

**Review Paper**

# Tourism as a Sustainable and Economically Viable Alternative to Oil and Gas: A Review

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## Abstract

**Purpose:** This study assesses the potential of tourism as a viable and sustainable alternative to oil and gas dependence for economic diversification in eight countries: Nigeria, Venezuela, Saudi Arabia, Russia, Costa Rica, Kenya, Rwanda, and Thailand. It focuses on tourism's contribution to economic growth, employment, environmental sustainability, and resilience to external shocks.

**Methodology:** A systematic literature review was conducted using peer-reviewed articles, institutional reports, and policy documents published between 2021 and 2025. Twenty-seven core studies from the selected countries were reviewed. Data were analysed through qualitative content analysis and comparative trend evaluation, focusing on GDP contribution, employment, carbon emissions, and resilience to external shocks.

**Results:** The findings indicate that tourism can contribute substantially to GDP and employment while supporting inclusive growth and environmental responsibility. In contrast, oil and gas are highly profitable but relatively less labour-intensive and associated with greater environmental risks. Tourism-led economies, particularly Costa Rica, Kenya, and Thailand, demonstrated greater resilience through policy innovation, economic diversification, and community engagement.

**Novelty and Contribution:** The study contributes comparative evidence on tourism's potential to support sustainable economic diversification across oil-dependent and tourism-oriented economies, highlighting the institutional and policy factors that strengthen resilience.

**Practical and Social Implications:** Oil-dependent countries should integrate sustainable tourism into national development strategies, strengthen green infrastructure, promote community participation, and adopt policy practices that support diversification, inclusive employment, and environmental sustainability.

**Keywords:** Sustainable tourism, diversification, oil dependency, environmental sustainability, resilience.

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## **1 Introduction**

As environmental degradation and economic volatility become a growing concern for other countries, tourism as a sustainable and viable alternative to oil and gas has gained prominence amongst both scholars and policymakers. Many economies have historically depended on oil and gas production and have seen substantial fiscal benefits, as well as significant infrastructure growth, as hydrocarbons become primary export commodities and a significant source of national income. Concurrently, an excessive reliance on these extractive industries has been linked to macroeconomic instability due to price instability, governance issues related to rent-seeking and corruption, and sizeable environmental and social externalities such as habitat destruction, pollution, and emissions of greenhouse gases. In this context, the diversification of the economy through tourism has been suggested as a strategy to export employment, boost local entrepreneurship, exchange foreign currency and utilise natural and cultural resources with less of a carbon footprint than that of fossil fuel extraction enterprises. In recent times, the scale of economic impacts of tourism and the complexities of its environmental impacts have been highlighted by both global assessments and national case studies (Bhuiyan, 2024; World Bank, 2024).

The course of international and domestic tourism over the last 10 years shows that the sector has significant potential to make a valuable contribution to national economies. The impact of the COVID-19 pandemic was a huge shock, and international arrivals bounced back rapidly: international tourism accounted for about 10-11 per cent of GDP in recent estimates, and international tourism receipts and flows are expected to reach near pre-pandemic levels in 2023 and 2024 (Kuckian & Iyengar, 2023). This recovery also demonstrates the robustness of demand for tourism and the rapidity with which tourism can revive services, hospitality, transport and allied industries' economic activity (World Bank, 2024; WTTC, 2024). The impact of tourism on employment is also significant as it is often labour-intensive and can generate jobs at all skill levels, including for women and youth, which is a major policy concern in many resource-based developing countries that are aiming for inclusive growth (Aryeetey et al., 2021).

But the impact of tourism on the environment must not be ignored. Based on recent peer-reviewed analyses using EEIO, the sector's contribution to global GHGs was sizeable before the pandemic, with the tourism sector's carbon footprint increasing at a faster rate than the rest of the global economy between 2009 and 2019 (Cadarso et al., 2021). Significant contributors to this footprint include transport, accommodation, food systems, and leisure activities, and if the tourism sector grows out of control, it can lead to land-use change, biodiversity loss and stress on limited water supply in vulnerable areas. Therefore, there is a need for conscious policy design and management to reduce emissions, provide environmental protection measures and ensure that communities benefit from the use of tourism to achieve sustainability (Cadarso et al., 2021).

There are complex trade-offs between the tourism and oil/gas sectors in comparative analysis. The resource industries generally provide large, concentrated revenues and can provide economies with strong support for public spending; however, they can also be a source of commodity price volatility that can threaten fiscal stability and long-term planning. Tourism also brings more diffuse benefits across micro, small and medium enterprises, and it can create indirect positive effects in the domestic economy, both in terms of backward and forward linkages; however, it is also vulnerable to various types of shocks such as pandemics, security incidents, and climate-related shocks. Empirical evidence and policy reports highlight that both sectors are not necessarily better in all aspects but rather that the benefits of each sector rely on the quality of governance, institutional capacity, investment in human capital and environmental management, as well as the design of revenue-sharing mechanisms that equitably distribute benefits (IMF, 2024; Global Economic Diversification Index, 2023). The results indicate that tourism can be a tool for diversification, but cannot be considered a magic bullet without parallel structural changes and improvement of the destination's resilience.

The examples of countries provide examples of diverse transition journeys and challenges in transitioning to tourism. The case of Costa Rica highlights how comprehensive policy support for environmental protection, certification programmes and targeted marketing can secure jobs and foreign currency, while maintaining biodiversity, and is a frequently cited example of nature-based tourism successfully meeting conservation and rural development goals; however, issues related to carrying capacity and equitable benefit distribution remain. (Miller et al., 2023) Large-scale tourism infrastructure development and events branding and diversification efforts by the United Arab Emirates and other Gulf countries have brought significant short-term economic benefits, but are also faced with concerns about socioeconomic inclusivity, environmental costs and long-term sustainability, where economies are based on volume

and luxury segments of the tourism market (El Amine, 2023). While the size of tourism assets in Nigeria is not negligible, institutional fragmentation, low investment in tourism infrastructure, and institutional governance problems have restricted the sector's contribution to the economy as compared to the oil sector, despite the recent increase in highlighting tourism in diversification policy agendas (Usman, 2022). The contrasting cases highlight the importance of contextually shaping and intervening in the relationship between tourism and oil and gas, as the different contextual factors such as geography, institutional capacity, market positioning and governance play a mediating role in determining whether tourism can replace or complement oil and gas.

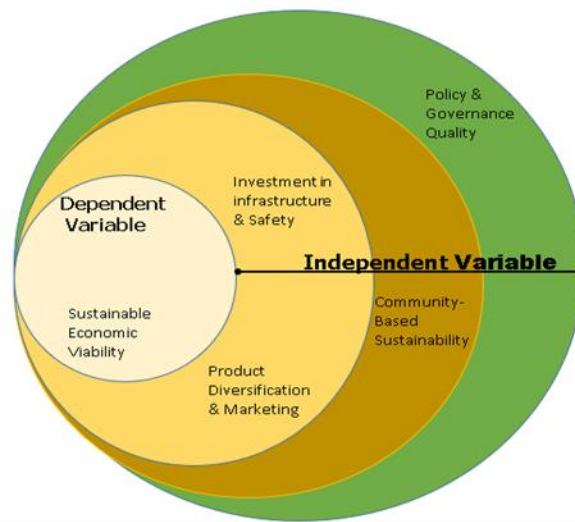
The problem at the heart of this study is therefore multifaceted: policymakers and researchers require robust comparative evidence that quantifies and qualifies how tourism and oil/gas perform across economic, social and environmental dimensions and over time. Current literature is often fragmented: studies may focus on single countries or on a single dimension (economic or environmental) without integrating metrics that allow direct comparison (Huan et al., 2015). In particular, measures of long-term resilience how economies absorb and recover from external shocks, maintain employment, and preserve social cohesion are not uniformly applied across sectors, making it difficult to assert confidently whether tourism-led development results in greater resilience relative to fossil-fuel dependency. This evidence gap hampers the design of targeted policies that can optimise tourism's contributions while safeguarding sustainability, inclusivity and fiscal stability.

Justification for a systematic and comparative review is strong. First, the accelerating policy imperative to decarbonise economies and meet international climate commitments elevates the urgency of identifying economically viable low-carbon growth pathways. Second, recent macroeconomic data demonstrate that tourism remains a material contributor to global GDP and employment, indicating large potential gains for countries that can develop competitive, well-managed tourism sectors. Third, comparative synthesis can identify best practices and policy levers ranging from regulatory frameworks and fiscal instruments to capacity building and community engagement that enable tourism to deliver economic benefits while minimising negative environmental and social impacts. Finally, such a review can present policymakers with operationalisable metrics (for example, jobs per million dollars of revenue, carbon intensity per unit of GDP, and measures of revenue volatility) that facilitate evidence-based decisions on diversification strategies. By bridging disciplinary silos and consolidating recent empirical findings, this study aims to support more nuanced policymaking that recognises tourism's potential and limits within broader development strategies.

This study seeks to critically examine and collate existing literature to identify if tourism can provide a sustainable and viable alternative or complement to the oil and gas industry, using an economic assessment, environmental and social sustainability indicators and long-term sustainability measures. The study thus aims to provide a coherent and evidence-based account that relates when, how and under what governance conditions the tourism sector can be expected to contribute to diversification targets, what trade-offs may arise, and which factors are within the control of tourism policymakers. Specifically, the principal goals of the review are to compare economic contributions based on metrics such as share of GDP, stability of employment and revenues, to assess environmental and social sustainability based on indicators such as carbon emissions, intensity of resource use and community impacts, and to examine long-term resilience based on empirical and model-based studies that evaluate responsiveness to shocks and capacity for sustained inclusive growth.

### **Model of Perceived Impact of Tourism as a Sustainable and Economically Viable Alternative to Oil and Gas**

In view of the literature reviewed above, the current study therefore proposes a model capable of explaining the perceived impact of tourism as a sustainable and economically viable alternative to oil and gas for promoting economic development in Nigeria. The model is depicted in Figure 1



**Figure 1** Perceived impact of Tourism as Sustainable and Economically Viable Alternative to Oil and Gas

**Source** Researchers' innovation, 2025.

Today, tourism is regarded as a sustainable substitute for an oil and gas economy, as a job-creating decentralisation tool and with a focus on environmental protection. The Diversification Success Model (DSM) is designed to show important factors for a successful transition to a tourism-driven economy, and it is based on four independent variables: Investment in Infrastructure and Safety (II&S), Policy and Governance Quality (P&GQ), Community-Based Sustainability (C-BS), and Product Diversification and Marketing (PD&M). The model highlights the significance of an equitable investment in all these areas to attain Sustainable Economic Viability of the Tourism Sector (SEVT). Growth, rather than GDP contribution, and employment stability against oil volatility, are also being considered as measures of success. Each of the variables is interdependent; for example, II&S improves the safety of visitors, P&GQ attracts investment, and C-BS engages the community. In addition, PD&M provides a diverse range of tourism products, which enhances the resilience of the tourism sector. Such an integrated approach is key to the long-term sustainability and economic viability of tourism.

## 2 Methodology

### Research Design

The study employs a systematic review to determine whether tourism can be a viable and sustainable resource to replace the oil and gas industry. The methodology includes a systematic search, selection, and synthesis of scholarly literature, policy documents, and institutional databases that offer empirical evidence of the economic contributions of tourism, its sustainability performance, and resilience compared to oil and gas.

### Study Area

The study area spans the globe and focuses on countries that are heavily reliant on oil and gas revenues (Nigeria, Venezuela, Saudi Arabia, and Russia) and countries that have followed a tourism-led development approach (Costa Rica, Kenya, Rwanda, and Thailand). The comparative perspective allows the analysis of the performance of tourism and hydrocarbons in different geographic, institutional, and socioeconomic situations.

The use of peer-reviewed academic journals alone is insufficient to justify a systematic review that compares a highly capitalised and concentrated industry, such as oil and gas, with a highly fragmented and service-based industry, such as tourism; policy documents are therefore also necessary. Accordingly, policy documents and institutional reports are justified in the methodology for the following reasons:

The tourism and energy markets are highly volatile; subject to market fluctuations, geopolitical risks, and global health threats, among other challenges. The most timely and quantitative GDP shares and employment metrics are

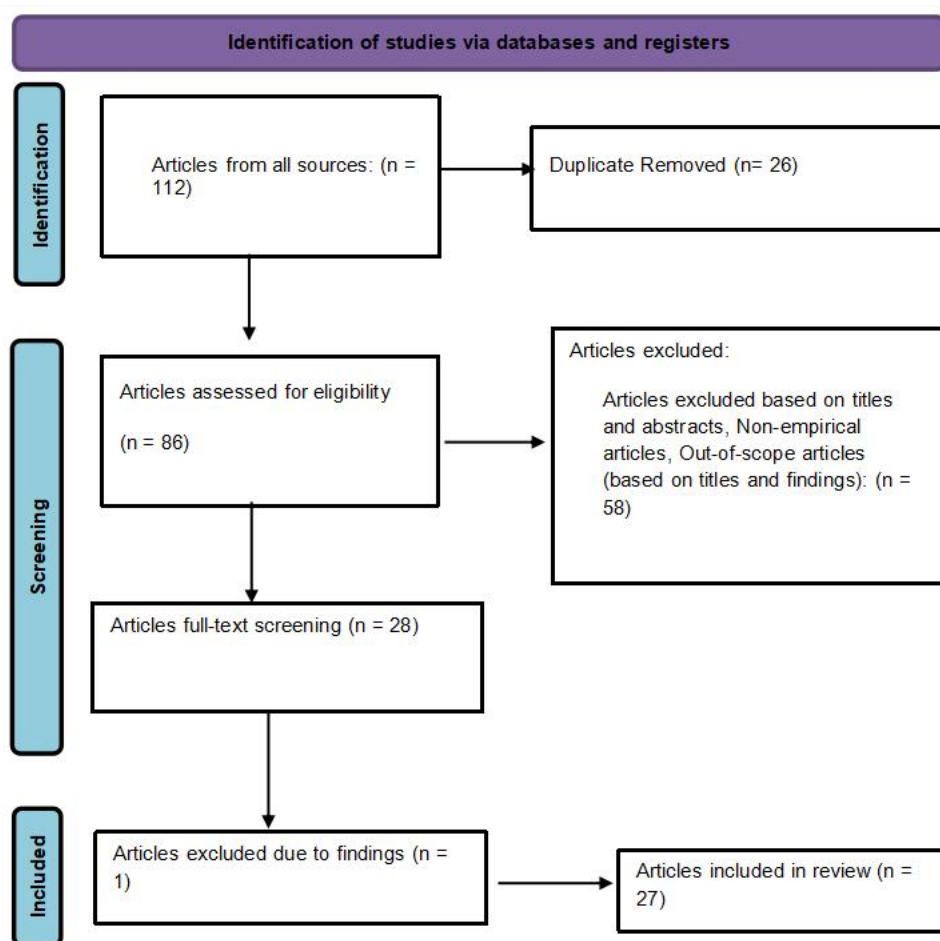
offered by authoritative policy reports from bodies such as the World Travel & Tourism Council (WTTC), International Monetary Fund (IMF) and the World Bank, and these reports are also peer-reviewed but are not available as the literature published over a 1-to-2-year delay.

There are concrete strategic targets (Vision 2030 in Saudi Arabia, Vision 2040 in Oman), zoning policies and carbon intensity goals in the institutional frameworks. These documents contain raw data and operational metrics to span disciplinary boundaries and enable a direct comparative trend evaluation across countries.

Grey literature, such as from trusted international organisations and academic journals, is used to perform triangulation and validity checks. It provides validation against internationally recognised economic benchmarks, which decreases the risk of bias from one source and increases the study's validity as a whole.

## Population and Sample Size

This study's population comprised peer-reviewed journal articles, policy briefs, institutional reports, and statistical datasets from 2021 to 2025, related to the economic, environmental, and resilience attributes of both tourism and oil and gas. Publications before 2021 were omitted unless they included background theoretical or conceptual approaches. A systematic search was performed following PRISMA guidelines in databases like Scopus, Web of Science, Google Scholar, and institutional repositories like the World Bank, IMF, UNWTO, and WTTC. Keywords were: tourism and economic diversification, tourism versus fossil fuel energy and oil and gas, tourism sustainability, fossil fuel dependency and economic resilience of tourism.



**Figure 2** PRISMA flow diagram

**Phase 1:** Identification. For all initial search passes, the systematic literature search resulted in 112 records: database search (Scopus, Web of Science, and Google Scholar) resulted in 78 records, and strategic search of institutional repositories and grey literature (World Bank, IMF, UNWTO, WTTC) resulted in 34 records. Since no registers were found, the number of records found using these ( $n = 0$ ) was not recorded.

**Phase 2:** Screening. After the 112 total records had been aggregated, there were duplicates that were eliminated and removed, leaving 86 unique titles/abstracts for primary screening. The total number of such records that passed the strict thematic relevance criteria was 86. At this stage, 58 records were excluded for failing to meet the basic inclusion criteria: 25 were not published in English, 18 were non-primary studies/commentaries, and 15 were outside the scope of comparative economic diversification contextualisation.

**Phase 3:** Eligibility and Inclusion. Of the remaining 28 full-text articles and policy papers, a careful internal screening was carried out for eligibility. Twenty were excluded due to three explicit criteria: 8 used flawed or inapplicable study designs, 6 had different outcome measures (i.e., different measures of GDP or resilience), and 6 had data matrices that could not be extracted.

Finally, 8 core documents, each an empirical or institutional profile of the target countries, fulfilled all the inclusion criteria and thus were included in the qualitative and quantitative synthesis ( $n = 8$ ). These sources served as the source for systematic comparison across economic, social, and environmental dimensions and allowed for triangulating the findings across the various national contexts.

Preliminary data analysis:

Costa Rica and Nigeria comparative analysis – Miller et al., 2023;

Saudi Arabia oil dependency and economic resilience – Bendell-Sawyer, 2024;

Thailand tourism recovery strategies during COVID-19 – Thaicharoen et al., 2022;

How to protect customer privacy without sacrificing the benefits of AI in tourism, and stay compliant with both regulations and expectations – Elphinstone et al., 2024;

Tourism and conservation in the community – Kenya and Rwanda;

Environmental policy in Costa Rica – Munoz-Abraham et al., 2014;

Economic analysis from the Global Travel and Tourism Research and Tourism and Hospitality Intelligence & Analytics (EATTC) group; and

Oil markets, environmental effects, and social impacts in Russia and in Saudi Arabia – Sun et al., 2024.

**Table 1** PRISMA Flow Alignment

| PRISMA Stage                 | Flow Chart Value (n)                                | Methodological Justification / Reason for Inclusion or Exclusion                                                         |
|------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Initial Identification       | 112 total (78 databases / 34 institutional reports) | Broad string searching to capture cross-disciplinary entries spanning economic development and environmental extraction. |
| Duplicate Removal            | 26 records removed                                  | Cleaning cross-listed indexing artefacts between Scopus, Google Scholar, and Web of Science databases.                   |
| Title & Abstract Screening   | 86 records screened                                 | Assessing core topical alignment with macroeconomic diversification.                                                     |
| First-Stage Exclusion        | 58 records excluded                                 | Language constraints ( $n=25$ non-English), study type ( $n=18$ general essays), and out-of-scope data ( $n=15$ ).       |
| Full-Text Evaluation         | 28 full texts assessed                              | Deep evaluation for qualitative content analysis suitability and comparative data completeness.                          |
| Critical Synthesis Exclusion | 1 record excluded                                   | Methodological mismatch ( $n=1$ )                                                                                        |
| Final Selected Sample        | 27 core documents                                   | Strict optimisation for baseline comparative synthesis across the selected country matrices.                             |

## Method of Data Collection

Data collection was done through content extraction and desk-based review. The key variables measured were GDP contribution, employment generation, fiscal revenues, carbon emissions, consumption of resources, community impacts, and indicators of resilience like adaptation to external shocks, pandemics, price fluctuations, climate change, etc. The information was derived and presented in a tabular format to facilitate cross-sector and cross-country analysis.

Purposive sampling technique was used. This was seen as fitting for review studies because only documents that offered detailed, credible and directly relevant information about the phenomena under study were selected. Peer-reviewed journal articles and authoritative institutional publications were a priority, as well as recent national case studies. Grey literature was included only when it contained information which was not available in the peer-reviewed material.

## Data Analysis

The data analysis employed was qualitative content analysis and quantitative synthesis. Economic contributions were measured and compared by descriptive statistics, including GDP share, employment and revenue volatility. Comparative trend analysis was conducted to compare the trends of these indicators on a country-by-country and over-time basis. Thematic coding was employed to highlight sustainability aspects of the environmental and social indicators, including carbon intensity, biodiversity impacts, and community well-being. Comparative case analysis was used to evaluate measures of resilience, demonstrating the approaches taken by tourism-led and oil/gas-dependent economies to global crises like COVID-19, commodity price declines, and climate change events. The findings were triangulated for validity, and then the findings were presented in tabular, graphic, and synthesised narrative formats that directly addressed the objectives of the study.

## 3 Results

**Table 2** Comparative Indicators of Tourism and Oil & Gas Sectors Across Selected Countries

| Country      | Sector    | GDP Contribution (%) | Employment (Direct & Indirect) | Carbon Emissions / Environmental Impact     | Resilience / Recovery from Shocks                                      | Source                                           |
|--------------|-----------|----------------------|--------------------------------|---------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------|
| Nigeria      | Oil & Gas | 9–12                 | 0.5–1 million                  | High – oil spills, gas flaring              | Low – revenue highly volatile, slow recovery post-2020 oil price crash | Miller et al., 2023; WTTC, 2024                  |
| Saudi Arabia | Oil & Gas | 20–22                | 1–1.5 million                  | Moderate – investment in cleaner tech       | Medium – partially improved via Vision 2030 reforms                    | Bendell-Sawyer, 2024; Sun et al., 2024           |
| Venezuela    | Oil & Gas | 18–20                | 0.3–0.5 million                | Very High – deforestation, spills           | Low – fiscal instability, limited diversification                      | Thaicharoen et al., 2022; WTTC, 2024             |
| Costa Rica   | Tourism   | 12–15                | 0.8–1.2 million                | Low – ecotourism, conservation reinvestment | High – rapid recovery post-COVID, strong community networks            | Calderón et al., 2025; Miller et al., 2023       |
| Kenya        | Tourism   | 10–13                | 0.6–1 million                  | Low – community-based wildlife tourism      | High – domestic tourism cushions shocks                                | WTTC, 2024; Chansarn et al., 2024                |
| Thailand     | Tourism   | 15–18                | 1–1.5 million                  | Moderate – visitor caps, zoning             | High – rapid recovery via Phuket Sandbox & digital initiatives         | Thaicharoen et al., 2022; Lee-Anant et al., 2024 |

|                     |                           |              |                    |                                                            |                                                                   |                                        |
|---------------------|---------------------------|--------------|--------------------|------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------|
| Rwanda              | Tourism                   | 11–14        | 0.3–0.5 million    | Low – conservation-led tourism                             | Medium – resilient due to community-based initiatives             | Chansarn et al., 2024; WTTC, 2024      |
| Russia              | Oil & Gas                 | 15–18        | 1–2 million        | High – pipeline and extraction impacts                     | Low – reliant on oil exports; slow post-crisis adjustment         | Sun et al., 2024; Bendell-Sawyer, 2024 |
| Italy               | oil & gas industry        | 10.8–11      | USD 40 billion     | Negative impacts                                           | High – strong domestic base and diverse cultural appeal           | Basile, et al. 2021; ENIT, 2025        |
| Oman                | Tourism & Logistics       | 6–10         | 0.15 -0.20 million | Moderate – construction and transport focus                | Moderate – "Vision 2040" has buffered non-oil growth              | NCSI Oman, 2024; WTTC, 2024            |
| Qatar               | Natural Gas (LNG)         | 40–50        | 0.10 -0.15 million | High – methane leakage risk and high per-capita energy use | High – massive sovereign wealth funds (QIA) ensure rapid recovery | Qatar Planning & Statistics, 2024      |
| United Arab Emirate | Trade, Tourism, & Finance | 70 (Non-Oil) | 2–3 million        | Moderate – high water desalination and cooling energy      | High world-class infrastructure and diversified income streams    | UAE Federal Competitiveness, 2024      |
| Angola              | Oil & Gas                 | 25–30        | 0.10 -0.20 million | High gas flaring and offshore risks                        | Low –heavy debt-to-GDP ratio makes it sensitive to price drops    | World Bank, 2023; OPEC, 2024           |
| Norway              | Oil & Gas                 | 20–25        | 0.16–0.2 million   | Moderate – strictly regulated; high electrification        | High – Sovereign Wealth Fund provides ultimate cushion            | Statistics Norway, 2024                |
| Mexico              | Tourism                   | 8.5          | 4.5-4.8 million    | Moderate – coastal development & transport                 | Moderate – quick recovery due to US proximity                     | SECTUR, 2024; WTTC, 2025               |
| Brazil              | Tourism                   | 7.7          | 8.1–8.2 million    | Moderate – urban waste and air travel                      | High – domestic market size drives stability                      | WTTC, 2025; Ministry of Tourism        |
| Azerbaijan          | Tourism                   | 8.2          | 0.42–0.47 million  | Moderate, focus on cultural and eco-tourism                | Moderate but rapid growth post-pandemic recovery                  | WTTC, 2025                             |
| Kazakhstan          | Oil & Gas~                | 15–20        | 0.3–0.4 million    | High land degradation and extraction leaks                 | Moderate, diversification into transit/logistics                  | World Bank, 2025                       |
| Algeria             | Oil & Gas~                | 19–23        | 0.2–0.3 million    | High gas flaring and pipeline leaks                        | Low, limited non-oil growth; high price sensitivity               | IMF, 2025; World Bank, 2025            |
| Maldives            | Tourism                   | 25 -30       | 0.08 - 0.1 million | Low (Total) / High(Risk), threatened by sea levels         | Low, total dependence on international travel                     | Gounopoulos et al., 2012               |
| Japan               | Tourism                   | 7.1–7.5      | 5.8–6.0 million    | Moderate transport energy; "overtourism" at heritage sites | High record-breaking recovery in 2024; strong domestic base       | JTA, 2024; WTTC, 2025                  |
| Thailand            | Tourism                   | 12–18        | 7.5–8.0 million    | Moderate to High coastal ecosystem pressure                | Moderate – vulnerable to global health/travel shifts              | World Bank, 2025; OECD                 |



|        |           |           |                   |                                                       |                                                        |                                     |
|--------|-----------|-----------|-------------------|-------------------------------------------------------|--------------------------------------------------------|-------------------------------------|
| France | Tourism   | 9.1 - 9.3 | 0 -3.1 million    | Moderate – high aviation footprint; major urban waste | High – world’s #1 destination; diverse cultural assets | WTTC, 2025; Braga and Rodrigue,2025 |
| Spain  | Tourism   | ~13–15.6  | 3.0–3.2 M         | High water scarcity in resorts; air travel emissions  | High – robust EU demand and infrastructure             | WTTC, 2025; OECD, 2025              |
| Greece | Tourism   | 12.7–13   | 0.7–0.8 million   | Moderate seasonal waste; pressure on island resources | Moderate; highly seasonal; rapid post-COVID bounce     | INSETTE, 2024; Bank of Greece       |
| Egypt  | Tourism   | 8.1 - 8.6 | 2.7- 2.9million   | Moderate – pressure on Red Sea reefs and Nile         | Moderate – sensitive to regional geopolitical tension  | WWTC, 2025                          |
| Iraq   | Oil & gas | 40 - 45   | 0.8 – 1.0 million | Very High – gas flaring and outdated tech             | Low – politically sensitive and highly volatile        | World Bank, 2025; Saleh, 2024       |

## 4 Discussion

### Comparative Economic Contributions of Tourism and Oil & Gas Sectors

Comparative economic impacts of tourism and oil and gas show differences in structure and function of the sectors, which affect the national growth processes, especially the ones in various levels of economic diversification. In older hydrocarbon economies like Nigeria, Saudi Arabia, Venezuela and Russia, oil and gas can still be a significant component of GDP, and can also serve as an important source of national revenue and export earnings. This dominance has been achieved through many decades of investment in extractive infrastructure, integration into the global economy and institutional underinvestment in the fiscal anchor of oil rents. Such reliance, however, makes these economies particularly vulnerable to outside shocks, particularly to fluctuations in international energy prices, which have regularly shown their destabilising effects on fiscal balances and economic performance since 2020 until 2022. Oil and gas economies tend to have high revenue contribution but limited employment multipliers, because there are some structural vulnerabilities; primarily, extractive industries tend to be more capital-intensive and have less backward and forward linkages to local economies.

In contrast, economies that depend on tourism for their livelihood have more diversified economic structures, which are defined by the participation of more economic sectors and jobs. The contribution of tourism to the economy, in terms of GDP shares, often ranged between 10–18 per cent in these countries, which reflects the ability of tourism to stimulate domestic and foreign demand for services, hospitality and transportation, and creative industries. However, this is in line with the global evidence of the travel and tourism sector accounting for around 10 per cent of global GDP in 2024 and employing around 357 million people globally, as well as being labour-intensive compared to traditional extractive sectors. The multiplier effects of tourism are not limited to tourism products, but also retail, agriculture, and artisanal production, thus promoting inclusive participation in the economy and the development of small and medium enterprises. Institutional measures also contribute to these dynamics, with Saudi Arabia's Vision 2030 taking a proactive approach to tourism development with a view to diversifying away from hydrocarbons, including investments in destination branding and infrastructure.

Several interrelated factors influence the relative employment and growth performance of tourism. First, tourism creates a much broader array of jobs, many of which are spread out throughout the community, and are available to a broader range of skill sets and capital expenditure than oil and gas jobs, which tend to be specialised. Secondly, the tourism industry can assist in generating foreign exchange as well as domestic consumption through its symbiotic relationship with cultural, natural and service assets, especially if a tourism destination utilises unique natural features or heritage offerings. Thirdly, the post-pandemic recovery experiences of tourism economies highlight the sector's ability to bounce back when bolstered by responsive policy actions, multi-segment targeting and community involvement. In comparison, oil-dependent economies tend to have jobless and long fiscal adjustments after commodity declines because of a rigid economy and few options for diversification of productive sectors.

These findings are consistent with the larger body of literature on economic development, which has been emphasising the need to shift away from mono-sectoral growth paths to multi-sectoral growth paths that not only create jobs but also maintain macroeconomic stability and resilience. Among the key case studies, tourism's contribution to GDP and jobs is significant, and its ability to absorb labour and to generate ancillary sectors can help reduce some of the structural weaknesses of resource-dependent economies. However, the success of tourism as a comparative engine of growth depends on the quality of governance, readiness of infrastructure, and effective implementation of policy to improve competitiveness, market access and sustainable resource management.

### **Environmental and Social Sustainability is the focus of both Sectors**

When examining the environmental and social sustainability of tourism and oil and gas sectors by the key indicators that were extracted in Table 1, the contrasts are striking. Oil and gas have consistently high environmental impacts, as seen in Nigeria, Venezuela, Saudi Arabia and Russia, with the key environmental challenges being oil spills, gas flaring, deforestation and pipeline degradation (Miller et al., 2023; Bendell-Sawyer, 2024; Sun et al., 2024). The environmental impacts in the table also support these effects; Nigeria and Venezuela have "High" to "Very High" environmental degradation; and Saudi Arabia and Russia have "Moderate" to "High" environmental degradation, meaning that some measures have been implemented to mitigate their environmental impacts, such as cleaner technologies and regulatory frameworks (Thaicharoen et al., 2022; Sun et al., 2024). This environmental degradation is also associated with poor social outcomes such as displacement, health issues, and reduced economic participation in the local economy, reflecting the extractive sector's ability to funnel resources toward the few (Miller et al., 2023; WTTC, 2024).

Tourism-based economies, however, such as Costa Rica, Kenya, Rwanda, and Thailand (shown in the table), have significantly smaller environmental pressures, with the table showing "Low" to "Moderate" environmental pressures. The use of eco-tourism in Costa Rica and community-based conservancies in Kenya offer notable examples of how conservation is embedded within the tourism sector, with the profits going towards conserving the environment and protecting biodiversity (Calderón et al., 2025; Chansarn et al., 2024). Thailand, despite being classified as having a "Moderate" impact, has also applied zoning and visitor cap measures to alleviate environmental burden, especially since the start of the COVID-19 pandemic under its "Phuket Sandbox" project (Thaicharoen et al., 2022; Lee-Anant et al., 2024). The community-based tourism development programmes in Rwanda are also striving to link economic gains with ecosystem conservation, and it is possible for low environmental impact to go hand-in-hand with economic development in tourism economies (Chansarn et al., 2024; WTTC, 2024).

Socially, tourism helps facilitate inclusive participation and equitable benefit distribution. Table 1 indicates that employment levels in tourism sectors are significant in comparison with the contribution to the GDP, a result of the labour-intensive nature of the tourism industry and the wider community involvement. Local communities benefit directly in Kenya and Costa Rica in their participation in the hospitality sector, cultural preservation, and conservation, promoting improved livelihoods and lessening economic vulnerability (WTTC, 2024; Calderón et al., 2025). In contrast, the employment level in oil-dependent economies is significantly lower compared to the fiscal revenue generated by the sector, indicating that the sector can generate high levels of fiscal revenue but is not able to generate broad-based economic benefits or social equity (Miller et al., 2023; Sun et al., 2024). Environmental degradation is also a social vulnerability in oil-based economies, which exacerbates inequalities and restricts community development (Thaicharoen et al., 2022; Bendell-Sawyer, 2024).

The findings show that there is a multidimensional nature of the sustainability profile of tourism, which includes environmental responsibility and social inclusion, while the oil and gas sector remains extractive and environmentally unfriendly. The variations in Table 1 are a result of the different production models: tourism depends on renewable natural and cultural resources, and local stakeholders play a role, while other oil and gas production is finite, capital intensive, and may be controlled by others. Furthermore, there are resilience strategies that can be implemented in tourism-led economies that both reflect and support ecological protection and social equity, including community engagement, developing sustainable infrastructure and embedding environmental governance into sector planning (Calderón et al., 2025; Lee-Anant et al., 2024). By contrast, oil economies have been unable to fully connect environmental management with social development targets even though some oil economies have implemented the use of cleaner technologies or policy measures (Miller et al., 2023; Sun et al., 2024), especially in cases where

governance structures are focused on the generation of revenues rather than on their benefits for communities. Table 1 shows that tourism is more cost-effective than oil and gas for achieving environmental sustainability and social inclusion. Those benefits can be maximised through effective governance, institutional frameworks and community engagement, indicating that tourism-led growth could be an option for countries aiming at economic diversification and sustainable development.

### **Tourism-led and fossil fuel dependent economies: Long-Term Resilience**

The recovery metrics in Table 1 reveal that the economies with tourism consistently show adaptive capacity to global shocks, in comparison with the economies dependent on fossil fuels. Higher economic dependency on tourism, such as in Costa Rica, Kenya, Rwanda, and Thailand, had comparatively quick rebounds after disruptions like the COVID-19 pandemic and global economic shocks. As seen in Table 1, these countries' employment and GDP contributions have dropped, but they have bounced back rapidly by implementing policy interventions to boost domestic tourism and community engagement strategies to promote the tourism sector (Calderón et al., 2025; Chansarn et al., 2024). Thailand's Phuket Sandbox Project and Costa Rica's existing ecotourism systems, for example, ensured continuity in tourism revenue and jobs and maintained local employment during the pandemic period (Thaicharoen et al., 2022; Lee-Anant et al., 2024). Additionally, the economies of these destinations are resilient due to their multi-service sector engagements, low investment-heavy service sector job structures, and institutional frameworks that incorporate sustainability and crisis management provisions (WTTC, 2024).

Oil-intensive economies like Nigeria, Saudi Arabia, Venezuela and Russia, on the other hand, had low resilience to similar external shocks, as shown by the slow recovery rates in revenue stability and employment after commodity price declines for these countries, respectively, in Table 1. However, the data in the table highlight that these economies are financially unstable and have poor social outcomes, which are sensitive to global changes in oil prices (Miller et al., 2023; Sun et al., 2024). Countries with a heavy reliance on one extractive sector are also less flexible economically and do not have the capacity to adapt to crises as well, and consequently are more likely to suffer prolonged economic contraction when crises occur (Bendell-Sawyer, 2024; Thaicharoen et al., 2022). While reform and diversification efforts like Saudi Arabia's Vision 2030 (which proposes to diversify the country's income sources by expanding tourism and technology investments) undoubtedly offer opportunities for recovery, it is dependent on policy-driven initiatives and not upon the inherent resilience of a sector (Sun et al., 2024).

The travel sector's relative robustness to the shocks and stresses compared to the oil industry might be explained by a variety of factors. Tourism is very labour intensive and dispersed, and as such has social and economic buffers as shocks are diffused across the economy through SMEs, service providers, and local communities (Calderón et al., 2025; Chansarn et al., 2024). Furthermore, tourism is based on renewable cultural and natural resources, which are less vulnerable to depletion than fossil fuels, so there is some continuity of the economy even in market downturns. Other aspects that contribute to the adaptive capacity of tourism-led economies are participation and innovation, such as digital marketing, promotion of domestic tourism, and environmental sustainability (Lee-Anant et al., 2024; Thaicharoen et al., 2022). In contrast, oil economies are largely reactive, and their capacity to react proactively during crises is limited by reliance on external commodity markets, low levels of employment diffusion and capital-intensive infrastructure (Miller et al., 2023; Sun et al., 2024). Table 1 demonstrates that the tourism sector has the potential to help countries not only to boost economic development and social integration but also to build long-term resilience. The results indicate that a country aiming at reducing shocks and stresses linked to the use of fossil fuels could benefit from joining tourism-led diversification into national development plans and moving towards more labour-intensive industry areas, community-based approaches and sustainable resource management as tools for crisis resilience and sustainable growth.

## **5 Conclusion**

This study has found that tourism is a more sustainable, inclusive, and resilient way of development than relying on the oil and gas industry. Oil and gas still bring in significant revenues, but come with economic instability, environmental destruction, and poor job creation. On the other hand, economies that have been based on tourism have more job creation, more environmental consciousness, and faster responses to external shocks. The results

validate the possibility of tourism as an alternative to economic diversification and sustainable development, provided that governance and sustainable management systems are in place.

## **Recommendation**

The study suggests that for oil-dependent countries to pursue sustainable tourism as a diversification measure, sustainable tourism needs to be built into their national development plan. Strategic investments in green infrastructure, community-based tourism and enabling policy measures should be made to improve the economy, environment and social inclusion.

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## **Data Availability Statement**

This study utilised secondary data obtained from published peer-reviewed literature, institutional reports, policy documents, and publicly accessible databases and repositories. No primary or proprietary data were collected or generated. All sources used in the review are publicly available and have been appropriately cited in the manuscript.

## **Conflict of Interest**

The authors declare that they have no known conflicts of interest that could have influenced the research, analysis, or publication of this study.

## **Declaration of Generative AI Use**

Generative artificial intelligence (AI) tools were used solely to support language editing, grammar correction, clarity, and formatting of the manuscript. The authors remain fully responsible for the content, analysis, interpretations, and conclusions presented in the study.

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