



## **THE ENVIRONMENTAL IMPACT OF THE CURRENT TOURIST MODEL: A PRESENT AND FUTURE VISION, FROM THE FIELD OF SUSTAINABILITY**

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### **ABSTRACT**

The tourism sector represents a very important economic activity due to its employability and the flow of passengers or tourists, but at the same time it can become a harmful activity for the environment and local populations. It is undeniable that today and in the last decades this sector has become one of the main sources of income for localities, cities and even entire countries, and that this has been developing together with the rise of the concept of sustainability, which should have conditioned the tourist activity and its development until it has become today a clean and respectful industry for future generations. This concept of sustainability and the need to implement it in the sector has been put forward by experts, but the management and handling of policies remains in the hands of public bodies and institutions, who over the last three decades have not been capable of implementing them effectively and have caused the sector to drift towards unsustainability and climatic collapse.

**Keywords:** Sustainability, environment, global warming, sustainable development, load capacity.

### **EL IMPACTO AMBIENTAL DEL MODELO TURÍSTICO ACTUAL: UNA VISIÓN DE PRESENTE Y FUTURO, DESDE EL ÁMBITO DE LA SOSTENIBILIDAD**

### **RESUMEN**

El sector turístico representa una actividad económica muy importante por su empleabilidad y el flujo de pasajeros o turistas, pero al mismo tiempo puede llegar a convertirse en una actividad nociva para el medioambiente y las poblaciones locales. Es innegable que, a día de hoy y en las últimas décadas, este sector se ha convertido en una de las principales fuentes de ingresos de localidades, ciudades y hasta países enteros, y que ésta se ha venido desarrollando junto con el auge del concepto sostenibilidad, el cual debería haber condicionado la actividad turística y

su desarrollo hasta llegar a convertirse a día de hoy en una actividad limpia y respetuosa con las generaciones venideras. Este concepto de sostenibilidad y la necesidad por implantarlo en el sector nace de boca de expertos, pero la gestión y el manejo de las políticas queda en manos de los organismos e instituciones públicas, quienes a lo largo de las últimas tres décadas no han sabido emplearlas de una manera efectiva y han llevado a que el sector se encuentre actualmente en una situación con un horizonte que lleva a la insostenibilidad y el colapso climático.

**Palabras clave:** Sostenibilidad, medio ambiente, calentamiento global, desarrollo sostenible, capacidad de carga.

## L'IMPACT ENVIRONNEMENTAL DU MODÈLE TOURISTIQUE ACTUEL: UNE VISION DU PRÉSENT ET DE L'AVENIR, DANS UNE LUMIÈRE DE DURABILITÉ

### RÉSUMÉ

Le secteur du tourisme représente une activité économique vitale de par son potentiel d'emploi et l'afflux de passagers ou de touristes. Cependant, il peut aussi s'avérer néfaste pour l'environnement et les populations locales. Il est indéniable qu'aujourd'hui, et ces dernières décennies, ce secteur est devenu l'une des principales sources de revenus pour les villes, les agglomérations et même des pays entiers, et que son développement s'est accompagné de l'émergence du concept de durabilité. Ce concept aurait dû orienter l'activité touristique et son développement, pour en faire une activité propre et respectueuse de l'environnement pour les générations futures. Si le concept de durabilité et la nécessité de l'appliquer au secteur touristique sont nés de l'expertise de spécialistes, la gestion et la mise en œuvre des politiques restent du ressort des organismes et institutions publics. Au cours des trente dernières années, ces organismes ont échoué à appliquer efficacement ces politiques, conduisant le secteur à sa situation actuelle, qui laisse présager une situation non durable et un dérèglement climatique.

**Mots-clés:** Durabilité, environnement, réchauffement climatique, développement durable, capacité de charge.

### 1. INTRODUCTION

Tourism represents one of the main sectors at an international and national level and is key to the development of the economy and the generation of employment. It has experienced a continuous growth and increased diversification, accounting for approximately 10% of the world's Gross Domestic Product, turning the sector into a key agent not only economically, but also socially and culturally. In the context of the pandemic, despite having been hit hard and having reduced its activity to zero, by the year 2021 a total of 415 million tourist trips were already recorded across the globe, pointing to the year 2022 a year with a continuing and uninterrupted growth.

The interrelationship between tourism and local populations is undeniable, resulting in a series of negative and positive impacts as a result of the development of tourism activity. These impacts range from the generation of jobs and the diversification of the tourist offer, to the deterioration of the natural environment or cultural heritage.

Sustainability and the term sustainable development are presented as a means to achieve the balance between economic, social and cultural aspects. The term has been on the lips of scientists, experts, and members of the sector for decades as a mean to fill the gaps in global tourism and convert it into a viable long-term industry that is respectful with the environment and raises awareness of the tourist.

The aim of this project is to present a historical analysis of the development of the term sustainability at international and national level in the tourism sector. This analysis will lay the foundations that have made current policies aimed for the year 2030 to reconvert the sector and achieve absolute sustainability as the only means to accomplish the survival of itself. To conclude and to illustrate and contextualise the current situation, various initiatives, proposals and plans presented by experts in the field of tourism, who seek to reconvert the sector and present solutions to achieve its sustainability, are covered in the project.

## **2. JUSTIFICATION AND WORK OBJECTIVES**

Given the close relationship of the tourism sector with the economic, social and cultural fields, and the fact that the sector and the development of its activity are directly conditioned by external circumstances, as has been the case with the Covid-19 pandemic or the economic crisis of 2008, I consider that the analysis of reports and studies on global warming are essential to understand the coming policies and why the development of the sector is going to be destined to achieve the greatest possible sustainability.

I have wanted to study the development throughout history of the term sustainability and all that it implies due to the close relationship between it and the sector since its first appearance in 1987. Taking this analysis of the term to the international and national field, knowledge about the facts that have brought us to the point where we find ourselves today and that have conditioned the measures taken with a view to reconverting, is provided.

As a presentation of possible actions or alternatives when it comes to achieving the objectives agreed at the international level by countless countries for the incoming years, anAs a presentation of possible actions or alternatives when it comes to achieving the objectives agreed at the international level by countless countries for the incoming years, an analysis of insights, thoughts and opinions from several experts of the tourism sector is included. These experts and the public administrations are the responsible of the current scenario the sector is facing and the ones in charge of carrying out future measures to convert it into a responsible and sustainable activity.

Lastly, to fight the concerns about the unsustainable activities of the sector, initiatives being carried out at the moment by members of the sector are included. These initiatives are a response against current threats like the Covid-19 disease, the deterioration of the cultural heritage, the depopulation of rural areas and the interior of the Iberian Peninsula, at the same time as they foment to reconvert the tourism sector and bring it into sustainability through tourist awareness and education.

General objective 1: to understand the current environmental reality of the tourism sector.

General objective 2: acknowledge the development of the term sustainability over the years.

General objective 3: to study the regulatory instruments used in the environmental management of tourism.

General Objective 4: to present the possible alternatives and initiatives that may reconvert the sector.

General Objective 5: to present the possible actions that may end with the unsustainable activities of the current scenario.

### **3. STUDY METHODOLOGY**

The analysis of the sector starts from the legal documents that cover the tourism policies, agendas and plans that have been approved and launched by public bodies at national and European level, to later focus on those dedicated to the promotion of sustainability. As a means of studying the possible alternatives to these policies, an analysis of manifests from experts in the sector is carried out to test the different ways of facing the reconversion of the sector and its activity, in addition to relevant information for the subject extracted from journalistic articles, theses and reports published by media or members close to the tourism industry. It is mainly based on secondary sources of information that have served to contextualise the subject matter analysed and to provide the views of professionals in the sector. Primary information sources have also been used, although to a lesser extent, mainly represented by official documents from public institutions, such as the 2020 Strategy or the Sustainability Strategy in destinations.

### **4. CONCEPT OF SUSTAINABILITY**

The concept of sustainable development and the need to achieve it has been on the rise since its appearance in the 1980s. This development and the urgency to achieve sustainability have occupied an important part of the political and economic news of the last 20 years, until becoming the protagonist when it comes to developing the current policies that will define the future of our activity. The tourism sector, for its part, has also been conditioned in recent decades due to the implementation of measures in favour of sustainability and the reconversion of the sector to a model that respects the environment, resources, and local populations. Tourism activity and the development of the sector must understand sustainability as the means to achieve a balance between the factors that condition its own development. These are the social, environmental, and economic factors, currently exemplified by cases such as overtourism, the degradation of the natural environment, the overexploitation of cultural resources, etc.

#### **4.1. PRINCIPLES AND OBJECTIVE OF SUSTAINABLE TOURISM DEVELOPMENT**

In 1987, the Brundtland report established the first definition of sustainable development as *"the development that meets present needs without compromising the ability of future generations to meet theirs"* (Brundtland Report, 1987). This concept of sustainable development would

later be reinforced at the Rio de Janeiro Summit in 1992, where the need to achieve a balance between the economic, social and environmental aspects was recognized (da Costa, 2011).

Sustainability is not applicable if it is not carried out in an integral way, seeking the long term through economic efficiency, environmental protection and social equity (Rocuts, 2009). Based on the definition of the Brundtland report and considering that *"sustainable development has to be economically viable generating wealth; socially fair respecting equal opportunities; and conserve and properly manage natural resources"* (Antón y González, 2005), we can affirm that sustainable development implies the satisfaction of a wide spectrum of needs, whether economic or social, while respecting natural and cultural assets, always bearing in mind equality and long-term economic and social well-being.

The relationship between sustainability and tourism and the characteristics of a sustainable destination are represented through the following:

- ✚ Natural resources and biodiversity are conserved through optimal use of resources.
- ✚ The socioculturality of local communities is respected.
- ✚ The local community is integrated into the tourist activity.

These three actions provide capital to the economy and an economic benefit to the community. The benefits must be managed appropriately to maintain the position of a sustainable destination, being used for resource conservation, poverty reduction and local development. The success of tourism in the long term depends on whether the tourism sector manages the social, environmental and economic aspects, as well as being dimensions of sustainable development (Wearing and Neil, 2012).

The social benefits of sustainable tourism are represented through the generation of employment in the local community and in supplier sectors such as agriculture, fishing or crafts. In addition, a sustainable activity helps to redistribute income, with the transfer between rich areas and those that receive tourists and investments, who generally have less economic capacity (Fraiz, 2018).

The promotion of sustainable tourism also translates into investments by the private sector and the State: new accommodation, means of transport, communication networks, energy resources, etc. With them, new local tourism companies appear, who create jobs, provide economic benefits, and help the emergence of other companies dedicated to the sector (Hosteltur, 2022). Meaning that the local population can also benefit from the infrastructures created by the promotion of sustainable tourism, and new markets that benefit the local economy are opened.

Sustainable tourism not only brings economic benefits and social improvements, but also raises awareness among local populations and gives residents a sense of cultural identity.

This is thanks to the increase in the environmental quality of a region or population, which improves the tourist effect by attracting more visitors and giving a renewed pride to local populations who previously did not appreciate the natural, historical and cultural resources of their region in the

same way (Fraiz, 2018). This proves that tourism stimulates the revitalization of certain aspects of cultural heritage.

We may conclude that the tourist activity must be carried out in a sustainable way, without degrading or depleting the resources that make the development of the tourist activity possible, seeking sustainability through economic efficiency, social equity and environmental protection. The success of sustainable tourism must be sought, seeking correct management of social, environmental and economic aspects.

## **5. SUSTAINABLE TOURISM IN THE INTERNATIONAL ARENA: CONFERENCES, AGENDAS AND DECLARATIONS**

To illustrate the development of the term sustainability since its first appearance and how it has been conditioning international actions in tourism and economic development, the following will be represented by the conferences, agendas and declarations that have taken place in recent decades, which have defined the development that has been happening and have made the countries take more and more seriously the search for sustainable development as the only possible one to develop their activities.

### **5.1. INTERNATIONAL REGULATIONS IN THE FIELD OF SUSTAINABLE TOURISM**

The idea of sustainable development policy was born in 1972 in the Declaration of the United Nations Conference on the Human Environment. In it, the progressive deterioration of natural resources and the environment and the need to limit the progress of human activity were put on paper (Brida, London, Rojas, 2014).

As a result of this first meeting, the United Nations Environment Program (UNEP) emerged, which acts as a catalyst, promoter, educator, and facilitator to promote the rational use and sustainable development of the global environment as a spokesperson within of the United Nations system (United Nations Environment Programme, 2011).

In 1980, the World Tourism Conference was held, convened by the World Tourism Organization (UNWTO), where it was stipulated that "the national communities and the entire international community must make the necessary efforts for the preservation and conservation of the historical, cultural and religious places, as one of the fundamental responsibilities of the States" (World Tourism Organization, 1980).

Thanks to these first events and conferences, in 1987 the Brundtland-Our Common Future Report was published, responding to the call of the United Nations General Assembly that sought to establish a global agenda for change. It was in this report that a definition of sustainable development was given for the first time, considering it as "the activity that guarantees the needs of the present without compromising the possibilities of future generations to satisfy their own needs" (Crespo, 2019).

The commission in charge of developing the report took into account population and human resources, with a skyrocketing birth rate worldwide and limited resources; the disadvantaged situation in which some species and ecosystems found themselves; the consumption of non-renewable energies, affirming that the system would not be able to resist the problems

of warming and acidification and the urgency in the application of measures to switch to renewable energies; the industry, growing at that time; and the urban challenge, which affirmed the need to support third world urban centres to benefit their future generations and those affected by the rural exodus.

In 1992 the United Nations Conference on Environment and Development was held in Rio de Janeiro; where it was stated that protection of the environment and the economic and social development were essential to achieve sustainable development. This was to be achieved through the "Rio Principles" (United Nations, 1992). It was at this time that Agenda 21 was created with the aim of abandoning the current economic model and basing it on one that protects the environment (Flores, 2009).

In 1995, the Sustainable Tourism Charter was adopted during the World Conference on Sustainable Tourism, which established 18 principles to design a global tourism strategy based on sustainable development. This was followed by the International Conference on Biodiversity and Tourism, where an attempt was made to adapt the approved principles to tourism (Palazuelo, 2007).

In 1997 the International Conference on Biodiversity and Tourism was celebrated, where the principles approved in Rio in 1992 were adapted to tourism. For this, the promotion of sustainable and environmentally friendly tourism activities was proposed for the first time.

In that same year, the Treaty of Amsterdam was signed, placing sustainable development on the agenda of the European Union. Proof of this was the subsequent approval (2001) of the European Union Strategy for Sustainable Development, which set out a series of long-term objectives related to environmental protection and economic growth (United Nations, 1997).

Another unprecedented event to highlight was the World Summit on Ecotourism, held in Canada in 2002. It was pointed out that ecotourism is based on the principles of sustainable tourism, but also takes into account other aspects such as the conservation of natural heritage and culture or the integration of local populations (Crespo, 2020).

In 2003, the International Conference on Climate Change and Tourism was held for the first time. It emphasized the need for governments to promote sustainable development and combat climate change (OMT, 2003).

The next International Conference on Climate Change and Tourism was held in 2007. In it, the international commitment to act against climate change was formed, where the tourism sector would play a very important role in achieving the objectives (OMT, 2007).

It was in the same year that the official text of the European Union's Sustainable Tourism Charter was presented, focused on developing tourism activity in protected areas that complied with the principles of sustainable development. This Charter was a call for collaboration between countries in promoting the planning and development of tourism, focusing on sustainability in the environment, in tourism businesses and in travel wholesalers.

In 2009 the Lisbon Treaty was implemented, which among its guidelines for strengthening democracy and the protection of fundamental rights, environmental policy incorporated the fight against climate change and reforms in the framework of energy policy, focusing on security and interconnection of supply.

In 2012, the United Nations Conference on Sustainable Development was held again in Rio de Janeiro, where the "Rio Principles" were reaffirmed and the tourism sector was singled out as a sector of interest for the benefit of sustainable development (ONU, 2012).

In 2015, the World Summit on Sustainable Tourism takes place, reiterating the principles included in the "Sustainable Tourism Charter" of 1995 and recognizing the Sustainable Development Goals (SDG) as being of interest to the tourism sector (OMT, 2007).

The contribution of tourism to the Sustainable Development Goals is represented through several objectives. These objectives are focused on the implementation of measures aimed at sustainability, employment improvement, equality and accessibility.

Figure 1. Tourism related Sustainable Development Goals.

OBJECTIVE	DEFINITION
<b>OBJECTIVE 8.</b> Promote continued, inclusive and sustainable economic growth, full and productive employment and decent work for all	Tourism, with a high specific weight in the generation of wealth and that offers employment opportunities to a high percentage of the working mass, has a great responsibility in terms of its contribution to the creation of decent and stable employment.
<b>OBJECTIVE 10.</b> Reduce inequality.	The integration of tourism in the local community contributes to generating economic development and promoting the redistribution of wealth. The participation of the local population in the sector is a key aspect that results in the improvement of social conditions, contributes to reducing inequalities and offers an opportunity for local development and prosperity.
<b>OBJECTIVE 11.</b> Make cities and human settlements inclusive, safe, resilient and sustainable.	Sustainable tourism can contribute to the improvement of urban infrastructure, regenerating decaying areas and promoting accessibility, green and open spaces.
<b>OBJECTIVE 12.</b> Ensure sustainable consumption and production patterns	Initiatives for efficient and responsible use of resources, adopting consumption practices and provision of services that pursue sustainability.
<b>OBJECTIVE 14.</b> Conserve and sustainably use the oceans, seas and marine resources for sustainable development	Tourism development must promote the conservation of fragile marine ecosystems, forming part of the integrated management of coastal areas and promoting the blue economy.
<b>OBJECTIVE 15.</b> Manage forests sustainably, combat desertification, halt and reverse land degradation and halt biodiversity loss.	Sustainable tourism can contribute to the conservation of biodiversity while promoting the preservation of terrestrial ecosystems, with policies to reduce waste, minimize the carbon footprint and conservation strategies for native flora and fauna.

Source: Own elaboration.

It is in that same year when a total of 195 countries signed the Paris Agreement, recognising the need for a response to the climate threat and the urgency of achieving sustainable development (United Nations, 2015).

This treaty took into account the importance of conservation and increasing the number of greenhouse gas sinks and reservoirs, as well as the conservation of the oceans, biodiversity, and the need for education and awareness-raising among citizens.

The sustainable objectives brought together in this treaty encompassed different measures aimed at the same objective: responding to climate change.

To this end, it was agreed to limit the global average temperature increase to 1.5°C compared to the pre-industrial revolution era, to promote sustainable development that is low-emission and leads to climate-resilient development, and to adapt to and be prepared for the effects of climate change by minimising losses and damage caused by extreme weather events.

The EU Sustainable Tourism Strategy of 2021 considers tourism as an activity that directly affects the environment and climate, but which is also part of the economic growth and development of the member countries. This is why the pandemic crisis should be the trigger for the Commission and the Member States to fully recognise the importance of the tourism sector and to fully integrate it into the development plans of the EU development plans (European Parliament, 2021). It is important to add that considers the sector to one of the most affected sectors by Covid-19, with at least 6 million jobs at risk due to a 70% drop in the number of tourist arrivals by 2020.

The European Union should coordinate and complement Member States' action in the tourism sector, committing to accelerate and implement measures and actions to increase its sustainability, and resilience actions that contribute to the reduction of the ecological footprint.

To achieve these objectives, it is necessary a development of an efficient and sustainable public transport system, the improvement of the quality of the tourism offer and the commitment to digitalisation and modernisation of the sector. In addition, it is proposed to create a communication campaign to promote travel in the EU and restore public confidence, together with the introduction of an EU certification label on hygiene.

With the aim of achieving sustainable and responsible tourism, the EU calls on Member States to develop their own action plans, taking into account that the Covid-19 pandemic has changed tourist demands for "safe, clean and more sustainable tourism"(United Nations, 2021). It therefore calls for "exploring the resilience of cultural heritage" and supports the promotion and encouragement of sustainable cultural tourism, which can help EU citizens to visit and visit European towns and cities that are not leading in terms of visitor numbers.

On the other hand, it points to the need to invest in the transition to cleaner, low-emission and zero-emission fuels and more sustainable means of transport with a smaller ecological footprint. In this section we can include the promotion of cycle tourism.

## **5.2. REQUALIFYING THE TOURISM SECTOR WITH A VOCATION FOR SUSTAINABILITY: NATIONAL REGULATION**

Sustainability and the search for responsible tourism exploitation have been on the lips of the Spanish tourism sector for decades. This section will be devoted to an analysis of the strategies, plans and agendas that have been most relevant in the last 20 years in terms of conditioning the development of the tourism activity in Spain. These policies have been approved and developed in response to the international environment and the call for sustainability, as well as having been conditioned by crises such as the economic crisis of 2008 or the Covid-19 one.

### **5.2.1. THE STRATEGY ON SUSTAINABLE TOURISM IN SPAIN TOWARDS 2020**

Spain's strategy for the year 2020 in regarding the development of the tourism sector, proposed by the Institute of Tourism Studies in 2007, sought to "promote a comprehensive requalification of the tourism system that reduces its environmental/climatic impact and, at the same time, optimizes its socioeconomic opportunities" (Plan Estratégico Horizonte 2020 del Turismo Español, 2007), and emphasized on the environmental, global and local carrying capacity, conditioned by the unlimited urban growth.

As a solution, it was proposed a requalification of the value chain of tourism with a mid-term view and with the priority to remodel the most affected destinations by tourism overcrowding during the last decades, in addition to all the sources of natural and cultural value in the interior of Spain.

For this requalification in terms of sustainability, 5 objectives were proposed:

1. Revaluing the satisfaction of the tourist experience throughout the value chain, promoting territorial diversification, differentiation, authenticity linked to natural and cultural values and the seasonal adjustment of the tourist season.
  2. Guaranteeing the quality of the environment of each place and society, ensuring integration and social welfare, safety and health, as well as social participation in tourism development strategies in destinations.
  3. Obtaining the maximum possible socio-economic profitability per unit of sustainable cargo capacity and investment, through a range of quality professional services and a long season as a key factor to strengthen the economy, profitability and local employment.
  4. Collaborating in the coastal-interior territorial rebalancing and ensuring the preservation of the country's vital and heritage ecosystems.
  5. Adapting tourism development to environmental load limits, both local and global, taking into account critical limits and climate change.
- The primary condition to achieve these objectives is a public leadership committed to it, in addition to cooperation between the Government, Autonomous Communities and Municipalities (Prats, 2007).

This was to be achieved through an ecological balance that met a contained urban growth and a reduced environmental and climatic load, resulting in an economic improvement and an increase in tourist occupation (Jiménez Herrero, L., 2007).

The determining factors to get an increase in occupancy were "the containment of the growth in supply, the increase in overnight stays and the stabilization of the average stay" (Prats, 2007). The aim was to correct seasonality and strengthen inland destinations, increase daily spending by improving the tourism value chain, to balance the average amount of overnights, and pointed to the implementation of energy saving programs and the reduction of greenhouse gas emissions from the tourism sector.

To achieve everything listed above, a series of actions were proposed by the Institute of Tourism Studies, considered these as key to reach the objectives:

*"Public-private collaboration and exemplary «governance» to start a new tourism cycle in the key of sustainability".* This should be achieved through the commitment to Tourism 2020, holding Congresses to evaluate the implementation of sustainable policies, creating a Spanish Tourism Observatory and a Spanish Tourism Sustainability Indicator, and innovating in the "Territorial and Sectoral Strategies prepared by the Autonomous Governments". "Responsibility commitments in relation to tourists, society, cultural and natural heritage and mitigation/adaptation to climate change". Committing to tourism, the quality of life of local populations and the sustainable use of cultural and natural heritage seems to be the best ways to change and reposition Spanish tourism, bearing in mind international commitments related to emission limits and climate change in the different territories and links of the tourist value chain.

It should be noted that the Institute considered that by the year 2012 the most important destinations and companies and groups of transport and tourist services should already have formalized their ecological commitments.

*"Creation of powerful reference prototypes, tools, stimuli and awareness of tourism and sustainability".* The lines of action proposed were "the development of awareness programs around sustainability and tourism", the implementation of certifications such as the Q for quality, and the promotion of the international standardization of tourism certification systems.

*"Extraordinary actions for the revaluation and sustainability in the coast and interior of the country".* The comprehensive requalification of mature coastal destinations is considered the key proposal to be developed. This is to be achieved through "rehabilitation and 'naturalization' of the coastal land and sea system", together with other measures related to the environmental load and the improvement of the quality of life of local populations and the environment.

*"Creation of cooperation networks on tourism and sustainability inside and outside the country".* It is proposed the creation of a Cooperation Network on Tourism and Sustainability to foment sustainable interrelationships between national and international tourism, next to a promotion of cooperative actions to learn new strategies and sustainable proposals to be implemented in the Spanish tourism system.

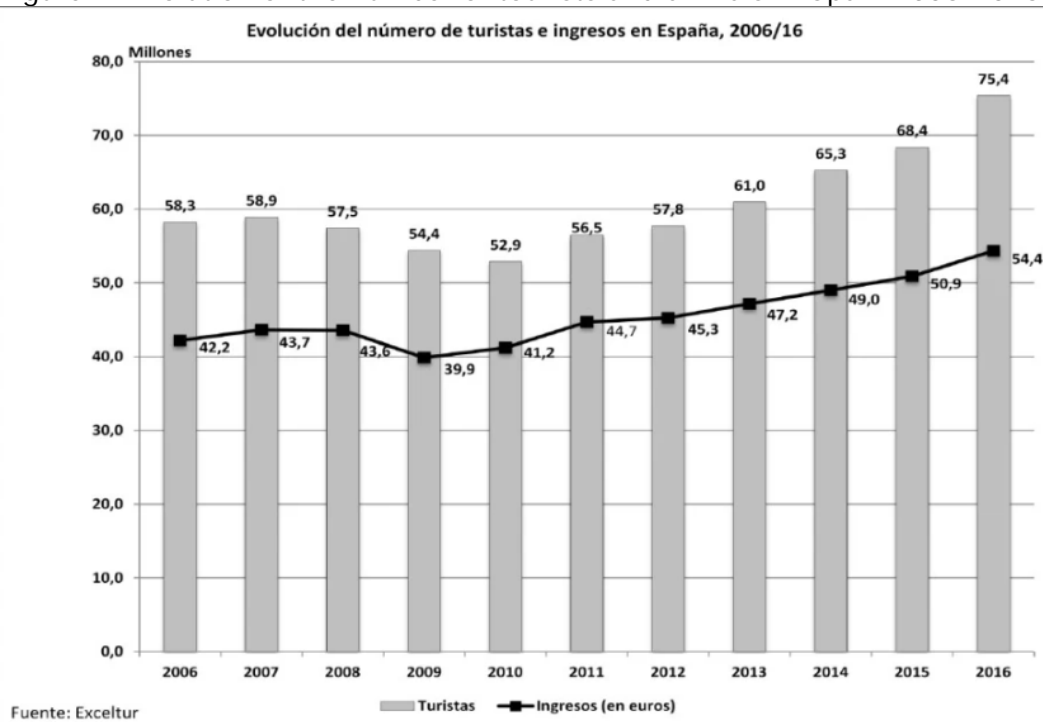
Focusing even more on the axis of sustainability, the Tourism 2020 plan includes strategies for progress in sustainable commitments and the development of activities with international projection, the promotion of public-private co-responsibility and social participation, and the

requalification of mature tourist destinations. With all these measures we can affirm that the Tourism 2020 plan focused on the change and profitability of the tourism system, taking ecological/environmental sustainability as the axis and mean to achieve it.

### 5.2.2. THE NATIONAL AND COMPREHENSIVE TOURISM PLAN (PNIT)

The following recovery plan for the tourism sector carried out by the Central Government was conditioned by the economic crisis that began in 2008. The international financial and economic crisis altered the scenario in which the adjustments required by the Spanish economy had to be carried out. This crisis had an important effect on the reduction of the number of national and international tourists until it achieved a certain recovery in the same year of the plan's approval.

Figure 2. Evolution of the number of tourists and arrivals in Spain 2006-2016.



Source: Exceltur.

The international financial and economic crisis altered the scenario in which the adjustments required by the Spanish economy had to be carried out. This crisis had an important effect on the reduction of the number of national and international tourists until it achieved a certain recovery in the same year of the plan's approval.

Due to the economic crisis of 2008 and the change of government in 2011, the correct implementation of many of the proposals included in the 2020 plan were not possible. Because of that, by 2012 the National and Comprehensive Tourism Plan was proposed as a solution to the crisis through tourism activity.

The PNIT, made up of 6 axes and 28 measures, was created by the Secretary of State for Tourism through the Spanish Tourism Institute (Turespaña), and with the collaboration of the Autonomous Communities, business organisations, trade unions and various representatives of the sector (Ministerio de Industria, Energía y Turismo, 2012).

Figure 3. Areas that make up the PNIT and the relative weight of each of them.

FIELD	RELATIVE WEIGHT (%)
Talent and entrepreneurship	8
Knowledge	12
Public-private partnership	21
Offer and destinations	33
Customer focus	17
Strength of the Spanish brand	9

Source: Own elaboration.

The plan is mainly focused on the requalification and improvement of areas that are destined to the generation of income and hence, the increase of tourist arrivals. The lack of measures in favour of sustainability, the requalification of professionals in the sector, or the reconversion of the coastline and other areas affected by tourism activity seem to be relegated to the background.

Attracting tourists across borders is one of the focal points for the economic recovery of the sector due to the current crisis. The PNIT recognises itself: "Despite the availability of all these resources, for various reasons our offer is poorly positioned in international markets, which is why it is essential the development of actions to boost the demand for this type of tourism in our country" (Vizcaíno, 2015).

The Ministry of Industry, Energy and Tourism oversaw the development and coordination of the plan, making experts doubt about the reaching of the sustainable objectives approved before the crisis. It's been stated that grouping tourism in a ministry in charge of other economic activities such as energy or telecommunications, "seems to underlie the idea of the Spanish State of conceiving tourism preferably as an economic activity, which affects its management by the prioritization of economic criteria" (Ramírez, 2015).

The Secretary of State for Tourism stated in 2012 that "tourism activity in Spain has suffered a significant loss of competitiveness in recent years" and "the economic, social and environmental sustainability of our model is in question for the future", proposing the PNIT as a solution, an "economically, socially and environmentally sustainable" model (Ministerio de Industria, Energía y Turismo, 2012). "The big difference is that the 2020 plan arose as a response to a concern about the degradation of the Spanish tourism model and as a commitment to achieving a sustainable tourism model. The PNIT instead, emerged as a response to an economic crisis affecting the sector, and whose commitment is to increase the competitiveness of the destination to capture higher income from tourism" (García, 2015). "Most of the proposals and initiatives of the PNIT are imprecise in what refers to sustainability" (Pulido, Cárdenas, 2012) appreciating the lack of strategy for their implementation and ignoring the setback in the treatment of the sustainability. The lack of depth in sustainability, and even less in the environmental aspect, proved that the PNIT sought the generation of quantitative benefits instead of moving towards a correct management of sustainability and all the agents involved. The fall of the Tourism 2020 plan caused by the economic crisis, the reduction of the Ministry's budget, and the change of Government, demonstrates the lack of management focused on achieving medium and long-term objectives. The failure of the plan left Spain with a history of almost thirty years since sustainability became the focus of tourism plans

and strategies, and “the results continue to be quite poor to this day, being the advances very insignificant” (García, 2015). Everything suggests that the PNIT provided measures for economic recovery while forgetting the basis of its own activity, which is the environment and tourist destinations. These destinations were affected both by the economic crisis and by a tourism industry that implied a lack of sustainability measures and the mismanagement on the requalification of tourist destinations.

### **5.2.3. THE 2030 STRATEGY**

The General Guidelines of the Sustainable Tourism Strategy of Spain 2030 were being prepared by the Government’s Secretary of State for Tourism before the Covid pandemic hit: “a national tourism agenda to face the challenges of the sector in the medium and long term, promoting the three pillars of sustainability: socioeconomic, environmental and territorial” (Ministerio de Industria, Comercio y Turismo, 2019).

The guidelines were developed in view of the global situation projected for 2030 and how it will affect the Spanish tourism industry. It was predicted “the world population will continue to grow to reach 8.6 billion people in 2030” and that “85% of the population will live in emerging economies and the middle class will comprise 5 billion people worldwide”, mentioning that “natural resources will be subjected to greater stress due to demographic growth and climate change” and the expectation of the “energy demand to increase by more than 50% and water withdrawals by 40% for the 2030”. In addition, it is pointed out that “the consequences may lead to the outbreak of extreme weather events and increases in ocean levels” and that “the effects on the environment and the climate may have consequences on tourist destinations, modifying some of the characteristics that make attractive” (Ministerio de Industria, Comercio y Turismo, 2019).

It should be noted that these extreme weather events are already a reality and that the consequences on populations and, consequently, on tourist destinations, are catastrophic and costly to repair.

“The Government has the responsibility to reorient the Spanish tourism model towards sustainability”, considering this an essential asset for the Spanish tourism sector to continue being an engine of economic and social development. Sustainability continues to be the key for these future years, which is why “we must start from the idea that, without sustainability, there will simply be no tourism in the future” (Ministerio de Industria, Comercio y Turismo, 2019).

As we have seen since the beginning of the century in many policies and guidelines related to tourism in Spain, emphasis is placed on the need to act and cooperate more quickly and effectively in the public-private sphere. Something to add is that in this case a new factor is considered: the diversity of markets. This is due to the aforementioned “progressive increase in global influence of Asian countries”, which will mean a change in the global geo-political landscape, and which Spain must take advantage of to expand its market.

The dependence on the sun and the beach, and the high seasonality, continued to be two of the greatest weaknesses of the sector, next to the lack of demand for rural tourism, because despite the fact that rural accommodation companies have tripled in the last 15 years, reaching a total of 17,000 in the year 2019, the number of tourists still does not reach

levels that make the proliferation of companies dedicated to the sector economically profitable. In this case, "the 50% annual growth experienced by the supply of tourist housing" is added as a point to reflect on, and that is that "in the main cities of the country, the number of places in housing for tourist use can exceed the of hotel beds since 2016" (Ministerio de Industria, Comercio y Turismo, 2019).

As for the factors that can limit tourist activity, it should be noted that "climate change, and its impact on water resources, coastal destinations and weather" ranked sixth, rubbing shoulders with other threats such as Brexit, the recovery of destinations affected by the overtourism, and the "foreseeable pressure of demand on infrastructures, natural resources and destinations".

The proposed Strategy towards 2030 followed a series of foundations aimed at socioeconomic growth and social benefit, listing some proposals already seen, such as the need to equitably distribute tourism demand over the territory, "enabling participatory governance mechanisms with the competent administrations", or maintaining its leadership position in tourism.

In the environmental aspect, "preservation of natural and cultural values" was mentioned, referring to the conservation of cultural and natural heritage, the challenge of ecological transition and the promotion of values in favour of the environment and tourist destinations.

The evolution of tourism activity towards the protection of the environment and the use of clean energy was also mentioned, in addition to promoting the development of products based on values that respect the environment to contribute to the diversification of the offer and increase the value chain of the Spanish tourism. That is why companies and consumers were urged to adapt to the evolution towards responsible consumption patterns.

#### **5.2.4. THE RECOVERY, TRANSFORMATION AND RESILIENCE PLAN**

In the current national sphere to reconvert the Spanish tourism sector and have it adapted to a post-pandemic scenario, the Recovery, Transformation and Resilience Plan, inspired by the 2030 Agenda, the Sustainable Development Goals and the European policy covered above, is the plan that will be carried out by the Government during the coming years. As the plan itself dictates, "*the main objective is to transform and modernize the tourism sector in Spain through sustainability and digitization, increasing its competitiveness and resilience*" (Ministerio de Industria, Comercio y Turismo, 2021).

The Plan establishes that this transition must be based on the incorporation of environmental limits when approving and regulating policies or economic activities, and the need to stop the processes of irreversible ecological deterioration.

The two general objectives are to support tourist destinations in their process of transformation and innovation and to achieve greater territorial cohesion, playing with the offer and the connections between destinations. This seeks a balanced development of destinations while at the same time consolidating values in the communities that contribute to reducing and

mitigating environmental and socioeconomic problems. Thus, we could say that the Plan seeks to improve the competitiveness of tourist destinations and diversify their offer, incorporate sustainability in the management of tourism resources and products, and improve the natural capital of the tourism system.

The Plan also classifies tourist destinations according to their nature or their main characteristics to announce the possible initiatives to carry out.

In the case of sun and beach tourism, referring to highly internationalized beach destinations and residential sun and beach destinations, the leading role it has had since Spain became a benchmark for this type of tourism is considered, at the same time as the need to put sustainability in the focus of tourism policies is urged. It is also stated that the floating population is greater than the resident population, in the case of internationalized destinations, and at least their limitation as large tourist containers is requested to achieve the objectives of the Plan.

It is also stated that *"second homes dominate the accommodation offer, which reduces their profitability and suffers from greater seasonality. As a measure to avoid this, the expansion of the tourist offer is proposed to add value to the destination.*

Rural tourist destinations, meanwhile, have a wide tourism potential. It is proposed to *"generate job opportunities, revitalize aging social spaces, generate associative and business fabric at the local level, support the modernization of destinations and work on the strategy against depopulation"*. Natural spaces, high mountain destinations, and coastal rural destinations also fall into this category, which may need revitalization, investment and tourist exploitation that is *"respectful and compatible with its ecological and environmental values"*.

Urban tourism represents close to one quarter of the international tourist demand towards Spain, making it face important challenges of renewal of supply, maintenance and improvement of the historic centres, reconciliation of tourist activity with the local population, or others associated with green mobility or the *"naturalization of the city"*. Madrid and Barcelona, being the tourist centres compared to other urban destinations, concentrate the greatest capacity for innovation and experimentation. It is requested to implement tourism transformation policies focused on sustainability, mobility, and innovation.

In the case of cities with tourist identity and other urban destinations, it is requested to consider the load capacity of the destinations and the use of the unexploited to achieve a sustainable tourism model. This is motivated by the usual congestion of the great tourist focus, whether it is a monument, work or building, which characterizes many towns known for their cultural, artistic, architectural or other heritage.

To determine the way in which each territory and destination should face the challenges to achieve sustainable tourism, the Territorial Tourism Sustainability Plans in Destination will be defined. These plans bring with themselves a series of measures depending on the characteristics of the destinations that will contribute to the transformation of the tourism industry in Spain and reach the goals agreed in the 2030 Agenda.

Between the measures, the ones directly connected with the focus on the sustainability are the following:

Figure 4. Tourism sustainability: Destination and Measure.

DESTINATION	MEASURE
Sun and beach tourism	Regenerate the coastline. Increase energy efficiency. Improve public spaces and infrastructure. Reconvert infrastructures located on the coast and transport infrastructure. Reduce saturation by applying technology to the management of tourist flows. Advance in the sustainable and intelligent management of urban solid waste. Restore ecosystems.
Rural tourism	Boosting the tourism offer at a local scale linked to the territory and base it on the cultural, gastronomic or other natural heritage. Models of public use of protected natural spaces to make their conservation compatible with responsible tourist use and sustainable. Create tourism products linked to the rural environment and the ecosystem services of protected areas (cultural tourism, ecotourism, active tourism, agrotourism, etc.) Involve all stakeholders in the tourism system in the protection of resources, conservation of biodiversity and the carrying capacity of destinations.
Urban tourism	Create computer tools oriented to tourism for the management of flows, loads and demand. Value tourist resources outside the historic center, to contribute to the deconcentrating and redistribution of tourist income. Develop sustainable mobility systems. Improve energy efficiency. Preserve, improve and enhance the cultural heritage of the destination.

Source: Own elaboration

The diversity of measures and actions that could take in place in every destination proves the number of possibilities at our disposal. Mostly focused on reconvert the sector in those destinations that have been facing issues during the last decades due to the unstoppable flow of tourist in concentrated areas and have the services and services updated to the needs of the current tourist,

## 6. TOURISM ACTIVITIES FACING GLOBAL PROCESSES AND CLIMATE CHANGE

We have at our disposal a wealth of studies that support the occurrence of climate disruption and the progressive increase in global temperature since the beginning of the industrial era. The main cause of these effects is the human being and all its activities related to the emission of greenhouse gases, mainly carbon dioxide (CO<sub>2</sub>) and its concentration in the atmosphere.

The phenomena related to these disturbances or changes are various, such as the increase in ocean temperatures, extreme events such as cyclones and hurricanes of greater force, alterations in precipitation in different seasons, the melting of glaciers that contribute to the rise in sea level, and more (Moreno, 2010).

It is very important that every state and economic sector takes climate change into account and acts accordingly. To this end, measures must be taken to reduce greenhouse gas emissions and reduce the impacts caused by the climate change. These are called adaptation and mitigation measures, respectively (Jiménez Herrero, L., 2007). Shall be noted that the tourism sector is directly related to climate and therefore to the impacts of climate change and the measures to be employed for adaptation and mitigation. Due to its dependence on the environment, the tourism sector is characterised by a high climate sensitivity (Jarraud, 2007).

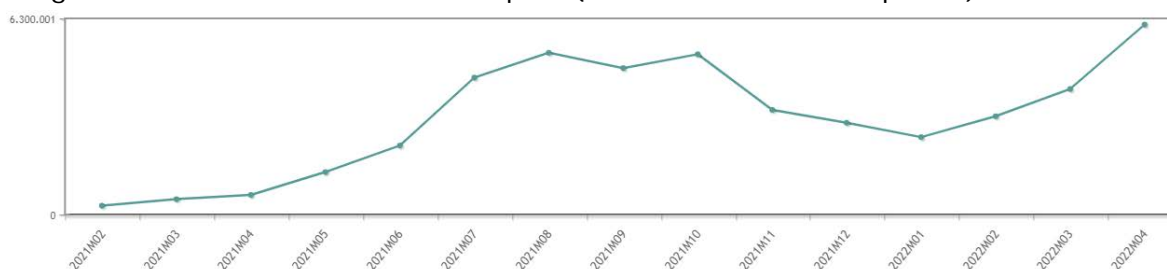
## 6.1. ROLE OF TOURISM IN CLIMATE CHANGE

In addition to being conditioned by climate change and all its consequences, the tourism sector is among the largest emitters of greenhouse gases and therefore acting as a contributor to the deterioration of the atmosphere (Morales, 2020)

The World Tourism Organization, the United Nations Environment Program, and the World Meteorological Organization estimated that emissions of the main sectors (international and national tourism) represented 5% of global emissions in 2005. Transport generated close to 75% of the total CO<sub>2</sub> emissions of the tourism sector at a global level, while air travel alone contributed 40% of total CO<sub>2</sub> emissions (World Tourism Organization and International Transport Forum, 2019).

Analysing the CO<sub>2</sub> emissions, a total of 7,230 million tons of CO<sub>2</sub> were expelled into the atmosphere during 2016. Those emissions arose from passenger and freight transport, representing 23% of the total emissions caused by human beings and an increase of 65% compared to 2005.

Figure 5. Total National Tourist in Spain (base data 2021-2022 period)



Source: NATIONAL INSTITUTE OF STATISTICS (INE).

The arrival of national tourists amounted to 8 billion, increasing by 119% compared to 2005. As for the arrival of national and international tourists, the number increased to 20 billion, doubling the figures for 2005. Consequently, the total emissions from transport involved in tourist movements reached 1,597 million tons of CO<sub>2</sub>, around 22% of total transport emissions and 5% of total man-made emissions (32.1 billion tonnes) in 2016.

Despite the efficiency of current fuels and the emergence of green or sustainable modes of transport, forecasts estimate that by 2030 the increased demand for passengers and transport will translate into higher CO<sub>2</sub> emissions. It is estimated that the total emissions for 2030 will exceed the emissions of 2016 by 21%, produced by the increase in tourist trips, mainly represented by national tourism. It is estimated that the increase in national and international tourism will increase by 78% and 46%, respectively. The emissions that will be produced by the movement of travellers between 2016 and 2030 will be carried out by the car and the plane. The latter is expected to exceed the total CO<sub>2</sub> emissions produced by the car.

Despite the fact that CO<sub>2</sub> is the gas with the greatest weight when it comes to contributing to global warming, the presence of other gases also conditions its development. According to the Spanish System of Inventory and Projections of Emissions into the Atmosphere, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride are direct causes of the greenhouse effect.

For the year 2020, methane and nitrous oxide represented 13.7% and 6.6%, respectively, having shown a decrease since 2005 but without reducing the figures for 1990. Next to them, the entry into force of the tax on hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride, emissions has reduced them to represent nowadays just 2% of total emissions, making their contribution to the greenhouse effect almost minimal.

Another major concern directly caused by global warming and hence, the emission of greenhouse gases, is the melting of the poles and, consequently, the rise in sea level. If carbon emission reduction commitments signed in the Paris Treaty are met, the Earth would warm 2.7°C by the year 2100. If efforts to curb greenhouse gases fail, temperatures could rise 4°C or more per year. above mid-19th century levels. This warming would add 20 to 30 feet to the world's oceans in the long run, forcing to build huge defences against future rising waters or rebuilding cities and towns on higher ground (Deutsche Welle, 2021).

There is also evidence that a rise in sea level translates into a greater number of storms, storms, and other extreme weather events, which end up threatening crop fields, aquifers, fauna and flora, etc. (Climate Institute, 2021)

Another consequence derived from human activity and the overexploitation of natural resources is deforestation. Measures are urgently needed to reduce its damage (Santander Universidades, 2022) such as agroforestry, a farming method that integrates trees into agricultural systems and preserves soils, restores degraded ecosystems and improves agricultural production conditions, or forest carbon projects, which aim to restore and preserve forests, as well as support the socioeconomic development of disadvantaged communities with the planting of trees.

According to the Global Forest Review, the planet lost an area of tree cover larger than the UK in 2020, including more than 4.2 million hectares of primary tropical forest (Global Forest Review, 2021). Tree cover loss increased in both the tropics and temperate regions due to increased deforestation and fire incidence in the Amazon.

## 6.2. THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE REPORT (IPCC)

The Intergovernmental Panel on Climate Change (IPCC) presented a very crucial report in 2021. A total of 234 experts from 66 countries participated in it, who warned on the effects of global warming and spotted various scenarios depending on the amount of greenhouse gases emitted in the coming decades (Moerenhout, Bellmann, 2021).

Among other notes and statements of the report, the increase in the global average temperature by 1.1 C° since the beginning of the industrial revolution and its inevitably trend to rise until at least mid-century acts as the leading warning. In case of a non- reduction of the greenhouse gas emissions during the coming years, by the end of the century the Earth could be facing an increase of 4.4 C° in the average global temperature, which implies an increase in extreme phenomena in an environment unprecedented in millions of years (Intergovernmental Panel on Climate Change, 2021).

To counter-argue the hesitation and avoidance in acknowledging the problems it was stated that "*the evidence of the influence of human beings on the climate is already so overwhelming that there is no scientific doubt*" (José Manuel Gutiérrez, 2021)

The IPCC analysis proves the direct relationship between the increase in average temperatures and the multiplication of hot extremes, heavy rainfall, agricultural and ecological droughts in some regions, in addition to the increase in intense tropical cyclones and the decrease in Arctic Sea ice and reduced snow cover and permafrost.

The State Meteorological Agency states "*climate is the support for tourism and the most important element in the tourism product*" (AEMET, 2009). The increase in maximum temperatures, the greater frequency of cyclones and hurricanes, changes in rainfall and intense droughts directly affect the tourism industry. Not only do they influence the decrease in tourist demand, but they also cause structural damage, and the need to apply economic measures to mitigate these phenomena, implying costs (Jameel, 2019)

It is also known from various studies that tourists have a high capacity for adaptation and rejection when choosing tourist destinations with environmental problems or social conflicts, which directly affects tourism companies, property owners, and all actors involved in the sector.

## 6.3 SUSTAINABLE MOBILITY: AVIATION

The air transport sector has been in constant growth. Such has been this, that only since 2005 the number of passengers/kilometres transported has increased by 60% (European Aviation Environmental Report, 2019). Among other statements:

The number of flights increased by 8% between 2014 and 2017 and is likely to grow by 42% between 2017 and 2040. In 2016, aviation was responsible for 3.6% of the total greenhouse gas emissions of the 28 EU countries and 13.4% of emissions from transport. The forecast is that by 2040 CO<sub>2</sub> and NO<sub>x</sub> emissions will increase by at least 21% and 16% respectively. The number of major airports handling more than 50,000

annual aircraft movements is expected to increase from 82 in 2017 to 110 in 2040. Despite the extreme need to reduce emissions in tourist travel, the forecasts and projections of the aviation sector at a European level point to a constant and uninterrupted growth of its services, which will imply greater difficulty in reducing emissions from transportation and tourist travel.

Currently the work that is being developed by multiple researchers for the production of fuels from waste will not be enough to meet the objectives established in terms of sustainability and emission reduction (European Environment Agency, 2021). The most important way to reduce emissions and increase the sustainability of the aviation sector worldwide is through reducing the number of flights. *“Although there are a series of measures that can help reduce the impact of air transport on climate change, the exponential increase in flights in recent years has overturned any improvement associated with technological improvements”* (Muñoz, P. 2021).

The Aviation Degrowth report proposes the elimination of proximity flights and their replacement by promoting rail transport, among other measures for the reconversion of the sector and the reduction of greenhouse gases emissions.

#### **6.4 CLIMATE CHANGE SCENARIOS IN SPAIN**

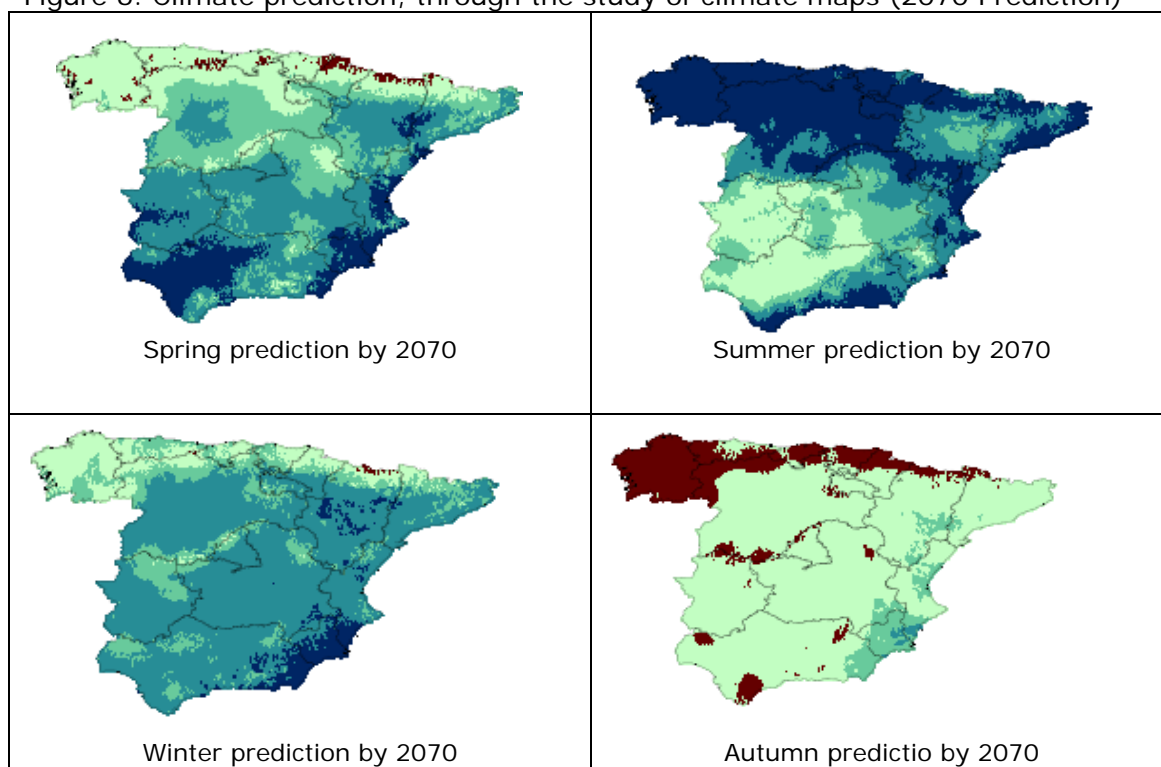
The conclusions of the study carried out by the State Meteorological Agency (AEMET, 2009), which drew up a series of regionalised climate change scenarios for Spain over the course of the 21st century, provide an analysis of the interrelation of territory with climate change.

The study is based on the period from 1960 to 1990 and ranges from the most moderate scenarios to those in which the impacts will be of the greatest magnitude. Considering the characteristics of each in terms of temperature and rainfall, proves that the different regions are completely influenced by the seasons. Focusing on the spring, from March to May, the areas with the best climatic suitability correspond mainly to the Guadalquivir Valley and the interior of the Region of Murcia and the Valencian Community. In the case of autumn, from September to November, the situation is similar except for some areas in the Guadalquivir Valley, Extremadura and Valencia. During summer, from June to August, the ideal destinations are the cities in the north of the peninsula, as well as a large part of Castile and Leon, La Rioja and Navarre. The other regions with similar and appropriate conditions for tourism are the mountain areas, such as the Pyrenees or the Central System, or the coastal areas of the Levante and south of the peninsula. Other regions suitable for tourism in the summer period are placed in the south-west of the peninsula, although not in the same conditions as the regions mentioned above. From December to February, most of the north of the peninsula presents unfavourable conditions for tourism and any related activity, with the exception of the east of Andalusia, the Region of Murcia, and some areas of Valencia and the Ebro Valley.

The prediction for the end of the century (2071-2100) determines that the most considerable changes would affect the spring and summer. During spring, temperatures will have risen while rainfall will have decreased. The summer will be characterized by the appearance of areas with unfavourable conditions, estimating that more than 30% of the peninsular territory will not be suitable for any tourist activity. This is a reduction of the areas with

excellent conditions, being these represented by the north coast in the case of a lower impact scenario, until being able to be reduced to only a small part of Galicia and Asturias in the higher impact scenario.

Figure 6. Climate prediction, through the study of climate maps (2070 Prediction)



Source: AEMET

Data proves that a large part of the centre and south of the peninsula could be considered unfavourable areas by the middle of the century. Conditions will deteriorate in most of the area of the communities that are currently considered to be very good and therefore suitable for tourism. These cases correspond mainly to Aragon and Catalonia. Data and analysis provided by the University of Baja California Sur reinforces the theory that climate and seasonality have a relationship, and both have direct effects on the tourist demand and numerous economic aspects, including the supply of basic goods such as heating, water, or food (Michel Jarraud, 2007).

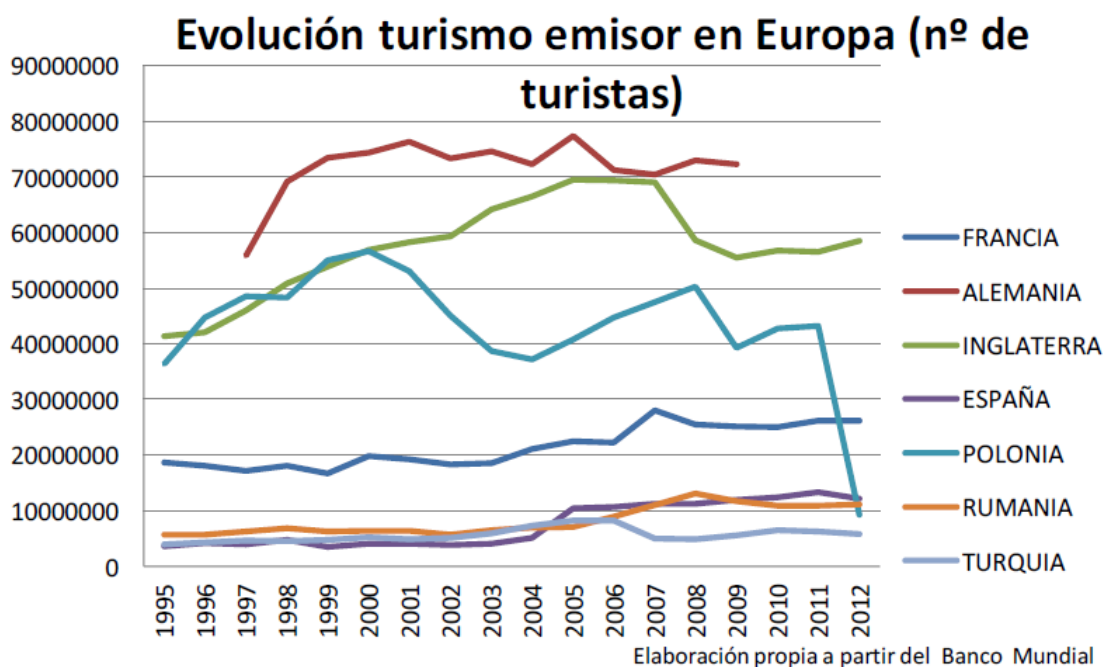
## 7. SUSTAINABILITY AND TOURISM DEMAND: AN EVOLVING APPROACH

Historically there has been a lack of recognition of the importance of tourism in helping the economic growth of the territories (Bernier, E. 1994). This is demonstrated by the strategy carried out worldwide in the 1960s and 1970s, aimed at developing economic activity through the secondary sector, leaving behind the service sector. (Bottle, G. 1994). However, by the beginning of the 21st century, the importance of the tourism sector for the economic development of a country had already been recognized by international organizations (WTTC, 2005).

The elasticity of the tourism demand with respect to income determines the proportion in which tourism demand is modified when the tourist's income rises or falls. Provided by previous studies, the tourism sector is

determined to present services with a high elasticity, meaning that the increase in per capita income supposes a greater number of tourists. Such is the case of Spain, where in the recent decades the number of Spaniards who have travelled within and outside the country has multiplied exponentially thanks to the increase in their purchasing power.

Figure 7. Europe tourist flow evolution (1995-2012).



Elaboración propia a partir del Banco Mundial

Source: Flores, D. and Jiménez, L. University of Huelva (2016).

Based on the number of trips, since the mid-1990s international tourist demand has grown steadily, except for the period of global economic crisis that emerged in 2007 (Flores, D. y Jiménez, L). Regarding the behaviour of outbound tourism with respect to the evolution of income, in periods of economic growth in countries such as Spain, Germany, Romania or Turkey, the demand for tourism grows in a greater proportion. In periods of economic decline, the effect is the same: the demand for tourism declines in an even greater proportion than the economy does

When it comes to influencing tourists and increasing demand, various factors play their role. These may be the type of need for the trip, whether for leisure, business, or otherwise; the existence of substitute services that can cover the same route, such as airplane routes that can be replaced by the train; the price of tourist services. Although tourism is considered a superior category good, the trend is for it to be further away from being considered a luxury good. This conclusion is drawn from the tendency of the elasticity to be maintained or even to decrease in the medium and long term.

## 7.1 RELATIONSHIP BETWEEN SUSTAINABILITY AND TOURISM SYSTEM

Considering the current environmental problems and the tremendous interconnection between global and local ecosystems, there are already

several initiatives that advocate responsible use of renewable and non-renewable resources, adhering to the life cycles of the biosphere.

An example of this are the principles published by H. Daly (1972):

- ✚ The principle of zero irreversibility, which advocates the reduction to zero of emissions of non-biodegradable toxic components or irreversible damage caused to biodiversity, such as the extinction of plant and animal species. It should be noted that this principle marks the end of the nuclear industry and of many processes produced in the chemical industry.
- ✚ The sustainable harvesting: harvesting rates must be equal to the regeneration rates of these resources. Daly understood that it is necessary to maintain natural capital at an optimal level.
- ✚ Sustainable emptying: to divide the net income from non-renewable resources into a component of income that can be consumed regularly each year and a component of capital that is invested in a renewable substitute.

The remaining principles advocate efficiency, applied to the technology used to obtain and generate resources and to the emission of waste by obtaining them.

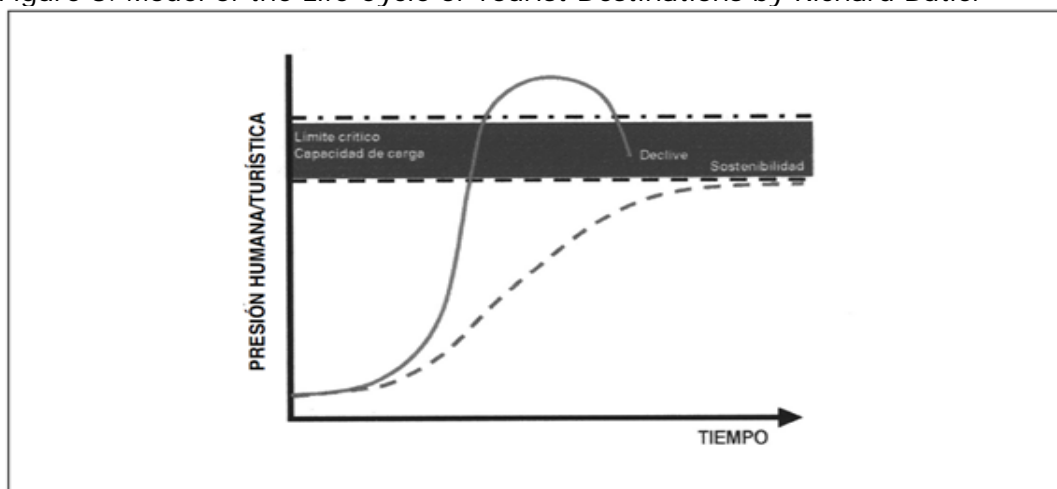
The Institute of Tourism Studies (2005) emphasizes the need for the tourism industry to respect the carrying capacity of destinations while urges to the tourist to be responsible with the consumption of resources and the use of natural systems, without endangering the interrelationships within ecosystems or their ability to recover.

Regarding the carrying capacity of destinations, there are 4 spheres:

- ✚ Environmental load capacity: from which local ecosystems are degraded and inadmissible impacts are induced in relation to global biological and physical-chemical cycles.
- ✚ Socio-cultural carrying capacity: from which undesirable impacts are produced on identity, cultural evolution and local quality of life.
- ✚ Economic carrying capacity: from which negative effects are induced on other strategic sectors of the local economic system or on the profitability of the system itself.
- ✚ Carrying capacity of the tourist experience: above which the satisfaction and experience of the visitor begins to be devalued.

To apply these principles and respect the load capacities of tourist destinations, we have at our disposal a very good indicator that allows us to analyse the environmental performance of any product or service: the concept of the Life Cycle of tourist destinations. Richard Butler created in 1980 the Model of the Life Cycle of Tourist Destinations, where he equated the evolution of destinations with that of products or services and showed that tourism implies development over time, conditioned by factors such as the influx of visitors, the relationship between tourists and the local population or the availability and use of infrastructures. Today, it is a widely used tool as a theoretical basis for research and analysis of the tourism sector (Jiménez Herrero, L., 2007).

Figure 8. Model of the Life Cycle of Tourist Destinations by Richard Butler



Source: F, Prats. Estudios Turísticos (2007).

Butler's model is divided into six phases that get through the whole process of evolution of a tourist destination since its first establishment as a tourist attraction in relation to the sustainability and the load capacity of the assets that work as an attraction for tourists.

Figure 9. Butler's model phases, conditioned by the evolution of tourist destinations

PHASE	MEASURES
Zero irreversibility	The reduction to zero of emissions of non-biodegradable toxic components or irreversible damage caused to biodiversity, such as the extinction of plant and animal species.
Implication	Local population starts businesses for tourism, such as apartments for tourist use, restaurants, etc. implying the appearance of investors, and making the government organize and develop an infrastructure for the tourism industry.
Development	The promotion of the destination and the number of visitors is increases. Infrastructures continue to develop and companies outside the locality or foreign companies begin to emerge, looking for a piece of the tourist market.
Consolidation	Growth slows down although it continues to rise, while tourism has already established itself as the destination's main source of income. Here capital flight continues to take place and the deterioration of the infrastructure, and the well-being of local populations begins.
Stagnation	Tourist demand decreases and stagnates because the destination is no longer fashionable. The economic, environmental, and social problems are already a reality.
Decline or rejuvenation	Tourist demand decreases and stagnates because the destination is no longer fashionable. The economic, environmental, and social problems are already a reality.

Source: Own elaboration

Tourism must assume its alignment with the environmental viability commitments that are emerging in the different areas. Therefore, aspects such as load limits, the life cycle of destinations or the effectiveness and efficiency of tourism processes must be considered.

In 2005 Exceltur published an analysis of the Sun and Beach tourism offer that characterizes Spain. This study listed a series of symptoms

caused by 40 years of supply based on climate, sea and massive accommodation, and evidenced the reasons why Spain was beginning to lose market share and reduce its business profitability compared to other countries with a similar tourist offer. *"Going for more balanced tourism growth models [...] would substantially increase direct and induced socioeconomic effects in tourist areas in the short and medium term and shows that greater construction and occupation of the territory does not generate a sustainable socioeconomic system"* (Exceltur, 2005)

Proof of this was the overcoming of the carrying capacity of tourist destinations, induced by the growth of construction and the deterioration of some tourist areas. Many Spanish tourist destinations are not adapted to the demands of today's tourist: a *"more demanding tourist, with greater knowledge of the local identity traits and of all its alternative options, much more sensitive to management of the territory and the environment"* (Jiménez Herrero, L., 2007). *"Urban growth has limits"*, as shown by the load capacity of destinations, and as a solution there is, among other actions, *"the rehabilitation and renovation of the existing plant and the recovery of the historic centres or urban areas"* (Exceltur, 2005).

## 7.1 TOURISM TYPOLOGIES AND SUSTAINABILITY: ECOTOURISM

Ecotourism was defined for the first time as *"traveling to visit relatively unaltered natural areas, including protected areas, in order to enjoy, appreciate and study the natural attractions (landscape, flora and fauna), as well as any cultural manifestation of the present and the past through a process that promotes conservation, has a low negative environmental and cultural impact, fosters an active and socioeconomically beneficial involvement of local communities"* (Ceballos, 1983)

Four common aspects between tourism and the environment have been considered at the moment of giving ecotourism a definition: the natural environment as the basis for the development of tourist activity, its management to reduce its impact, the contribution of said activity to the conservation of natural resources, and the behaviour by part of tourists and tour operators about caring for the environment (Buckley, 1993).

Ecotourism has been also dictated as *"the responsible travel to natural areas that conserves the environment and sustains the well-being of the local population"* (International Ecotourism Society, 2009), or as *"a form of tourism that has in mind and preserves social, economic and ecological interests in a balanced way"* (Congress of Scientific Experts in Tourism, 2017).

To add that the emergence of the ecotourism concept and its study is directly related to what has occurred in the international sphere in terms of sustainable policies and development objectives over the last three decades, which sought and seek to promote a more sustainable and green tourism sector.

Regarding the impacts of ecotourism, most authors and experts prove even though ecotourism brings real benefits with itself, it also supposes negative impacts on local populations (WWF, 2001). On the negative impacts, ecotourism may result in the generation of waste, the deterioration of fauna and flora, and the loss of cultural identity (Castellanos, Orgaz, (2013, 2016). Among the various positive aspects that ecotourism has as a form of sustainable tourism, we can extract: the promotion of economic

development and generation of employment, the management of resources to help the survival of the environment, the increase in interest in knowing the natural environment and cultural by tourists, improvements in infrastructure, promotion of education of local populations and visitors, etc. (Orgaz, 2014)

This proves that a good ecotourism management does not have to have a large negative impact on the environment, but rather it creates awareness among the local population and the tourists who arrive at the destination, promotes the preservation of biodiversity and natural and cultural resources, and generates employment and economic benefits.

However, at ecotourism management and how it is carried out may have a great environmental impact, in addition to being conditioned by the limit of possible contracts and the unequal distribution of resources and income between the local community and urban sectors (Pinkus, Das, Chatterjee, (2009), (2015).

## **8. POST-PANDEMIC THOUGHTS: NEW PERSPECTIVES IN THE FACE OF NEW REALITIES**

To provide a more realistic approach that has in consideration the pandemic that hit the world in March 2020, this will be followed by a series of thoughts shared by experts and professionals of the tourism sector and coordinated by the Minister of Tourism, Industry and Commerce of the Government of the Canary Islands, among others.

These reflections or thoughts may work as an addition to what has already been covered so far and may be useful to discover aspects and themes that may have been overlooked throughout the analysis. The contents covered in these reflections will also enforce the importance of the matters analysed until this point in terms of sustainability and the urge to change the tourism industry.

### **8.1. TERRITORIAL VULNERABILITY OF SPANISH DESTINATIONS**

María Dolores Pitarch reflects on the territorial vulnerability of the different tourism models while being in the middle of a pandemic crisis and the different approaches that coordinators and members of the sector should take in order to reactivate the tourism flow.

Pitarch considers the territorial planning as an strategic element when it comes to returning the activity to pre-pandemic scenario, making the territory the basis on which quality and health safety should be based in order not to lose competitiveness. This is because the tourist would opt for less crowded destinations and therefore, safer, although the current economic situation would make them opt for national destinations, specifically 77% according to a survey carried out by Hosteltur in April 2020.

Historically, the 2008 crisis particularly affected Spain for various reasons, among others, "*productive specialization that generates environmental impacts*", *the waste of natural resources and the generation of waste*" (Pitarch, 2020). In addition, the overcrowding and touristization of certain spaces, motivated by the unstoppable growth in the number of

tourists since the end of the crisis, ended up generating conflicts with local communities, affected by pollution and poor management of tourist flows.

It shall be noted that although the demand for tourists in Spain began to recover soon after the 2008 crisis, the tourist at that time had *"a sensitivity towards a quality offer, especially environmental"* (Pitarch, 2020).

Political measures developed after the pandemic are urged to consider the mistakes already committed at the beginning of the century, the concerns of the locals, and the characteristics and tendencies of the actual tourist. These must be considered next to some aspects already seen throughout the reconversion plan of the tourism industry, such as sustainable development, load capacity control, environmental management or the risks associated with climate change, etc.

## **8.2. The Reconversion Plan of Galicia**

The proposal for a reactivation plan for Galicia was prepared and shared by several members of the Faculty of Business Sciences and Tourism of the University of Vigo.

The plan primarily seeks to promote employment, generate liquidity and reactivate consumption, and should be achieved through the promotion of the tourist offer, the creation of new tourist products and the training of workers in the sector to increase their competitiveness.

Among the different measures proposed for the promotion and reactivation of the sector, public-private coordination to reformulate the advertising campaign and adapt it to the circumstances of the moment, promotion of MICE tourism, digitalization and use of big data in the tourism sector to adapt supply to the demand are the most remarkable.

To generate new tourism products and diversify the tourism demand, the measures should be aimed at the tour operator sector, geo destinations and travel agencies. These should be proposed to promote products in new strategic areas, plan alternative guided tours, or promote campaigns to promote alternative products such as the Wine Routes.

At a political level, it is asked to do some work to improve the training of professionals in the sector and to innovate it to promote its reactivation. Proposals such as the Solidarity Bonus, which serves to encourage consumption, the Training Plan, which would improve the training of workers in the sector, or the creation of an observatory for tourism innovation and sustainability, focused on the renewal and improvement of the sector, are some of the initiatives aimed to be carried out by public administrations.

Innovation, training and the use of information are necessary measures to develop a tourism strategy, regardless of whether we are still in a pandemic or not, and will help improving the resilience of destinations and adapt their offer to the circumstances of the moment (Araújo, Fraiz, Toubes, 2020).

In May 2020, the President of the Galician Government, Alberto Núñez Feijóo, presented the Tourism Reactivation Plan for the Community of Galicia, opting to *"return to the path of tourism growth in the country, committed to ensuring that tourism, which was key to recovering from the*

2008 crisis, will once again become a key sector for us to recover [...]” With a contribution of 3,000 million euros, the plan approved a series of measures to achieve actions aimed at hygienic-sanitary security and establishing Galicia as a safe destination, together with measures aimed at promoting employment, reactivating consumption and generating liquidity (Xunta de Galicia, 2020).

The reorganization of the strategy to promote Galicia as a tourist destination, the adaptation of the tourist product to the demands of post-confinement tourists and the establishment of a new offer conditioned by the new paradigm were approved. To attract local tourists and thus promote local tourism, the Stay in Galicia program was launched, a prepaid card in which the Xunta contributes 40% of the cost of the so-called tourist voucher.

### 8.3. PANDEMIC AND CLIMATE CHANGE

“Pandemic and climate change refer to the same cause” (Olcina, J., 2020), referring to the uninterrupted economic growth of the entire world, conditioned by the constant increase in the number of inhabitants and the use of natural resources. The human being is one of the main causes of the Covid-19 disease, a virus that was supported by atmospheric pollution, and makes the tourism sector one of the causes of the climate change, promoted mainly from the movement of people, means of transport and energy consumption.

The Professor Olcina warns that the atmospheric contamination, besides from being the cause of climate change, will be present throughout the following decades and will come accompanied by other crises or dangers of natural or human cause, which will cause alterations in destinations and transform them as we know today. These alterations are the increase in extreme atmospheric phenomena and the loss of climatic comfort, which affect the different tourist territories depending on their characteristics:

Figure 10. Climate change effects on tourism destinations by typologies.

CATEGORY	CONSEQUENCE ON TOURISM
Sun and beach destination	Changes in marine ecosystems. Effects on drinking water supply. Changes in tourist seasons. Increase in extreme weather events. Effects on the waterfront.
Snow destination	Elevation of snow levels. High season reduction. Urgency in the need to diversify the product. Increased production of artificial snow.
Rural destination	Loss of comfort in interior areas. Rainfall reduction. Changes in the ecosystems that act as a tourist resource.
Urban destination	Effects on drinking water supplies. Increased atmospheric hazard. Increased vulnerability and exposure.

Source: Own elaboration.

Pandemic and climate change are two opportunities to change the tourism sector, which must return to normality with variations in the economic model and the reduction in the exploitation of resources. "*What is immediate must be conditioned by what is next*" (Olcina, 2020), referring to the fact that it is the pandemic what should bring about the changes in a long-term, looking for the future well-being of the sector.

Remodelling of urban mobility, which should be aimed at promoting the use of public transport, the pedestrianization of streets, that seeks to recover lost spaces at the expense of the car, and the use of new technologies to improve the position and competitiveness of tourist destinations, who must plan their actions with a view to the medium and long term, are some of the change proposals.

In response to climate change and adaptation of destinations to it, destinations and infrastructure supplied by energy sources without greenhouse gas emissions should be the present and future, in conjunction with the remodelling of buildings and urban design, the improvement in the management of water resources, conditioned by the foreseeable droughts or reductions in rainfall, the sustainable territorial planning, adapted to possible climatic conditions, and the monitoring of information on coastal destinations are the activities to carry out.

Based on Olcina's reflections, that economic progress and natural resources are not infinite, they are conditioned by anthropogenic risks such as the pandemic and global warming. On the other hand, the activity carried out by the human being is the direct cause of these phenomena, which "*know no borders and keep memory*". Therefore we must be able to implement mitigation and adaptation measures that help reduce the consequences in the tourism sector and maintain its competitiveness and role in the economic development of each country.

#### **8.4. THE URGE TO CHANGE**

Besides having a sustainable development that maintains balance with the Earth and reduces the effects of climate change, keeping in mind the objectives of the 2030 Agenda and the Sustainable Development Goals when managing tourist activity should be the general guidelines. Shall be remarked the importance of this moment to change the whole sector to leave it in a good position by the end of the decade and make things easier to achieve during the following years (Azcárate, 2020).

This is because "*consumer concern for sustainability will continue*", referring to the importance that this will have as the only purchase option that will help improve the sector. This helps to affirm that the future development of destinations must be focused on "*achieving economic, social, climatic and environmental resilience*".

As consumers will bet on sustainable and environmentally friendly destinations, "*pride in showing what is local*" should be the bet of many tourist destinations, which will help giving them a cultural identity that will attract tourists motivated by ethical values before the aesthetic ones.

Another aspect to consider as an advantage for destination is the certification. It serves to have the destination located and preview the conditions in which it finds itself, involving the agents that are part of the

planning, management and marketing. It also helps to take remedial measures that can reverse the conditions of the destination.

## 8.5. THE IMPORTANCE OF THE ETHICS

One more conditioning factor to achieve sustainable change and reformulate the sector, and which seems to be forgotten, is consumer ethics and how it affects heritage. There is a clear shortage of works and studies that analyse the consequences of global tourism on cultural heritage. This is because the declarations that exist today are usually "a facelift" of attitudes and actions that deteriorate the heritage of destinations, whether cultural or natural (Castro, González, 2020).

Factors that condition heritage management and how it is affected by tourist flows are "*the responsibility that arises towards respecting the authenticity of the object, the owner's rights over heritage objects or the responsibility regarding to the very profession of tourism management*" (Castro, González, 2021).

Applying this to the city of Córdoba, we find La Fiesta de los Patios. This was included in the category of World Heritage by the United Nations Educational, Scientific and Cultural Organization, being considered as the greatest exponent of the city's cultural heritage. However, it ended up being overwhelmed by an excessive number of tourists, attracted by managers who allocated all their resources to generate business and forgot the three main aspects to be considered at the time of heritage management, which are research, conservation and dissemination of heritage.

It is in cases like this where various authors propose the approval of policies that convert the tourism attracted by La Fiesta de Los Patios into "*an ally for its own conservation*". This would be achieved through planning and economic and safeguard management, mainly (González, López-Guzmán, 2016).

The concern about the commitment in post-pandemic times to a model based on attracting enormous amounts of tourism flows that do not take into account the consequences, is real. It is necessary to apply real measures like limiting the number of overnight stays in the cities, limiting the price of rentals or managing tourism traffic in the old towns in order to avoid us falling into the exact same situation as before the Covid-19 hit us.

## 8.6. THE OPPOSITES OF OUR APPROACHES

Some of the Sustainable Development Goals and the policies and declarations elaborated in recent years, despite incorporating an important ethical and moral burden and being aimed at promoting equality and sustainability, may end up being counterproductive and achieve the opposite effect wanted. An example of this is the "*democratization of access to tourism*", included in article 13 of the Universal Declaration of Human Rights (United Nations, 1948). Tourism is strongly stratified, which added to the easy access of the lower classes to destinations characterized by mass tourism, supported by initiatives such as pro-poor tourism or low-cost tourism, ended up leading to a global overtourism and helped to maintain those class differences (Cousin, Réau, 2009).

The development model of the tourism sector worldwide ends up promoting job insecurity within the sector too and feeds the underground economy, in addition to "*expelling the usual or poor populations from the old towns*", as is the case of the Spanish cities of Madrid and Barcelona (Bianchi, Cañada, 2015 – 2019). In conjunction, numerous apps encourage

the action of local investors "*at the microenterprise level*" who end up blowing up the market due to their pricing policies, creating franchises, etc. (Coca Cola, 2021).

These issues are direct consequences of the wrong approach by the sector and the malpractice that these policies foment. Even though they were developed in good faith, the monitoring of how these are implemented and carried out by all the actors involved should be one of our concerns to remodel the future of the industry.

## **9. ENVIRONMENTAL INITIATIVES AND OPPORTUNITIES: CHALLENGES FOR THE FUTURE, IN SPECIFIC CASES**

To present the reality of the tourism industry, the following will be led by measures, initiatives and proposals of change, aimed at reducing mass tourism, promoting and giving visibility to sustainable and environmentally friendly destinations, involving and raising awareness among tourists, or changing the trend towards which the so-called "rural Spain" is destined.

### **9.1. Tourism opportunities: Agrotourism in Spain**

Today there is an undeniable shortage of inhabitants in different towns in Castilla y León, Castilla-la Mancha, Extremadura and Aragón, motivated by the emigration of its young population to the cities in recent decades (Caro, 2022). In addition, the inhabitants of these populations are older, producing a slowdown in the birth rate and an increase in mortality.

*"Rural tourism is a valuable tool to restore the rural population and revitalize the economy"* (Mahony, 2021). Among the various ways in which rural tourism can express itself, such as Green Tourism, Adventure Tourism, or Ecotourism, the main actor that can reconvert these populations and guide them towards sustainability is agrotourism. This is because in the case of agrotourism *"the tourist participates in a considerate way and contributes as much as he consumes"*, while in the traditional forms of nature tourism *"the tourist simply observes or takes more of nature than contributes"* (Mahony, 2021).

We must bear in mind that agrotourism involves all the agents of the tourist circle: the businessman, the tourist, and the environment or surroundings. *"It allows people to get involved in agricultural, livestock, forestry, among others, tasks in the primary sector"* (Cebrián, 2017). In other words, agrotourism can bring a series of benefits to the environment and to those in charge of the local activity, at the same time as generating an interest in the traveller for supporting and respecting them.

Examples of agritourism activities and regions that are or may become a niche for this type of tourism are the following: Extremadura, characterized by attracting *"a high demand for assistants in cherry orchards and pepper"* (Masot, Rodríguez, 2020); La Rioja, the main actor when it comes to attracting tourists motivated by *"wine, with its landscapes and wineries, together with gastronomy and natural-cultural heritage"* (Almonte, Pazos-García, 2016); Andalusia and its growing oil tourism, which attracts tourists interested in discovering the unknown aspects and the history of oil through *"visits to oil mills, oil tastings, etc."* (Vázquez de la Torre, Gutiérrez, 2010); or the rural areas of northern Spain, which have a selection of protected

cheeses of the highest quality that promote the so-called "*cheese tourism*" (Fusté-Forné, 2018).

We can see these are great initiatives and ways to diversify the tourism offer in order to generate an awareness in the tourist, making him get involved and valuing and respecting activities of this nature.

## **9.2. TOURISM INITIATIVES: ECO-CAMPING S IN SPAIN**

Camping's are an attraction of tourists at the same time as being closely connected with the environment and nature. Therefore, these may be used as a good generator of tourists who are aware of the sustainable values that we have seen throughout this study.

Based on previous analysis it is possible to affirm the existence of a tourist who bets on sustainable initiatives and values when choosing a campsite, being mainly conditioned by the opinions published by other users in matters of sustainability.

The existence of a type of tourist that has these characteristics opens the door to the market for all those entrepreneurs interested in developing sustainable businesses.

Campsites in Spain "*offer different elements that are part of the essential practices guide for sustainability*" (Pérez, 2021), while the actions conditioned by the legal field are the only ones respected and fully complied with by these establishments. We must emphasize that, today, the private sphere is the one that assumes the costs of having a commitment to the environment, even though it does not have to be profitable, for which reason the State and the Public Administrations are urged to act on the matter and begin to develop and implement sustainable practices that facilitate the activity of campsites.

In the case of the use of renewable energy sources, such as wind, solar or geothermal, this represents a minimum value compared to establishments that use traditional fuels. This implies an opportunity to achieve an important improvement for the coming years.

We must add that these types of establishments contribute to sustainability through "*raising awareness and disseminating sustainable practices*" (Fed. Catalana de Campings, 2020). This is achieved through actions such as the presentation and provision of information about the environment, the promotion of the preservation and care of fauna and flora, or "the promotion of their way of understanding the world so that users make it their own".

Thus, we see that campsites in Spain are another way to promote sustainability towards tourists and a series of ethical and moral values that help to respect and preserve the environment.

## **9.3. TOURISM AWARENESS PROJECTS IN THE CITY OF CÓRDOBA**

Thanks to the Municipal Institute of Tourism of Córdoba, since 2019 several activities or initiatives have taken shape with the aim of valuing the art, culture, and heritage of the city of Córdoba, promoting tourist awareness to respect and value the city and everything that surrounds it (Turismo de Córdoba, 2019).

Examples of these initiatives may be Kalendas Corduva, which includes visits to archaeological sites, school activities, workshops, dramatized routes or historical re-enactments that reveal the city's Roman history; Córdoba in Purple, which proposes similar activities with the aim of cultivating tourists in the importance that Christian culture had and has in the heritage, gastronomy or crafts of Córdoba; or Ramadan Nights, an initiative originating in the Madrid neighborhood of Lavapiés in which the city of Córdoba is currently collaborating and which represents "*a unique meeting to publicize the culture of the Muslim world*" (Casa Árabe, 2022), so representative of history and news of our country.

We can see that these initiatives carried out by a public body of the city of Córdoba are one of the ways in which to make the city known, in addition to raising awareness among tourists and transmitting values and respect for the cultural and natural heritage, something very important when it comes to achieving the sustainability of destinations, as we have seen throughout the study.

## **9.5. ENVIRONMENTAL PLANNING INSTRUMENTS: BIOSPHERE CERTIFICATION**

The Biosphere certification, developed by Biosphere Tourism, "*is a revolutionary system that indicates the real level of sustainability of any company*" (Biosphere, 2022).

It works 100% online and is accessible to all types of tourism companies, regardless of their activity. These can be from hotels, campsites and vacation rentals, to museums, theme parks or convention centers.

Through this certification, the company can develop its own sustainability plan, linked to the management of the 2030 Agenda and its objectives.

Biosphere has its own community of sustainable destinations, who "*show their interest in getting involved in continuous improvement and sustainable development*" (Biosphere, 2022). These destinations have, among other advantages, better positioning and greater transparency than other tourist destinations, greater control and information about the territory, and greater promotion of good practices.

Today there are a total of 35 destinations throughout the world that have the Biosphere certification, among which are Spanish destinations such as the islands of Lanzarote and Mallorca, or cities such as Barcelona, A Coruña and Gijón.

## **10. CONCLUSIONS**

The analysis of the global situation in terms of global warming and climate change warns of the urgency that we live today to change to a system that reduces emissions and looks at the long term, while it transitions to an economic model that leaves to be based on obtaining energy from fossil fuels and bets on renewable energies. It must be considered that tourism and its activity is based on the climate, so opting for this transition and reversing the current situation is the only way out for the sector to continue subsisting, at least at the national level, due to the geographic location of the Iberian Peninsula.

On the other hand, the historical analysis of the term sustainability at an international level and its evolution proves that after more than 30 years since its first appearance, the application of measures in favour of achieving a sustainable sector seem to have achieved rather little.

At the national level, the failure to apply measures to regenerate the tourism sector is directly related to the absence of proper management by public-private organizations and the Central Government, who have based their policies on maximizing income and the number of visitors neglecting important aspects such as the carrying capacity of destinations and the natural environment or local populations. Despite this, by the day of today the European Union and the member countries seem to have become aware of the climate problem in the tourism sector. As has been seen, the most current measures are clearly aimed at the institutionalization of sustainability on practically all fronts, recognizing it as the only means to achieve the objectives of reducing emissions and climate footprint.

Despite the knowledge of the problem and the actions to be taken to achieve the transition of the sector, as has been seen from the opinions, reflections and manifestos of experts and members of the sector, the success or failure of it is in the hands of political leaders, responsible for raising awareness and applying the necessary measures.

Given the challenge that administrations and members of the sector are facing, collaboration and coordination between the two will be key to being able to promote measures and programs that are governed by European objectives and transform Spain's tourism offer. This has to be fostered by the application of real policies and measures that encourage citizens, entrepreneurs, and public administrations to transition to a new tourism model in which sustainability and all that it brings with it ceases to be a visual or superficial aspect and turns into the protagonist of the tourist offer.

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