
GREEN ECONOMY POLICIES: CHALLENGES, PERCEIVED BENEFITS, AND THE GOVERNMENT'S ROLE IN THE TRANSITION TO A GREEN ECONOMY

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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. The research aims to identify the perceived benefits, challenges, and the government's role of the transition to a green economy in the Egyptian tourist destination. The research population included tourists visiting the Red Sea destination and tourism experts. A total of 400 questionnaires were distributed among tourists, with 366 valid responses analyzed after excluding 34 invalid ones. The interview with nine of tourism experts conducted to gather information about the green economy. 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 Policies, Sustainable Tourism Development, Red Sea Destination, reducing environmental risks.

INTRODUCTION

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, 2012). The GE, which will be a new route for the future economy, has received a lot of attention from organizations because of its benefits. According to the United Nations Environment Programme (UNEP), a green economy produces jobs, improves equality in society, and has a good impact on the labor market. The International Labour Organization (ILO) believes that GE has the potential to produce millions of jobs (Ge & Zhi, 2016). 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).

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. We must transform economic practices and policies and link them with sustainability principles to accomplish the Sustainable Development Goals (SDGs). Policymakers around the world should restructure their economies to eliminate poverty, increase employment and societal justice, boost incomes and environmental stewardship, and grow following with the Goals for Sustainable Development (Newton, 2011).

RESEARCH AIM AND OBJECTIVES

The research aims to identify the perceived benefits, challenges, and the government's role of the transition to a green economy in the Egyptian tourist destination. To achieve this research aim, the current research specifically seeks to achieve the following research objectives:

1. Recognize the main benefits of implementing green economy policies for tourism in the Red Sea destination.
2. Determine the government's role in the transition to a green economy in the Red Sea destination.
3. Classify the challenges facing the tourism industry in transitioning to a green economy.
4. Identify the main motive for choosing the Red Sea as a destination.
5. Examine the relationship between green economy policies and consumer behavior.

RESEARCH QUESTIONS

1. What strategies can be implemented to establish the Red Sea as a leading sustainable tourism destination?
2. What are the benefits of implementing green economy policies for tourism in the Red Sea destination?
3. What challenges does the tourism industry face in transitioning to a green economy?
4. What is the government's role in transitioning to a green economy?
5. What is the impact of the green economy on consumer behavior?

GREEN ECONOMY

These days, it is crucial for contemporary society to protect the environment and preserve nature. The primary goal of environmental policy is to address the expanding demands of society on the environment, ensuring that human needs are met and that natural resources are used sensibly and efficiently while maintaining the environment's structure, quality, and sustainability of processes and functions (Sverdan, 2021). 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 can actually play a useful role in changing the way society manages the interaction between the environment and the economic sector, especially in terms of the principles of sustainable development (Iavicoli et al., 2014). The International Chamber of Commerce (ICC) points out that the GE is described as an economy in which economic growth and environmental responsibility complement each other and support social development and progress (Marco-Fondevila et al., 2018). The green economy is an economic activity that, in addition to increasing human well-being as the ultimate goal of economic activity, also expects to contribute to the realization of justice, both social justice and justice for the environment and natural resources themselves (Walker and Plotnikova, 2018).

PRINCIPLES OF GREEN ECONOMY

Programs and initiatives for sustainable development, such as those aimed at preventing pollution and promoting sustainable production and consumption, must incorporate the concepts of the green economy. It is necessary to have discussions with many stakeholders before developing green economic principles in order to address the requirements, goals, and vision of each sector.

In order to operationalize a green economy, a set of GE principles that arise from discussion can be used as a set of rules for decision-making that can be applied across institutions and sectors. The fundamental tenets of the green economy are social justice, ecological boundaries, and community ownership (Vargas-Hernández, 2020). The GE is evaluated using a several different criteria. These developed principles highlight several facets of the green economy. Research was done by Nahman et al. (2016) and Rede & Ingle (2022) to determine the norms and guiding principles of the GE. The criteria were connected following the twelve principles, as illustrated below:

1. The green economy is a strategy for sustainable development.
2. The green economy uses relevant indicators and measures for assessing development beyond Gross Domestic Product (GDP).
3. The green economy respects ecological constraints, planetary limitations, and scarcity (complete decoupling).
4. The green economy uses integrating environmental, social, and economic decision-making, which calls for excellent governance that is inclusive, democratic, participatory, responsible, transparent, and stable.
5. Developing impacts, promoting green investment and innovation, and providing incentives for sustainable behavior and lifestyles are all aspects of the green economy.
6. Infrastructure and greening economic activities are investments made by the green economy.
7. The green economy uses less energy and resources.
8. There is no waste, little emissions, and little carbon in the green economy.
9. The green economy supports biodiversity and ecosystems.
10. The green economy provides social safety, well-lived livelihoods, access to basic amenities, and a decrease in poverty.
11. Green jobs and honest employment should be produced by the green economy.
12. The green economy is just, fair, and equitable within and between nations as well as across generations.

BENEFITS FROM GREEN ECONOMY

Countries that transition to a green economy benefit from several advantages. GE has several advantages, including the introduction of environmentally friendly economic items, a significant rise in quality of life in sustainable cities, and a decrease in demand for energy and other natural resources. The GE, which has been developed to analyze the environmental impacts of production and consumption activities, is said to be effective in directing decision-making processes in terms of indicators, as well as developing economic policies and sustainable development indicators (Loiseau et al., 2016).

Green economic development promotes the sustainable use of a country's resources. This could lead to new markets through specialization and the development of specialized markets for products and services in energy efficiency, renewable energy production, or sustainable natural resource management, such as solar installation. GE efforts help to mitigate these issues by focusing on efficient ways to reduce energy imports. GE projects contribute to better health by reducing pollution and improving the natural environment. Examples are sustainable transportation policies that reduce air pollution. The green economy is concerned with the long-term management of natural assets and resources such as landscapes, lakes, rivers, mountains, and forests in order to retain or improve their advantages (Bongay & Turay, 2024). The GE increases a country's resilience to environmental change or shocks, resulting in improved adaptation to climate change and natural disasters. This is an area for new products and market development. The green economy contributes to addressing the core causes of environmental issues by building mechanisms for dealing with environmental deterioration through methods such as waste treatment, reuse, and recycling.

This has major health advantages, lowers infrastructure maintenance costs, and promotes overall well-being (Ali et al., 2021).

THE TRANSITION TOWARDS A GREEN ECONOMY

The shift to a green economy is now a top priority for every nation. Sansyzbayeva et al. (2020) look at technologies and innovations as a driving force in this shift, as well as successful practices and lessons learned from developed nations that other nations can apply to their own situations. Technological innovations are a crucial component of a green economy transition, but ultimately, such a transition can only be achieved through societal innovation, which has been defined as a novel economic or social improvement to people's everyday lives or systemic change to society's structures or modes of operation. The two key norms are that any transition towards a GE must improve both societal and environmental conditions. We propose a two-dimensional framework that can serve to operationalize and measure a successful transition to a GE (Droste et al., 2016). As follows:

First proposition: Natural capital is enhanced by a green economy. The UNEP defines a GE as one in which ecosystems and the services they provide are preserved. In order to achieve this, investments in natural capital and resource efficiency must be made in order to increase the inventories of natural resources. Eventually, this will result in a complete decoupling of economic activity from resource depletion (Barbier, 2011). Second proposition: In the society issue, a GE improves the standard of living. It is necessary to enhance

human welfare and societal equality in a GE. Being an inclusive economy, the green economy requires policies that lead to successful transitions to include important stakeholders in the design of goals as well as in their implementation and monitoring. Transitions to a GE also need innovative leadership and creative players. The success of a green economy transition can be assessed in terms of enhancing human well-being and societal equity using social equity indicators that involve a wide range of variables, including life satisfaction, health, education, working conditions, and many more (Allen, 2012).

In order to move to a green economy, the following measures must be taken: (Khanfar, 2014).

1. Examining and redrafting government regulations to encourage changes in investment, consumption, and production trends.
2. Focusing on rural development with the intention of reducing rural poverty by providing more resources.
3. Keeping an eye on the water sector, controlling and streamlining its usage, and avoiding pollution.
4. Working on energy-related sustainable investments and efficiency-boosting initiatives.
5. Implementing more energy-efficient industrial technologies and developing low-carbon development plans.

METHODOLOGY

In this research, a mixed-method approach was used by collecting both qualitative and quantitative data to better understand the research problem than using a single approach. The population of this research consists of tourists who visit the Red Sea destination and tourism experts. Interviews with tourist experts and questionnaires with tourists are the source of the primary data. Interviews with nine of tourist experts were conducted to identify the various opinions about green economy policies. A sample of experts was chosen because they are fully familiar with the tourism field. The researcher distributed 400 questionnaires among tourists. After analysis, 34 questionnaires were deemed invalid, while 366 were valid for analysis. To obtain a statistically representative sample size of the population, Cochran's formula was used for an unknown population (Chaokromthong & Sintao, 2021). Pilot research was conducted on 40 questionnaires to extract the variance of the community (Kotrlík & 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.

Table (1) 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 (1):

- 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 (2) 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 (2):

- 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 (3) Descriptive Statistics of Challenges Facing the Implementation of the Green Economy

Challenges Facing the Implementation of the Green Economy	Mean	Std.D	Rank
1. Unsustainable use of natural resources	4.25	.75	1
2. Lack of environmental planning in tourism projects.	4.12	.82	5
3. Limited investor awareness of the areas and applications of green economy policies.	4.13	.80	4
4. Insufficient budget allocation for the implementation of green economy projects.	4.14	.83	3
5. Low consumer awareness or unwillingness to pay for sustainable products.	4.17	.78	2
Overall	4.16	.66	

As shown in table (3):

- The first rank of challenges facing the implementation of the green economy is “Unsustainable use of natural resources” with a mean of (4.25) and a standard deviation of (.75), indicating strong agreement that the unsustainable use of natural resources is a critical issue hindering the green economy transition. Respondents believe that addressing resource depletion is crucial for the region’s shift to green economy.
- The second rank of challenges facing the implementation of the green economy is “Low consumer awareness or unwillingness to pay for sustainable products” with a mean of (4.17) and a standard deviation of (.78), this challenge highlights the role of consumer behavior in the transition process. There is strong consensus that many consumers are either unaware of or unwilling to pay a premium for sustainable products, which hinders the adoption of eco-friendly practices.
- The third rank of challenges facing the implementation of the green economy is “Insufficient budget allocation for the implementation of green economy projects” with a mean of (4.14) and a standard deviation of (.83), Adequate funding is seen as essential to supporting the necessary projects and policies for the green economy transition, yet it appears that there is a lack of sufficient financial commitment.
- The fourth rank of challenges facing the implementation of the green economy is “Limited investor awareness of the areas and applications of green economy policies” with a mean of (4.13) and a standard deviation of (.80), The respondents view the lack of understanding about the green economy policies and their potential as a significant barrier to the transition, which could prevent investments in sustainable practices.
- The fifth rank of challenges facing the implementation of the green economy is “Lack of environmental planning in tourism projects” with a mean of (4.12) and a standard deviation of (.82), suggesting that while respondents see environmental planning as important, it may be perceived as a less immediate obstacle compared to the other challenges. However, it is still considered a significant issue, as sustainable planning in tourism is critical for reducing environmental impacts.
- **Overall:** The data highlights several significant challenges to the implementation of a green economy in the Red Sea destination. The unsustainable use of natural resources and low consumer willingness to pay for sustainable products are the most pressing issues, followed closely by financial constraints in the form of insufficient budget allocation and limited investor awareness. Addressing these challenges requires a multi-faceted approach that includes public education, policy reform, and financial investments in green projects.

Table (4) Descriptive Statistics of Consumer Behavior

Consumer Behavior	Mean	Std.D	Rank
1. I prefer destinations that implement policies to reduce their environmental footprint.	4.10	.83	1
2. I am willing to pay a premium for eco-friendly experiences and accommodations.	3.90	.95	5
3. My awareness of sustainability issues significantly influences my travel decisions.	3.95	.89	4
4. I am more inclined to support destinations that actively promote environmental conservation.	4.07	.83	2
5. A green economy approach to tourism positively impacts my travel choices.	4.03	.87	3
Overall	4.01	.75	

As shown in table (4):

- The first rank of consumer behavior is “I prefer destinations that implement policies to reduce their environmental footprint” with a mean of **(4.10)** and a standard deviation of **(.83)**, This indicates that environmental policies are a key factor in their decision-making process when choosing destinations.
- The second rank of consumer behavior is “I am more inclined to support destinations that actively promote environmental conservation” with a mean of **(4.07)** and a standard deviation of **(.83)**, highlighting that active promotion of environmental conservation is an important factor for consumers when selecting a destination.
- The third rank of consumer behavior is “A green economy approach to tourism positively impacts my travel choices” with a mean of **(4.03)** and a standard deviation of **(.87)**, indicates the adoption of a green economy approach positively influence travel decisions.
- The fourth rank of consumer behavior is “My awareness of sustainability issues significantly influences my travel decisions” with a mean of **(3.95)** and a standard deviation of **(.89)**, This suggests that awareness of sustainability is important but not as impactful as destinations' actual policies and practices.
- The fifth rank of consumer behavior is “I am willing to pay a premium for eco-friendly experiences and accommodations” with a mean of **(3.90)** and a standard deviation of **(.95)**, indicates that although there is some

willingness to pay more for eco-friendly experiences, it is less prevalent. Cost remains a barrier, and many consumers may prioritize other factors, such as overall cost or convenience, over paying a premium for sustainability.

- **Overall:** The data shows that environmental policies and conservation efforts are strong drivers of consumer behavior, with a preference for destinations that prioritize reducing environmental footprints and actively promote sustainability. However, while there is some willingness to pay more for eco-friendly options, the price sensitivity of travelers means that cost-effective sustainable options are likely to be more successful. To increase the adoption of eco-friendly travel experiences, destinations may need to focus on balancing sustainability with affordability to attract a broader range of consumers.

Analysis of Interviews

Table (5): Interview Questions

Research Questions	Interview Questions
First question: What practices can the government implement to support the transition to a green economy in the Red Sea destination?	<ul style="list-style-type: none"> • What regulations does the government implement to facilitate the transition to a green economy? • To what extent does your tourism establishment adopt renewable energy? • Does your establishment consider protecting biodiversity and natural resources?
Second question: What are the main benefits of implementing green economy policies for tourism in the Red Sea destination?	<ul style="list-style-type: none"> • Do you think that implementing green economy policies will reduce pollution from tourism activities? • To what extent will implementing green economy policies improve the destination's image? • How can coastal areas be protected from the impacts of climate change? • To what extent will implementing green economy policies improve local communities?
Third question: What strategies can be implemented to establish the Red Sea as a leading sustainable tourism destination?	<ul style="list-style-type: none"> • To what extent can the Red Sea destination use green transportation? • What is your opinion on launching marketing campaigns that highlight the environmental identity of the destination? • Do you agree that recycling and waste management are essential for the destination? • To what extent will educationally campaigns influence tourists' attitudes toward the environment?

From table (5):

Following are the three main themes that emerged from the thematic analysis from the interviews:

- The government's role in the transition to a green economy in the Red Sea destination.
- The benefits of implementing green economy policies.
- Strategies that can be implemented to establish the Red Sea as a leading sustainable tourism destination.

First: The government's role in the transition to a green economy in the Red Sea destination

The results showed the respondents' perspectives on government's role in the transition to a green economy as follows:

- Developing policies and regulations supporting green economy
- Promoting the use of renewable energy
- Developing Plans to Protect Marine Life and Beaches from Pollution
- Using technology to monitor the environmental impact of tourism activities
- Launching awareness campaigns targeting tourists and tourism industry workers about the importance of environmental conservation.
- Building tourist facilities with eco-friendly designs by using materials that are environmentally friendly and practices that reduce resource consumption.
- Supporting small and medium enterprises by encouraging projects that offer tourism services aligned with the principles of sustainable tourism.

Second question: The benefits of implementing green economy policies

- Reducing dependency on non-renewable resources: by using renewable energy sources such as solar and wind power.
- Creating new job opportunities: in the fields of eco-tourism and green projects.
- enhancing the region's reputation as an environmentally responsible tourism destination: contributing to increased tourist flow.
- protecting coastal areas from the impacts of climate change, such as rising sea levels.
- Reducing carbon emissions: by promoting renewable energy (e.g., solar, wind) and energy efficiency in tourism infrastructure.

1. Engaging local communities in eco-tourism activities: strengthening the sustainability of the local economy.
2. Improving the quality of life for residents: by reducing pollution and enhancing essential services.

Third question: strategies can be implemented to establish the Red Sea as a leading sustainable tourism destination

1. Encouraging eco-tourism activities such as eco-friendly diving, bird watching, and nature walks, focusing on minimizing the environmental impact of tourists.
2. Adopting solar and wind energy in tourism establishments (such as hotels and resorts) to reduce carbon emissions.
3. implementing water recycling technologies to recycle water for irrigating green spaces in resorts.
4. Designing green resorts and hotels in line with environmental standards, using eco-friendly building materials.
5. Improving public transportation by providing sustainable transport options, such as electric vehicles.
6. Launching marketing campaigns which highlighting the red sea's environmental identity as a responsible tourism destination.
7. Offering awareness programs to tourists for teaching them the importance of marine conservation and how to reduce their environmental footprint during visits.
8. Creating a sustainable monitoring system to assess the impact of tourism activities on both marine and terrestrial environments.

Table (6) the Relation between Green Economy Policies and Consumer Behavior

Variables		Consumer Behavior
Green Economy policies	Pearson Correlation	.445**
	Sig. (2-tailed)	.000
	N	366
**. Correlation is significant at the 0.01 level (2-tailed).		

The table evaluates the relationship between Green Economy Policies and Consumer Behavior using Pearson correlation analysis. The results indicate that Green Economy Policies have a statistically significant moderate positive impact on Consumer Behavior ($R=0.445$, $p<0.01$). This implies that consumers are influenced by green policies, potentially shifting toward more sustainable and environmentally friendly actions. While the correlation is moderate, it reflects the potential for green economy initiatives to shape consumer

preferences and behaviors, making it essential to implement and promote such policies to encourage further behavioral change.

Table (7) the Impact of Green Economy Policies on Consumer Behavior

Model	R	R2	Beta	f	Sig.	t	Sig.
(Constant)	.445	.198	1.905	89.916	.000	8.445	.000
Consumer Behavior			.502			9.482	.000
a. Predictors: (Constant) Green Economy policies							
b. Dependent: Consumer Behavior							

From a table (7) Indicates a moderate positive correlation between Green Economy policies and Consumer Behavior which $R^2=0.198$ Suggests that 19.8% of the variance in Consumer Behavior can be explained by Green Economy policies. Beta = 0.502: Indicates a strong positive effect of Green Economy policies on Consumer Behavior. For every unit increase in Green Economy policy implementation, Consumer Behavior improves by 0.502 units on average. $t=9.482$, $p<0.001$: Highlights the statistical significance of the predictor, demonstrating that Green Economy policies have a substantial and meaningful influence on Consumer Behavior.

Table (8) Differences Between Tourists' Nationalities Regarding Green Economy Policies

Green Economy policies					
Nationality	N	Mean	Std. D	F	Sig.
Egyptian	125	4.30	.47	6.100	.000
European tourist	108	4.35	.65		
American tourist	62	4.03	.84		
Asian	42	4.04	.61		
Other	29	3.83	.87		
Total	366	4.20	.67		

The table presents ANOVA results for the perceptions of Green Economy policies across different nationality groups. The analysis compares the means of five nationality groups: Egyptian, European tourist, American tourist, Asian, and Other. The F-value of 6.100 suggests that there is a significant difference in the perceptions of Green Economy policies among the nationality groups. The p-value is less than 0.05 (0.000), which means that the differences in perceptions of Green Economy policies across nationalities are statistically significant. Indicating, the nationality of an individual significantly affects their perception of Green Economy policies, as indicated by the statistically

significant p-value ($p = 0.000$). European tourists have the highest mean (4.35), followed by Egyptians (4.30), while Other (3.83) have the lowest mean.

Table (9) Differences Between Tourists' Genders Regarding Green Economy Policies

Independent Samples Test				
Green Economy policies	Gender	N	Mean	Sig. (2-tailed)
	Male	219	4.20	.941
	Female	147	4.20	

The **INDEPENDENT** Samples Test compares the means of Green Economy Policies perceptions between males and females. The p-value is 0.941, much greater than the 0.05 threshold. This means there is no statistically significant difference between males and females in their perceptions of Green Economy policies. The mean perceptions for both genders are exactly the same (4.20), confirming that gender does not have any impact on the perception of Green Economy policies in this sample.

RECOMMENDATIONS FOR THE MINISTRY OF TOURISM AND ANTIQUITIES

Based on the findings of this research, several recommendations can be suggested as follows:

1. Developing policies and regulations supporting the green economy.
2. Promoting the use of renewable energy.
3. Developing plans to protect marine life and beaches from pollution: such as tightening controls on diving and snorkeling activities to prevent damage.
4. Using technology to monitor the environmental impact of tourism activities.
5. Encouraging projects that offer tourism services aligned with the principles of sustainable tourism.
6. 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.
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. 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.
10. 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.

FURTHER RESEARCH

Future researchers may explore the obstacles faced by investors in implementing green tourism projects. Furthermore, they can assess how awareness of green policies influences tourists' decision-making and satisfaction levels.

REFERENCES

- Akinyemi O, Efobi U, Asongu S, et al. (2018) Green Growth Strategy and Trade Performance in Sub-Saharan Africa. Department of Economics and Development Studies Working Paper, Covenant University, Nigeria.
- Ali, A. H. S. (2021). Societal green economy and its impact on sustainable development. *Int. J. Sustain. Dev*, 16, 105-114.
- Allen, C. (2012). Issue 3: Exploring green economy policies and international experience with national strategies. A Barbier, E. (2011, August). *The policy challenges for green economy and sustainable economic development. In Natural resources forum (Vol. 35, No. 3, pp. 233-245). Oxford, UK: Blackwell Publishing Ltd. Guidebook to the Green Economy.*
- Barbier, E. B. (2016). Is green growth relevant for poor economies?. *Resource and energy economics*, 45, 178-191.
- Bongay, E., & Turay, M. J. (2024). Achieving and Sustaining the Green Economy and Its Potential Benefit to the Economic Growth of Sierra Leone: Empirical Analysis. *International Journal of Agricultural Economics*, 9(3), 229-241.
- Chaokromthong, K., & Sintao, N. (2021). Sample size estimation using Yamane and Cochran and Krejcie and Morgan and green formulas and Cohen statistical power analysis by G* Power and comparisons. *APHEIT International Journal of Interdisciplinary Social Sciences and Technology*, 10(2), 76-86.

- Droste, N., Hansjürgens, B., Kuikman, P., Otter, N., Antikainen, R., Leskinen, P., ... & Thomsen, M. (2016). Steering innovations towards a green economy: Understanding government intervention. *Journal of cleaner production*, 135, 426-434.
- Gasparatos, A., Doll, C. N., Esteban, M., Ahmed, A., & Olang, T. A. (2017). Renewable energy and biodiversity: Implications for transitioning to a Green Economy. *Renewable and Sustainable Energy Reviews*, 70, 161-184.
- Ge, Y., & Zhi, Q. (2016). Literature review: The green economy, clean energy policy and employment. *Energy Procedia*, 88, 257-264.
- Iavicoli, I., Leso, V., Ricciardi, W., Hodson, L. L., & Hoover, M. D. (2014). Opportunities and challenges of nanotechnology in the green economy. *Environmental health*, 13(1), 1-11.
- Kotrlík, J. W. K. J. W., & Higgins, C. C. H. C. C. (2001). Organizational research: Determining appropriate sample size in survey research appropriate sample size in survey research. *Information technology, learning, and performance journal*, 19(1), 43.
- Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgens, B., Pitkänen, K., ... & Thomsen, M. (2016). Green economy and related concepts: An overview. *Journal of cleaner production*, 139, 361-371.
- Marco-Fondevila, M., Moneva Abadía, J. M., & Scarpellini, S. (2018). CSR and green economy: Determinants and correlation of firms' sustainable development. *Corporate Social Responsibility and Environmental Management*, 25(5), 756-771.
- Nahman, A., Mahumani, B. K., & De Lange, W. J. (2016). Beyond GDP: towards a green economy index. *Development Southern Africa*, 33(2), 215-233.
- Newton, A. C. (2011). The green economy and the knowledge economy: Exploring the interface. *International Journal of Green Economics*, 5(3), 231-247.
- Rede G. D. and Ingle S. G (2022). Green Economy: A Review Article, *Agriculture and Food: E-Newsletter*, 4(1) January.
- Sansyzbayeva, G., Temerbulatova, Z., Zhidebekkyzy, A., & Ashirbekova, L. (2020). Evaluating the transition to green economy in Kazakhstan: A synthetic control approach. *Journal of International Studies*, 13(1).
- Sverdan, M. (2021). Green economy: Development in the light of new policy. *Green, Blue and Digital Economy Journal*, 2(1), 45-52.
- UNDESA (United Nations Department of Economic and Social Affairs), in: A Guidebook to Green Economy, Issue 2: Exploring Green Economy Principles., UNDESA United Nations Division for Sustainable Development, New York, United States of America, 2012, p. 62. b .

- UNEP (2011). towards a green economy: Pathways to Sustainable Development and Poverty Eradication. Nairobi: United Nations Environment Programme.
- Vargas-Hernández, J. G. (2020). Strategic transformational transition of green economy, green growth and sustainable development: An institutional approach. *International Journal of Environmental Sustainability and Green Technologies (IJESGT)*, 11(1), 34-56.
- Walker, K., & Plotnikova, M. (2018). Ecological Settlement As a Self-Government Model in Rural Areas. *Management Theory and Studies for Rural Business and Infrastructure Development*, 40(3), 416–423.