
4. Encouraging projects that offer tourism services aligned with the principles of sustainable tourism.
5. Promote Eco-friendly Practices: Encourage tourism operators, hotels, and transportation providers to adopt sustainable practices such as reducing energy consumption, minimizing waste, and using renewable energy sources.
6. Align tourism strategies with environmental protection and cultural heritage conservation to ensure that Egypt's natural and archaeological sites are preserved for future generations.
7. Launch awareness campaigns to educate tourists about Egypt's environmental and cultural heritage, encouraging them to respect local traditions and practice sustainability during their visits.
8. Provide financial incentives, subsidies, or tax breaks to businesses that implement sustainable practices, such as installing solar panels, offering eco-friendly services, or developing waste reduction programs.
9. Encourage local communities to engage in tourism activities that are environmentally and culturally sustainable, benefiting from both the economic returns and the preservation of local heritage.
10. The Ministry of Tourism and Antiquities should cooperate with the Ministry of Environment in managing waste in tourist and archaeological areas to position Egypt as a green tourist destination.
11. The Ministry of Tourism and Antiquities should cooperate with the Ministry of Investment to issue laws that provide investment incentives for tourism projects that adopt green practices, such as tax reductions.

RECOMMENDATIONS FOR INVESTORS

Here are some recommendations for investors in the tourism sector to align with green economy policies and contribute to sustainable tourism development:

1. Investors should prioritize projects that incorporate energy-efficient building designs, use renewable energy sources (like solar or wind), and implement water-saving technologies in hotels, resorts, and tourist attractions.
2. Support projects that embrace circular economy principles, such as those that reduce waste through recycling, upcycling, or reusing resources in the tourism industry.
3. Invest in tourism ventures that involve local communities in sustainable practices, such as community-based eco-tourism projects that preserve cultural heritage, support local artisans, or protect natural resources.
4. investors should prioritize long-term projects that align with global sustainability goals. This can include creating a portfolio of sustainable tourism investments that generate lasting environmental, social, and economic benefits.
5. Work with governments and international organizations to help shape policies and incentives that support sustainable tourism investment, creating a favorable environment for green economy initiatives.
6. Tourism establishments should adopt training programs to equip their employees with the right environmental skills and behaviors and raise their awareness of the importance of preserving the destination's tourist environment.
7. By focusing on these recommendations, investors can play a critical role in advancing Egypt’s green economy, particularly within the tourism sector, driving long-term, sustainable development that benefits both the economy and the environment.

FURTHER RESEARCH

Future researchers may explore the impact of green economy policies on repeat visitation and destination loyalty among tourists. Furthermore, they can evaluate the effectiveness of technology in educating tourists about conservation and eco-friendly activities. Additionally, researchers may investigate how digital tools and apps can enhance sustainable practices in the tourism sector.

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