# SUSTAINABILITY ANALYSIS OF GREECE'S PROMOTION AS A TOURISM DESTINATION

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#### **Abstract**

Sustainable tourist destination management is nowadays one of the competitive components of the tourism industry. Sustainable marketing advocates new mainstream marketing methods that replace conventional publicizing practices, which lead to sustainable development. It also creates an appeal to the businesses to take into consideration social and ecological limitations of conventional corporate marketing philosophy. Promoting sustainability has been considered as a core theme of destination tourism management for attaining competitive edge. Aim must be the sustainable tourism promotion of the tourism destinations. The purpose of this article is to reveal the degree to which the promotion of Greece as a tourist destination is based on sustainable principles. This is done through the analysis of sustainable promotion of 13 regions of Greece, in 2020. The main objective for the analysis of sustainable promotion is the approaching of sustainability concept through the special characteristics of sustainable promotion. The sustainability analysis will be approached quantitively. Three (3) representative variables has been used: a) the approved funds for tourism promotion, b) the tourist over-night staying and c) the tourism saturation of the area, as determined by the TALC model growth coefficients calculation. The results, which have stem from the analysis, could be a useful tool for sustainable tourism management and marketing in frame of the regional policy. They also could be the basis for the proposed strategies. This will help in the future the planners to make tourism development and promotion more sustainable.

**Keywords:** Tourism Marketing, Tourism Promotion, Sustainability, Sustainability Analysis

JEL classification: M31, Z330, Q56

# 1. Introduction

Promotion refers to all the tools of communication mix used together towards a common objective of persuasion. The objective of promotion is to create behavioral modifications along with informing, persuading, and reminding stakeholders' methods of conducting a particular task in a specified manner (Kotler and Keller, 2012). Promotion is a form of an external motivator that is defined on the basis of environmental and social aspects and allows attracting an individual towards following a specific behavior (Caca et al., 2015; Kim and Trail, 2016). Further Schultz (2011), is suggestive that human activities are drivers of several diverse phenomena causing unsustainability these include climate change, loss of habitat for different species', and even ocean acidification among others. These conditions can be traced back to consequence of the lifestyle choices of humans and hence, conservation methods also must change behavior through "promotion" of sustainable development.

Promotion of sustainable development includes measures of encouraging practices of environmental ethics in society. Consequently, it leads to propagation of environmental literacy among people. Also, promotion of sustainable development is boosting persistent and inclusive economic growth of the sector to full and productive employment of resources at hand. This leads to building resilient infrastructure at the same time promote viable and inclusive industrialization in each segment and foster innovation (Karagiannis et al., 2010; Alexiadis et al., 2011, 2015; Crespo et al., 2017; Kokkinou et al., 2018).

The paradigm of sustainable tourism has developed over the past half-century and is still evolving. Inclusion of the terms sustainability and sustainable development in tourism has enabled tourist destinations to respond to developmental demand better (Tsiotas et al., 2021a). That is, by clearly integrating unavoidable demands of tourism such as better facilities stay and tourism-related infrastructure with sustainable use of available resources (Weaver, 2006; Tsiotas, 2017; Polyzos and Tsiotas, 2020a,b). The mission of sustainable development is to meet the needs of the present, without jeopardizing the ability of future generations to meet their own needs (WCED, 1987; Alexiadis et al., 2011; Kalantzi et al., 2016). Environmental health, economic viability and social justice are essential, in order to achieve it. Tourism management has adopted the concept of sustainability. The traditional consumer marketing perspective on the contrary, in which profit maximization is the main objective, did not adopted it yet fully. Tourists' needs are not restricted to one factor and the principal theory of promotion argues that each tourist destination has its own groups or segments of clients. Each destination needs to build a typology of tourists and their need to promote tourism better (Stayrakis et al., 2011; Vijayanand, 2013; Tsiotas et al., 2020).

To be sustainable, marketing, must incorporate social, consumer and environmental perspectives. For this reason, Jamrozy (2007) proposes a sustainable tourism-marketing model (STMM), which will challenge the traditional tourism-marketing model. "This new sustainable marketing paradigm requires the integration of alternative approaches and radically moving towards more sustainable tourism marketing principles and practices". This model reflects the principles of sustainable development based on the Brundtland report (WCED, 1987) and "represents the three dimensions of sustainability, economic viability, social equity and environmental protection". Otherwise, tourism marketing is an oxymoron.

Meler and Magas (2014), in a study define sustainable marketing as a "holistic approach with the aim of satisfying the wants and needs of customers while putting an equal emphasis on environmental and social issues, thus generating profit in a responsible way". Sustainable marketing thus advocates new mainstream marketing methods that replace conventional publicizing practices to include environmental concerns and lead to sustainable development. It also creates an appeal to the business to take into consideration social and ecological limitations of conventional corporate marketing philosophies (Belz and Peattie, 2012).

From the above, it becomes clear that the pursuit of sustainable tourism development of a tourist destination is nowadays a key goal. Likewise, aim must also be the sustainable tourism promotion of the tourism destinations.

# 2. Methodology and Data

The purpose of this article is to reveal the degree to which the promotion of Greece as a tourist destination is based on sustainable principles. This will help in the future the planners to make tourism development and promotion more sustainable. This is done through the analysis of sustainable promotion of 13 regions of Greece, in 2020. The main objective for the analysis of sustainable promotion is the approaching of sustainability concept through the special characteristics of sustainable promotion. The overall analysis can be a useful tool for tourism management – marketing and regional policy. The results, which would stem from the analysis, will be the basis for the proposed strategies. The sustainability analysis will be approached quantitively. Three (3) representative variables will be used: a) the approved funds for tourism promotion, b) the tourist over-night staying and c) the tourism saturation of the area, as determined by the TALC model growth coefficients calculation. These variables will be properly correlated and the results will determine both the effectiveness of the funds sharing and if the saturated areas need further promotion or not. At the end, there will be a brief report and connection with the qualitative aspect of a sustainability approach analysis of the regions of Greece,

The areas, for which the sustainability analysis is conducted, are those of the Greek administrative spatial segregation as applied by Act 3852/2010, known as 'Kallikratis Program' (Alexiadis et al., 2011; Xanthos et al., 2012; Polyzos and Tsiotas, 2020a,b). This Act's objective was a reformation of the existing regional administration system in terms of jurisdictions, spatial separations, fund distribution and local authorities' elections. Basic points of this Act were the following: a) reduction of the number of municipalities. b) transition of secondary administrative jurisdiction from the former fifty-seven (51) prefectures (NUTS III Level) to the thirteen (13) regions (NUTS II Level) (Alexiadis et al., 2010; Ladias et al., 2011; EU, 2018), c) separation of some insular prefectures in more territorial parts, for purposes of administration, thus resulting in a total of seventy-six (76) prefectures, d) formation of decentralized authorities, e) change in the way of funding the organizations of local subsidiarity, f) redistribution of administrative responsibilities among local authorities organisms and g) extension of administration service from 4 to 5 years.

In this paper is used the NUTS II Level (Alexiadis et al., 2011; Ladias et al., 2011; EU, 2018), the segregation of thirteen (13) regions. Figure 1 and Table 1 depict the name, labelling and position of all Greek regions (NUTS II Level). Moreover, Table 2 depicts the composition of regions with their respective prefectures. For purposes of easily locating, each area (NUTS II Level) in this paper will be referred along with its respective labeling number.

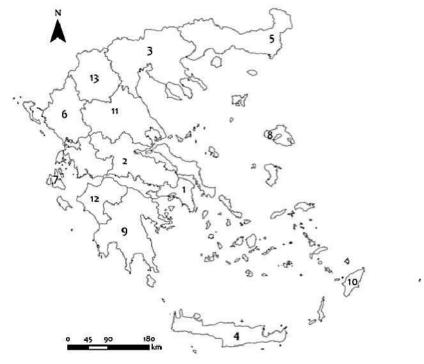


Figure 1. The Greek NUTS II regions (Source: European Union, 2018)

Table 1

The Greek NUTS II regions

Label	REGION	Label	REGION
1	ATTICA	8	NORTHERN AEGEAN
2	CENTRAL GREECE	9	PELOPONNESOS
3	CENTRAL MACEDONIA	10	SOUTHERN AEGEAN
4	CRETE	11	THESSALIA
5	EASTERN MACEDONIA AND THRACE	12	WESTERN GREECE
6	EPIRUS	13	WESTERN MACEDONIA
7	IONIAN ISLANDS		
•	G F	TT . 2010	

Source: European Union, 2018

Table 2
Composition of Greek regions (NUTS II Level)

Label	REGION	Label	PREFECTURE
1	ATTICA	6	ATTIKHS
2	CENTRAL GREECE	12	EUVOIAS
		14	EVRYTANIAS
		16	FOKEEDOS
		17	FTHEOTIDOS
		49	VEOTIAS
3	CENTRAL MACEDONIA	7	CHALKEDIKHS
		20	HMATHIAS
		28	KILKIS
		39	PELLAS
		40	PIERIAS
		45	SERRON
		47	THESSALONIKHS
4	CRETE	8	CHANEON
•		21	HERAKLEEOU
		34	LASITHIOU
		42	RETHYMNOY
5	EASTERN MACEDONIA	11	DRAMAS
3	AND THRACE	11	DICH WING
	THE THEREE	13	EVROY
		25	KAVALAS
		43	RODOPHS
		50	XANTHIS
6	EPIRUS	5	ARTAS
U	Li ikos	22	IOANNINON
		41	PREVEZAS
		46	THESPROTIAS
7	IONIAN ISLANDS	26	KEFALLONIAS
/	IONIAN ISLANDS	27	KERKYRAS
		36	LEFKADOS
		51	ZAKEENTHOU
8	NORTHERN AEGEAN	9	CHIOU
0	NORTHERN AEGEAN	35	LESVOU
		33 44	
9	DEL ODONNIEGOS		SAMOU
9	PELOPONNESOS	3	ARGOLEEDOS
		4	ARKADIAS
		29	KORENTHIAS
		32	LAKONIAS
10	COLUMNIA POPAN	38	MESSEENIAS
10	SOUTHERN AEGEAN	10	DODEKANEESOU
1.1	THEOGATA	31	KEEKLADON
11	THESSALIA	23	KARDITSAS
		33	LARISSIS
		37	MAGNESSIAS
4.5	www.mamma	48	TRIKALON
12	WESTERN GREECE	1	ACHAIAS
		2	AITOLOAKARNANIAS
		19	HELEIAS
13	WESTERN MACEDONIA	15	FLORINAS
		18	GREVENON
		24	KASTORIAS
		30	KOZANHS

Source: European Union, 2018.

# 3. Sustainable promotion of tourism

Among other responsibilities, every region is responsible for the promotion and development of its touristic product in order to make it known to a wider audience. This is mainly achieved via marketing practices including the participation in tourism-related conferences or actions, the advertising of tourism capabilities in media (TV, internet, radio etc.), distribution of informational leaflets, the establishment of 'routes' including the area's attractions and the use of technology in general, to name a few. The actions taken to serve this goal are complied with the sustainable tourism concept, hence considering the current and

future economic, social and environmental impacts while simultaneously addressing the needs of visitors, the industry, the environment and host communities (Middleton and Hawkins, 1998; Karagiannis et al., 2010).

The interest and notability that each region shows towards its tourism promotion and development is mainly depicted on the establishment and fulfillment of tourism promotion plan and the economic resources spent for the fulfillment of these actions. These resources are mainly deriving from European Union's subsidies in a general context of financial enhancements towards member countries in order to achieve growth and development (Alexiadis et al., 2013; Kalantzi et al., 2016; Kokkinou et al., 2018).

Regarding the evaluation of the tourism promotion via the spectrum of sustainability concept, a quantitative analysis is performed, as a necessary procedure for extracting accurate results and suggesting effective strategy. Moreover, it is worth mentioning that the tourism marketing plans are devised for every region (NUTS II Level), so the analysis and evaluation of them will be performed in such spatial level.

# 3.1. Variable configuration

To transfuse a quantified dimension on the marketing plan analysis and evaluation through a qualitive aspect, it is considered necessary to use appropriate variables. As the terms of 'promotion' and 'marketing' are subjectively linked with the economic factor, the basic and essential variable used is the approved funds each region (NUTS II Level) received from central government for the year 2020 (F2020), in order to design and fulfill its marketing plan. Furthermore, the dimension of sustainability is approached via the dynamics of incoming tourism in correlation with the saturation of an area. These two parameters are appropriately represented by the available data for tourist overnight stayings per prefecture Ns2017 (year 2017) (ELSTAT, 2020; Tsiotas et al., 2020, 2021) and the TALC growth coefficient r(t) respectively.

The growth coefficient r(t), as defined in TALC Theory (Polyzos et al., 2013; Polyzos, 2019), represents in a way the velocity of saturation in an area as it shows how quickly the number of incoming tourism increases throughout a period of time. Consequently, behind this parameter many other factors are hidden which include the starting conditions of each area (existing infrastructures, socioeconomic situation, cultural heritage etc.), special features of it along with environmental characteristics to name a few. Therefore, the calculation of this coefficient is vital to deepen into the study of tourism saturation in an area.

As the tourism marketing plan is referred to regions (NUTS II Level), the TALC growth coefficient should be adjusted to such spatial level. Consequently, the TALC growth coefficient rw(t) for each region is the weighted average of the separate TALC growth coefficient r(t) of prefectures that consist each region.

# 3.2. Correlations

The quantitative aspect of sustainable promotion analysis will be performed by utilizing a proper correlation (Walpole et al., 2012; Tsiotas et al., 2021b) among the variables that will be used. This correlation is meant to depict simultaneously the distribution (Walpole et al., 2012; Tsiotas et al., 2021c) of funds according to the touristic profile of each region in conjunction with the saturation of it. The objective of this composite correlation is in a way the evaluation of effectiveness of funds sharing for tourism promotion.

Firstly, the effectiveness of the funds sharing can be partly revealed by the amount of used resources per capita, which in our case is considered to be appropriately depicted by the approved funds' weighted distribution. For this reason, an auxiliary ratio fst, as shown in relation (1), is calculated at first place; which will depict the weighted approved funds of each region regarding the tourist's overnight stayings NS2017.

$$f_{st} = \frac{F_{2020}}{N_{S2017}} \tag{1}.$$

The next step of the quantitative analysis is the calculation of the correlation between the regions' fst ratios and TALC growth coefficients rw(t). The results of this correlation suggest if there is any patterned policy regarding the distribution of the funds from the central

government, while it is expected to reveal each area's need for promotion in terms of its saturation degree

# 4. Sustainable promotion in the greek regions

# 4.1. Variable configuration

The values of the three variables are depicted in Table 3. It is worth noticing that the regions considered the pillars of incoming summer tourism, hence the insular ones of Crete (NUTS II: 4), Ionian Islands (NUTS II: 7) and Southern Aegean (NUTS II: 10) are endorsed with at least one million euros each. A first reading of this fact reveals both an interest to expand the incoming tourism and a need to maintain the so far established touristic profile of the area. On the other hand, the rather augmented funds for the regions of East Macedoniaand Thrace (NUTS II: 5) and Peloponissos (NUTS II: 9) are indicating an attempt for a dynamic presence in the tourism sector. Regarding the rest regions, low budget of certain areas such as Central Greece (NUTS II:2), Epirus (NUTS II:6), Western Greece (NUTS II:12) and Western Macedonia (NUTS II:13), could probably be indicative of their dynamics in touristic activity, while the medium size one at Central Macedonia (NUTS II:3), Northern Aegean (NUTS II:8) and Thessalia (NUTS II:11) probably show a more moderate approach towards tourism promotion.

Approved funds for tourism marketing plan (F2020), overnight stayings (NS2017) and weighted growth coefficient rw(t) for each Region of Greece

Label	Region	$F_{2020}$	$N_{S2017}$	$r_w(t)$
		(million euros)		
1	Attica	0.68	8833584	4.670
2	Central Greece	0.35	1717667	6.050
3	Central Macedonia	0.60	9086001	7.418
4	Crete	1.00	24473913	9.574
5	Eastern Macedonia and Thrace	1.80	1973242	5.155
6	Epirus	0.38	1099202	4.114
7	Ionian Islands	1.73	9885033	9.912
8	Northern Aegean	0.50	1750671	8.216
9	Peloponnisos	1.20	3091937	4.988
10	Southern Aegean	1.00	21310044	10.083
11	Thessaly	0.80	2209719	4.629
12	Western Greece	0.30	1902912	3.975
13	Western Macedonia	0.35	294448	3.276

Source: Compiled by authors

#### 4.2. Correlations

After reviewing the absolute values of approved funds for each region, they were further evaluated in terms of visitors' density by using an appropriate indicator, as described in section 3.2. The fst ratio's values, for each region, are depicted on Table 4, in ascending order.

Table 4

The fst ratio for each Region

Label	Region	$f_{st}$ ratio
13	Western Macedonia	1.189
5	Eastern Macedonia and Thrace	0.912
9	Peloponissos	0.388
11	Thessaly	0.362
6	Epirus	0.341
8	Northern Aegean	0.286
2	Central Greece	0.204
7	Ionian Islands	0.175
12	Western Greece	0.158
1	Attica	0.077
3	Central Macedonia	0.066
10	Southern Aegean	0.047
4	Crete	0.041

The results of the fst ratio almost override the review made on the absolute values of the approved funds. It is obvious that the ratio is higher to the less popular tourist destinations (despite a few exemptions), thus indicating that there is awareness from region and State's side of the need for further promotion and tourism development in these areas. Secondly, the regions with recognizable touristic value such as Central Macedonia (NUTS II: 3), Crete (NUTS II: 4), Ionian Islands (NUTS II: 7) and Southern Aegean (NUTS II: 10) are willing to spent even 7-30 times less funds per overnight staying, as they are already established to the national and international tourist destination map, thus having secured the growth of incoming tourism.

Moreover, this intuitive ascertainment is statistically amplified by using the Pearson correlation coefficient r (Norusis, 2004; Walpole et al., 2012), along with a t-test for fst ratio and rw(t) growth coefficient. Indeed, the r Pearson correlation coefficient turned to be r=-0.54, while the t-test resulted in Pone-tail= 7.0681 E-07 and Ptwo-tail= 1.4136 E-06. These results indicate a moderate and statistically significant correlation between the fst ratio and the regions' growth coefficient rw(t), which supports the initial impression about the funds distribution.

The following figure 3 depicts a concentrated view of the fst ratio, the rw(t) growth efficient and the approved funds F2020 in order to visualize the distribution of them among the regions. Moreover, figure 4 depicts the pair-wise correlation between the fst ratio and rw(t) growth efficient which is characterized by a linear distribution.

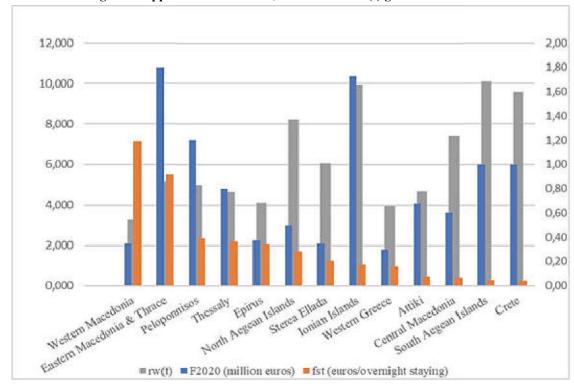


Figure 3. Approved funds F2020, fst ratio and rw(t) growth coefficient

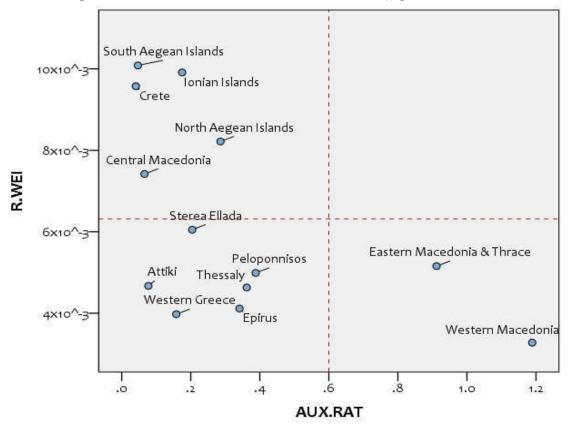


Figure 4. Pair-wise correlation between fst ratio and rw(t) growth coefficient

## 5. The qualitive dimension of the sustainable promotion

The qualitative aspect of analysis is thought to be the key for a successful promotion policy. It is performed by evaluating and correlating the specific actions each region has set up for the forthcoming year through its tourism marketing plan with the proposed strategy configuration of this thesis. The expected result of such evaluation will be the rating of each region's tourism marketing plan regarding its supportability to this thesis' sustainable development proposals. Inferentially, after the evaluation of each region's tourism marketing plan, it is safe to claim that they are supporting this thesis' proposals in a quite satisfactory degree (Amoiradis, 2021). Apart from the regions of Ionian Islands, Attica and Crete, whose marketing plan seems to lack of focused actions which could support specific objectives, the rest of the regions seem to have acknowledged their special needs related to tourism by devising proper tourism marketing plans to serve them. For purposes of categorization, the regions' tourism marketing plans will be rated by one of the following three (3) qualitive values, depending on their supportability to this thesis' strategic development proposals and are depicted in Table 5:

- Disconnected: Low supportability to this thesis' strategic development proposals
- Connected: Adequate supportability to this thesis' strategic development proposals
- Supportive: Excellent supportability and integration of this thesis' strategic development proposals

Table 5 Regions' tourism marketing plans rating

Label Region **Tourism** Marketing plan rating Attica Disconnected 2 Central Greece Supportive 3 Central Macedonia Supportive 4 Crete Disconnected 5 Eastern Macedonia and Thrace Connected **Epirus** 6 Supportive Ionian Islands 7 Disconnected 8 NORTH AEGEAN Supportive 9 Peloponnisos Supportive 10 SOUTH AEGEAN Supportive 11 Thessalia Supportive 12 Western Greece Supportive 13 Western Macedonia Connected

## 6. Conclusions

The purpose of this article is to reveal the degree to which the promotion of Greece as a tourist destination is based on sustainable principles. This is done through the analysis of sustainable promotion of 13 regions of Greece, in 2020. The main objective for the analysis of sustainable promotion was the approaching of sustainability concept through the special characteristics of sustainable promotion. The sustainability analysis has been approached mainly quantitively.

At the end, there was a brief report and connection with the qualitative aspect of a sustainability approach analysis of the regions of Greece. The marketing plan of each region was evaluated after its correlation with the proposed development strategy, as a result of which it was evaluated as supporting the sustainable development strategy or not (Amoiradis, 2021).

From the previous quantitative analysis, we can observe the following:

At first glance, three regions, which are characterized as the pillars of inbound tourism, have increased funds for their tourism promotion. This shows a strong interest in maintaining the tourist profile of the area but also expanding inbound tourism. Two other areas have relatively high funding. There we see an effort to create a profile with a stronger presence in the tourism sector. Medium-sized funds are observed in three regions, which probably show a more modest approach to tourism promotion. Finally, in four areas we have a low budget, which probably indicates their dynamics in tourism.

The results after using of the fst ratio almost replace the view taken on the absolute prices of authorized funds. It is obvious that the ratio is higher to the less popular tourist destinations (with some exceptions), thus indicating that there is awareness on the part of the region and the state about the need for further promotion and tourism development in these areas. Furthermore, areas of recognizable tourist value such as Central Macedonia (NUTS II: 3), Crete (NUTS II: 4), the Ionian Islands (NUTS II: 7) and the South Aegean (NUTS II: 10) are willing to spend even 7-30 times less funds per night. They are already installed on the map

of national and international tourist destination, thus ensuring the development of inbound tourism, having secured the growth of incoming tourism.

After determining the supportiveness' degree of the regions' tourism marketing plans, it is worth retracing the figure 4, where the pair-wise correlation between fst ratio and rw(t) growth coefficient is depicted. The regions located to lower-right quartile are those of the greatest need for tourism reinforcement and their promotion plans are at an encouraging level towards this direction. On the other hand, the prefectures at the upper-left quartile, 60% of them (3 out of 5) are consistent and supportive to development strategy proposals, probably due to their 'secured' attractiveness and established ranking among tourism destinations. Finally, the regions of the lower-left quartile are quite more willing to support the development strategy as 83,3% of them (5 out of 6), thus probably indicating that they are not complacent regarding the tourism promotion and are trying to find possible ways to attract more tourists in a sustainable context.

Finally, the regions' tourism marketing plans rating (Table 5) shows the supportiveness' degree of the each regions. Here we can observe that the results of the quantitative analysis largely confirm the findings of the reported qualitative analysis.

The overall analysis could be a useful tool for sustainable tourism management and marketing in frame of the regional policy. The results, which have stem from the analysis, could be the basis for the proposed strategies. This will help in the future the planners to make tourism development and promotion more sustainable.

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