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## Blue Tourism

The Transition Towards
Sustainable Coastal and
Maritime Tourism in
World Marine Regions

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6

INDE)

35/ Sea, Sand and Sun

**AAPA** / American Association of Ports Authorities

ACS / Association of Caribbean States

AfT / Aid for Trade

**AOSIS** / Alliance of Small Island States

**APTA** / Association for Promotion of Tourism to Africa

**ASATA** / Association of Southern African Travel Agents

**ASOC** / Antarctic and Southern Ocean Coalition

ATA / Africa Tourism Association

**ATCM** / Antarctic Treaty Consultative Meeting

**ATS** / Antarctic Treaty Secretariat

ATTA / African Travel & Tourism Association

AU / African Union

**AusAID** / Australian Agency for International Development's

AWF / African Wildlife Foundation

**AWTS** / Advances Water Treatment Systems

BC / Barcelona Convention

**CAMPAM** / Caribbean Marine Protected Area Management

**CANARI** / Caribbean Natural Resource Institute

**CARICOM** / Caribbean Community and Common Market

**CBD** / Convention of Biological Diversity

**CCAMCR** / Conservation of the Antarctic Marine Living Resources

**CCAMLR** / Convention for the Conservation of Antarctic Marine Living Resources

**CDB** / Caribbean Development Bank

**CEP** / Committee for Environmental Protection

**CHTA** / Caribbean Hotel and Tourism Association

**CI** / Conservation International

**CLIA** / Cruise Lines International Association

CMT / Coastal and Maritime Tourism

**COMESA** / Common Market of East and Austral Africa

**CROP** / Council of Regional Organizations in the Pacific

**CSA** / Caribbean Shipping Association

CSR / Corporate Social Responsibility

**CSTZ** / Caribbean Sustainable Tourist Zone

**CTO** / Caribbean Tourism Organisation

**DFI** / Development Finance Institutions

**EC** / European Commission

**ECA** / Emission Control Areas

**ECF** / Enterprise Challenge Fund

**EEA** / European Environmental Agency

**EEDI** / Energy Efficiency Design Index

**EEZ** / Exclusive Economic Zone

**EFTA** / European Free Trade Association

**EIB** / European Investment Bank

**EIF** / Enhanced Integrated Framework

**EMAS** / Eco-Management and Audit Scheme

**EMS** / Environmental Management Systems

**EPA** / Environmental Protection Agency

ESA / Endangered Species Act

ESG / Environmental, Social and Governance

ESPO / European Sea Ports Organisation

**ETIS** / European Tourism Indicators Systems

**ETOA** / European Tourism Association

**EU** / European Union

FAO / Food & Agriculture Organisation

FCCA / Florida-Caribbean Cruise Association

FDI / Foreign Direct Investments

FOC / Flags of Convenience /

**GCET** / Global Code of Ethics for Tourism

**GCRMN** / Global Coral Reef Monitoring Network

GDP / Gross Domestic Product

**GES** / Good Environmental Status

GHG / Greenhouse Gases

**GSTC** / Global Sustainable Tourism Council

**GVA** / Gross Value Added

GVC / Global Value Chain

**HFO** / Heavy Fuel Oil

IAATO / International Association Antarctica Tour Operators

IATA / International Air Transport Association

ICAO / International Civil Aviation Organization

**ICOMIA** / International Council of Marine Industry Association

ICZM / Integrated Coastal Zone Management

IDA / international development agencies

**IDB** / Inter-American Development Bank

IFC / International Finance Corporation

IGAD / Intergovernmental Authority on Development

IHRA / International Hotel and Restaurant Association

ILO / International Labour Organisation

IMO / International Maritime Organization **RCU** / Regional Coordinating Unit IMO / International Migration Organisation **RETOSA** / Regional Tourism Organisation of Southern Africa **IOC** / Intergovernmental Oceanographic Commission **SADC** / South African Development Community IOC / Indian Ocean Commission **SCP** / Sustainable Consumption and Production IORA / Indian Ocean Rim Association Development **SDAA** / Sustainable Destinations Alliance for the Americas **IPCC** / Intergovernmental Panel on Climate Change **SDG** / Sustainable Development Goals ISM / International Safety Management Code **SEEA** / Environmental-Economic Accounting **ISPS** / International Shop and Port Facility **SEMCs** / South-East Mediterranean Countries ITA / International Tourist Arrival **SIDS** / Small Islands Developing States IUCN / International Union for Conservation of Nature **SLR** / Sea Level Rise LBS / Land-based Sources **SMC** / South Mediterranean Countries LCA / Life Cycle Assessment **SOLAS** / Safety of Life at Sea **LDC** / Least Developed Country **LLDC** / Landlocked Developing Country **SPC** / South Pacific Community LME / Large Marine Ecosystem **SPREP** / South Pacific Regional Environment Programme LNG / Liquidified Natural Gas **SPTO** / South Pacific Tourism Organisation **LUP** / Land Use and Spatial Planning SSE / Shore side electricity MAP / Mediterranean Action Plan STC / Sustainable Tourism Conference MARPOL / International Convention for the Prevention **STCW** / Standard of Training Certification and Watch of Pollution from Ships **STP** / Sustainable Tourism Programme MDB / Multilateral Development Bank **TAPAS** / Tourism and Protected Areas Specialist MEET / Mediterranean Experience of Eco-Tourism MGO / Marine Gas Oil **TIES** / The International Ecotourism Society MISP / Marine Invasive Program TNC / The Nature Conservancy **MLC** / Maritime Labour Convention TO / Tour Operator MMPA / Marine Mammal Protection Act TSA / Tourism Satellite Account MNC / Multinational Corporations TSKB / Turkish Development and Investment Bank MPA / Marine Protected Area **UfM** / Union for the Mediterranean MRV / Monitoring, Reporting, Verification **UNCLOS** / United Nations Convention on the Law of the Sea MSD / Marine Sanitation Devices **UNCSD** / United Nations Conference on Sustainable Development **MSFD** / Marine Strategy Framework Directive **UNDP** / United Nations Development Program MSP / Marine Spatial Planning **UNECED** / United Nations Conference on Environment MSSD / Mediterranean Strategy for Sustainable Development and Development MST / Measuring Sustainable Tourism **UNEP** / United Nations Environment Programme MTSA / Maritime Transportation Security Act UNESCO / United Nations Educational Scientific and Cultural **NDZ** / No-Discharge Zone Organization **NEMC** / North-Eastern Mediterranean Countries **UNF** / United Nations Foundation NGO / Non-governmental Organization **UNFCCC** / United Nations Framework Convention NMC / Northern Mediterranean Countries on Climate Change **NPA** / Natural Protected Area **UNGA** / United Nations General Assembly **NSMA** / National Marine Sanctuaries Act **UNWTO** / United Nations World Tourism Organization **NTES** / National Tourism Export Strategy **NWMC** / North-Western Mediterranean Countries **USD** / United States Dollar **ODA** / Official Development Assistance VGP / Vessel General Permit **OECD** / Organisation for Economic Co-operation and Development VIO / Vanilla Islands Organization **OECS** / Organisation of Eastern Caribbean States VNR / Voluntary National Review **OPS** / Onshore Power Supply WAOH / WILDSEA Atlantic Ocean Heritage **OSPAR** / Convention WATA / World Association of Travel Agencies PA / Paris Agreement WEF / World Economic Forum

PIF / Pacific Island Forum

**PIPSO** / Pacific Islands Private Sector Organization

PM / Particular Matter

**PPP** / Public-Private Partnership **PSSA** / Particularly Sensitive Sea Area **R&D** / Research & Development

RCRA / Resource Conservation and Recovery Act

WIDECAST / Wider Caribbean Sea Turtle Conservation Network WIO / Western Indian Ocean

WOC / World Ocean Council

WFD / Water Framework Directive

WTTC / World Travel and Tourism Council

WWF / World Wildlife Fund

## Executive Summary

Coastal and maritime tourism (CMT) has become a major economic sector for countries with accessible and attractive coastlines. However cruises, resorts and even ecotourism are activities with critical environmental and social impacts on natural resources and local communities. In addition, oceans and littorals are increasingly coveted spaces as strategic resources for states and businesses as they sustain a large part of the world population and global economy. Hence, coastal and maritime tourism, as part of the blue economy, is facing emerging challenges at local and global level that deserve closer attention. In particular, the interlinkage of tourism with sustainability commitment such as the Paris Agreement or the Agenda 2030 and its Sustainable Development Goals needs to be well assessed and understood.

In this context, this report intends to understand and define better the ecological impacts of coastal and marine tourism in the Mediterranean, the Caribbean, the North East Atlantic, the South Pacific Ocean, and the Western Indian Ocean, the major global marine regions, in order to disseminate field learnings and develop common policy recommendations for policy-makers, tourism stakeholders and other relevant institutional and civil society actors.

#### Global coastal and marine challenges

- Tourism is a major economic sector for developing countries, accounting for up to 25 % of national GDPs in Small Islands Developing States (SIDS), with high visitor concentration in space and time, mainly in the coastlines.
- More than **600 million people (around 10% of the world's population) live in coastal areas** that are less than 10 meters above sea level and nearly 2.4 billion people (about 40% of the world's population) live within 100 km (60 miles) of the coast, hence depending and vulnerable to ocean's quality, stability and accessibility.
- Climate change will affect strongly the coastal areas with high anthropic vulnerability, through temperature increase, more frequent environmental events, water scarcity and sea level rise (SLR).

**Tourism is highly dependent on the quality of natural ecosystems** to attract visitors but at the same time is strongly contributing to its depletion and fragilization, hence putting at risk its own sustainability.

#### Specific coastal and marine tourism issues

- Cruising: a major source of large environmental and social impacts, which are not addressed by current legislations and governance schemes.
- Hotels and Resorts: a mass-tourism offer with popular and affordable products for local and global travelers, generating unbalanced environmental, social and economic effects.
- Ecotourism: an emerging alternative to mass tourism, with reduced negative environmental externalities and higher benefits for local communities.

#### **Recommendations**

By analysing existing practices and institutional frameworks in the world marine regions, key levers for a sustainable tourism industry have been identified, with recommendations for governments, public and private actors, focused on preventing and mitigating spatial, social and environmental impacts of coastal and maritime tourism around the marine regions. It covers governance mechanisms, environmental regulations and management issues, as well as promoting initiatives limited not only to alternative tourism and niche market segments, but also covering the entire mass-tourism sector including cruise and resorts.

#### 1. Global Actions for Sustainable Coastal and Maritime Tourism

Sustainable coastal and maritime tourism policies must acknowledge the impacts of tourism activities on the coastal territories, the vulnerability and complexity of the coastal and maritime ecosystems and its interactions with the different sub-components of the CMT.

- **1.1. Promotion of policy coherence, stakeholders collaboration and cooperation mechanisms** in order to ensure coherent, integrated and consistent policies at all political, geographic and sectoral level,
- **1.2. Support of integrated maritime & coastal planning through an ecosystem-based approach** by implementing transversal spatial and environmental planning instruments,
- **1.3. Development of comprehensive monitoring, evaluation and statistics schemes** by measuring and monitoring the impacts of maritime and coastal tourism to natural ecosystems, promoting quantitative instruments and assessment tools to evaluate the carrying capacity of destinations or territories,
- **1.4.** Identification, support and dissemination of sustainable practices, responsible businesses and green skills, by promoting sustainable business practices,
- 1.5. Implementation of sectoral strategies and action plans to green and decarbonize the whole tourism industry,
- **1.6. Financing sustainable blue tourism activities, strategies and actors** in order to guarantee the alignment of development aid and cooperation schemes,
- **1.7. Involvement, Involvement and empowerment and empowerment of travellers, the industry and key stakeholders,** by partnering with the private sector, educating travellers and tourists, and engaging with civil society.

#### 2. Specific Recommendations for Hotels and Resorts

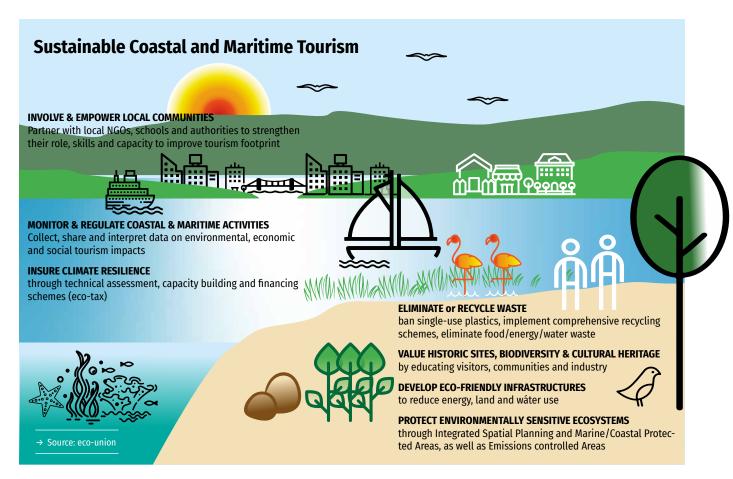
- **2.1. Mainstreaming of sustainability certifications, eco-labelling and environmental initiatives** through the identification, adaptation and implementation of a shared and standardized certification system for hotels and resorts at the regional and national levels,
- **2.2. Implementation of sustainable and comprehensive tourism planning**, monitoring and management tools by developing regional and national policies to redistribute tourism on a spatial and temporal scale,
- **2.3. Increase investments in energy efficiency, water treatment and waste recycling schemes**, by promoting industry management plans of natural resources for the use of energy, water and food in hotels and resorts.

#### 3. Specific Recommendations for Cruises and Ports

- **3.1.** Providing sound regulation, technical support and financial incentives to green ports and cruises practices by developing green tax schemes in ports and cruises, supporting investment for onshore Power Supply (OPS), and implementing stringent environmental legislation controlling air pollution such as Emissions Control Areas.
- **3.2.** Leverage zoning, integrated planning and risk mitigation in sensitive marine areas by reducing and monitoring cruise traffic in or near Marine Protected Areas, and identifying, regulating and enforcing Particularly Sensitive Sea Areas.
- **3.3. Monitor, manage and regulate passengers and cruise flows**, by redistributing cruises disembarkation away from the city centres and dense areas, and developing a comprehensive database and planning of passengers and cruise flows.
- **3.4. Promotion of environmental conception, construction, operation and dismantling of cruise vessels**, by implementing eco-design tools such as Life Cycle Assessment, and investing in resources-efficient technologies and environmental practices.

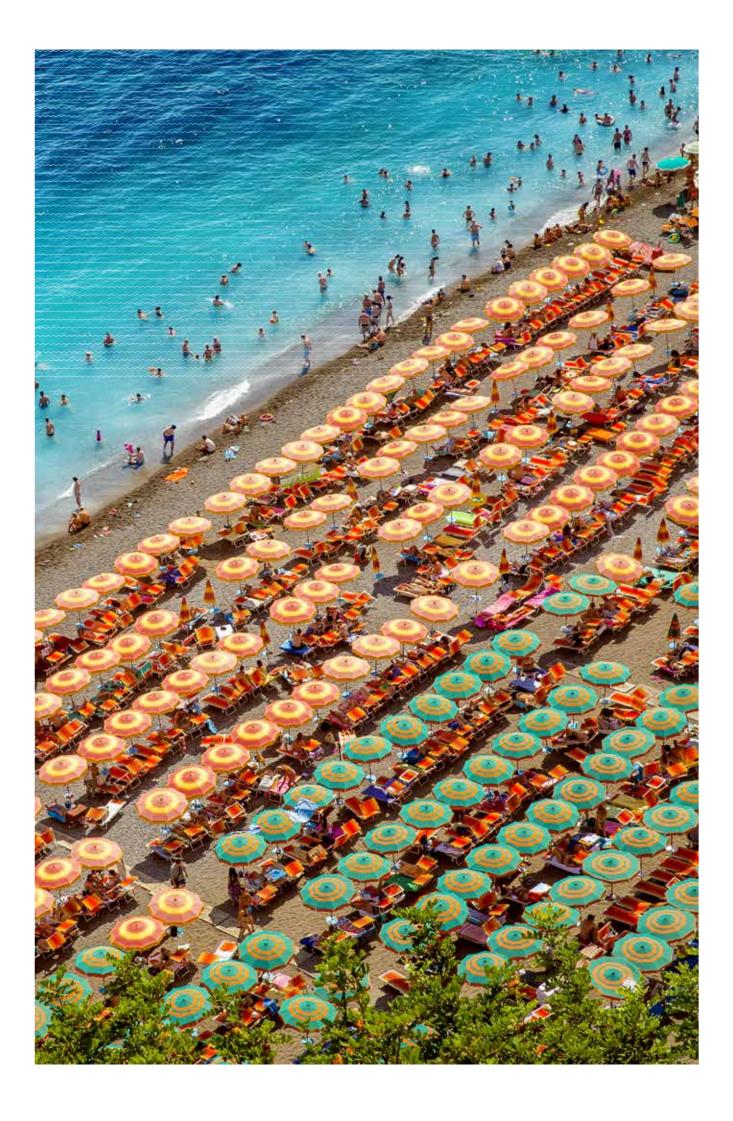
#### 4. Specific Recommendations for Ecotourism

- **4.1 Development of integrated monitoring & planning, ecotourism strategies and networking platforms**, by putting in place integrated monitoring and planning tools, and designing medium and long-term ecotourism development strategies, and creating national and regional networks of ecotourism destinations.
- **4.2. Maximisation of economic and social benefits for and by local communities**, by supporting community-based businesses, developing strategic economic sectors of the local community, and reinvesting generated revenues by ecotourism activities.



- **4.3. Dissemination of sustainable practices and environmental initiatives** through enhancement of sustainability certifications and eco-labels, education, preparation and empowerment of eco-tourism staff, visitors and local population.
- **4.4. Monitoring of ecotourism through data collection and participatory science** by developing and implementing integrated indicators, and promoting scientific research on local ecosystems.

The emerging destinations are becoming quickly emergency territories due to its rising vulnerability to environmental risks, climate change impacts, biodiversity losses and quality of ecosystems, putting in danger coastal territories and local communities and requesting urgent policy answers. It is also necessary to take into account the long-term trends in tourism production and consumption patterns to anticipate - and influence - growth scenarios and increase resilience to natural, social and economic shocks for local communities and socio-economic structures. Finally, the development of monitoring tools and multi-stakeholders governance mechanisms, both globally and locally, is strongly needed to allow a full overview and comprehensive management of the reality of maritime and coastal tourism. The use of participatory tools such as citizen science are therefore very useful to collect data at a very low cost while involving local communities and educate visitors and industry value chain.



## GLOBAL OVERVIEW OF COASTAL MARITIME TOURISM

This section introduces the concept of Coastal and Maritime tourism (CMT) as well as the different sub-sectors such as resorts, cruises and ecotourism. It also presents the main stakeholders, their socio-economic role and the environmental impacts associated with CMT activities on a global scale.

ITA will increase by 150% for Asia and the Pacific region — reaching up to 500 millions tourists; it will grow by 47% in America with 220 million tourists, and double in Africa and in the Middle East reaching respectively 100 million and 200 millions by 2030.

#### **Definitions, Issues and Trends**

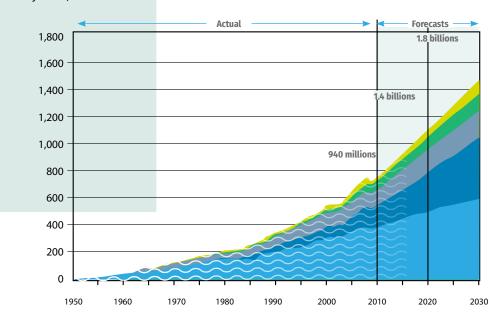
#### Global tourism trends

According to the UN World Tourism Organization (UNWTO), International Tourist Arrivals (ITA) are expected to increase worldwide by 65% from 2010 to reach a number of 1.8 billion arrivals per year by 2030. The growth (2010-2030) will be faster for emerging and developing regions compared to developed regions. While Europe will remain the leading region with almost 780 million tourists by 2030,

#### **Coastal and maritime tourism**

Coastal tourism refers to beach-based tourism and recreation activities, including swimming, sunbathing and surfing, alongside with other activities taking place on the coast and for which the proximity of the sea is advantageous, such as coastal walks or wildlife watching. Maritime tourism refers to predominantly water-based activities, such as sailing, yachting and cruising, and other nautical sports —often carried out in coastal waters—. Both coastal and maritime tourism are considered among the oldest and largest segments of the tourism industry.





- 1 Ecorys (2013): "Study in support of policy measures for maritime and coastal tourism at EU level". Available at: https://ec.europa.eu/maritimeaffairs/sites/maritimea-ffairs/files/docs/body/study-maritime-and-coastal-tourism\_en.pdf
- 2 Idem
- Honey M. & Krantz D. (2007): "Global Trends in Coastal Tourism. Center on Ecotourism and Sustainable Development". Available at: https://www.responsibletravel.org/docs/Global\_Trends\_in\_Coastal\_Tourism\_by\_CESD\_Jan\_08.pdf

They evolved from leisure activities reserved to the wealthiest in the 19th century to more 'democratic' activities within the reach of middle and working classes, especially with the spreading of paid vacations' and all-inclusive resorts' concepts and the growth of affordable means of transportation.<sup>4</sup>

In terms of analysing the current trends of coastal and marine tourism, there are three main types of tourism: beach resort tourism, cruise tourism —both components of the mass tourism market—, as well as **ecotourism**. On the one hand, mass tourism is characterized by an expansion of the number of lower-priced, high-density hotels and resorts, with a higher concentration in retail, entertainment clusters and tours. One of the newest coastal developments in this subject is the 'residential tourism', combining beach resorts with vacation homes. This trend appears as a business strategy developed by companies to ease financing, earn faster returns on investment and answer the current consumer demands of a vacation focused on relaxing and resting. Moreover, the new trends of global urbanization confining people to build, the increase of disposable income in emerging and developing countries —such as China—, together with the retirement of the generation of baby-boomers in developed countries has led the pressure on the world's coastlines in the form of considerably increasing mass tourism and the booking

On the other hand, there is the emergence of **ecotourism** as a sustainable alternative of the traditional tourism practices in coastal and maritime areas. It is typically a small-scale and low-impact activity focusing on the promotion of local communities and the conservation of natural resources. This type of tourism, in spite of its growth rate, is still marginal compared to mass tourism. However, it is getting more popular even in the conventional tourism market, and it is being implemented by certain chain hotels and large resorts —mainly luxury facilities —, and to a lesser extent by premium cruise ships, as the industry response to the rising social and environmental awareness of the travellers 7.

of package tour holidays by a larger number of people<sup>5</sup>.

## Sustainability overview of coastal and maritime tourism

**Coastal and maritime tourism** affects sustainable development in all of its components. In terms of environmental impact, poorly-managed tourism activities alter the natural ecosystems of coastal destinations. With the

massification of tourism, the pressure on natural resources has increased exponentially. Mass tourism overwhelms the coasts with a large number of tourists degrading ecosystems and negatively affecting local biodiversity. Furthermore, induced land-use change is causing both coastal artificialization as well as air and noise pollution derived from transport. This situation impacts the welfare of inhabitants and local communities through the generation of negative externalities, often not compensated for.<sup>8</sup>

Moreover, mass tourism in and around coastal cities leads to the rise of the cost of living and a relatively lower purchasing power for the locals. This situation is exacerbated by the nature of maritime and coastal tourism based on seasonality, in particular in islands, contributing to job insecurity in tourism services, low wages and high workload affecting both the well-being and the disposal revenue and consumption of locals. Additionally, tourists expenses are not distributed equally between all tourism stakeholders. They mostly benefit the big companies due to the verticality of the tourism industry, which is designed with the aim of channelling profits to corporation at the exclusion of local businesses.<sup>10</sup> Comparing the money injected by tourist flows into the local economy with direct, indirect, and opportunity costs, it reveals that the costs of attracting and retaining mass-tourism businesses often outweigh the benefits.11 However, lower-impact models of stayover tourism, such as **ecotourism**, generally mitigate some of the issues raised by mass tourism practices on the economic, social and environmental perspective, although to a much smaller scale.

## Tourism in the islands: a vulnerability hotspot

Due to its particular geographical situation and territorial resources, the **islands are a top destination for coastal and maritime tourism** for millions of tourists every year. Islands constitute an economic, social, cultural and strategic heritage that **support 20% of the global biodiversity**<sup>12</sup>. They are also highly dependent on marine resources and blue economy activities, in particular in the tourism sector. The strong dependency on the natural ecosystem services provided by the oceans make them much more vulnerable to a series of risks than other coastal territories with larger hinterlands areas.

In island destinations, **the sustainability** of tourism **is therefore a crucial challenge**. Moreover, the insularity constraints natural resources, which, in turn, increases the conflicts on natural resources control and ownership.

<sup>4</sup> Idem.

<sup>5</sup> Idem.

<sup>6</sup> An example would be Six Senses Resorts & Spas in the Maldives. Forbes (2018), Luxury resort owner takes going green to the extreme. Accessible at: https://www.forbes.com/sites/pamelaambler/2018/07/10/luxury-resort-owner-takes-going-green-to-the-extreme/

<sup>7</sup> Honey M. & Krantz D. (2007): "Global Trends in Coastal Tourism. Center on Ecotourism and Sustainable Development". Available at: https://www.responsibletravel.org/docs/Global\_Trends\_in\_Coastal\_Tourism\_by\_CESD\_Jan\_08.pdf

<sup>8</sup> UNWTO and UNDP, (2017): "Tourism and the Sustainable Development Goals – Journey to 2030". UNWTO, Madrid, 108 pp. Available at: https://www.e-unwto.org/doi/book/10.18111/9789284419401

<sup>9</sup> Idem

Honey M. & Krantz D. (2007): "Global Trends in Coastal Tourism. Center on Ecotourism and Sustainable Development". Available at: https://www.responsibletravel.org/docs/Global\_Trends\_in\_Coastal\_Tourism\_by\_CESD\_Jan\_08.pdf

<sup>11</sup> Idem

<sup>12</sup> https://www.iucn.org/commissions/commission-ecosystem-management/our-work/cems-specialist-groups/island-ecosystems



Tourism influences directly on this resource constraint, as it depends on the same resources of locals; consequently, mass tourism development has become a political issue for the socio-economic and environmental sustainability of many islands around the world. These islands have concentrated their activities around the tourism industry as a strategic driver for economic development, but in reality it has become a vicious circle. This makes the sustainability of tourism in islands, in particular in SIDS (Small Islands Developing States)<sup>13</sup>, even more precarious, emphasizing the challenges of sustainability:

- **Economic dependency**: In 2010, SIDS tourism accounted for 3% of the global market share of inbound tourism arrivals (overnight), while the annual SIDS value of incoming tourist spending exceeds \$38 billion. Between 2006 and 2010, 11 SIDS have benefited from an average of annual spending on incoming tourism over \$1 billion<sup>14</sup>. In Cape Verde, the contribution of direct and indirect tourism to GDP is more than 50%<sup>15</sup>. In Maldives, tourism represent up to 40% of the national GDP<sup>16</sup>.
- dependent on air transport, considered the most convenient means of access. In this way, tourism is highly vulnerable to global fluctuations in oil and airlines markets as well as to regional economic and trade agreements. The development of air transport in small islands also has a considerable impact on their natural environment through the construction of airports often built near the coast—, and the carbon emissions from air travellers.
- Mass and cruise tourism: Cruise tourism accounts for over 60% of the total ITA in twelve SIDS and can even reach up to almost 90% of the total arrivals<sup>17</sup>. Even the

- strong specialization in the cruise tourism —or other kinds of mass tourism— can cause a strong dependence on these very unstable flows, insecure over time and with a real lack of economic contribution to the local population, as well as create problems of overtourism.
- Foreign investments sensitivity: Tourism development in islands has usually been accompanied by economic liberalization with the entry of the large multinationals supported by foreign investments, a potential source of economic, social destructuralization and dependency on lending countries. An example is the Caribbean islands, with massive Foreign Direct Investments (FDI) in the tourism sector, mainly targeting the Dominican Republic<sup>18</sup>.
- Environmental and economic vulnerability: In islands, natural and climate events are more intense and the anthropic pressures caused by tourism exacerbate the environmental problems. The islands of the Caribbean, Western Indian Ocean and South Pacific are actually considered by UNWTO and UNEP<sup>19</sup> as a "tourism vulnerability hotspot", due to the high vulnerability to climate change and the high economic dependence on tourism. In the SIDS Antigua and Barbuda, Belize, Saint Lucia and Fiji, the total contribution of tourism to GDP exceeds 40%, reaching 65% in the Seychelles<sup>20</sup>.

## Climate change and coastal & maritime tourism

Tourism is one of the most vulnerable economic sectors to climate variability as it is extremely dependent and sensitive to climate and weather factors, which influence

<sup>13</sup> United Nations lists 57 small island developing states globally sharing similar sustainable development challenges.

<sup>14</sup> World Tourism Organization (2012): "Challenges and Opportunities for Tourism Development in Small Island Developing States", UNWTO, Madrid

United Nations Economic Commission for Africa (2014): "Unlocking the full potential of the blue economy: Are African Small Island Developing States ready to embrace the opportunities?", UNECA, Addis Ababa, Ethiopia, 33 pp.

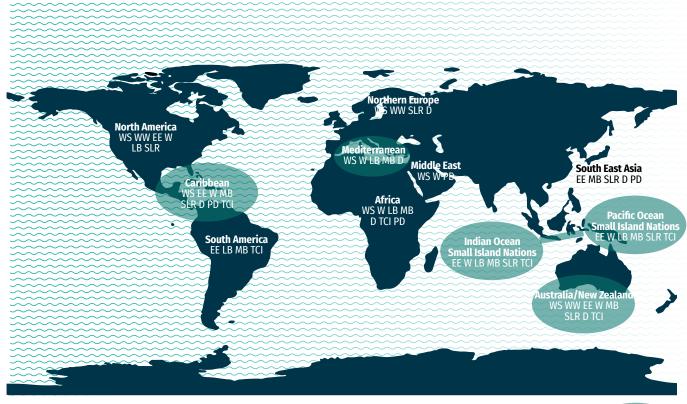
<sup>16</sup> UNWTO, 2017

<sup>17</sup> Ibid.

<sup>18</sup> World Tourism Organization (2012): "Challenges and Opportunities for Tourism Development in Small Island Developing States", UNWTO, Madrid

<sup>19</sup> Simpson, M.C.; Gössling, S.; Scott, D.; Hall, C.M. & Gladin, E. (2008): "Climate Change Adaptation and Mitigation in the Tourism Sector: Frameworks, Tools and Practices". UNEP, University of Oxford, UNWTO, WMO: Paris, France, 136 pp.

<sup>20</sup> WTTC, Country Reports 2017



**WS** / warmer summers

ww / warmer winter

**EE** / increase in extreme events

SLR / sea level rise

→ Geographic Distribution of Major Climate Change Impacts Affecting Tourism Destinations

Source: Simpson et al., 200826

LB / land biodiversity loss

MB / marine biodiversity loss

W / water scarcity

PD / political destabilization

**D** / increase in disease outbreaks **TCI** / travel cost increase from

 travel cost increase from mitigation policy HOTSPOT

the decision-making process of tourists and the success of tourism businesses<sup>21</sup>. Simultaneously, it is one of the largest activities that contributes to climate change as it is estimated that between 2009 and 2013 the overall **carbon footprint of tourism increased from 3.9 to 4.5 GtCO<sub>2</sub>e, representing 8% of global greenhouse gas emissions<sup>22</sup>.** 

All tourist destinations will be affected by climate change, but coastal and island destinations will be the most vulnerable to the impact and risks caused by climate change<sup>23</sup>. Its causes are the constant presence of tourist infrastructures and high dependence on tourism, the concentration of the population present at the coasts, the SLR

and intensity of extreme events, which can cause a sudden interruption of tourism<sup>24</sup>.

The impact of climate change varies according to the territorial elements and climatic requirements<sup>25</sup>. However, as described in the figure below, the world climate change hotspots correspond to the geographic areas with the most intensive coastal and maritime tourism activities, in particular in the Mediterranean Sea, Caribbean, Pacific and Indian Ocean.

<sup>21</sup> Gómez-Martín , M. B. (2005): "Weather, climate and tourism a geographical perspective". In Annals of Tourism Research, Vol. 32, nr. 3, pp. 571-591;
Becken, S. (2010): "The importance of climate and weather for tourism". In Leap Land Environment and people, 23 pp. Available at: <a href="http://www.lincoln.ac.nz/PageFiles/6750/WeatherLitReview.pdf">http://www.lincoln.ac.nz/PageFiles/6750/WeatherLitReview.pdf</a>

<sup>22</sup> Lenzen, M; Sun, Y. Y.; Faturay, F.; Ting, Y. P.; Geschke, A. & Malik, A. (2018): "The carbon footprint of global tourism". In Nature Climate Change, vol. 8, pp. 522–528. Available at: https://www.nature.com/articles/s41558-018-0141-x

<sup>23</sup> Scott et al. (2008): "Climate Change and Tourism» Responding to Global Challenges". UNWTO, UNEP and WMO, Madrid, 256 pp. Available at: https://sdt.unwto.org/sites/all/files/docpdf/climate2008.pdf
Simpson et al. (2008): "Climate Change Adaptation and Mitigation in the Tourism Sector: Frameworks, Tools and Practices". UNEP, University of

Oxford, UNWTO, WMO: Paris, France, 136 pp. Available at: <a href="http://www.unep.fr/shared/publications/pdf/DTIx1047xPA-ClimateChange.pdf">http://www.unep.fr/shared/publications/pdf/DTIx1047xPA-ClimateChange.pdf</a>; Moreno, A. & Becken, S. (2009): "A climate change vulnerability assessment methodology for coastal tourism". In Journal of Sustainable Tourism Vol. 17, nr. 4, pp. 473-488

Gössling, S.; Hall, C. M. & Scott, D. (2009): "The Challenges of Tourism as a Development Strategy in an Era of Global Climate Change". In Rethinking Development in a Carbon-Constrained World. Development Cooperation and Climate Change, pp. 100-119

<sup>25</sup> Gómez-Martín , M. B. (2005): "Weather, climate and tourism a geographical perspective". In Annals of Tourism Research, Vol. 32, nr. 3, pp. 571-591

Simpson et al. (2008): "Climate Change Adaptation and Mitigation in the Tourism Sector: Frameworks, Tools and Practices". UNEP, University of Oxford, UNWTO, WMO: Paris, France, 136 pp. Available at: http://www.unep.fr/shared/publications/pdf/DTIx1047xPA-ClimateChange.pdf

## Overview of the Coastal & Maritime Tourism Industry

#### Tourism global value chain: the digital age

The coastal and maritime tourism global value chain (GVC) follows the tourist's footprint, through multiple interactions with the industry from the moment they decide to take a trip to the completion of their international journey, including the distribution, transport, lodging and recreation activities segments<sup>27</sup>.

The figure below represents a simplified classification scheme as tourists can choose to bypass certain activities and not all businesses are represented, such as food services or financial services. However, these activities are included by proxy in the distribution and recreation activities segments. The disruption of **digital travel** has favoured travel mobility and new business models, creating a new value chain, more diverse and characterised by the customer bargain power, in comparison with conventional travel system, and less controlled by market regulators.

The tourism industry GVC starts with the distribution segment.28 While the exact destination or product is being identified, the decision on what and how to purchase comes quickly in the tourist decision-making. Travel agents and tours operators were until now the main distribution intermediaries in CMT. Travel agents act as the retail outlet for tourism products meaning that they often suggest best transportation in the destination country, best accommodation and known recreation activities. Tour operators purchase blocks of airline seats, hotel rooms and design bundles or packages offered later to clients. These packages are sold directly or through a travel agency to the tourist who also have the possibility to book the whole trip without any intermediary. However, the disruption of digital travel has increased independent travel and more hybrid distribution channels (tour operators, online travel services providers and user-generated content platforms).

In fact, the expansion of the **use of internet** by tourists to book their flights and accommodations has profoundly changed the value chain of tourism introducing new actors and products as well as alternative marketing strategies.<sup>29</sup> Internet has transformed both the demand and the supply side, mainstreaming digital tools such as flight comparison and alternative accommodation websites or virtual

|   | Outbound  | countries                  |                                   | Inbound   | countries                 |                              |  |
|---|---|----------------------------|-----------------------------------|---|---------------------------|------------------------------|--|
| Tourist   | Distribution  | International<br>Transport | Distribution                      | Local<br>mobility   | Lodging                   | Recreational activities      |  |
| ·   | Traditional travel Agencies                         | International airlines     | National/local<br>Travel Agencies | National<br>airlines  | Multinational hotels and  | Retail & hospitality         |  |
|   | Online Travel<br>Agencies                           | untines                    | National/local                    |   | resorts                   |                              |  |
|   | Traditional travel Agencies                         | Trains                     | Tours operators                   | Tours operators   | Ferries &<br>cruises      | Independent<br>hotels and    | Cultural<br>amenities<br>(museums etc) |
|   | International Tour Operators                        | Buses & coaches            |                                   |   | resorts                   | (illuseums etc)              |  |
|   | Online accom- modation rental Cruiselines platforms |                            | Recreational boating &            | Private<br>individuals<br>(via online                             | Festivals and live events |                              |  |
|   |   | Ferries                    |                                   | yatching  | platforms)                |                              |  |
|   |   |                            |                                   | Individual<br>transports  | Camping and caravaning    | Excursions by tour-operators |  |
|   |   |                            |                                   | (bikes, car<br>rental, taxi)                                      |                           | Local guides and tours       |  |
|   |   |                            |                                   | Collective<br>transports (bus,<br>train, carpool,<br>hitchhiking) |                           |                              |  |
| → Global Tourism Value<br>Source: eco-union ba<br>M. Christian et al, 201 | sed on  |                            | Online s                          | social networks   | & travel agencies         |                              |  |

<sup>27</sup> Christian, M. K.; Fernandez-Stark, G.; Ahmed, & G.Gereffi (2011): "The Tourism Global Value Chain: Economic Upgrading and Workforce Development'. Duke Center on Globalization, Governance & Competitiveness (Duke CGGC).

<sup>28</sup> Ibio

<sup>29</sup> Batinić, I. (2013): "The role and importance of the internet in contemporary tourism in travel agencies business". In International Journal of Cognitive Research in science, engineering and education Vol. 1, no. 2

tour operators. With the increase in the competition with traditional tourism actors and travel agency businesses, these operators tend to invest more in promotion, resources, knowledge and quality in order to achieve satisfactory growth, offering therefore an electronic platform for customers through a website or an application.<sup>30</sup>

International transport is the next step in the tourist's journey which is often by plane or boat, and at a lesser extent by train or car.<sup>31</sup> While the tourists engage in a number of activities in the destination countries (transportation, recreation activities), the most profitable is the lodging business and it ranges from the small scale accommodations to the luxury hotels and resorts. When it comes to recreation activities such as excursions, snorkelling, surfing or sailing, they are sold by operators and executed by locals. Tourists also engage in retail activities considered essential for local merchants as they boost local productions and artisanal crafts.

International companies such as airline carriers, cruise lines, global tour operators and multinational hotel and resort brands are the lead firms in the coastal and maritime tourism GVC. These firms usually based in developed countries play a key role in shaping the trends through strong marketing campaigns and strong interaction with the customers. They study the travel patterns and preferences of consumers from high end to budget travel in order to adapt the products and services offered. They also create connections between firms along the GVC from the outbound country in a variety of ownerships, alliances and outsourcing strategies. The strategy chosen depends on the economic development of the target country, the policy and regulatory environment, human resources, level of infrastructure available and market demand.

Except for international airfare, most of the segments of the tourism GVC are characterized by coexistence with **diverse business structures** (organization, ownership and operation): international corporation and firms coexist with small and medium enterprises and micro-businesses. Usually, these firms are those with a wide range of product offers and marketing capabilities, such as international distribution actors and multinational hotels or resorts.

Within target countries, incoming **travel agents**, which are chosen by global tour operators for their ability to coordinate and meet product offering needs, and **national tour operators** play the lead role in the destination management of coastal and maritime tourism. Hotels and resorts in touristic countries usually work directly with operators in charge of recreational activities and tour guide suppliers that require their providers to have quality insurance and liability.

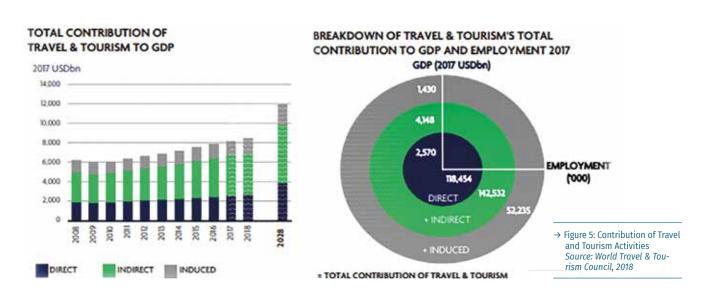
#### **Socio-economic overview of tourism**

According to the World Travel and Tourism Council (WTTC), the travel and tourism sector supports 1 in 10 jobs (319 million) worldwide and generates 10.4% of the world GDP. In 2018, this industry experienced a growth of 3.9%, —compared to the global economy (3.2%)—, and one in every five new jobs were created by the industry over the last five years<sup>32</sup>.

When it comes to the **coastal and maritime tourism**, its share on the total ocean industry value-added is expected to reach 26% by 2030, becoming the largest blue economy sector<sup>33</sup>.

Moreover, coastal and maritime tourism will employ approximately 1.5 million people more by 2030 (from 7 million employed in 2010 to 8.5 million by 2030).

At a global scale, over 350 million people annually travel to the **coral reef coast** of the world. The coral reef tourism sector has an estimated annual value of \$36 billion with over 70 countries and territories having "million dollar reefs" —reefs that generate over \$1 million in tourism spending annually. In total, 600,000 people have been estimated to spend over US \$30 million annually to watch sharks.<sup>34</sup>

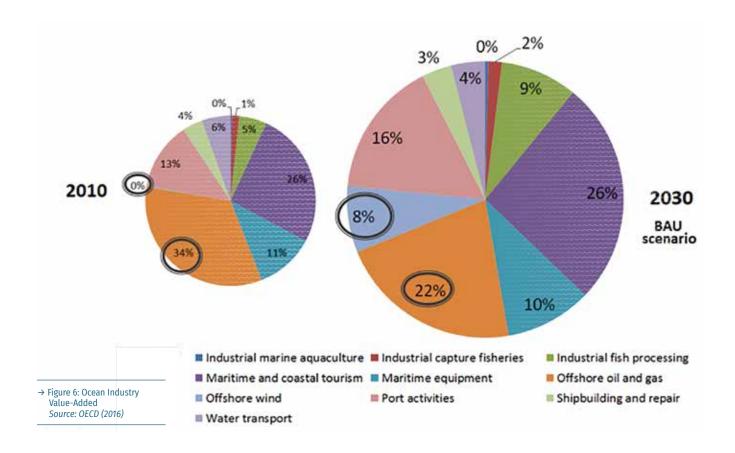


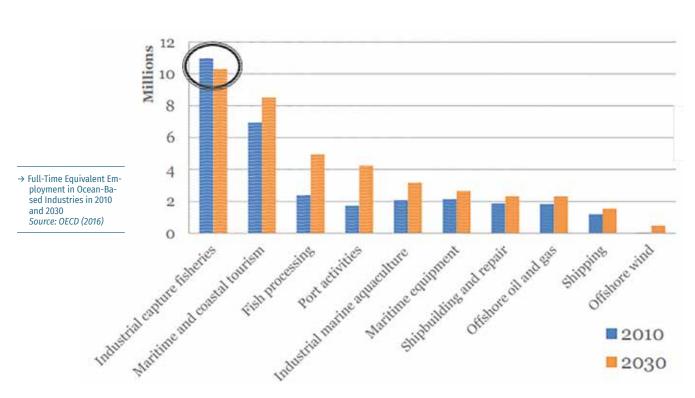
<sup>30</sup> Ibid.

<sup>31</sup> Ibid

<sup>32</sup> World Travel & Tourism Council, 2018

OECD (2016): "The Ocean Economy in 2030", Powerpoint, Workshop on Maritime Clusters and Global Challenges 50th Anniversary of the WP6, 1 December 2016. Available at: https://www.oecd.org/sti/ind/Session%201\_b%20-%20Claire%20Jolly%20-%20Web.pdf





## Environmental impacts of coastal and maritime tourism

In spite of being economically profitable, this sector generates considerable environmental damages and it is overly dependent on natural resources. To supply visitors with a variety of goods and services, pressure on natural resources can become quickly unsustainable. For instance, the additional demand of water, energy or food —extremely scarce resources in many coastal areas—causes pressure on local territories and communities, leading to overfishing, water shortages, as well as expensive electricity and cooling/heating costs. In addition, coastal and maritime tourism causes marine and freshwater pollution through

the discharge of sewage and the disposal of considerable quantities of solid waste.

Coastal and maritime tourism generates indirect land activities linked to **infrastructure constructions** that are responsible of considerable amounts of pollution and destruction of natural habitats, as well as of pressure on natural resources such as water but also sand, limestone and wood.

→ Table 1: Key Impacts of Coastal and Maritime Tourism Activities on Natural Ecosystems Source: eco-union <sup>36</sup>

| Impacting Activity  | Pressure on Ecosystems   | Impacted Ecosystems   |
|---|--|---|
| Recreational Boating and Yachting   | <ul> <li>Anchoring</li> <li>Increases in turbidity</li> <li>Emission of fuel and chemical products</li> <li>Port construction and maintenance of ports</li> <li>Noise</li> <li>Mammals collisions</li> </ul>   | <ul> <li>Damage plant species, algae, corals and benthic species</li> <li>Increases in pollution and solid waste</li> <li>Lost microhabitats</li> <li>Contamination of food chain and ecosystem services</li> <li>Coastal erosion</li> <li>Decrease in the individuals of the populations</li> <li>Alteration of benthic ecosystems</li> </ul>      |
| Cruising  | Dumping of waste, sewage and petrol illegally     Anchoring     Emission of fuel and chemical products     Port construction and maintenance of ports  | <ul> <li>Endangering and poisoning animals and plankton in open seas</li> <li>Damaging coral reefs and eelgrass meadows</li> <li>Coastal erosion and alteration of benthic ecosystems</li> </ul>  |
| Sunbathing, Picnicking and Other<br>Coastal Activities                                      | Litter, faecal matter     Breaking plants     Noise and presence disturbance   | <ul> <li>Affecting plant communities in sandy beaches through eutrophication, fire hazard and threat to animals.</li> <li>Damaging vegetation and soil erosion.</li> <li>Stressing and disturbing animal species such as turtles laying eggs.</li> </ul>  |
| Skin Diving   | <ul> <li>Damaging corals</li> <li>Underwater hunting</li> <li>Perturbing sediments</li> <li>Touching and feeding fish</li> <li>Littering</li> </ul>  | <ul> <li>Damaging reefs, shifting species makeup in coral reefs.</li> <li>Decimating fish species and shifting species makeup.</li> <li>Impacting photosynthesis due to clouding of water.</li> <li>Shifting species makeup and stressing/disturbing certain fish species.</li> <li>Causing eutrophication and threatening animals</li> </ul>       |
| Swimming  | Water contamination from sun-blocks, sun-tan oil and soap  | Generating the eutrophication of coastal waters and lagoons   |
| Other Motorized Water Sports (jet<br>skis, water skiing, parasailing and<br>jet ski-riding) | <ul> <li>Generating noise</li> <li>Generating wake waves, vibrations and perturbing sediments</li> <li>Using propellers and causing mechanical effects</li> <li>Contaminating waters with oil, petrol and anti-rot coating</li> <li>Anchoring</li> </ul> | <ul> <li>Stressing animal species in coastal waters, lagoons and river mouths.</li> <li>Injuring and killing animals such as turtles or whales.</li> <li>Damaging shore and underwater vegetation.</li> <li>Contaminating waters with heavy metals and poisoning animals and plants.</li> <li>Damaging coral reefs and eelgrass meadows.</li> </ul> |
| Non-motorized water sports (sur-<br>fing, sailing and paddling)                             | Disturbing the ecosystem through physical pre-<br>sence and movement   | Stressing animal species in coastal waters, sea and beaches   |
| Sightseeing (underwater or glass<br>bottomed boats activities                               | Generating wake waves and propeller effects,<br>perturbing sediments and contaminating waters<br>with chemical   | Same effects as motorized water sports  |
| Fishing and Clam Diving   | Overfishing and over gathering of specific species   | Decimating lusted species in open seas, coastal waters,<br>lagoons river mouths or beaches.   |
| Nature Observation on foot or boat<br>and visiting natural reserves                         | Disturbing the biodiversity with physical presence and noise   | Stressing animal species  |
| Walking and cycling   | Same bad practices as sunbathing, picnicking   | Same impacts as sunbathing, picnicking in dunes and hinterland  |
| Eating and drinking in coastal restaurants  | Overfishing of lusted fishes and seafood   | Decimating fish species, lobsters   |
| Purchasing of souvenirs in coastal shops  | Impacting corals and shells  | Decimating coral and clam species in coral reefs and seafloor   |

| Impacting infrastructures  | Bad practices  | Impacted ecosystems  |
|--|--|--|
| Paths, beach promenades and<br>boardwalks                            | Covering coastal areas, reading; litter; constructing with concrete (pouring concrete on rocks or onshore sand-pumping).   | Shifting species makeup and disrupting habitats in wetlands, dunes and beaches.  |
| Marinas for small boats and har-<br>bours for larger passenger ships | <ul> <li>Bulldozing of shallow coastal areas</li> <li>Blasting of boat passageways</li> <li>Expending harbours for cruise ships</li> </ul>   | <ul> <li>Destructing seafloor flora and fauna and shifting species make-up.</li> <li>Destructing coral reefs.</li> <li>Destructing small oceanic islands.</li> </ul>   |
| Building   | <ul> <li>Overbuilding and sealing off of ground</li> <li>Clearing projects</li> <li>Draining and landfill in wetlands (including reducing mosquito population)</li> <li>Extracting building materials such as sand, limestone and wood</li> </ul>  | <ul> <li>Destructing dunes and rocky coasts and disrupting land-sea connections.</li> <li>Destructing plant communities, causing soil erosion and sedimentation in coastal waters and coral reefs.</li> <li>Destructing or causing severe impairment of wetlands and mangroves.</li> <li>Destructing beaches, coral reefs, mangroves and forests in hinterland, increasing erosion and deforestation.</li> </ul> |
| Parks Sporting Facilities  | <ul> <li>Introducing alien species</li> <li>Consuming a lot of water for lawns and golf courses</li> <li>Using fertilizers and pesticides</li> </ul>   | <ul> <li>Displacing endemic species in dunes and hinterland.</li> <li>Increasing aridity and salinization of small islands and arid hinterland.</li> <li>Causing the eutrophication and water contamination of wetlands, dunes and coastal waters.</li> </ul>  |
| Energy supply  | Electric conduits     Generating noise, exhaust fumes and oil pollution because of diesel generators.  | <ul> <li>Threatening birds in dunes and the hinterland.</li> <li>Causing a disruptive effect on animals and contaminating waters and soils.</li> </ul>   |
| Water supply   | Consuming high levels of water   | Destructing small oceanic islands and wetlands because of aridity and influx of salt water.  |
| Garbage disposal   | Lacking regulated garbage removal  | Pollutes open seas, seafloors, dunes and other wetlands.   |
| Sewage disposal  | Treating sewage facilities inadequately  | Clouding of water, causing algae concentration, the death of large numbers of organisms and oxygen deficit.  |
| Transportation and infrastructure                                    | <ul> <li>Building airports: using landfills and sealing off land</li> <li>Operating airports: noise, exhaust fumes and kerosene</li> <li>Building roads: using landfills and sealing off land</li> <li>Generating motor-vehicle traffic: noise, exhaust fumes and oil/ petrol pollution</li> </ul> | <ul> <li>Destructing and cutting off small oceanic islands, hinterland, rock coasts, mangroves and wetlands.</li> <li>Contaminating waters and soils, causing impairment of the habitats and stressing animals.</li> <li>Cutting off of rock coasts, dunes, wetlands and the hinterland.</li> <li>Contaminating waters and soils, causing impairment of the habitats and disturbing animals.</li> </ul>          |
| Coastal-protection such as pum-<br>ping sand on shore                | • Changing current ecosystems.   | Changes in the habitat in sandy beaches.   |

<sup>→</sup> Table 2: Key Impacts of Coastal Tourism-Related Infrastructures on Natural Ecosystems Source: eco-union35

Based on a review of academic literature and Policy reports: - Honey & Krantz, 2007
- Orams, M. B. (1997): "Biodiversity and Tourism: Conflicts on the World's Seacoasts and Strategies for their Solution". Bonn: German Federal Agency for Nature Conservation, pp. 51-53
- González, D. A.; Grimalt, V. M.; Tonazzini, D. & Fosse, J. (2018): "Hacia una ordenación espacial marítima del turismo con enfoque ecosistémico en la Demarcación Levantino-Balear". Informe técnico. eco-union. Barcelona, 125 pp. Available at: <a href="http://www.ecounion.eu/wp-content/uploads/2019/03/InformeTe%CC%81cnico\_PLANMEDTUR\_-1.pdf">http://www.ecounion.eu/wp-content/uploads/2019/03/InformeTe%CC%81cnico\_PLANMEDTUR\_-1.pdf</a>

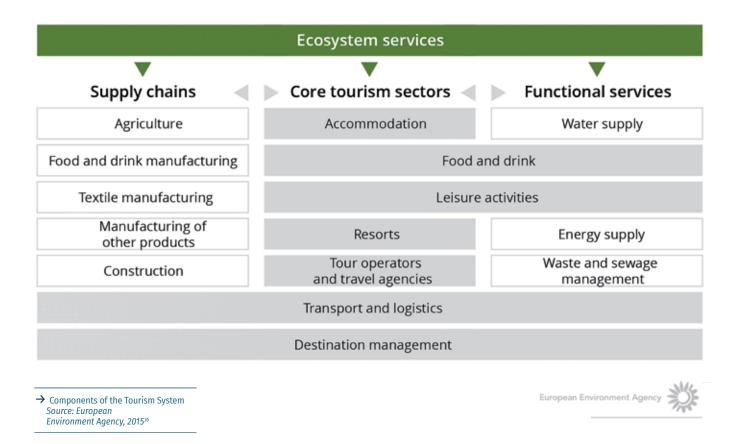
#### Structure and Governance of Coastal and Maritime Tourism

#### Structure of coastal and maritime tourism

Coastal and maritime tourism is based on a **complex and multi-layered structure** that funnels tourists and travellers around the world. In the **countries of origin** of these tourists —mainly North America, Europe and China—, multiple actors are involved in international movements: retailers, travelling agencies, wholesalers such as tour operators, car rental agencies, airlines, cruise lines, tourism offices, credit card companies and, to a certain extent, media and advertising companies. On the other hand, in the **host country**, tourism operations rely mostly on tour operators, cultural and craft centres, ground transporters and local guides,

along with accommodation facilities, national tourism offices, national and private parks and other recreational sites. The tourism industry is composed of and interacts with many **different economic sectors**, including transport, agriculture, construction or foods & drinks. It also depends on several **functional services** usually provided by local authorities, such as water, energy supply, and waste or sewage management.

Despite the fact that most businesses are originally small, the structure of the tourism industry is becoming more vertical and horizontal, with a **global consolidation** among the main international tourism's agents, namely airlines, hotel and resort chains, cruise ships, travel agencies, and tour operators. The different sectors of coastal and maritime tourism imply different wealth distribution schemes. While mass tourism's main revenues are usually captured by countries of origin, profits tend to stay in the host countries under ecotourism and sustainable tourism models.<sup>37</sup>



<sup>36</sup> https://www.eea.europa.eu/soer-2015/europe/tourism

<sup>37</sup> Honey M. & Krantz D. (2007): "Global Trends in Coastal Tourism. Center on Ecotourism and Sustainable Development". Available at: https://www.responsibletravel.org/docs/Global\_Trends\_in\_Coastal\_Tourism\_by\_CESD\_Jan\_08.pdf

#### **Role of main stakeholders**

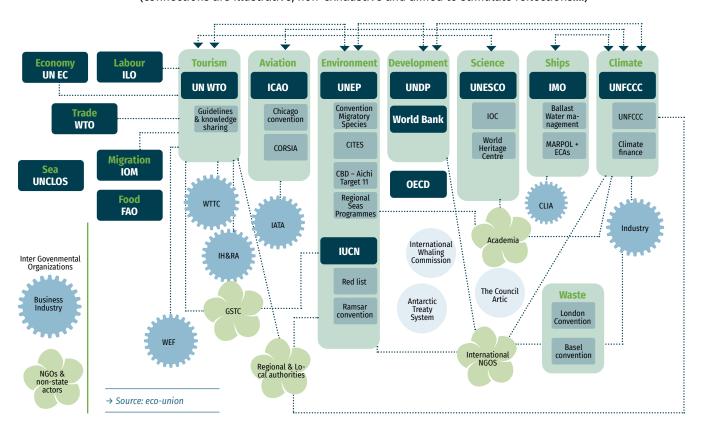
In order to understand the different mechanisms behind the governance of CMT, it is essential to investigate local realities in terms of business ownership, land management and purchase policies as well as the role and degree of government responsibility in infrastructure development and land use planning. National and local governments are usually the main actors of coastal and maritime tourism management. They take the decisions concerning land use and investment in infrastructures supporting tourism, channelling both public and private funds of national, regional and international investors. These choices affect and are affected directly by the real estate industry —including mostly financial institutions and real estate developers, operating at several levels.38 Yet, in developing countries, international development agencies (IDA) remain important for the development of infrastructure, land use planning and hotel financing.

Internationally, the pool of **coastal real estate developers** is constantly increasing and changing with speculators, and investors getting involved by using their savings from non-tourism businesses (both legal and illegal) to invest in resort and vacation home developments<sup>39</sup>. Speculation is common in this sector, and it makes the development of golf courses and marinas a token of the land-value increase; both for nearby resorts or vacation homes. The speculative nature of this sector makes the situation highly unstable. Investors and owners focus more on short term gains than on committing to the long term well-being of locals.<sup>40</sup>

The current reality of coastal and maritime tourism around the world is instigating a **complexification of its development, management and governance**.<sup>41</sup> New actors are becoming relevant with the massification of recreational activities, the emergence of residential tourism and the rise of peer-to-peer economic platforms, such as home-renting. The number of stakeholders are multiplying,

#### Global Coastal & Maritime Tourism (un)governance mechanisms

(connections are illustrative, non-exhaustive and aimed to stimulate reflections....)



<sup>38</sup> Idem

<sup>39</sup> Ecorys & European Commission (2016): "Study on specific challenges for a sustainable development of coastal and maritime tourism in Europe". Final Report, European Commission. Available at: https://publications.europa.eu/en/publication-detail/-/publication/ab0bfa73-9ad1-11e6-868c-01aa75ed71a1

<sup>40</sup> Iden

<sup>41</sup> MITOMED, 2015 Final Conference "Challenges and perspectives for Coastal and Maritime Tourism in Europe" http://www.medmaritimeprojects.eu/article/challenges-and-perspectives-for-coastal-and-maritime-tourism-in-europe-the-outcomes-of-mitomed-final-conference

including development companies, banks and hotel chains as well as independent entrepreneurs, governments, development agencies, along with local communities and citizens in general.

Moreover, the ability of **governments** to govern coastal and maritime tourism is often hindered by weak municipal authorities as well as illegal or shadow business **deals** and practices<sup>42</sup>. To gain control over lucrative land-use, developers can be tempted to pay fines by displacing local owners and violating local laws rather than following time-costly bureaucratic procedures<sup>43</sup>. This type of corruption and cronyism is difficult to document; however, it considerably affects decision-making in tourism worldwide. Only in the European countries, 20% to 25% of the **shadow economy** is represented by tourism-related industries —wholesale, retail, automotive and motorcycle sales, maintenance, transportation, storage, communications, hotels and restaurants<sup>44</sup>. On the other hand, eco-tourism shows positive growing trends as a small, but potentially powerful innovative group gathering environmentally responsible developers and investors.45 This group of green enthusiasts is building alternative sustainable models that are becoming recognized on the international level by governments and organizations and which values are being incorporated in international conventions and regulatory frameworks.

The role of non-corporate international institutions and organizations is undeniable when treating the subject of ocean governance and coastal and maritime tourism. It involves mostly **international aid and development agencies**, such as the World Bank and International Finance Corporation (IFC), bilateral donors, UN agencies as well as regional banks. Since the 1990s, these agencies have increased their lending for sustainable and ecotourism projects. In spite of this trend, most consequent loans are usually attributed to large coastal developments or else agencies seem to lack clarity in their criteria<sup>46</sup>. Therefore, the continuing role of international development agencies in coastal and maritime tourism projects and infrastructure financing emphasizes the need to promote best practices in coastal and maritime tourism within agencies and companies.

Non-governmental organizations (NGO), such as The Nature Conservancy, WWF or IUCN have developed tourism programs promoting responsible tourism. Most of their activities focus on taking into account the negative environmental effects of mass tourism by promoting simultaneously clear standards of sustainability through certification programs and the local activities of host communities and indigenous tourism. Incorporating these values and practices within outbound tour operators through training, awareness raising and advocacy fosters moderating mechanisms to the negative externalities of conventional tourism. <sup>47</sup>

| KEY ACTORS                                   | SHORT DESCRIPTION  | ROLE ON CMT   | PROJECTS or INITIATIVES on tourism  |  |  |
|--|--|---|---|--|--|
|  | International Governmental Organizations (IGO)   |   |   |  |  |
| UNWTO  | UN institution in charge of the development of the global tourism.                                 | Monitoring of ITA, knowledge sharing, tourism governance  | INSTO (network of tourism observatories), TOU-<br>RISM for SDGs (platform on SDGs and Tourism),<br>ONEPLANET (network of sustainable tourism) |  |  |
| UNEP   | UN institution in charge of global<br>environmental policies and natural<br>resources preservation | Global and regional environ-<br>mental regulation (regional<br>seas convention), pollution<br>monitoring, knowledge<br>sharing. | ONEPLANET (network on sustainable tourism)  |  |  |
| UNESCO                                       | UN institution in charge of educa-<br>tion, culture and sciences.                                  | Protection of world natural<br>and cultural heritage.<br>Participatory sciences.  | World Heritage and Sustainable Tourism Program,<br>People Protecting Places, How-to guides  |  |  |
| International Maritime<br>organisation (IMO) | UN institution in charge of maritime affairs.  | Global regulation of the ship-<br>ping and cruising industry  | Regulation on maritime flows and marine pollution   |  |  |
| Alliance of Small Island<br>States (AOSIS)   | Intergovernmental organization of developing coastal and island states.                            | Political influence, sustaina-<br>ble development, adaptation<br>to climate change  |   |  |  |

<sup>42</sup> Papathanassis, A.; Katsios, S. & Dinu, R. N. (2017): "Yellow Tourism" - Crime & Corruption in Tourism". In Journal of Tourism Futures, vol. 3 nr. 2, pp. 200-202

<sup>43</sup> MITOMED, 2015 Final Conference "Challenges and perspectives for Coastal and Maritime Tourism in Europe" http://www.medmaritimeprojects.eu/article/challenges-and-perspectives-for-coastal-and-maritime-tourism-in-europe-the-outcomes-of-mitomed-final-conference

<sup>44</sup> Schneider, The shadow economy in Europe, AT Kearney

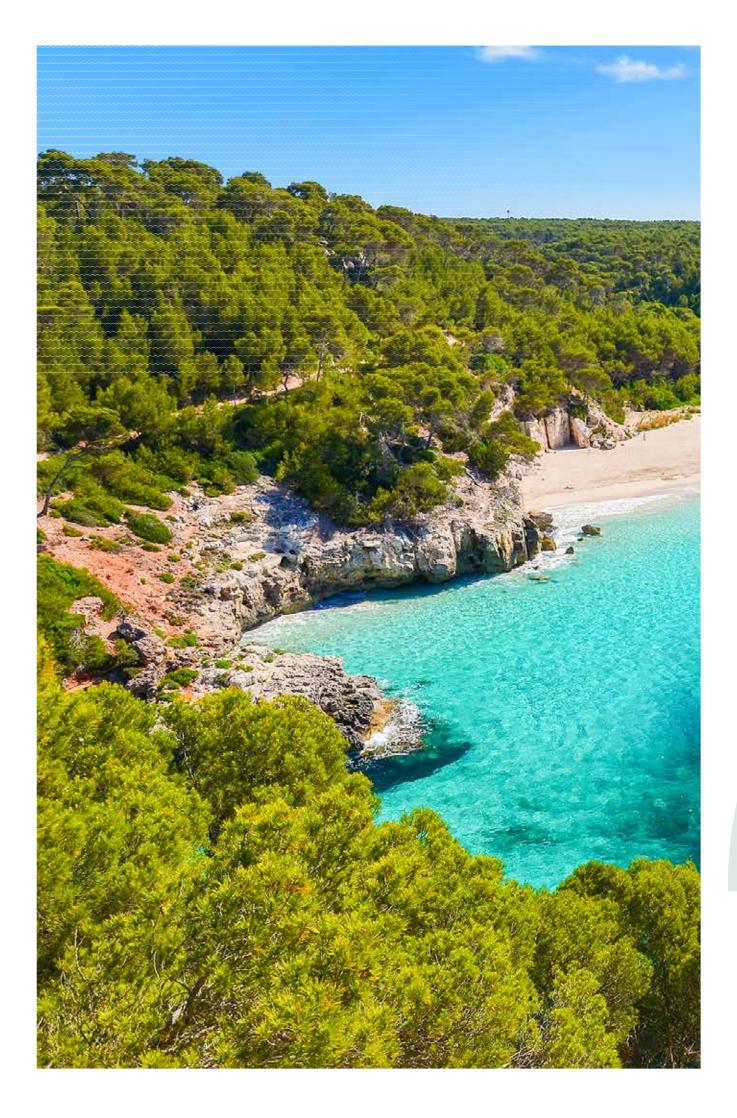
<sup>45</sup> MITOMED, 2015 Final Conference "Challenges and perspectives for Coastal and Maritime Tourism in Europe" http://www.medmaritimeprojects.eu/article/challenges-and-perspectives-for-coastal-and-maritime-tourism-in-europe-the-outcomes-of-mitomed-final-conference

<sup>46</sup> Honey M. & Krantz D. (2007): "Global Trends in Coastal Tourism. Center on Ecotourism and Sustainable Development". Available at: <a href="https://www.responsibletravel.org/docs/Global Trends">https://www.responsibletravel.org/docs/Global Trends</a> in Coastal Tourism by CESD Jan 08.pdf

<sup>7</sup> Idem.

|   | Private Sector  |   |  |  |
|---|---|---|--|--|
| World Tourism & Travel<br>Council (WTTC)                            | Global platform of private tourism industry actors.   | Good practices and knowled-<br>ge sharing, research, political<br>influence.  | Annual reports on contribution of tourism to GDP   |  |
| International Council<br>of Marine Industry<br>Association (ICOMIA) | World recreational maritime industry  | Economic growth, political influence  | Environment Committee - Recreational Boating<br>Industry statistics  |  |
| Cruise Lines Internatio-<br>nal Association (CLIA)                  | World cruises lines' network.   | Economic growth, political influence  | Annual reports on contribution of cruising to the economy  |  |
| World Ocean Council<br>(WOC)  | Professional network of coastal and marine private businesses   | Economic growth, political influence  | Annual conference on sustainable ocean   |  |
| World Association<br>of Travel Agencies<br>(WATA)                   | Global network of travel agencies.  | Economic growth, political influence  | Lobby  |  |
| International Hotel and<br>Restaurant Associa-<br>tion (IHRA)       | Association of hospitality and restaurant structures.   | Economic growth, political influence, sharing of good practices.  | Lobby  |  |
| The International<br>Ecotourism Society<br>(TIES)                   | Network of professionals of eco-tou-<br>rism  | Economic growth, political influence, exchange of good practices.   | Lobby  |  |
| International Air<br>Transport Associa-<br>tion (IATA)              | Association of airlines and aircraft construction industry  | Economic growth, political influence, industry regulation   | No specific to tourism: Carbon offset, alternative fuel  |  |
|   |   | International NGOs  |  |  |
| Sustainable Tourism<br>International                                | International NGO encouraging sustainable practices for professionals and destinations concerning local cultures, climate change, biodiversity. | Evaluation and planning,<br>education, standards develo-<br>pment, impact monitoring  | Actions addressing coral reef destruction, biodiversity losses, overfishing, coastal erosion   |  |
| International Union for<br>the Conservation of<br>Nature (IUCN)     | International environmental NGO gathering regional and local authorities as well as non-profit associations and foundations.                    | Knowledge sharing, partner-<br>ships, research and training,<br>advocacy.   | Tourism and Protected Areas Specialist (TAPAS), biodiversity: my hotel in action, sustainable tourism and natural World Heritage, integrating business skills into ecotourism operations, siting and design of hotels and resorts. |  |
| World Wildlife Fund<br>(WWF)  | International NGO protecting natural resources and biodiversity.  | Research, training and<br>knowledge sharing; public<br>advocacy, on-the-ground<br>projects, public-private<br>partnerships. | Partnership with sustainable tourism businesses.<br>Blue Economy research, ocean and marine gover-<br>nance (Mediterranean, Western Indian Ocean).   |  |
| The Nature Conservan-<br>cy (TNC)                                   | International NGO protecting natural spaces and biodiversity  | Influence policies for conservation of nature   | Ocean Wealth initiative  |  |
| Conservation Interna-<br>tional (CI)                                | International NGO protecting biodiversity hotspots across the globe.  | Promotion of sustainable oceans and good practices.   | Ocean Health Index   |  |
| Global Sustainable<br>Tourism Council<br>(GSTC)                     | International organization promoting common standards for sustainable tourism.  | Certification, good practices<br>sharing and networking   | GSTC Criteria  |  |
| United Nations<br>Foundation<br>(UNF)                               | Public charity supporting the Charter<br>of United Nations  | Financing on-the-ground projects  | World Heritage and Sustainable Tourism Pro-<br>gramme, Linking Biodiversity Conservation and<br>Sustainable Tourism at World Heritage Sites.   |  |

<sup>→</sup> Table 3: Key International Stakeholders at a Global Level Source: eco-union (based on corporate information and websites)



## Sustainable Tourism: Concepts, Frameworks, Actors, Tools

This section describes the concept of sustainable tourism, in particular related to the multilateral frameworks, the key global and regional stakeholders as well as the most relevant policy tools and market mechanisms to promote the sustainability of tourism activities.

#### Key Institutional Frameworks Related to Sustainable Tourism

Sustainable tourism has been embedded in many different international and regional frameworks. Here is an overview of the most relevant frameworks that have contributed to the development of sustainable tourism, with a particular focus on coastal and maritime tourism.

## The principles of sustainable tourism in the United Nations

At the turn of the millennium, alleviating poverty became a high priority within international frameworks relevant to sustainable development. In 2005, the UNWTO and the UN Environment Programme (UNEP) published *Making Tourism More Sustainable*. This report identified twelve principles for sustainable tourism described below. In essence, it laid out a broad sustainable tourism agenda aimed at reducing poverty within communities at destinations and minimising negative environmental impacts.

## UNWTO and UN Environment Principles for Sustainable Tourism

- 1. Economic Viability: To ensure the viability and competitiveness of tourism destinations and enterprises, in order to enable the continuation of prosperity and delivery of benefits at the long term.
- **2. Local Prosperity:** To maximize the contribution of tourism to the prosperity of the host destination, including the proportion of visitors' spending, retained locally.

- 3. Employment Quality: To strengthen the number and 3. quality of local jobs created and supported by tourism, including the level of pay, conditions of service and availability to all without discrimination by gender, race, disability or in other ways.
- **4. Social Equity:** To seek a widespread distribution of economic and social benefits from tourism throughout the recipient community, including the improvement of opportunities, income and services available to the poor.
- **5. Visitor Fulfilment:** To provide a safe, satisfying and fulfilling experience for visitors, available to all without discrimination by gender, race, and disability or in other ways.
- **6. Local Control:** To engage and empower local communities in planning and decision making about the management and future development of tourism in their area, in consultation with other stakeholders.
- 7. Community Well-being: To maintain and strengthen the quality of life in local communities, including social structures and access to resources, amenities and life support systems, avoiding any form of social degradation or exploitation.
- **8. Cultural Richness:** To respect and enhance the historic heritage, authentic culture, traditions and distinctiveness of host communities.
- **9. Physical Integrity:** To maintain and enhance the quality of landscapes, both urban and rural, and avoid the physical and visual degradation of the environment
- **10. Biological Diversity:** To support the conservation of natural areas, habitats and wildlife, and minimize damage to them.
- **11. Resource Efficiency:** To minimize the use of scarce and non-renewable resources in the development and operation of tourism facilities and services.

<sup>ightarrow</sup> Source: UNWTO and UN Environment, 2005 $^{2}$ 

<sup>1</sup> UNEP & UNWTO (2005): "Making Tourism More Sustainable: A Guide for Policy Makers". Available at: www.unep.fr/shared/publications/pdf/DTIx0592x-PA-TourismPolicyEN.pdf

<sup>2</sup> Idem.

One of the important contributions of *this* UN initiative is prominently reflecting on the link between tourism and climate change. The report recognises climate change as a major issue for the long-term sustainability of tourism in two aspects: climate change will have consequences for tourism, and tourism is a contributor to climate change.<sup>3</sup>

#### International environmental agreements

Multilateral Environmental Agreement (MEA) and other international environmental initiatives have been promoting more sustainable tourism activities from the 1990s. In particular, the following frameworks are relevant towards the sustainable transition of tourism:

#### Agenda 21 (1992)

At the Rio conference in 1992, 182 countries adopted the Agenda 21, a non-binding action plan aimed at integrating sustainable development in national policies. The Agenda 21 identified tourism as one of the five industries required to achieve sustainable development, acknowledging the potential of ecotourism<sup>4</sup>. The Agenda 21 for the Travel and Tourism Industry: Towards Environmentally Sustainable Development<sup>5</sup> stressed the need to make the tourism and travel enterprises sustainable and recommended governments priority areas and objectives to minimise environmental impacts and collaborate with local communities.<sup>6</sup>

#### Convention of Biological Diversity (2000)

The 1992 Rio Conference also set forth the Convention of Biological Diversity (CBD). Although this agreement does not mention tourism, Contracting Parties recognized in 2000 the importance of developing sustainable tourism and ecotourism. Four years later, the CBD Secretariat published a guideline on sustainable tourism<sup>7</sup>, and several programmes on this matter have since then been developed.<sup>8</sup>

#### UNWTO's Global Code of Ethics for Tourism (1999)

In 1999, the UN General Assembly (UNGA) adopted the UNWTO's Global Code of Ethics for Tourism (GCET). The GCET is composed of ten articles, including Article 3, which

recognises tourism as a possible factor of sustainable development and invites all concerned stakeholders to protect the environment and develop policies to promote sustainable tourism.<sup>9</sup>

#### • The Rio + 20 Declaration (2012)

In 2012, renewed efforts to clarify environment and development interaction took place at the Rio+20 UN Conference on Sustainable Development (UNCSD), and were formalized in the declaration *The Future We Want*<sup>10</sup> aimed at ensuring the promotion of an economically, socially and environmentally sustainable future. The declaration calls for:

- supporting sustainable tourism activities and relevant capacity building in developing countries in order to contribute to the achievement of sustainable development;
- promoting investments in sustainable tourism, including ecotourism and cultural tourism;
- developing appropriate guidelines and regulations, in accordance with national priorities and legislation, to support sustainable tourism.<sup>11</sup>

Hence, Rio+20 helped to continue the discussion of tourism and sustainability leading to future initiatives, such as the UNWTO's and UNEP's 10-year Sustainable Tourism Programme.

## 10 Years sustainable tourism programme by UNWTO

In 2014, UNWTO and UNEP launched the 10 Year Sustainable Tourism Programme (STP) as part of the 10-Year Framework of Programmes on Sustainable Consumption and Production (SCP) patterns endorsed at the Rio+20 summit. Its vision is "a tourism sector that has globally adopted sustainable consumption and production practices resulting in enhanced environmental and social outcomes and improved economic performance". The objectives of the programme are presented below.

<sup>3</sup> Idem.

<sup>4</sup> Dangi, T. B. & Jamal, T. (2016): "An Integrated Approach to "Sustainable Community-Based Tourism."" 8 Sustainability 475, p. 478

<sup>5</sup> WTTC, UNWTO, & EC (1995): "Agenda 21 for Travel and Tourism Industry: Towards Environmentally Sustainable Development". A Report. Available on-line: http://wwwv1.agora21.org/johannesburg/rapports/omt-a21.html

<sup>6</sup> Dangi (2016) p. 478.

<sup>7</sup> CBD (2004): "Guidelines on Biodiversity and Tourism Development". CBD Guidelines, Montreal: Secretariat of the Convention on Biological Diversity, 29 pp. Available at: <a href="https://www.cbd.int/doc/publications/tou-gdl-en.pdf">https://www.cbd.int/doc/publications/tou-gdl-en.pdf</a>

<sup>8</sup> CBD (2005): "Handbook of the Convention on Biological Diversity Including its Cartagena Protocol on Biosafety". CBD Guidelines, 3rd edition, Montreal: Secretariat of the Convention on Biological Diversity, 1258 pp.. Available at: https://www.cbd.int/doc/handbook/cbd-hb-all-en.pdf

<sup>9</sup> United Nations World Tourism Organization (UNWTO-GCET) (1999) Global Code of Ethics for Tourism. Retrieved from: <a href="http://www.gdrc.org/uem/ecotour/principles.html">http://www.gdrc.org/uem/ecotour/principles.html</a>

<sup>10</sup> United Nations (2012): "Outcome document of the United Nations Conference on Sustainable Development". Rio de Janeiro, Brazil, 20–22 June 2012, 72 pp. Accessible at: https://sustainabledevelopment.un.org/content/documents/733FutureWeWant.pdf

<sup>11</sup> ibid, 34-35.

| Objective   | Tasks  |
|---|--|
| Integrating SCP patterns in tourism related policies and fra-<br>meworks  | <ul> <li>Integrating SCP principles and objectives for sustainable development</li> <li>Monitoring policy implementation</li> </ul>  |
| Collaboration among stakeholders for the improvement of the<br>tourism sector's SCP performance                           | <ul> <li>Data sharing and exchange of information</li> <li>Fostering stakeholder collaboration and joint action</li> <li>Capacity building for stakeholders</li> <li>Establishing monitoring frameworks</li> </ul>               |
| Fostering the application of guidelines, instruments and tech-<br>nical solutions to prevent and mitigate tourism impacts | <ul> <li>Developing integrated tools for use at destinations and in tourism enterprises</li> <li>Research and action on priority issues of the tourism value chain</li> <li>Influencing consumer choice and behaviour</li> </ul> |
| Enhancing sustainable tourism investment and financing  | <ul> <li>Promoting use of sustainable tourism investment and financing tools</li> <li>Enabling and mainstreaming sustainable tourism investment and finance</li> </ul>   |

<sup>→</sup> Table 4: UNWTO and UNEP 10 Years Sustainable Tourism Programme - Objectives Source: UNWTO and UN Environment, 2015<sup>22</sup>

## 2030 Agenda and the Sustainable Development Goals (SDGs)

In 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development. Within this agenda, seventeen Sustainable Development Goals (SDGs) were defined. While all of them have an impact on the tourism sector, several SDGs explicitly include coastal and maritime tourism, in particular SDG 8 (Economic Growth), SDG 12 (Sustainable Consumption and Production) and SDG 14 (Ocean Conservation).

#### SDGs related to tourism<sup>13</sup>

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Target 8.9: By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

Goal 12. Ensure sustainable consumption and production patterns. Target 12.b: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Target 14.7: By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.

#### **Global Sustainable Tourism Council**

While most international sustainable tourism frameworks are UN supported agreements, a new set of private, public or blended initiatives are also emerging, most notably the Global Sustainable Tourism Council (GSTC)<sup>14</sup>, a non-for-profit institution created in 2009 through a collaboration between UN Agencies, travel companies, tour operators, hotels and other tourism stakeholders. While the GSTC's pillars and criteria aim at addressing issues concerning society, culture, environment and economy, most of its initiatives promote a voluntary approach and lack regulatory enforcement.<sup>15</sup>

#### **Regional Seas Programme by UNEP**

In 1974, UNEP launched the Regional Seas Programme that gave birth to 18 regional conventions and action plans. Typical activities covered by regional seas include regular monitoring and assessment of land-based and sea-based sources of pollution, development of protected areas, coastal zones management or fight against marine pollution. Though none of the regional conventions and action plans originally refer explicitly to tourism, several regional frameworks have developed guidelines on sustainable tourism in their respective region. The precise role of the regional seas in supporting sustainable tourism is described in the following section.

<sup>12</sup> http://www.oneplanetnetwork.org/sites/default/files/10vfp-stp-brochure-en.pdf

<sup>13 &</sup>lt;a href="http://www2.unwto.org/content/tourism-2030-agenda">http://www2.unwto.org/content/tourism-2030-agenda</a>

<sup>14</sup> https://www.gstcouncil.org/

<sup>15</sup> Dangi, T. B. & Jamal, T. (2016): "An Integrated Approach to "Sustainable Community-Based Tourism." Sustainability 475, p. 478

<sup>16</sup> UNEP (2016): "Development of an international legally-binding instrument on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction under the United Nations Convention on the Law of the Sea". Available at: <a href="https://www.un.org/depts/los/biodiversity/prepcom\_files/UNEP\_and\_BBN]">www.un.org/depts/los/biodiversity/prepcom\_files/UNEP\_and\_BBN]</a> PrepCom2.pdf



→ Regional Seas Programme - UNEP Source: UNEP <sup>17</sup>

## CMT, Agenda 2030 and the Paris Agreement

The **2030 Agenda** is the main international framework promoting the mainstreaming of sustainable development. **SDG 14** specifically targets the conversation and the sustainable use the oceans, seas and marine resources for sustainable development. Through the 2015 **Paris Agreement**, the international community committed to limiting the increase in the global average temperature to "well below 2° C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5° C". Tourism, in particular CMT, as a significant source of GHG emissions (aviation, cruises, accommodation), and its governance has substantial implications for the implementation of the Paris Agreement. Hence, it is crucial to assess how the governance of tourism can contribute to both reach SDG and the Paris Agreement.

In Particular Coastal and Maritime tourism must contribute to the most relevant SDGs:

- · SDG 12 on Responsible Consumption and Production
- SDG 13 on Climate Action
- SDG 14 on Life Below Water
- · SDG 8 Decent Work and Economic Growth

#### SDGs, VNRs and CMT

Sixty-four countries presented their Voluntary National Reviews (VNRs) to the SDGs up to 2018. The VNRs provide an indication of the countries' intention to achieve the SDGs. So far. 45 VNRs recognise tourism as a high-impact sector with potential to advance all SDG, of which 11 specifically mention contributions of tourism in achieving SDG 14.18 SDG 14 referred as Life Below Water calls to conserve and sustainably use the oceans, seas and marine resources for sustainable development<sup>19</sup>. Bangladesh recognises in its VNR that coastal and marine tourism, in particular ecotourism, are key matters to consider when developing marine policy, laws, and regulations. Curacao and The Netherlands are also promoting scientific tourism to achieve SDG 14, while **Norway** is investing heavily in research on ocean-based industries such as tourism, in order to mainstream the blue economy in the country.20

To achieve **SDG 14**, tourism, as well as other sectors that have an impact on the coastal and marine environment, should take into consideration marine and coastal systems, including habitats, species, and their interactions, in order to maintain ecosystem productivity and resilience<sup>21</sup>. Private actors need to conduct their business in a manner that prevents and reduces marine pollution, uses marine resources sustainably, and improves the state of the marine ecosystem<sup>22</sup>. For instance, tourism can incentivise public and private actors in restoring damaged coral reefs to attract more tourist and thus economically sustain local communities. Other industries linked to the tourist sector, such as transport, tour operators, and accommodation, should also minimise their impact to the marine environment by, for instance, lowering their emissions, waste, promoting sustainable business, and engaging in coastal and marine clean-ups.<sup>23</sup>

<sup>17</sup> https://www.unenvironment.org/explore-topics/oceans-seas/what-we-do/working-regional-seas/regional-seas-programmes/un-environment

<sup>18</sup> UNWTO & UNDP (2017): "Tourism and the Sustainable Development Goals – Journey to 2030". UNWTO, Madrid, 108 pp. Available at: <a href="https://www.e-un-wto.org/doi/book/10.18111/9789284419401">https://www.e-un-wto.org/doi/book/10.18111/9789284419401</a>

<sup>19 &</sup>lt;u>https://sustainabledevelopment.un.org/sdg14</u>

<sup>20</sup> UNWTO & UNDP (2017): "Tourism and the Sustainable Development Goals – Journey to 2030". UNWTO, Madrid, 108 pp. Available at: <a href="https://www.e-un-wto.org/doi/book/10.18111/9789284419401">https://www.e-un-wto.org/doi/book/10.18111/9789284419401</a>

<sup>21</sup> Wright et al. (2017): "Partnering for a Sustainable Ocean: The Role of Regional Ocean Governance in Implementing SDG 14". PROG: IDDRI, IASS, TMG & UN Environment,73 pp. Available at: <a href="https://www.prog-ocean.org/wp-content/uploads/2017/03/PROG">https://www.prog-ocean.org/wp-content/uploads/2017/03/PROG</a> Partnering-for-a-Sustainabe-Ocean\_Report.pdf

<sup>22</sup> UNWTO & Global Compact Network Spain (2016): "The Tourism Sector and the Sustainable Development Goals: Responsible tourism, a global commitment", UNWTO, Madrid , 50 pp. Available at: <a href="http://cf.cdn.unwto.org/sites/all/files/pdf/turismo\_responsable\_omt\_acc.pdf">http://cf.cdn.unwto.org/sites/all/files/pdf/turismo\_responsable\_omt\_acc.pdf</a>

<sup>23</sup> ibid, 54.



→ Sustainable Development Goals associated with coastal and maritime tourism

### Implication of the Paris Agreement for tourism

The achievement of the **Paris Agreement** (PA) objective ultimately requires decarbonisation in all economic sectors. This is particularly challenging in the tourism sector, characterised by rapid emission growth, expected to double its 2010 emissions by 2030, especially due to the increase of air and land transport, and accommodation capacity<sup>24</sup>. Climate change especially impacts coastal areas, and hence coastal tourism. The IPCC has high confidence that, in the coming decades, coastal areas will increasingly experience adverse impacts such as submersion, coastal flooding, and coastal erosion due to sea-level rise.<sup>25</sup> The massive loss of marine biodiversity due to climate-induced ocean acidification will progressively reduce the tourism value of coastal areas, as seen with the coral bleaching of the Great Barrier Reef.<sup>26</sup>

The tourism sector, as a significant source of GHG needs to reduce its **carbon footprint** to facilitate the temperature target of the PA. Coastal destinations require robust adaptation measures to minimise the loss of tourism value by climate-induced processes, such as the sea level rise. However, coastal areas depend on rapid global mitigation measures to minimise the impacts caused by rising ocean acidification and temperature.

Beyond the PA, UNEP and UNESCO propose broad **recommendations** to policy-makers for regulating tourism in a manner that minimises climate change:<sup>27</sup>

 develop strategies and policies that lead to Greenhouse Gas Emission reductions from the tourism sector that are in line with the goals of the Paris Agreement;

- create detailed climate change action strategies for tourism management and development at vulnerable sites that engages the tourism industry;
- fully integrate climate change impacts and preparedness into national and site-level tourism planning, policies and strategies;
- develop management tools for collecting data on tourism and climate impacts to facilitate combined tourism development and climate impact assessment;
- implement policies and action on climate change and tourism that are gender-responsive and participatory; and
- develop tourism investment guidelines that encourage inclusive and equitable development.

### **Financing Sustainable Tourism**

The mainstreaming of sustainable tourism, and hence enabling the possibility of tourism to abide by the SDGs and the Paris Agreement, requires strong political will, private sector commitment, and most importantly, financial mechanisms making such a transformation possible.

#### The landscape of finance instruments in sustainable tourism

An increasing number of **Multilateral Development Banks** (MDBs) are recognising the key role of tourism in achieving

<sup>24</sup> http://cf.cdn.unwto.org/sites/all/files/docpdf/presentationmaterialsustainabletourismwebinar2.pdf (slide 23).

<sup>25</sup> IPCC (2014): "Climate Change 2014: Impacts, Adaptation, and Vulnerability". Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1132 pp, p. 17

<sup>26</sup> https://www.theguardian.com/environment/2018/jun/08/domestic-tourism-to-great-barrier-reef-falls-in-wake-of-coral-bleaching

<sup>27</sup> Markham, A. et al. (2016): "World Heritage and Tourism in a Changing Climate". United Nations Environment Programme, Nairobi, Kenya and United Nations Educational, Scientific and Cultural Organization, Paris, France, 104 pp. Available at: <a href="https://www.ucsusa.org/sites/default/files/at-tach/2016/05/world-heritage-and-tourism-in-a-changing-climate.pdf">https://www.ucsusa.org/sites/default/files/at-tach/2016/05/world-heritage-and-tourism-in-a-changing-climate.pdf</a>

| Source          | Actors   | Types of instruments   | Case examples   |
|-----------------|--|--|---|
| Public finance  | <ul> <li>Supranational institutions (e.g., DFIs, MDBs)</li> <li>Regional institutions (e.g., EU)</li> <li>National institutions (e.g., national banks, national government)</li> <li>Subnational institutions (e.g., municipal authorities)</li> </ul> | Subsidies, grants, green bonds, credit guarantees, insurance for green assets  | Turkish Development and Investment Bank (TSKB) provides financing and consultancy services for green building investment in the tourism sector. <sup>28</sup> |
| Private finance | Private banks, insurers, investors, corporations, philan-<br>thropists, foundations, micro-funders   | Market: loans, green bonds,<br>mini-bonds, mezzanine finance,<br>blockchain.     investment: blended finance,<br>microfinance, rewards-based<br>crowdfunding | Triodos Bank provides loans to<br>Green tourism certified busines-<br>ses for property purchases and<br>on-site renewables <sup>29</sup>                      |

→ Table 5: Public and Private Financial Sources to Sustainable Tourism Source: eco-union

sustainable development by facilitating finance to sustainable tourism in developing countries. However, more resources are needed via **Official Development Assistance** (ODA) and Aid for Trade (AfT), to mainstream sustainable tourism<sup>30</sup>. In fact, the tourism industry has only received 0.14% of total ODA between 2011 and 2015.<sup>31</sup>

The **Enhanced Integrated Framework** (EIF) is one of the many instruments that finance the development of sustainable tourism in Least Developed Countries (LDCs) Small Island Developing States (SIDS) and landlocked developing countries (LLDCs). The EIF supports LDCs in using trade for poverty reduction, inclusive growth and sustainable development. It is currently helping 48 countries worldwide, supported by a multi-donor trust fund with a funding target of \$250 million, of which 10% is dedicated to tourism<sup>32</sup>. Nevertheless, scaling up investment in sustainable tourism requires innovative financing mechanisms. New capital markets, such as **green bonds** must reach the tourism sector. In addition, the growth of sustainable tourism requires direct financing, blending of public and private finance, and economic incentives<sup>33</sup>. Some financial solutions that can potentially upscale sustainable tourism are<sup>34</sup>:

- Green bonds: While the tourism sector has not yet tapped into the booming green bond market, some countries, such as Colombia, Australia, USA, have already seen green bonds financing tourism.
- Impact investment: Tourism-related impact investment is also emerging in Myanmar, Nepal, East Africa and Latin America.

- Energy efficiency loan facilities: The United Nations Environment Programme (UNEP) has facilitated loans for installing solar PV in hotels. The United Kingdom has offered interest-free loans and 100% capital tax allowances on energy-efficient equipment through the Low Carbon Trust.
- Blended finance from development finance institutions: The International Finance Corporation (IFC) has, for instance, mobilized USD 12 million for the development of ecotourism in Peru.
- Smart incentives for eco-certification: Some countries, such as Barbados, Italy and Spain have facilitated tax incentives to enterprises from the tourism industry that adopt eco-certification.
- Enterprise challenge funds (ECF): ECF<sup>35</sup> subsidizes private investment in developing countries via competitive calls. The Australian Agency for International Development's (AusAID) ECF will enable the Wilderness Lodge, an ecotourism provider in the Solomon Islands, to double guest accommodation<sup>36</sup>.
- Crowdfunding and crowd-investing: Many sustainable tourism-related projects are seeking crowdfunding initiatives through online platforms or institutional support<sup>37</sup>.

<sup>28</sup> OECD (2018): "Tourism Trends and Policies 2018". OECD Publishing, Paris, 375 pp. Available at: <a href="https://read.oecd-ilibrary.org/urban-rural-and-region-al-development/oecd-tourism-trends-and-policies-2018">https://read.oecd-ilibrary.org/urban-rural-and-region-al-development/oecd-tourism-trends-and-policies-2018</a> tour-2018-en#page3 p. 98.

<sup>29</sup> ibid. p. 99.

<sup>30</sup> UNWTO & UNDP (2017): "Tourism and the Sustainable Development Goals – Journey to 2030". UNWTO, Madrid, 108 pp. Available at: https://www.e-un-wto.org/doi/book/10.18111/9789284419401

<sup>31</sup> Ibid, 60.

<sup>32</sup> Ibid, p.61.

<sup>33</sup> Ibid, p.65.

<sup>34</sup> ibid, p.67.

<sup>35</sup> ECF (challenge funds) are established by a public entity, foundation or development partner to provide small financial contributions to socially or environmentally worthwhile projects delivered by the private sector.

<sup>36</sup> https://www.solomontimes.com/news/australia-supports-sustainable-ecotourism-project-in-western-province/5772

<sup>37 &</sup>lt;a href="https://crowdfundup.com/blog/85/crowdfunding-platforms-and-innovative-tourism-developments">https://crowdfundup.com/blog/85/crowdfunding-platforms-and-innovative-tourism-developments</a>

**Developing countries** could seek further financial flows for developing sustainable tourism through other frameworks, such as trade-related technical assistance programmes and the UN 10YFP Sustainable Tourism Programme<sup>38</sup>. In all contexts, new green financial mechanisms, such as green bonds, have the potential to become a significant source financing sustainable tourism projects.<sup>39</sup>

Barriers to finance sustainable tourism

While general barriers for mobilising investment in tourism are the economic situation, domestic regulations, and land availability, among other factors, specific barriers to increasing finance in sustainable tourism also include the following:40

- lack of alignment between ODA and sustainable tourism requirements;
- poor management and planning, lack of political commitment and weak sustainability awareness; and
- lack of financing instruments as well as few incentives, subsidies and supportive policies and regulations.

Nevertheless, each destination has their specific barriers to sustainable tourism and, it should be thus analysed thoroughly to design a plan in order to effectively increase investment in sustainable tourism.

Planning, Management, and Monitoring Tools

This section assesses benefits from management frameworks for sustainable coastal/marine tourism as well as reviews essential policy tools that can facilitate the effective implementation and monitoring of management plans for sustainable tourism.

#### Coastal, marine and land planning

Planning the use of **marine space** is still an underdeveloped task, which will require more effort to reach a similar level of maturity reached by planning of terrestrial surface. The following table compares the benefits of different management frameworks that can be used for the development of sustainable CMT.

| Framework   | Approach   | Benefits  | Challenges  |
|---|--|---|---|
| Marine Spatial Planning<br>(MSP) <sup>41</sup>  | <ul> <li>Planning of human activities<br/>in marine areas through<br/>ecosystem-based, integrated,<br/>adaptive, strategic and partici-<br/>patory processes. 42</li> </ul>            | <ul> <li>Achieves Good Environmental<br/>Status (GES)</li> <li>Improves climate resilience</li> <li>Prevents overflow of tourism</li> <li>Distributes environmental pressures<sup>43</sup></li> </ul> | Communication     Engagement of all stakeholders <sup>44</sup>  |
| Integrated Coastal Zone<br>Management (ICZM)  | <ul> <li>Integration of terrestrial and<br/>marine environments taking<br/>into account ecosystems,<br/>landscapes, human activities<br/>and their interaction<sup>45</sup></li> </ul> | Avoid conflicts between coastal users     Adds value to product with eco-labelling     Ameliorates environmental status     Encourages participation     Prevents overflow of tourism <sup>66</sup>   | <ul> <li>Information and predictability</li> <li>Costs</li> <li>Low engagement of private sector<sup>47</sup></li> <li>Difficult to implement<sup>48</sup></li> </ul> |
| Intends to manage land (including coastal zones) to optimise the social, environmental and economic outcomes through the practice of zoning |  | Targets economic, social, and ecological objectives.  | Not specific to the marine environ-<br>ment     Focused on coastal land   |

<sup>→</sup> Table 6: MSP, ICZM, and Land-Use Planning Source: eco-union

<sup>38 &</sup>lt;a href="http://www.oneplanetnetwork.org/sustainable-tourism">http://www.oneplanetnetwork.org/sustainable-tourism</a>

<sup>39</sup> UNWTO & UNDP (2017): "Tourism and the Sustainable Development Goals – Journey to 2030". UNWTO, Madrid, 108 pp. Available at: https://www.e-unwto.org/doi/book/10.18111/9789284419401

<sup>40</sup> Idem p. 73

<sup>41</sup> See case studies at e.g., http://oceancouncil.org/wp-content/uploads/2016/05/WOC-MSP-Case-Studies-Mar-2016.pdf

<sup>42</sup> Papageorgiou, M. (2016): "Coastal and marine tourism: A challenging factor in Marine Spatial Planning". Ocean & Coastal Management, vol. 129, pp. 44-48

<sup>43</sup> ibid, p. 48.

<sup>44</sup> WOC (2016): "Marine Spatial Planning: Case Studies", 35 pp. Available at: <a href="http://oceancouncil.org/wp-content/uploads/2016/05/WOC-MSP-Case-Studies-Mar-2016.pdf">http://oceancouncil.org/wp-content/uploads/2016/05/WOC-MSP-Case-Studies-Mar-2016.pdf</a> p. 33-34.

<sup>45</sup> Ibid, p.46

<sup>46</sup> http://www.unep.fr/shared/publications/pdf/dtix1091xpa-sustainablecoastaltourism-planning.pdf p.57.

<sup>47</sup> Idem p.63-64.

<sup>48</sup> Papageorgiou (n 48) p.46.



MSP and land-use planning both manage the activities within a space through the designation of respective zones. However, while MSP may disregard further in-land zones, land-use planning often ignores marine zones. Therefore, as land and marine processes interact with each other, for instance, marine eutrophication due to runoff agriculture nutrients, MSP and land-use planning should be integrated. On the other hand, ICZM is similar to MSP in that it also addresses inadequate governance in marine settings through participative solutions. Nevertheless, ICZM does not systematically implement zoning for specific maritime activities. Hence, MSP and ICZM can work alongside in addressing both environmental and economic issues in a destination.<sup>49</sup>

#### Policy tools for sustainable tourism

Policy tools are essential to ensure long-standing sustainable management of tourism. Although their success in

achieving sustainable tourism will greatly depend on the political will of the relevant authorities, access to finance, engagement of all stakeholders, as well as the availability and quality of data required to develop sound long-term management strategies. The following table illustrates different policy tools that national and local governments can use to facilitate sustainable tourism.

In the table above, green and tourist taxes differentiate from the other tools in the sense that they do not directly offer relevant data on the sustainability of tourism in a destination. Green taxes reduce unsustainable practices of tourism while a general tourist tax only contributes to sustainable tourism if the revenues collected are invested in the sustainability of the destination. On the other hand, carrying capacity, ecological footprint, lifecycle assessments, and sustainable tourism indicators are all indicators that are essential —though not sufficient— for the effective planning of sustainable tourism in a destination.

| Tool                           | Sustainable tourism indicators   | Challenges   |
|--------------------------------|--|--|
| Green taxes                    | Green taxes are directed to penalize practices that are harmful to the environment   | <ul> <li>Establishing amounts that effectively incentivise green practices</li> <li>Managing pressure from affected stakeholders</li> </ul>  |
| Tourist tax                    | Levies on tourist establishments to restore negative impacts of the tourism activities   | Managing pressure from affected stakeholders (e.g. Catalan and Balearic cases)   |
| Carrying capacity              | Establishing a physical limit to tourist activities and number of visitors to ensure long -term environmental/social sustainability                      | <ul> <li>Establishing sciences-based limits</li> <li>Managing pressure from affected stake-holders</li> <li>Difficult to implement in urban areas</li> <li>Difficult to measure</li> </ul> |
| Ecological footprint           | Indicator that measures the biologically productive requirements to assimilate the consumption and waste produced in a destination by tourism activities | <ul> <li>Difficulty in accounting all factors</li> <li>Does not identify location of specific impacts</li> </ul>   |
| Life Cycle Assessment (LCA     | Integrated indicator measuring the environmental impact of each component of tourism (such as accommodation, transport, food)                            | Difficulty in accounting all factors.     Lack of data accessibility and quality   |
| Sustainable tourism indicators | Broad set of indicators developed by public or private bodies for measuring the state of sustainable tourism in a destination <sup>50</sup>              | <ul> <li>Specific needs of each destination</li> <li>Lack of data quality, accessibility or transparency</li> <li>Low stakeholder involvement</li> </ul>                                   |

<sup>→</sup> Policy Tools Supporting Sustainable Tourism Source: eco-union

#### **Eco-labelling tourism schemes**

Eco-label is a label based on specific criteria, usually determined through a participatory and regularly updated process<sup>51</sup>. These criteria are used to assess the manufacture and transformation of a product, the offer of services or the design of a management system. The compliance with these criteria is verified by an inspection body, which is supposed to be independent. In most cases, the criteria of a label are

specifically determined for a group of products or a service sector such as eco-tourism labels. Some labels are official ones, awarded by the Member States (e.g. EU ecolabel), or awarded by an organisation/association (e.g. Travelife), or by a company (e.g. Green Globe). Eco-label is a voluntary process and labels need to comply with the national legislation. However, ecolabels vary in terms of credibility and transparency given that there are a wide variety of specifications and working methods among certifying bodies.<sup>52</sup>

<sup>50</sup> See for e.g.,: UNWTO (2016): "Measuring Sustainable Touris: Developing a statistical framework for sustainable tourism". October 2016 Discussion Paper #1; EC (2016) The European Tourism Indicator System: ETIS toolkit for sustainable destination management.

<sup>51</sup> Switch Med (2017). SUSTAINABLE TOURISM LABELS. https://www.switchmed.eu/en/e-library/the-new-sustainable-tourism-labels-guidebook

<sup>52</sup> Idem.

| Name                            | Type of organi-<br>zation           | Sector   | Objective  |
|---------------------------------|-------------------------------------|--|--|
| BIO Hotels <sup>53</sup>        | Industry asso-<br>ciation (Austria) | Organic and regional products in Hotels (Germany)  | Environmental sustainability and CO2 emissions reduction   |
| Biosphere Tourism <sup>54</sup> | Non-profit<br>(Spain)               | Destinations and tourist rou-<br>tes; Accommodations; Tourists<br>cities and centres; Parks; Tour<br>operators | Promote sustainable development actions and programs in tourism destinations and companies   |
| Blue Flag <sup>55</sup>         | Non-profit<br>(Netherlands)         | Beaches and marinas  | Environmental quality and sustainability of coastal areas  |
| Blue Angel <sup>56</sup>        | Governmental<br>(Germany)           | Tourism and other  | Protection goals: health, climate, water, and resources  |
| Earth Check <sup>57</sup>       | Private-oriented<br>(Australia)     | Tourism  | Scientific benchmarking certification and advisory for travel and tourism.   |
| Ecolabel <sup>58</sup>          | Governmental<br>(EU & France)       | Tourism and other  | Encourage businesses to market greener products and services and allow consumers to identify them  |
| Green Seal <sup>s9</sup>        | Non-profit (USA)                    | Tourism and other  | Life-cycle approach to ensure tangible reductions in the whole environmental footprint   |
| Green Key⁰                      | Non-profit<br>(Denmark)             | Tourism businesses   | Environmental Sustainability   |
| Rainforest Alliance             | Non-profit (USA<br>& Netherlands)   | Tourism and other sectors  | Alliance of farmers, forest communities, companies, and consumers committed to creating a world where people and nature thrive in harmony. |

<sup>→</sup> Table 8: Eco-labels for sustainable tourism Source: eco-union based on Ecolabel Index<sup>61</sup>

<sup>53</sup> https://www.biohotels.info/

<sup>54</sup> https://www.biospheretourism.com/en/biosphere-certification/83

<sup>55</sup> https://www.blueflag.global/

<sup>56</sup> https://www.blauer-engel.de/en

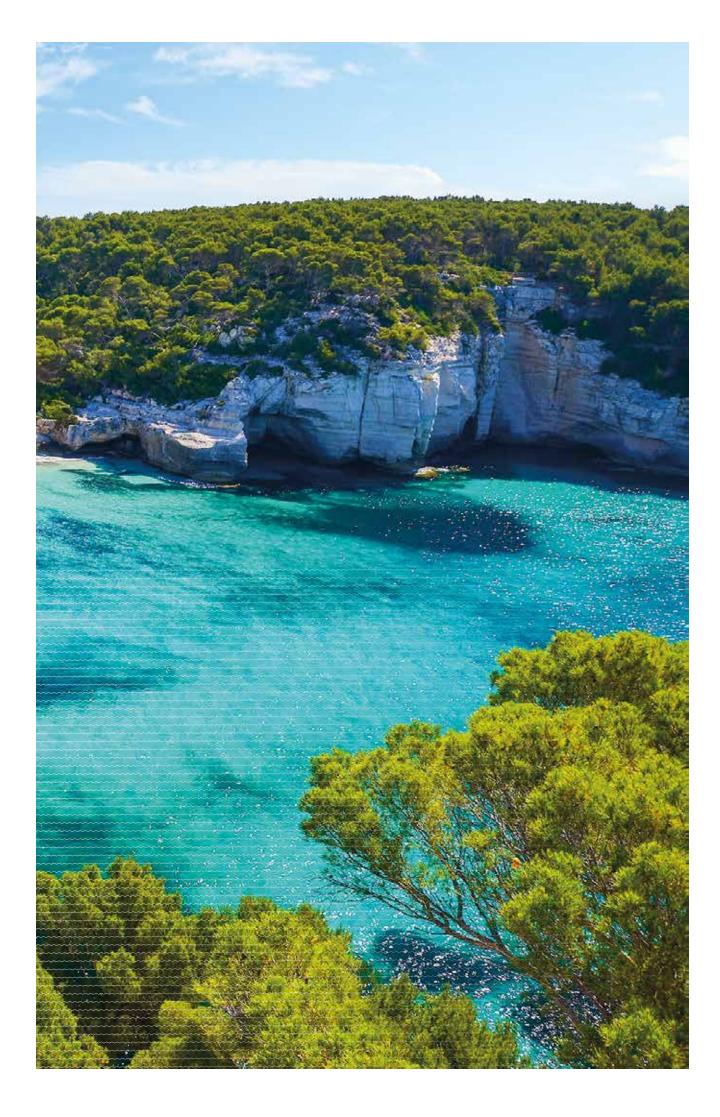
<sup>57</sup> https://earthcheck.org/

<sup>58</sup> https://www.ecolabeltoolbox.com/en/

<sup>59</sup> https://www.greenseal.org/

<sup>60</sup> https://www.greenkey.global/

<sup>61</sup> http://www.ecolabelindex.com/ecolabels/?st=category,tourism



# Coastal and Maritime Tourism in World Marine Regions



This section focuses on maritime & coastal tourism management and structure in six major marine regions. The geographical, political, ecological, economic specificities, as well as environmental governance schemes, key tourism actors and policies are underlined to provide the state of the art of CMT in these regions.

### **Mediterranean Sea**

## Geographic, political and environmental profile

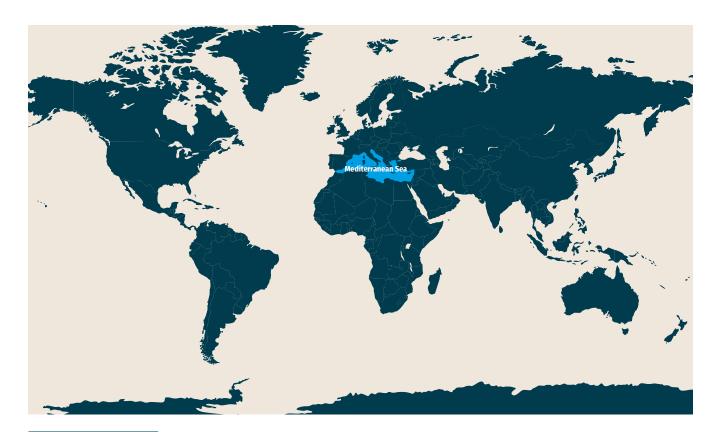
The Mediterranean Sea is the largest of the semi-closed European seas: its basin area covers almost 2.6 million km<sup>2</sup>

and 0.82% of the world's ocean surface, overlooked by 22 countries that share environmental, climatic, historical and cultural ties, over 46.000 km of coastline<sup>1</sup>. The region is also characterized by strong imbalances: economic, humanitarian crises, climate change and population growth. which create a rift between the North and South shores of the Mediterranean, creating a highly unequal regional context. The Mediterranean region is home to about 480 million people spread across three continents, with an extremely varied population density. Approximately, one third of the Mediterranean population lives in coastal areas<sup>2</sup>, where tourism is concentrated, leading to urban sprawl and artificialization of the coast. Tourism is the main economic sector in the Mediterranean region, representing 30% of global tourism flow and it is the world's principal regional tourist destination3.

<sup>1</sup> EEA - UNEP/MAP (2014): "Horizon 2020 Mediterranean report Toward shared environmental information systems". EEA Technical report No 6, 142 pp. https://www.eea.europa.eu/publications/horizon-2020-mediterranean-report

<sup>2</sup> https://www.eea.europa.eu/soer-2015/countries/mediterranean

<sup>3</sup> https://www.e-unwto.org/doi/pdf/10.18111/9789284419876



→ Figure 12: Mediterranean Sea Source: Google Maps

The Mediterranean Sea hosts between 7% and 9% of the world's marine biodiversity of which 20-30% endemic species, and benefits from strong protection with 1,231 marine protected areas covering 179,798 km²⁴. However, 51% of native marine fish species and subspecies in the Mediterranean are in danger of extinction and 22 species (4%) are listed as near threatened⁵. Pressures contributing to the loss of habitats, include unsustainable exploitation of resources, pollution, climate change, eutrophication and invasive marine species⁶. Biodiversity is fundamental for the Mediterranean economy, with benefits derived from ecosystem services estimated over €26 billion a year, more than two-thirds of which come from tourism and value derived from nature⁵.

#### Geographical Characteristics of the Region<sup>8</sup>

- States: Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey, Palestina
- Population: 505 million
- Coastal population: 170 200 million (40% of total population)
- Geographical sea extension: 2.6 million km² (0.82% world's ocean surface)
- Coastline: 46,000 kilometres
- Marine fauna: 900 species (IUCN)

→ Source: IUCN<sup>9</sup>, WB, WTTC

- 4 MedPAN et. al. 2016. The 2016 status of Marine Prc RAC. https://drive.google.com/file/d/0Bw8D-TFFFc
- 5 IUCN <a href="https://www.iucn.org/regions/mediterranea">https://www.iucn.org/regions/mediterranea</a>
- Coll, M. et al., (2010): "The Biodiversity of the Mediterranean Sea: Estimates, Patterns, and Threats". PLoS ONE vol. 5, no. 8 e11842.
- 7 · Claudet & Fraschetti, 2010
  - PNUE/ PAM, 2012
  - UNEP/MAP, 2012
  - MedPAN et. al, 2016
  - Interreg Mediterranean Sustainable Tourism, 2017
  - WWF Report, 2017.
- Aggregates and average data taking into account all contracting parties to the Barcelona Convention
- 9 <a href="https://www.iucn.org/regions/mediterranean/about">https://www.iucn.org/regions/mediterranean/about</a>

#### **Governance framework**

In the Mediterranean, the main regional multilateral frameworks related to environmental, marine and tourism governance are the Barcelona Convention (for all Riparian countries), the EU policies (for Northern Mediterranean countries) and the Union for the Mediterranean (UfM) initiatives (for all Mediterranean countries), as described below.

### Barcelona Convention (BC) and its Mediterranean Action Plan (MAP)

The **Mediterranean Action Plan** (UNEP, 1975) and the **Barcelona Convention** (1976) are ratified by 22 Mediterranean Riparian countries, as an intergovernmental agreement aimed to protect the regional coastal and marine environment.

Framework Directive (MSFD, 2008) aiming to achieve Good Environmental Status (GES) of the EU's marine waters by 2020<sup>16</sup> and the Directive for Maritime Spatial Planning (MSP, 2014)<sup>17</sup>. The European Union also launched an Ecolabel<sup>18</sup> initiative to help consumers to choose environmental certified products and tourism services. Moreover, tourism policy is also influenced by the mobility framework of the EU. Its main tool is the Schengen Area, which abolishes checks at the EU's internal borders, thus facilitating free internal movement of people in the Area (except for Croatia and Cyprus in the NMCs). Other policy relevant to tourism development in the Mediterranean include initiatives in transport, consumer protection and visa allowances.

| Version and Protocols   | Relevance to tourism  | Specific to Sustainable Tourism   |  |  |
|---|---|---|--|--|
| Convention (1976) **  * Tourism is not mentioned  * Article 5 and 6 aims at preventing pollution from ships (includes cruise ships) |   | No  |  |  |
| Convention (1995) <sup>11</sup>   | Tourism is not mentioned  | No  |  |  |
| Protocol for the Protection against<br>Pollution from Land-Based Sources<br>and Activities (1980) <sup>12</sup>                     | Identifies tourism as an economic activity to regard when setting priorities for action plans                                 | Recognises the environmental pressures of the tourism industry  |  |  |
| Integrated Coastal Zone Manage-<br>ment (ICZM) in the Mediterranean<br>(2008) <sup>13</sup>   | Integrates article 9 on Tourism, sporting and recreational activities.  | (i) Encourage sustainable coastal tourism that preserves coastal ecosystems, natural resources, cultural heritage and landscapes;     (ii) Promote specific forms of coastal tourism, including cultural, rural and ecotourism, while respecting the traditions of local populations;     (iii) Regulate or, where necessary, prohibit the practice of various sporting and recreational activities, including recreational fishing and shellfish extraction. |  |  |
| Regional Action Plan on Sustainable<br>Consumption and Production in<br>the Mediterranean (2016) <sup>14</sup>                      | It promotes a specific regional action plan for sustainable tourism with several objectives.                                  | <ul> <li>3.1: Reduce environmental impacts of tourism ();</li> <li>3.2: Promote regulatory, legislative and financial measures (on) sustainable consumption and production in tourism ()</li> <li>3.3: () support sustainable destinations and green tourism services ()</li> </ul>   |  |  |
| Mediterranean Strategy for<br>Sustainable Development<br>(MSSD) 2016-2025 (2016) <sup>15</sup>                                      | Tourism appears in several objectives and actions of the MSSD, in particular Objectives 2 (rural development) and 3 (cities). | <ul> <li>2.4.3. Sustainable rural tourism</li> <li>3.1.2. Ensure legally-binding</li> <li>instruments for tourism development</li> </ul>  |  |  |

<sup>→</sup> Table 9: Links between Barcelona Convention and Tourism Governance Source: UNEP

#### • Environmental policies in the European Union

At the sub-regional European level, the most important initiatives of the European Union to protect the marine and coastal environment include the **Marine Strategy** 

#### • WestMED initiative<sup>19</sup>

The purpose of the WestMed Initiative, supported by the European Commission and the Union for the Mediterranean (UfM), is to foster sustainable blue growth and jobs, improve safety and security and preserve ecosystems and biodiversity in the Western Mediterranean region. This aims to be achieved through coordination and cooperation among the relevant countries: Algeria, France, Italy, Libya, Malta, Mauritania, Morocco, Portugal, Spain and Tunisia.

<sup>10 &</sup>lt;u>http://wedocs.unep.org/bitstream/id/53143/convention\_eng.pdf</u> (accessed 1 February 2019)

<sup>11</sup> Available at: http://web.unep.org/unepmap/1-barcelona-convention-and-amendments (accessed 1 February 2019)

<sup>12</sup> https://planbleu.org/sites/default/files/upload/files/Barcelona\_convention\_and\_protocols\_2005\_eng.pdf, p.49. (accessed 1 February 2019)

<sup>13</sup> http://web.unep.org/unepmap/8-iczm-protocol

http://web.unep.org/unepmap/regional-action-plan-sustainable-consumption-and-production-mediterranean

<sup>15</sup> http://web.unep.org/unepmap/mediterranean-strategy-sustainable-development-mssd-2016-2025

<sup>16 &</sup>lt;a href="http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index\_en.htm">http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index\_en.htm</a>

<sup>17 &</sup>lt;a href="https://ec.europa.eu/maritimeaffairs/policy/maritime\_spatial\_planning\_en">https://ec.europa.eu/maritimeaffairs/policy/maritime\_spatial\_planning\_en</a>

<sup>18 &</sup>lt;a href="http://ec.europa.eu/environment/ecolabel/">http://ec.europa.eu/environment/ecolabel/</a>

<sup>19</sup> http://www.westmed-initiative.eu/

| INTERNATIONAL FRAMEWORKS                 | DESCRIPTION  | IMPACT ON TOURISM   | RELEVANT POLICIES & REGULATION  |
|--|--|---|---|
| Barcelona Convention                     | The Barcelona Convention commits<br>parties to prevent, reduce and elimi-<br>nate marine pollution and improve<br>sustainability of the Mediterranean<br>basin.                  | Indirect: conservation and<br>prevention of the marine<br>ecosystem.  | Mediterranean Action plan (1995), Bar-<br>celona Convention (1995), SCP AP (2016),<br>MSSD (2016).  |
| EU Environmental<br>and Climate Policies | The EU Environmental Policies and<br>legislation applies to air and water<br>quality, and promotion of low-carbon<br>economy at the regional level.                              | Indirect: restriction over coastal development, wastewater management, emission control (cruises) waste management for ships, protection of biodiversity and definition of protected areas. | Natura 2000 Directive (1992), Marine<br>Strategy Framework Directive (2008),<br>Port Waste Reception Facilities Directive<br>(2000), Maritime Spatial Planning Directing (2014), MRV Regulation (2015), Sulphur Emission Directive (2016), Ecolabel Tourism Decision (2017) |
| EU Mobility Policies                     | The European mobility regulation aims<br>to facilitate the circulation of goods,<br>services and people between Member<br>States in the Schengen Area.                           | Direct: visa regulation, inter-<br>national mobility, EU mobility<br>in Schengen Area   | Schengen Borders Code (Regulation<br>201x), Visa Code (Regulation 2009), VIS<br>Regulation (2008)   |
| EU Tourism Policies                      | The European tourism policy aims to<br>create a favourable environment for<br>the development of tourism through:<br>competitiveness, sustainability, and<br>access to financing | Direct: actions to encourage<br>employment, competitive-<br>ness, quality and sustainabili-<br>ty in the tourism industry   | Blue economy communication (2014),<br>Coastal and Maritime tourism commu-<br>nication (2014), Political framework for<br>tourism communication (2010), European<br>Package Travel Directive (2015)  |
| Marine Conventions                       | International legislations on maritime issues are transposed into EU law that can affect tourism through the cruising and nautical tourism industry and their operations.        | Indirect: control and regulation over ship discharges, training and employment in the shipping and cruising industry  | MARPOL, SOLAS, STCW, UNCLOS III, Regulations on Port State Control inspections  |

<sup>→</sup> Table 10: Main Environmental and Tourism Governance Frameworks in the Mediterranean Source: eco-union

#### **Relevant stakeholders**

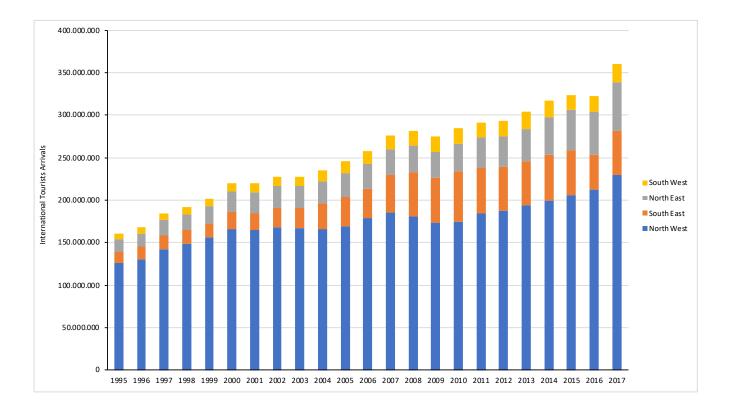
The Mediterranean region is a key economic and political hotspot in Europe and Africa; consequently, it concentrates

a large number of stakeholders exploiting markets, building cooperation and influencing policies at the regional level.

| KEY ACTORS                                  | MAIN ISSUES  | ROLE ON (COASTAL & MARITIME) TOURISM   | FLAGSHIP PROJECTS ON (C&M)<br>TOURISM   |  |  |  |  |  |  |
|---|--|--|---|--|--|--|--|--|--|
| PUBLIC ACTORS                               |  |  |   |  |  |  |  |  |  |
|   |  | Directives on MSP and MSFD, Blue growth strategy, Interreg funds   | EU ecolabels, Westmed initiative, ETIS, Copernicus, European atlas of the sea |  |  |  |  |  |  |
| European Environ-<br>mental Agency<br>(EEA) | Environmental conservation<br>and protection of European<br>natural ecosystems   | Monitoring of the environmental impacts of the tourism industry, environmental policymaking and assessment, as well as citizen participation   | Marine Litter Watch, Tourism and the environment report                       |  |  |  |  |  |  |
| Union for the Medite-<br>rranean (UfM)      | International cooperation,<br>environment, energy, inclusion<br>, transport, business  | Improvement of cooperation and regional dialogue to protect<br>the Mediterranean Sea; Implementation of project and, regional<br>platform on blue Economy                                      | Med Coasts for Blue Growth<br>(MedCoast4BG), MedECC,<br>WestMed               |  |  |  |  |  |  |
| African Union (AU)                          | Regional political and develo-<br>pment cooperation, Infras-<br>tructure and energy, economic<br>affairs, legal affairs, civil<br>society and diaspora | Implementation of the Agenda 2063: Infrastructure for economic integration, including tourism, knowledge on marine and aquatic biodiversity, resource management and protection of ecosystems. | Committee on Transport,<br>Communications and<br>Tourism.                     |  |  |  |  |  |  |

| Arab League  | Cooperation in social, legal,<br>parliamentary, financial, eco-<br>nomic and cultural affairs and<br>conflict resolution | Arab strategy on health and the environment. Facilitate Investments in tourism sectors such as hotels and resorts and other infrastructure.  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
| Arab Maghreb Union   | Free trade, economic growth,<br>industrial, agricultural, com-<br>mercial and social develop-<br>ment                    | Maghrebin charter for the protection of the environment and sustainable development (1992). Cooperation convention in the protection coastal and maritime areas (1991).                    | Promote Blue tourism and ecotourism through workshops and summits.   |  |  |  |  |  |
| UNEP/MAP   | Coordination, development,<br>implementation, follow-up and<br>monitoring of the Barcelona<br>Convention                 | ICZM Protocol, Mediterranean Strategy for Sustainable Development (MSSD) and Sustainable Consumption and Production (sCP) Action Plan  | SUPREME and SIMWEST-<br>MED; Marine litter; Switch-<br>Med initiative  |  |  |  |  |  |
| Plan Bleu/RAC  Regional Activity Centre of UNEP/MAP - Observatory on environment and sustainable development |  | Programmes of activities focusing on sustainable tourism in the Mediterranean. State of Mediterranean Environment and Development - Forecasting report.                                    | BleuTourMed Project,<br>Guidelines for Sustainable<br>Tourism, Blue Economy<br>initiative  |  |  |  |  |  |
| PAP/RAC  | Regional Activity Centre of<br>UNEP/MAP responsible for the<br>coastal management  | Promotion of the ICZM framework for sustainable tourism planning   | CO-EVOLVE project  |  |  |  |  |  |
|  |  | BUSINESS ASSOCIATIONS - PRIVATE ACTORS   |  |  |  |  |  |  |
| Med Cruise   | Association of the Mediterra-<br>nean cruise ports   | Common policies and regulations relating to cruise ports   | The Sustainable Cruise project (LIFE+)   |  |  |  |  |  |
| European Boating<br>Industry   | European leisure marine industry   | Monitoring of EU legislations, initiatives and actions; lobbying actions with members' support; pressures in favour of policies conducive to navigation at national level in the EU sphere | PHAROS4MPAs,<br>Blue Generation  |  |  |  |  |  |
| European Sea Ports<br>Organisation (ESPO)  | Association of European Sea<br>Ports   | Influence European public policy in favour of the port and maritime sectors  | ESPO Environmental report  |  |  |  |  |  |
| HOTREC   | European hospitality sector<br>(Hotels, Restaurants, Bars and<br>Cafes)  | Influence European policies regarding the hospitality sector   | Charter on energy efficiency<br>(2018); guidelines on food<br>waste reduction (2017);<br>Charter for environmentally<br>sustainable tourism (2003) |  |  |  |  |  |
| European Tourism<br>Association (ETOA)   | Trade association of tour ope-<br>rators and tourism suppliers in<br>European destinations                               | Political support and lobbying on European policies regarding the tour operators and tourism suppliers in European destinations.   |  |  |  |  |  |  |
| European Regions<br>Airlines Association<br>(ERA)  | European aviation industry   | Political support and lobbying on European policies regarding air transport (connectivity and airport facilities)  |  |  |  |  |  |  |
|  | INTERNATIONAL NGOS   |  |  |  |  |  |  |  |
| WWF-Med  | Environmental protection NGO   | Actions towards sustainable tourism and public/private partner-<br>ships and supported the finalization of MPA tourism manage-<br>ment plans   | Medtrends  |  |  |  |  |  |
| IUCN-Med   | Sustainability, conservation and cooperation NGO   | Action for Sustainable tourism in Protected Areas  | Projects DestiMED; PLAS-<br>TIMED  |  |  |  |  |  |

<sup>→</sup> Table 11: Key tourism regional actors in the Mediterranean Source: eco-union (based on information available on corporate website)



→ Mediterranean International Tourist Arrivals Trend (1995-2017) Source: eco-union based on UNWTO data, 2018<sup>20</sup>

#### Tourism in the Mediterranean region: between world record and territorial imbalances

**Indicators of Tourism** 

- ITA: 359.636.000 (2017, UNWTO)
- · Average direct GDP contribution: 6.2% (2017, WTTC)
- Average total GDP contribution: 15.4% (2017, WTTC)
- Average direct employment contribution: 5.9% (2017, WTTC)
- Average total employment contribution: 14.8% (2017, WTTC)

The Mediterranean region, with over 350 million national and international tourists, is one of the most popular tourist destination in the world. Sea sand and sun tourism accounts for 11.3% of the regional GDP<sup>21</sup>, and contributes

for 11.5% of employment in total, with an estimated growth of 12.4% in 2026<sup>22</sup>. The tourism sector is in full expansion, tourism flows having grown over 75% since 1995, and could reach 626 million by 2025.

The regional repartition of Mediterranean tourism flows is characterized by strong disequilibrium and inequality, both in terms of tourism flows and economic benefits. Indeed, the North-West of the Mediterranean concentrates 64% of ITA (France 84 million, Spain 65 million, and Italy 48 millions), while the South-East Mediterranean represents only 17%, North-East Mediterranean 14% and South-West Mediterranean 5%<sup>23</sup>. Furthermore, while the total contribution of tourism in the Mediterranean region was estimated at 901 billion dollars in 2015, only 58 billion dollars benefitted to North African countries<sup>24</sup>.

In the last ten years, some Southern Mediterranean countries, such as Egypt and Turkey, have seen significant growth in coastal tourism, which governments have encouraged the private sector to develop important tourism projects in coastal areas<sup>25</sup>. However, tourism remains unstable and volatile given the high sensitivity of this sector to external and internal turbulences. Simultaneous crises, such as social conflicts and political turmoil, terrorism, insecurity, economic slowdown, unemployment, climate change and environmental degradation, have a negative effect on tourism flows<sup>26</sup>.

<sup>20</sup> World Tourism Organization (2018), UNWTO Tourism Highlights, 2018 Edition, UNWTO, Madrid. Available at: <a href="https://www.e-unwto.org/doi/pdf/10.18111/9789284419876">https://www.e-unwto.org/doi/pdf/10.18111/9789284419876</a>

<sup>21</sup> Fosse, J. & Le Tellier, J. (2017) "Tourisme durable en Méditerranée: état des lieux et orientations stratégiques". Plan Bleu. Valbonne. (Cahier du Plan Bleu, 17), 55 pp. Available at: <a href="https://planbleu.org/sites/default/files/publications/cahier17">https://planbleu.org/sites/default/files/publications/cahier17</a> tourisme en web.pdf

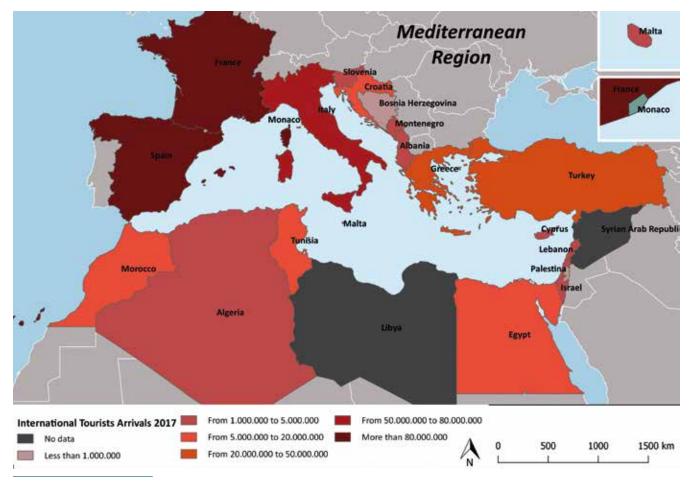
<sup>22</sup> WTTC (2015): "Travel & Tourism Economic Impact 2015 Mediterranean" Available at: <a href="https://zh.wttc.org/-/media/files/reports/economic-impact-re-search/regional-2015/mediterranean2015.pdf">https://zh.wttc.org/-/media/files/reports/economic-impact-re-search/regional-2015/mediterranean2015.pdf</a>

Petrick, K; Fosse, J.; Lammens, H. & Fiorucci, F. (2017): "Blue economy in the Mediterranean". UfM, 71 pp. Available at: <a href="http://www.ecounion.eu/wp-content/uploads/2018/01/UfMS\_Blue-Economy\_Report\_Template-UFM\_FINAL.pdf">http://www.ecounion.eu/wp-content/uploads/2018/01/UfMS\_Blue-Economy\_Report\_Template-UFM\_FINAL.pdf</a>

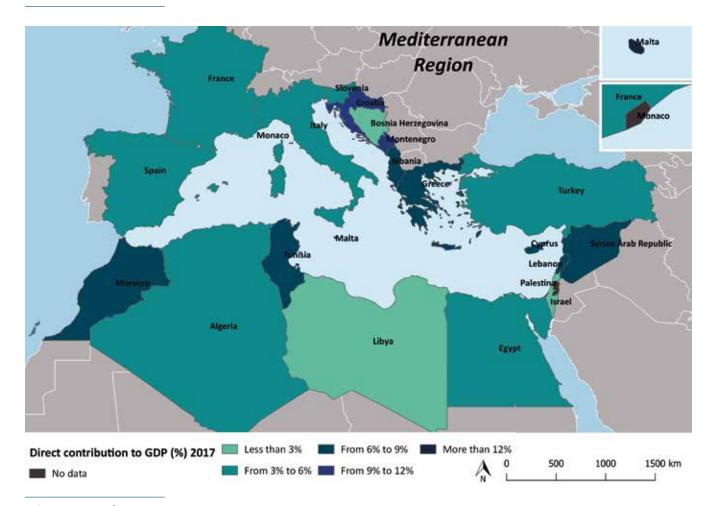
<sup>24</sup> WTTC (2017) "Travel & Tourism Economic Impact North Africa 2017". Available at: <a href="https://zh.wttc.org/-/media/files/reports/economic-impact-re-search/regional-2015/africa2017.pdf">https://zh.wttc.org/-/media/files/reports/economic-impact-re-search/regional-2015/africa2017.pdf</a>

<sup>25</sup> http://www.globalconstructionreview.com/news/egyptian-developers-pl7an-17bn-tou7rist-res7ort/

Fosse, J. & Le Tellier, J. (2017) *"Tourisme durable en Méditerranée : état des lieux et orientations stratégiques"*. Plan Bleu. Valbonne. (Cahier du Plan Bleu, 17), 55 pp. Available at: <a href="https://planbleu.org/sites/default/files/publications/cahier17">https://planbleu.org/sites/default/files/publications/cahier17</a> tourisme en web.pdf



→ Source map: eco-union Source data: UNWTO 2017



<sup>→</sup> Source map: eco-union Source data: WTTC 2018



#### **Environmental impact**

The impacts of tourism on the coastal and maritime areas of the Mediterranean originate mainly from the construction and operations of infrastructures, such as hotels. second-home residencies, ports/marinas, waste treatment facilities, etc., and from maritime and coastal recreational activities, such as nautical tourism, golf courses, water sports, etc. Main environmental impacts of tourism are water and energy consumption for tourism services, e.g. swimming pools, golf courses, accommodation, air conditioning<sup>27</sup>, especially in water sensitive areas<sup>28</sup>, land change and artificialization of the coast, pollution and biodiversity loss.

Marine litter is also a critical issue: in some Mediterranean tourism areas, more than 75% of the annual waste production is generated in summer<sup>29</sup>. Given the anticipated sectoral growth<sup>30</sup>, these environmental and social pressures are likely to increase if appropriate regulation of tourism flows is not implemented. Northern Mediterranean countries are a rather mature tourism destination, most of these pressures tend to be stationary; however, there are likely to increase in the coming years in SMCs.

#### **Barcelona Tourism Carbon Footprint**

In the city of Barcelona, a mature European destination, the carbon footprint of tourism is estimated at 9.6Mt CO<sup>2</sup>eq/year, which represents 97 kg CO<sup>2</sup>eq/visitor per day. The average carbon footprint of a tourist is 112 kg CO<sup>2</sup>eq/ day and 43 kg CO<sup>2</sup>eq/day for a day-tripper. The main source of emissions is arrival and departure transport (96%), and particularly aviation. Regarding GHG emissions in destination, accommodation is responsible for 77% of them<sup>31</sup>.

→ Ocean Asset Value of the Mediterranean Sea Source: WWF3

<sup>-</sup> Gössling, S. (2002): "Global environmental consequences of tourism". In Global Environmental Change, Vol. 12, Issue 4, pp. 283-302

<sup>-</sup> EEA - UNEP/MAP (2014): "Horizon 2020 Mediterranean report Toward shared environmental information systems". EEA Technical report No 6, 142 pp. Available at: https:// www.eea.europa.eu/publications/horizon-2020-mediterranean-report

<sup>-</sup> European Parliamentary Research Service (EPRS) (2017): "Sustainable tourism. The environmental dimension". Briefing March 201, European Union, 10pp. Available at:\_ http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/599327/EPRS\_BRI(2017)599327 EN.pdf

- EEA (2017): "Climate change, impacts and vulnerability in Europe 2016. An indicator-based report" Available at: https://www.eea.europa.eu/publications/climate-chan-

ge-impacts-and-vulnerability-2016

Plan Bleu (2010): "Management of energy air transport and tourism in the Mediterranean", Final report, 77 pp. Available at: https://planbleu.org/ sites/default/files/publications/1-1-en\_transport\_aerien\_0.pdf

Giulietti et al. (2018): "Tourism and the environment Towards a reporting mechanism in Europe". EEA Report, European Topic Centre on Urban Land and Soil Systems (ETC/ULS), 112 p.

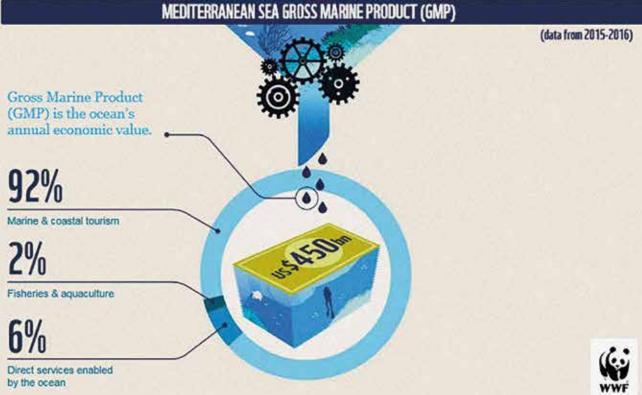
REF: UNWTO

Rico et al. (2019): "Carbon footprint of tourism in Barcelona". In Tourism Management, vol. 70, pp. 491-504 31

https://medpan.org/ensuring-a-sustainable-future-for-the-mediterranean-sea/

### OCEAN ASSET VALUE OF THE MEDITERRANEAN SEA - SHARED WEALTH FUND





<sup>→</sup> Ocean Asset Value of the Mediterranean Sea Source: WWF 33

#### **Dependency of natural ecosystems**

Coastal and Maritime tourism is highly dependent on the quality of natural ecosystems. With 46,000 km of coastline and unique marine and fisheries resources, the Mediterranean Sea represents the fifth largest economy in the region, with an overall value estimated at **US\$5.6 trillion** (4.7 trillion euro), according to a report by WWF<sup>34</sup>. WWF estimates that ocean-related activities in the Mediterranean Sea generate an annual economic value of \$450 billion, representing about **20% of the annual global GDP**, with **tourism accounting for 92%** of the Mediterranean's economic production.

#### **Vulnerability to climate change**

The Mediterranean tourism sector is exposed to growing pressures linked to the effects of climate change. Coastal erosion, for example, is already evident throughout the Mediterranean coast, especially in the Southern part.<sup>35</sup> Lack of water, coastal erosion, rising of sea levels are just some of the challenges that climate change poses to tourism operators and other stakeholders on the shores of the Mediterranean Sea. Although some impacts are still limited, future forecasts will increase rapidly. According to the UfM<sup>36</sup> the most worrying impact of climate change on tourism sector at the medium (2030) and long-term (2050) are in the Eastern (Egypt, Israel, Jordan, Lebanon

and Palestine) and Western (Algeria, Morocco and Tunisia) southern countries:

- Direct impacts: loss of visits and increase in direct costs due to high climate instability that discourages local visitors and particular international visitors.
- Indirect impacts: decrease of attractiveness due to the local biodiversity losses characterizing the destination, as well as the deterioration of local essential infrastructures (transport, hospitality, etc.) due to flood pressure.

Some important direct impacts in the tourism sector are not immediately visible. This causes a distortion in the perception of the risk to climate change in the tourism sector operators, which, to date, have not prioritised the adaptation and mitigation of actions to climate change, increasing the vulnerability of destinations in the Mediterranean coast.

### **Caribbean Sea**

## Geographic, political and environmental profile

The Caribbean Sea covers less than 1% of the world's oceans but it is nonetheless a key ecosystem for the countries of this region, as it directly sustains the economies of

| Level of impac                    |                     |   |   | Near future<br>(2030) |        |   |   |     |         |   |   | Longer term<br>(2050) |         |   |   |     |         |   |   |          |        |   |   |     |         |
|-----------------------------------|---------------------|---|---|-----------------------|--------|---|---|-----|---------|---|---|-----------------------|---------|---|---|-----|---------|---|---|----------|--------|---|---|-----|---------|
| High: ■ Mid:  <br>Data not availa |                     | J | 1 | Eas                   | t<br>P | E | T | Ne: | st<br>M | J | 1 | Eas                   | st<br>P | E | T | Ne: | st<br>M | J | 1 | Eas<br>L | t<br>P | E | V | Ves | st<br>M |
|                                   | Climate instability |   |   |                       | •      | Ē |   |     |         |   |   |                       |         |   |   |     |         |   | • |          | •      |   |   |     |         |
|                                   | Visits affected     |   |   |                       | •      |   |   |     | ı.      |   | • |                       |         |   |   |     |         |   | • |          |        | • |   |     | Ē       |
| Revenues                          | Losses / insurance  |   |   |                       |        |   |   |     |         | • |   |                       |         |   | • |     |         |   | • |          |        |   |   |     |         |
|                                   | Coastal erosion     |   | • |                       |        | Ē | • |     |         | ī |   |                       |         | • | • |     |         |   |   |          |        | • |   |     |         |
| Assets                            | Biodiversity losses |   |   | 3                     |        |   | • |     | -       | • |   |                       |         |   |   |     |         |   | • |          |        | • |   |     |         |
|                                   | Cultural heritage   |   |   |                       |        |   | • | E   | 3       |   |   |                       |         |   |   |     | 200     |   | • |          |        | • | • |     |         |
|                                   | Water availability  |   | • |                       |        |   |   | b   | 260     | = |   |                       |         |   |   |     |         |   |   |          |        | • | • |     |         |
| Services                          | Infrastructures     |   | • |                       | •      |   |   | 000 |         |   |   |                       |         |   | • | •   |         |   |   | 100      |        | • | • | •   | •       |

→ Impact of Climate Change on the Tourism Sector in the Southern Mediterranean Countries<sup>37</sup> Source: UfM, 2018

Randone et al. (2017): "Reviving the Economy of the Mediterranean Sea: Actions for a Sustainable future", WWF Mediterranean Marine Initiative, Rome, 64 pp. Available at: <a href="http://awsassets.wwfffr.panda.org/downloads/170927">http://awsassets.wwfffr.panda.org/downloads/170927</a> rapport reviving mediterranean sea economy.pdf

UfM (2018): "Climate change impact on the tourism sector in the southern Mediterranean. Foreseen developments and policy measures". Final Report, 83 pp. Available at: <a href="https://ufmsecretariat.org/wp-content/uploads/2018/11/UfMReport\_ClimateChangeAndTourism.pdf">https://ufmsecretariat.org/wp-content/uploads/2018/11/UfMReport\_ClimateChangeAndTourism.pdf</a>

<sup>36</sup> Ibid.



→ Caribabean Sea Source: Google Maps

37 territories<sup>38</sup>. The region is also the second most integrated after Europe, as several institutions support economic and political cooperation. The region is home to 44 million people, of which 41 million live within 10 km of the coast.

The Caribbean Sea encompasses four Large Marine Ecosystems (LMEs)<sup>39</sup> considered a global hotspot for marine biodiversity. Indeed, the Caribbean ecosystems host 7% of global coral reefs and 13% of world mangroves<sup>40</sup>. This biodiversity is crucial to the economy, estimated at 407 billion USD \$ in 2012, of which 47 billion USD \$<sup>41</sup> benefit to tourism. Biodiversity is managed through the CAMPAM (Caribbean Marine Protected Area Management) network, but out of the 285 MPAs identified in 2004, only 6% were considered to have "complete" protection, and 48% were considered to have inefficient protection<sup>42</sup>. Important ecosystemic degradation was observed in the region, with an important

decline in coral and mangrove coverage over the last 30 years. Indeed, 75% of Caribbean reefs are considered at risk from anthropogenic impacts: over a third are located within 2 km of inhabited land areas<sup>43</sup>.

#### Geographical Characteristics of the Region

- States: Antigua and Barbuda, Bahamas\*, Barbados, Belize\*, Colombia, Costa Rica, Cuba, Dominica, the Dominican Republic, France (Guiana), Grenada, Guatemala, Guyana\*, Haiti, Jamaica, Mexico, the Netherlands (Curacao, St. Maarten), Nicaragua, Panama, Puerto Rico, St. Kitts and Nevis\*, Saint Lucia, St. Vincent and the Grenadines, Suriname\*, Trinidad and Tobago, United Kingdom (British Virgin Islands, Cayman Islands), United States (US Virgin Islands), Venezuela.
- Population: 746 million
- Coastal population: 41 million (living on within 10 km coasts)44
- Geographical sea extension: 2,754,000 km<sup>2</sup>

\*not signatories of Cartagena convention45

<sup>38</sup> World Bank (2016): "Toward a blue economy: a promise for sustainable growth in the Caribbean: main report". Available at: <a href="http://documents.world-bank.org/curated/en/965641473449861013/pdf/AUS16344-REVISED-v1-BlueEconomy-FullReport-Oct3.pdf">http://documents.world-bank.org/curated/en/965641473449861013/pdf/AUS16344-REVISED-v1-BlueEconomy-FullReport-Oct3.pdf</a>

The four LMEs in Caribbean sea are: the North Brazil Shelf, the Caribbean, the Gulf of Mexico and the Southeast US Continental Shelf

<sup>40</sup> Augier, D. (2010): "Les écosystèmes marins de la Caraïbes: identification, diffusion et mode de gestion". Études caribéennes (On line). Available at: <a href="https://journals.openedition.org/etudescaribeennes/4343">https://journals.openedition.org/etudescaribeennes/4343</a>

<sup>41</sup> World Bank (2016): "Toward a blue economy: a promise for sustainable growth in the Caribbean: main report". Available at: <a href="http://documents.world-bank.org/curated/en/965641473449861013/pdf/AUS16344-REVISED-v1-BlueEconomy-FullReport-Oct3.pdf">http://documents.world-bank.org/curated/en/965641473449861013/pdf/AUS16344-REVISED-v1-BlueEconomy-FullReport-Oct3.pdf</a>

Augier, D. (2010): "Les écosystèmes marins de la Caraïbes: identification, diffusion et mode de gestion". Études caribéennes (On line). Available at: <a href="https://journals.openedition.org/etudescaribeennes/4343">https://journals.openedition.org/etudescaribeennes/4343</a>

<sup>43</sup> ibid.

<sup>44</sup> World Bank (2016): "Toward a blue economy: a promise for sustainable growth in the Caribbean: main report". Available at: <a href="http://documents.world-bank.org/curated/en/965641473449861013/pdf/AUS16344-REVISED-v1-BlueEconomy-FullReport-Oct3.pdf">http://documents.world-bank.org/curated/en/965641473449861013/pdf/AUS16344-REVISED-v1-BlueEconomy-FullReport-Oct3.pdf</a>

<sup>45 &</sup>lt;a href="http://www.cep.unep.org/pubs/legislation/cartstatus.html">http://www.cep.unep.org/pubs/legislation/cartstatus.html</a>

#### **Governance framework**

#### The Cartagena Convention

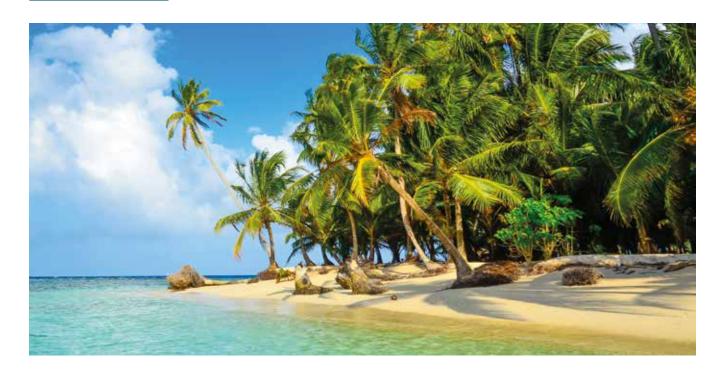
The Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (WCR), commonly referred to as the Cartagena Convention, aims at protecting the Caribbean Sea. It was adopted in 1983 with 25 Caribbean states ratifying it. Three protocols support the

Convention: the 1983 Protocol on Oil Spills (1983), the Protocol concerning Specially Protected Areas and Wildlife (SPAW, 1990), and the Protocol concerning Pollution from Land-Based Sources and Activities on Oil Spills (LBS protocol, 1999).

Other relevant environmental legal frameworks in the Caribbean Sea include MARPOL Convention on Prevention of Pollution from Ships and the UN convention on the law of the Sea (UNCLOS).

| Version and Protocols   | Relevance to tourism  | Specific to Sustainable Tourism   |
|---|---|---|
| Cartagena Convention (1983)   | Tourism is not mentioned in the Agreement   | <ul> <li>No relevant strategy to sustainable tourism</li> <li>The Secretariat has developed a guideline on best practices for coastal tourism (1997) and an assessment of ecotourism (1994)<sup>46</sup></li> </ul> |
| Oil Spills Protocol (1983)  | Recognises that coastal tourism should be protected from oil spills.  | <ul> <li>No mention of sustainable tourism</li> <li>No relevant strategies on sustainable tourism</li> </ul>  |
| Protocol Concerning Specially Pro-<br>tected Areas and Wildlife (SPAW,<br>1990)   | <ul> <li>Article 5 enforces parties to take measures<br/>that regulate tourism activities that might<br/>endanger ecosystems of protected areas</li> <li>Article 17 enforces parties to compile an inven-<br/>tory of areas with tourist value</li> </ul> | <ul> <li>No mention of sustainable tourism</li> <li>No relevant strategies on sustainable tourism</li> </ul>  |
| Protocol Concerning Pollution from<br>Land-Based Sources and Activities<br>(1999) | Tourism is not mentioned Recognises the "recreational" value of the marine and coastal ecosystems of the Wider Caribbean Region   | No mention of sustainable tourism     No relevant strategies on sustainable tourism   |

<sup>→</sup> Table 12: Cartagena Convention and tourism management Source: Cartagena Convention<sup>47</sup>



| THEMES                          | DESCRIPTION   | IMPACT ON TOURISM   | RELEVANT POLICY & REGULATION     |
|---------------------------------|---|---|----------------------------------|
| Cartagena Conven-<br>tion       | Focus on preventing pollution and ensure sound environmental management, avoid oil spill, protect special areas for wildlife, reduce pollution from land-based sources and activities.  | Indirect: conserva-<br>tion and protection<br>of the marine<br>ecosystem. | No specific to tourism           |
| Maritime and Sea<br>conventions | Applies to waste management and pollution from ships. The Caribbean region has a special status under the MARPOL Convention: it was declared a special area for Garbage disposal (2011) and Emission Control (2014) <sup>48</sup> . | Indirect: pollution<br>prevention<br>EU Package Travel<br>Directive       | MARPOL (1978), UNCLOS III (1982) |

#### **Relevant stakeholders**

Despite the lack of a specific strategy on sustainable tourism under the framework of the Cartagena Convention, the Caribbean region has now a developed and still growing tourism market because of the attractiveness of its landscapes and climate. Consequently, actors of the conventional and sustainable tourism in the region are numerous. The fact that some territories are European or American also contributes to the structuration of the sector.

→ Table 13: Tourism and Environmental Framework in the Caribbean Source: eco-union

| KEY ACTORS  | SHORT DESCRIPTION /<br>[AREAS OF FOCUS]   | ROLE ON (COASTAL & MARITIME) TOURISM  | FLAGSHIP PROJECTS ON (C&M) TOURISM  |  |  |  |  |
|---|---|---|---|--|--|--|--|
|   |   | PUBLIC ACTORS   |   |  |  |  |  |
| Caribbean Tourism Orga-<br>nization (CTO)             | Public (32 states) and private (industry) tourism alliance, focusing on employment, economic growth, destination promotion, financial tools, sustainability, blue economy | Tourism policies in the Caribbean and follow-up to the implementation; advisory services to international institutions, national governments and public / private organizations | Climate Smart and Sustainable Carib-<br>bean Tourism Industry;<br>Sustainable Destinations Alliance for the<br>Americas (SDAA); Caribbean Sustainable<br>Tourism Policy Framework               |  |  |  |  |
| Caribbean Community<br>and Common Market<br>(CARICOM) | Political and economic cooperation between 15 Caribbean states  | Coordination of the policies of the member countries on tourism; cooperation between countries; external economic and political agreements, strategic planning                  | Coastal Protection for Climate Change;<br>Adaptation in the Small Island States in<br>the Caribbean (KfW)   |  |  |  |  |
| Association of Caribbean<br>States (ACS)              | International cooperation<br>between 25 Caribbean states<br>on environment, energy, trade,<br>shipping  | Conservation and protection of Caribbean sea;<br>the establishment of the Caribbean Sustainable<br>Tourist Zone (CSTZ)  | The Sustainable Tourism Zone of The<br>Greater Caribbean Project; Meeting of<br>the Special Committee on Sustainable<br>Tourism   |  |  |  |  |
| Organisation of Eastern<br>Caribbean States (OECS)    | International cooperation<br>between 7 states on human<br>rights, governance, economic<br>harmonisation, sustainable<br>development.                                      | Harmonisation and coordination of tourism policies in the region. Common strategic plan.  | Development programs and strategic plans  |  |  |  |  |
|   | BUSINESS ASSOCIATIONS AND PRIVATE ACTORS  |   |   |  |  |  |  |
| Florida-Caribbean Cruise<br>Association (FCCA)        | Cruise industry Association in<br>Florida-Caribbean region  | Political and economic agreements for the growth of the cruise sector in the Caribbean  | FCCA/Aquila Tour Guide Excellence<br>Program (International Certification &<br>Training Program); Environmental Pro-<br>jects (Cleaning Beaches/Road; Hurricane<br>Clean-up; Community Project) |  |  |  |  |

| Caribbean Hotel and<br>Tourism Association<br>(CHTA)             | Business association of<br>Caribbean hotels and tourism<br>facilities  | Policy interventions on tourism management<br>Training, Marketing   | CHENACT Caribbean Hotel Energy<br>Efficiency Action Program; Caribbean<br>Alliance for Sustainable Tourism   |  |  |
|--|--|---|--|--|--|
| Caribbean Shipping<br>Association (CSA)                          | Caribbean shipping industry association  | Economic development and regional forum of<br>the maritime industry; Political support and<br>lobbying  | Partnership and Lobby  |  |  |
| American Association of<br>Port Authorities (AAPA)               | American Port authority community  | Political support and lobbying of port community  | Partnership and Lobby  |  |  |
|  |  | INTERNATIONAL NGOs  |  |  |  |
| Caribbean Natural<br>Resource Institute<br>(CANARI)              | Management of natural resources, environmental governance  | Facilitation and participatory approaches to natural resource governance to conserve biodiversity, enhancement of ecosystem goods and services, livelihood benefits and wellbeing of Caribbean population | Community-based tourism initiatives<br>in the Windwar Islands; Environmental<br>Management Legal And Policy Framewor-<br>ks In Grenada, Saint Lucia, St. Kitts And<br>Nevis And Montserrat |  |  |
| WWF - Latin America and<br>Caribe (LAC)                          | Environmental protection   | Supported actions for species and priority sites finalization, MPA management; work with local communities, decision makers and people to conserve unique habitats and species                            | Coalition to Save Belize's Heritage  |  |  |
| Wider Caribbean Sea<br>Turtle Conservation<br>Network (WIDECAST) | Conservation Caribbean Sea<br>Turtle   | Defence, monitoring and supported actions<br>for eco-tourism in marine coastal areas in<br>Caribbean Sea  | Turtle Eco-tourism Programs (Safeguarding Sea Turtle, Network Protection of sea turtle)  |  |  |
| IUCN Mexico Central<br>America & Caribbean                       | Sustainability conservation of<br>natural areas, the empower-<br>ment of civil society, the<br>generation of knowledge,<br>cooperation | Action for Sustainable tourism in Protected<br>Areas  | Biodiversity and Protected Areas<br>Management; Regional Costal Biodiver-<br>sity Project; Plastic Waste Free Islands<br>project (Caribbean SIDS)  |  |  |

→ Table 14: Key Tourism Actors in the Caribbean Sea Source: eco-union

## Tourism in the Caribbean: a Cornerstone of the Economy

#### **Indicators of Tourism**

- ITA: 70.375.300 (2016, World Bank Data)
- Average direct GDP contribution: 7% (2017, WTTC)
- Average total GDP contribution: 20% (2017, WTTC)
- Average direct employment contribution: 7% (2017, WTTC)
- Average total employment contribution: 19,5% (2017, WTTC)

With 70.3 million tourists in 2016 and an anticipated growth of between 2% and 3% in tourist arrivals for 2018<sup>49</sup>, tourism is a crucial contributor to Caribbean economies<sup>50</sup>. In 2017, the travel and tourism industry accounted for 20% of GDP and 19% of employment<sup>51</sup>, a contribution expected to

increase. The region is the most tourism-dependent in the world and the main tourism products are "sea-sand-sun" vacations and cruising with 27 million passengers cruising through the Caribbean in 2017<sup>52</sup>.

Caribbean SIDS in particularly dependant on cruise tourism, where cruise passengers account for over a half of all international arrivals. In Dominica and Saint Kitts and Nevis, cruises represent the 88%, 79% and 75% of the arrivals total. Although Caribbean economies rely strongly on tourism, a significant proportion of tourism assets are foreign-owned, which results in high levels of leakage for local economies. This is especially relevant for "all inclusive" vacation products, which represent a significant proportion of tourism flows.

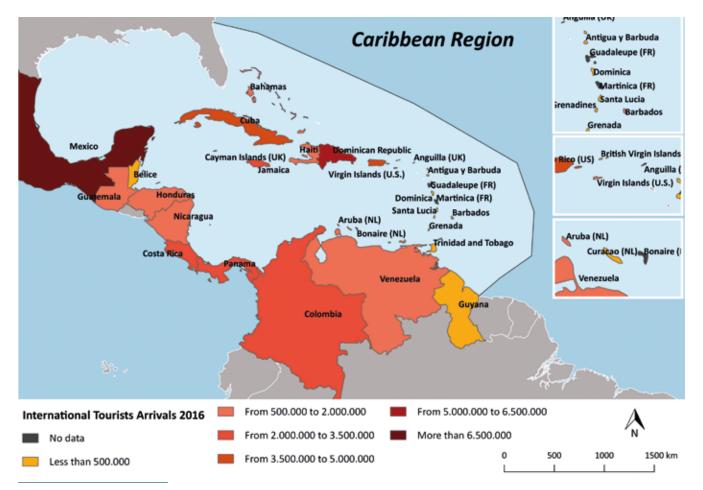
Despite important attractiveness, Caribbean economies are fragile, and many countries are transitioning their economies from colonial or annuity economy to sustainable ones. Furthermore, long standing issues of poverty, inequality and unemployment slow down the economic and social development economies. Additional factors such as high level of sovereign debt —estimated at 79% of

<sup>49</sup> Caribbean Tourism Organization, Key Data for 2017: https://create.piktochart.com/embed/27958259-key-stats-from-the-caribbean-tourism-organization

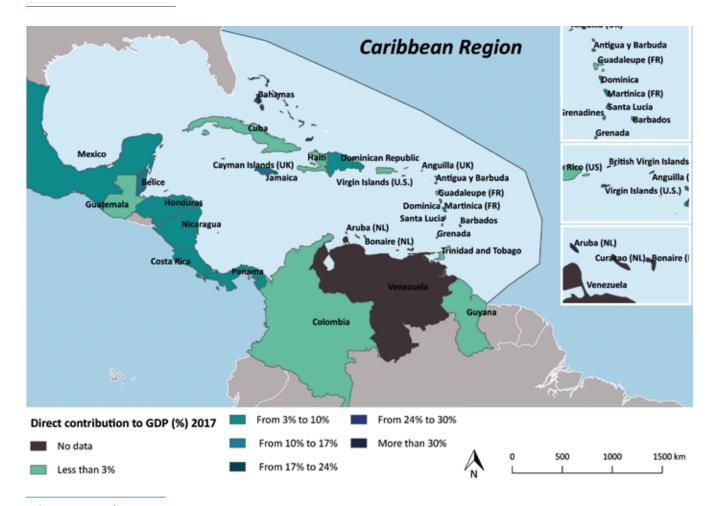
<sup>50</sup> Caribbean Tourism Organization, Key Data for 2017: https://create.piktochart.com/embed/27958259-key-stats-from-the-caribbean-tourism-organization

Caribbean Development Bank (2017): "Caribbean Economic Review, 2018 Outlook", 22 pp. Available at: <a href="https://issuu.com/caribank/docs/cdb\_2017\_ca-ribbean\_economic\_review">https://issuu.com/caribank/docs/cdb\_2017\_ca-ribbean\_economic\_review</a>

<sup>62</sup> Caribbean Tourism Organization, 2018 <a href="http://travelmarketsinsider.net/cto-caribbean-tourism-performance-report-2017-some-growth-after-hurri-cane-impact-recovery-underway/">http://travelmarketsinsider.net/cto-caribbean-tourism-performance-report-2017-some-growth-after-hurri-cane-impact-recovery-underway/</a>



→ Source map: eco-union Source data: World Bank Data 2017



<sup>→</sup> Source map: eco-union Source data: WTTC 2018



→ Punta Cana

the GDP in 2011 — or dependence on natural resource and vulnerability to climate change emphasize vulnerability .

#### **Environmental impact**

Overfishing, coastal development and pollution are some of the key drivers of environmental impacts identified in the Caribbean Sea. Most specifically, the coastal development and overall impact of the tourism industry has had a significant footprint over concerned ecosystems.

Tourism in this region results in water pollution —85% of waste waters releases are untreated running off from high manufactured grounds of tourist facilities, such as golf courses, gardens, and agricultural terrains, having high levels of marine litter and plastic pollution —the largest concentration level in comparison to other LMES—, clearance of natural habitats at the coast due to construction, dredging waterways for sea transport, and increase of water consumption and, consequently, reduction of water security. In addition, there is a high risk of saltwater intrusion in freshwater reserves and the overlap between the high season and dry season.

#### Dependency on natural ecosystems

According to a recent report from The Nature Conservancy<sup>53</sup>, reef-adjacent expenditure is estimated at \$5.7 billion

annually and drives some 7.4 million visitors in the Caribbean. Total values for all reef-associated tourism (on-reef and reef-adjacent) are now estimated at over \$7.9 billion of expenditure and over 11 million visitors, with average values of 660 visitors and \$473,000 per square kilometre of reef per year. The countries most dependent on reef-adjacent tourism include many small-island nations —Anguilla, Antigua and Barbuda, Bermuda, St Kitts and Nevis and St Martin— where there may be relatively few alternatives to reef adjacent tourism. Only 35% of reefs, in just seven jurisdictions, are not used by the travel and tourism sector, indicating that there is very little space for movement of activities to new areas.

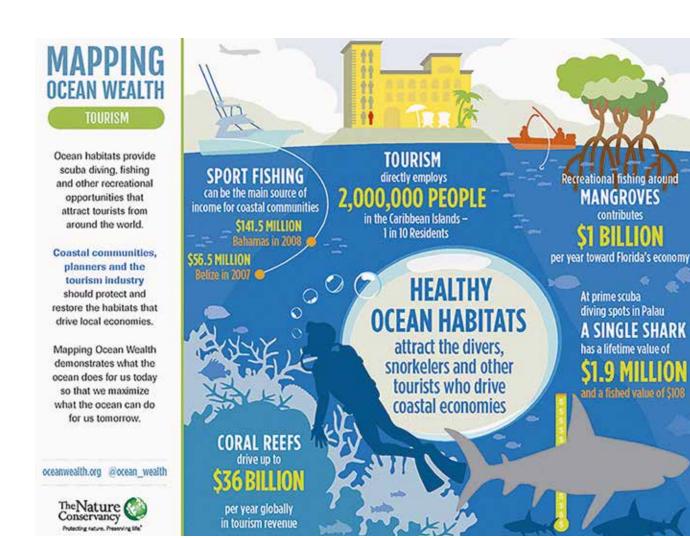
#### **Vulnerability to climate change**

The Caribbean has been classified as one of the tourist regions more vulnerable to climate change. The most developed resorts have beaches of 30 meters long at high tide; therefore, if the sea level increases 0.5 m, tourism income is expected to fall by 62% on Barbados and 34% on Bonaire<sup>54</sup>.

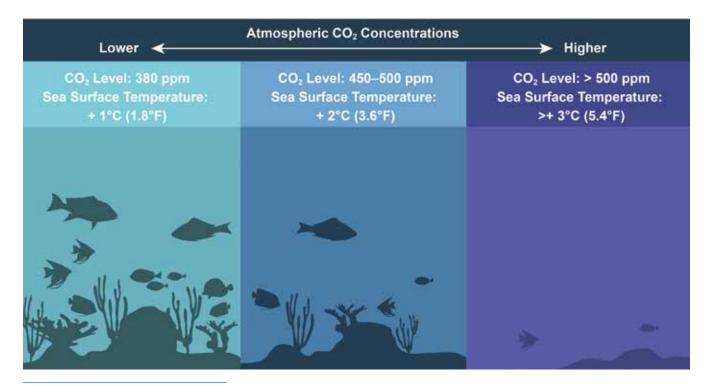
In addition, climate change will also cause water scarcity, a reduction in ecosystem services and greater risks for agriculture, human health, and wildlife. Some locations within the Caribbean may experience longer dry seasons

Estimating Reef-Adjacent Tourism Value in the Caribbean, The Nature Conservancy, 2018

<sup>54</sup> Pulwarty et al. (2010): "Caribbean Islands in a changing climate". In Environment Magazine, vol. 52, No. 6, pp. 16-27.



→ Mapping Ocean Wealth - CMT Source: The Nature Conservancy<sup>55</sup>



→ Climate Change Effects on Coral Sources: The National Climate Assessment (NCA), based in NOAA and USFS, 2018<sup>56</sup>

<sup>55 &</sup>lt;a href="https://blogs.worldbank.org/voices/Sustainable-Tourism-Can-Drive-the-Blue-Economy">https://blogs.worldbank.org/voices/Sustainable-Tourism-Can-Drive-the-Blue-Economy</a>

and shorter, but wetter, wet seasons in the future. Another important significant threat is the acidification of the oceans associated with rises in carbon dioxide (CO²) and ocean warming, which can cause shifts in habitats composing the coral reef ecosystem. The risk of climate change with human-caused stressors increases vulnerability and accelerates habitat loss and degradation<sup>57</sup>.

The World Bank estimates that the potential economic impact of climate change on the CARICOM countries would be between 5.6 % of the GDP (low scenario) to more than 34 % of the GDP (high scenario). According to these data, 66% of the population will be affected by 2080<sup>58</sup>, and the most affected activity will be tourism, which in some states covers almost 60 % of the economic revenues<sup>59</sup>.

degradation with 161 species listed as threatened and more than 50% of fish stocks either fully exploited or overexploited. Moreover, the coverage of strategic habitats such as mangroves, salt marshes, seagrass beds, and coral reefs have significantly decreased over the last 40 years. These ecosystems are important, as they support local fisheries and are assets to tourism. The WIO region is vulnerable to degradation in maritime ecosystems; several of its members are among the poorest countries in the world and the economy relies heavily upon fisheries and small-scale artisanal fisheries which are estimated to support over a quarter of fishers. The annual "gross marine product" of the WIO is estimated at US\$20.8 billion annually.

### **Western Indian Ocean**

## Geographic, political and environmental profile

The Western Indian Ocean (WIO) stretches over 15,000 km of coastline, covering 30 million km² (8.1% of the global ocean surface)<sup>60</sup>. The total population of the region was over 220 million people in 2017, and 60 million of them live along 100 km of the shoreline<sup>61</sup>. The region is marked with high levels of population density and population growth, in particular, in coastal areas, because the total population is expected to double by 2050<sup>62</sup>.

The Western Indian Ocean is home to 108 species of sharks, including endemic 11 species, and 66 species of states of skates, and around 2,086 species of fish live in its coral reefs. South-Western Indian Ocean is an important breeding and feeding area for five of the seven species of the world's marine turtles. There are relevant nesting sites in Comoros, Seychelles and Iles Eparses<sup>63</sup>.

In the line of CBD targets, 130,000 km² (2% of EEZs) have been placed under MPA management. Although marine ecosystems in the WIO region have been evaluated to be in fairly good condition<sup>64</sup>, maritime assets are now under important anthropogenic pressure. Indeed, evidence shows

#### **Geographical Characteristics of the Region**

- States<sup>67</sup>: Comoros, France (Reunion, Mayotte), Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, Tanzania and the
  - Republic of South Africa
- Population: 231 million
- Coastal population: 60 million (living on within 10 km of the coast)
- Geographical sea extension: 30 million km²

#### **Governance framework**

#### Nairobi Convention

The Nairobi Convention, which was first signed in 1985 and entered into force in 1996, is the main legal instrument protecting the marine environment of the West Indian Ocean. Its contracting parties are Comoros, France, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, Tanzania and the Republic of South Africa. In 2010, the Convention was composed of a Secretariat, a set of National Focal Points, the Partners of the Convention, expert groups/task forces, and the Regional Coordinating Unit (RCU).

<sup>57</sup> USGCRP (2018): "Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment", Volume II, Chapt. 20, U.S. Caribbean Available at: <a href="https://nca2018.globalchange.gov/chapter/20/">https://nca2018.globalchange.gov/chapter/20/</a>

<sup>8</sup> Pulwarty et al. (2010): "Caribbean Islands in a changing climate". In Environment Magazine, vol. 52, No. 6, pp. 16-27.

<sup>59</sup> USGCRP (2018): "Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment", Volume II, Chapt. 20, U.S. Caribbean <a href="https://nca2018.globalchange.gov/chapter/20/">https://nca2018.globalchange.gov/chapter/20/</a>

<sup>60</sup> Obura, D. et al. (2017): "Reviving the Western Indian Ocean Economy: Actions for a Sustainable Future". WWF International, Gland, Switzerland. 64 pp. Available at: https://sustainabledevelopment.un.org/content/documents/13692WWF2.pdf

<sup>61</sup> ibid

<sup>62</sup> Secretariat for the Nairobi Convention, Vision: A Prosperous Western Indians Ocean Region with Healthy Rivers, Coasts and Oceans

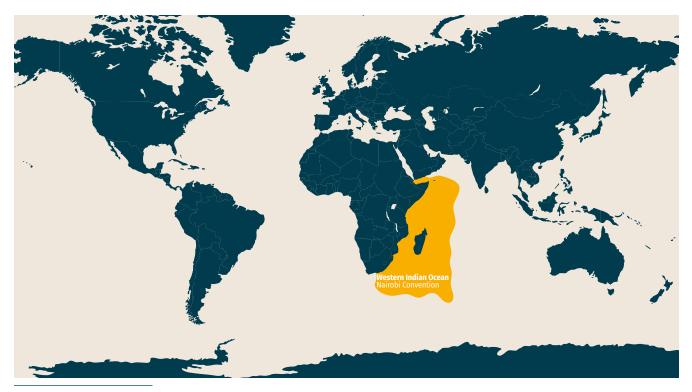
<sup>63 &</sup>lt;a href="https://www.cepf.net/our-work/biodiversity-hotspots/madagascar-and-indian-ocean-islands/species">https://www.cepf.net/our-work/biodiversity-hotspots/madagascar-and-indian-ocean-islands/species</a>

NEP-Nairobi Convention and WIOMSA (2015): "The Regional State of the Coast Report: Western Indian Ocean". UNEP and WIOMSA, Nairobi, Kenya, 546 pp. Available at: http://wedocs.unep.org/bitstream/handle/20.500.11822/9668/-Regional\_State\_of\_the\_Coast\_Report\_Western\_Indian\_OceanRSOCR\_Final.pdf.pdf?sequence=2&isAllowed=y

Obura, D. et al. (2017): "Reviving the Western Indian Ocean Economy: Actions for a Sustainable Future". WWF International, Gland, Switzerland, 64 pp. Available at: <a href="https://sustainabledevelopment.un.org/content/documents/13692WWF2.pdf">https://sustainabledevelopment.un.org/content/documents/13692WWF2.pdf</a>

<sup>66</sup> Idib.

<sup>67</sup> Nairobi Convention contracting parties



→ Western Indian Ocean Source: eco-union

| Version and Protocols   | Relevance to tourism  | Specific to Sustainable Tourism   |
|---|---|---|
| Nairobi Convention (1985)   | <ul> <li>Tourism is not mentioned in the 1985 Agreement</li> <li>The Secretariat's work programme for the period 2018-2022 refers to tourism once with regard to the intention of engaging in public-private collaborative efforts in marine conservation activities<sup>68</sup></li> <li>The Climate Change strategy for the Nairobi Convention recognises tourism both a significant source of GHGs and a vulnerable sector to climate change (Nairobi Convention, 2016)<sup>69</sup></li> </ul> | The Climate Change strategy for the Nairobi Convention recognises ecotourism as a vulnerable sector to climate change In 2015 the parties adopted decision CP8/10 and CP8/13, which aim at promoting a blue economy in the region (Nairobi Convention, WIOMSA & CSIR, 2017)70 |
| Nairobi Convention (2010)   | <ul> <li>Recognises the grave danger posed by land based sources to the marine and coastal environment and their impact on coastal tourism</li> <li>Recognises tourism as a priority activity to be considered when developing programmes, plans, and measures<sup>71</sup></li> </ul>  |   |
| Protocol concerning cooperation<br>in combating Marine Pollution in<br>cases of Emergency in the Eastern<br>African Region (1985) | Recognises that coastal tourism should be protected from oil spills.  | No relevant approach to sustainable tourism   |

→ Table 15: Nairobi Convention and its Relations with Tourism Management Source: UN Environment<sup>72</sup>

<sup>68</sup> http://wedocs.unep.org/bitstream/handle/20.500.11822/25759/CP9.2\_Work\_Programme\_EN.pdf?seq

<sup>69</sup> Nairobi Convention (2016). Climate Change Strategy for the Nairobi Convention. Pp 63<wedocs.unep.org/bitstream/handle/20.500.11822/25676/annex8\_climate\_strategy. pdf?sequence=1&isAllowed=y> (accessed 16 April 2019)

<sup>70</sup> Nairobi Convention Secretariat, Western Indian Ocean Marine Science Association & CSIR. 2017. A Case for Marine Spatial Planning in the Blue Economy of the Western Indian Ocean. Retrieved from: https://static1.squarespace.com/static/517fe876e4b03c6b86a4b81b/t/59327624bebafbe3e1e9ecd9/1496479285906/Marine+Spatial+Planning+of+the+Western+Indian+Ocean+Blue+Economy.pdf (Accessed 16 April 2019)

<sup>71</sup> Final Act of the Conference of the Plenipotentiaries for the Adoption of the Protocol for the Protection of the Marine and Coastal Environment of the Western Indian Ocean from land-Based Sources and Activities Adopted in Nairobi, Kenya on 31 March 2010. Retrieved frem: wedocs.unep.org/bitstream/handle/20.500.11822/25901/LBSA\_Protocol\_EN.pdf?sequence=1&isAllowed=y (accessed 16 APril 2019)

<sup>72 &</sup>lt;a href="https://www.unenvironment.org/nairobiconvention/">https://www.unenvironment.org/nairobiconvention/</a>

So far, the decisions adopted in 2015 regarding the promotion of a blue economy in the West Indian Ocean indicate that sustainable tourism is going to be a recurrent activity under discussion and development within the auspices of the Nairobi Convention.

| THEMES                                       | DESCRIPTION   | IMPACT ON TOURISM   | RELEVANT POLICY & REGULATION  |
|--|---|---|---|
| Regional Environ-<br>mental conven-<br>tions | Prevention, reduction and mitigation of pollution and the management of natural resources. Extension of the Nairobi Convention coverage with the adoption of a new ICZM Protocol.   | Indirect: conservation and prevention of the marine ecosystem.  | Nairobi Convention, UN Action Plan for the protection, management and development of the marine and coastal environment of the Eastern African Sea and the South West Atlantic, LBSA Protocol (1996), Protected Areas and Wild Fauna and Flora of the Eastern African Region Protocol (1985), Emergency Marine Pollution Eastern African Region Protocol (1995) |
| Maritime Conven-<br>tions                    | International legislations on maritime issues can affect tourism through the cruising and nautical tourism industry and their operations.   | Indirect: control and<br>regulation over ship<br>discharges, training<br>and employment in the<br>shipping and cruising<br>industry | MARPOL, SOLAS, STCW, UNCLOS III   |
| Regional Mobility<br>Agreements              | The African region has developed mobility policies promoting air transportation at the regional level. By opening and liberalizing the air service and air market, this policies facilitates tourism flows between states by increasing traffic and lowering fares. | Indirect: facilitation of transportation, circulation and entry in the region   | Yamoussoukro Decision (1999), Bilateral Air<br>Services Agreements,   |

<sup>→</sup> Table 16: Tourism and Environmental Framework in the Western Indian Ocean Source: eco-union

#### **Relevant stakeholders**

The Western Indian Ocean tourism market is not homogeneous; e.g. the islands identified as tourism spots for decades in the African coastal market are growing, and the cooperation culture is not developed yet. Consequently, regional actors are few and disparate. In addition, the instability of the region contributes to the creation of many tour operators to guide tourists in the region; therefore, there are many business associations.

| KEY ACTORS  | SHORT DESCRIPTION / [AREAS OF FOCUS]   | IMPACT ON (COASTAL & MARITIME) TOURISM   | FLAGSHIP PROJECTS ON (C&M) TOURISM  |
|---|--|--|---|
|   |  | PUBLIC SECTOR (OIG)  |   |
| Indian Ocean Commission<br>(IOC)                                  | Intergovernmental organization linking 5 countries of the Western Indian Ocean for economic and diplomatic cooperation. [Economic infrastructure, environmental policy]          | Strategic cooperation on the value of the natural heritage; economic cooperation and specific strategy for tourism | Specific strategy on marine ecosystems management                                   |
| Common Market of East and<br>Austral Africa (COMESA)              | Free-trade zone stretching<br>from Tunisia to Zimbabwe for<br>East African countries only.<br>[Trade, economic growth,<br>regional integration]                                  | Development of free trade including tourismin the region   | Economic partnership agreements, economic cooperation strategies                    |
| South African Development<br>Community (SADC)                     | Intergovernmental organiza-<br>tion working on socio-eco-<br>nomic topics, cooperation<br>and security [International<br>cooperation, sustainable<br>development, social issues] | Regional economic integration; Tourism<br>Protocol   | Study on opportunities and constraints of regional cross-border tourism             |
| Regional Tourism Organi-<br>sation of Southern Africa<br>(RETOSA) | Southern African Development Community responsible for tourism development and regional destination marketing [development of tourism, destination marketing]                    | Regional or national policies and mechanisms to facilitate the liberalization of trade in tourism services         | e-Learning Continuing Professional<br>Development (CPD) program for travel<br>trade |

| Indian Ocean Rim Associa-<br>tion (IORA)   | International organization of Indian ocean coastal states for the cooperation between government, business and academics [Blue economy, tourism, sustainability]                                | Regional cooperation in tourism, with the aim of achieving sustainable tourism growth in the region; Promotion of public-private partnerships (PPPs) and tourism trade networks; sharing of experiences and best practices | Workshops about: Development Sustai-<br>nable Tourism Destination Management<br>and Coastal and Marine Tourism                              |
|--|---|--|---|
| Intergovernmental Authority<br>on Development (IGAD)   | Eight-country trade bloc in<br>Africa (Horn of Africa, Nile<br>Valley and the African Great<br>Lakes) [Trade, economic<br>growth, cooperation issues]   | Regional economic cooperation; Development programs Sustainable tourism  | Land Project; Sustainable Tourism Master<br>Plan for IGAD   |
| African Union<br>(AU)  | Union of African states<br>for political and economic<br>cooperation [Regional<br>integration and cooperation,<br>economic policy, monetary<br>policy]  | Political integration and economic cooperation, including tourism and mobility.  | African union Specialized Technical<br>Committee on Transport, Intercontinental<br>and Interregional Infrastructures, Energy<br>and Tourism |
| Vanilla Islands Organization<br>(VIO)  | Organization of cooperation<br>for regional destination<br>marketing [Destination<br>marketing, sustainable<br>development]   | Development of sustainable tourism; creation<br>of clusters on sustainable tourism; Creation of<br>ecotourism, Luxury and golf offer   | Common destination management stra-<br>tegies at regional level   |
|  | BUS   | INESS ASSOCIATIONS AND PRIVATE SECTOR  |   |
| Africa Tourism Association<br>(ATA)  | Trade association with governments and tourism ministers, economic actor (hotels, resorts, airlines) [destination marketing]  | Advocacy for Africa as a travel destination, destination marketing, business-to-business programs, policy-making stakeholder   | Partnerships and lobby  |
| African Travel & Tourism<br>Association (ATTA)   | Tourism business association [destination marketing]  | Business-to-business cooperation, economic development of the tourism sector   | Partnerships and lobby  |
| Association for Promotion of<br>Tourism to Africa (APTA)   | Business association for destination promotion [destination marketing]  | Advocacy for Africa as a travel destination, destination marketing   | Partnerships and lobby, marketing   |
| Association of South African<br>Travel Agents  | Business association of sou-<br>thern African travel agents<br>[destination marketing]  | Business-to-business cooperation, destination marketing  | Partnerships and lobby  |
| Sustainable Tourism Certifi-<br>cation Alliance Africa<br>(ASATA)  | Alliance of sustainable<br>tourism certification stake-<br>holders in Africa [Sustai-<br>nability]  | Approach to sustainable tourism certification throughout the continent; Sharing of best practice and harmonisation among sustainable tourism standards-setting and certification bodies in Africa                          | Advocacy and lobby, impact analysis,<br>share of best practices and common<br>standards   |
|  |   | NGOs   |   |
| African Wildlife Foundation<br>(AWF)   | Continental NGO for the<br>protection of nature [bio-<br>diversity]   | Sustainable tourism partnerships; responsible Safaris; ecotourism based on African wildlife; Protection African wildlife with sustainable tourism  | Canines for Conservation program will<br>curb corruption in Mozambique; part-<br>nership with Thomson Safaris                               |
| Consortium for the Conservation of Coastal & Marine<br>Ecosystems in the Western<br>Indian Ocean (WIO-C) | Group of international and<br>regional NGOs and IOGs ac-<br>tive in marine and coastal<br>ecosystem management in<br>the Western Indian Ocean.<br>[C&M ecosystem manage-<br>ment, biodiversity] | Resilience of coastal socio-ecological systems in the Western Indian Ocean   | Resilient Coasts in the Western Indian<br>Ocean; Regional State of the Coast<br>Report  |
| IUCN - Eastern and Southern<br>Africa  | International organization<br>working in the field of<br>nature conservation and<br>sustainable use of natural<br>resources [biodiversity]  | Action for Sustainable tourism in Protected<br>Areas   | • IUCN Marine Mammal Protected Areas<br>task force; Biodiversity and Protected<br>Areas Management; Resilient Coasts<br>Initiative          |

<sup>→</sup> Table 17: Key Regional Tourism Actors in the Western Indian Ocean Source: eco-union

## Tourism in the Western Indian Ocean: an emerging destination

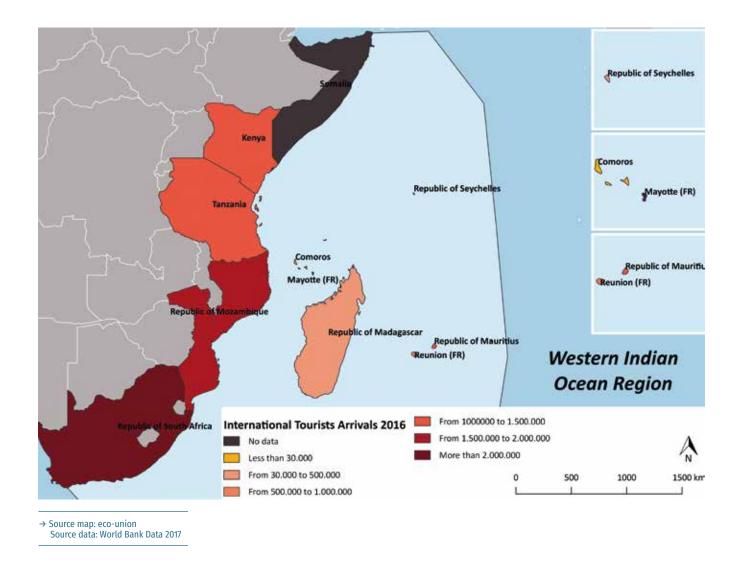
#### **Indicators of Tourism**

- ITA: 16.081.800 (2016, World Bank Data)
- Average direct GDP contribution: 7,8% (2017, WTTC)
- Average total GDP contribution: 20,4% (2017, WTTC)
- Average direct employment contribution: 7,6% (2017, WTTC)
- Average total employment contribution: 19,6% (2017, WTTC)

The Western Indian Ocean is a not well-known destination in the tourism market, with only approximately 3.9 million tourists' arrivals in 2012 (0.4% of global ITA for that year)<sup>73</sup>. However, the sector is expected to develop, with a projected growth of 3.3% up to 2030, resulting in 1.4 billion ITA in 2020 and 1.8 billion by 2030<sup>74</sup>. The economic contribution of tourism differs from country to country; spanning from 2.9% of

GDP in South Africa, concentrating the greatest share of arrivals and receipts<sup>75</sup>, to 26.4% of GDP in the Seychelles<sup>76</sup>. The region offers various tourism products including traditional leisure destinations (Mauritius and the Seychelles), whale and dolphin watching (Zanzibar and Mozambique), diving (Kenya), and nature-based tourism (many locations). However, in some countries, tourism is focused on inland circuits (safaris in Kenya and Tanzania). The WIO has also emerged as a cruise destination, with 200,000 tourists accessing the Seychelles in cruise vessels in 2010.

Tourism development in the WIO is exposed to several risks, linked to regional fragility. Such risks include high levels of poverty, dependence on natural resources, political instability, high population growth and maritime instability (piracy). These obstacles intensify the economic vulnerability of tourism-dependent states, given the volatility of tourism flows<sup>77</sup>. Tourism development is also related to social issues, such as the concentration of economic benefits within international firms and leakage from national economies and barriers of entry of the value chain for SMEs<sup>78</sup>.

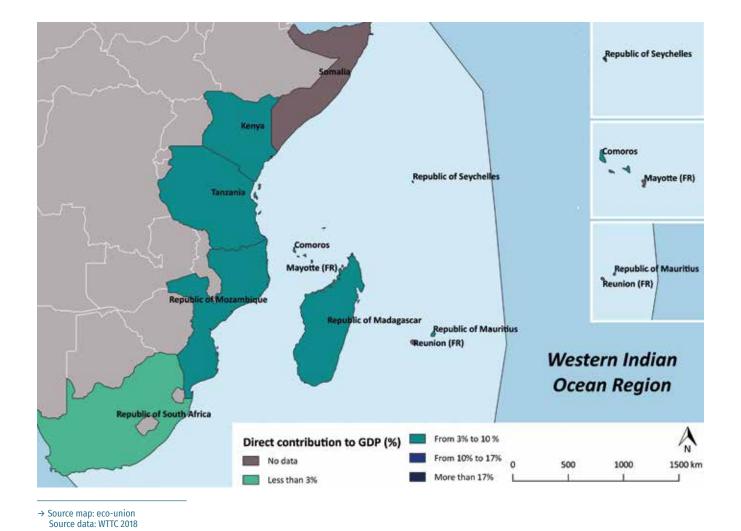


- 73 https://openknowledge.worldbank.org/bitstream/handle/10986/16641/820230WP0P12800Box0379855B00PUBLICO.pdf?sequence=1&isAllowed=y
- 74 Estimation from the UNWTO, see in UNWTO, 2013, Sustainable Tourism Governance and Management in Coastal Areas of Africa

75 Indeed, South Africa concentrated 29.8% of tourist arrivals and 67.9% of tourist receipts in DATE, see in UNWTO, 2013

- Data retrieved from WTTC's latest country reports
- 77 African Union (2012): "2050 Africa's Integrated Maritime (AIM) Strategy". Available at: <a href="https://cggrps.com/wp-content/uploads/2050-AIM-Strate-gy\_EN.pdf">https://cggrps.com/wp-content/uploads/2050-AIM-Strate-gy\_EN.pdf</a>

UNWTO, 2013, Sustainable Tourism Governance and Management in Coastal Areas of Africa Commission de l'Océan Indien, 2007, Strategic environmental assessments at national and regional levels. Final Report, 100pp. Available at: <a href="http://www2.unwto.org/publication/sustainable-tourism-governance-and-management-coastal-areas-africa">http://www2.unwto.org/publication/sustainable-tourism-governance-and-management-coastal-areas-africa</a>



Other important social impacts include restriction of access to beaches and conflicts, drop in purchasing power, pressure over food sovereignty and fish stocks and the development of sexual trade in coastal region<sup>79</sup>. Coastal maritime tourism contributes significantly to the West Indian Ocean's SIDS economy. Seychelles is very dependent on the tourism industry, with direct and indirect GDP estimated at 57%, especially from the luxury sun vacations. However, in Mauritius the prevailing tourist segment is high-end beach-resort tourists, with a limited economic return to the local population. <sup>80</sup>

#### **Environmental impact**

The impacts of tourism on coastal and maritime areas of the Western Indian Ocean are mainly linked to the construction of infrastructures and changes of land use and to maritime and coastal recreational activities. The fast development of tourism has placed significant pressure on infrastructure and spurred unplanned coastal development in a region already under stress due to high coastal population density.

Tourism infrastructures are commonly built on sand dunes and even up to the high level of the water on the shore. Dredges, coastal line modifications, seagrass bed removal, cover-ups and coral reefs for aesthetic improvements or removal of dangerous organisms for bathers, have degraded the ecosystem and the coastal environment since the 1990s.<sup>81</sup> This situation is exacerbated by the difficulties of resilience to climate change. Insufficient regional capacity to absorb and manage the impacts of tourism amplified environmental degradation —groundwater contamination, localized pollution episodes, threats to food sovereignty and fish stocks, etc.—. However, some countries have adopted strong national policy to manage environmental impacts of tourism, such as the Seychelles.

#### **Dependency to natural ecosystems**

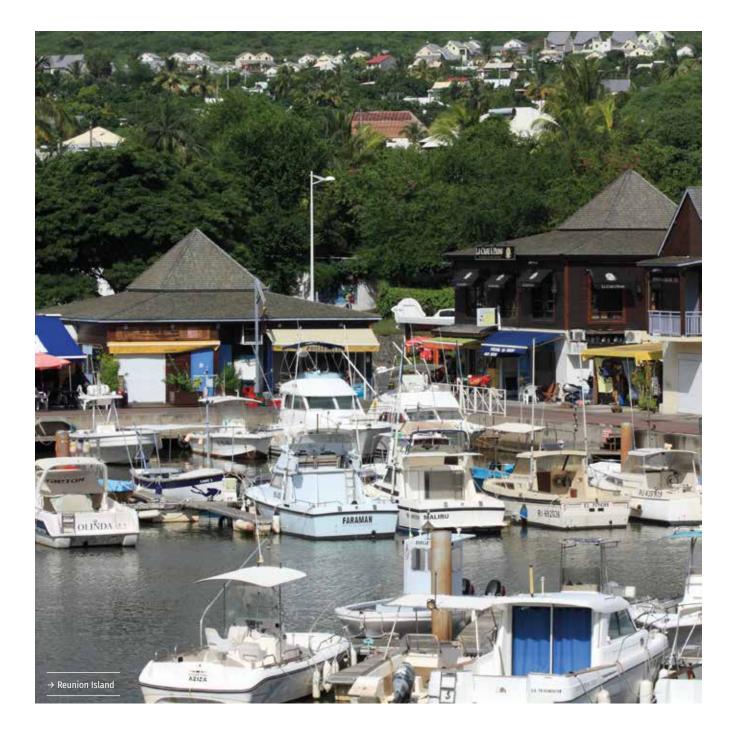
The marine and coastal ecosystems of the Western Indian Ocean are of vital importance for the whole region. According to a WWF report<sup>82</sup>, the WIO ocean assets are valued conservatively at **US\$334 billion**. The region's most valuable

<sup>79</sup> Commission de l'Océan Indien, 2007 http://commissionoceanindien.org/publications/archives/

United Nations Economic Commission for Africa (2014): "Unlocking the full potential of the blue economy: Are African Small Island Developing States ready to embrace the opportunities?", 33 pp. Available at: <a href="http://repository.uneca.org/bitstream/handle/10855/23170/b11564040.pdf?sequence=1">http://repository.uneca.org/bitstream/handle/10855/23170/b11564040.pdf?sequence=1</a>

B1 Daby, D. (2003): "Effects of seagrass bed removal for tourism purposes in a Mauritian bay". In Environmental Pollution, Vol. 125, Issue 3, pp. 313-324

<sup>82</sup> http://wwf.panda.org/?uNewsID=290410



assets are fisheries, mangroves, seagrass beds and coral reefs, as well as adjacent coastal and carbon-absorbing as central to the well-being of communities and the health of the ocean economy. The annual economic output of the WIO is at least **US\$21 billion**, making the 'ocean economy' the fourth largest economy in the region in its own right.

The most economically-valuable activities on an annual basis in the Western Indian Ocean are **coastal and marine tourism**, followed by carbon sequestration and fisheries<sup>83</sup>. The value of coral reefs is estimated at US\$7.291 million a year and the total economic value of mangrove forest

goods and services at US\$8.791 million per year, concentrated mainly in Mozambique, Madagascar and Tanzania. The total value of the coastal forest and seagrass meadows reaches respectively US\$5.581 million and US\$1.045 million a year. However, mangrove coverage is diminishing in most countries in the region —Kenya and Tanzania lost about 18% of their mangroves over 25 years, and Mozambique lost 27% over a shorter time frame (Bosire, 2015). Coral reefs declined by 15% in the decade after the 1997-98 El Niño climate event, which caused major coral bleaching and mortality (Atewerbehan et al. 2011).



**WIO GROSS MARINE PRODUCT** 

Gross Marine Product (GMP) is the ocean's annual economic value.

70.2%

ADJACENT BENEFITS OF THE OCEAN

50.0% Coastal tourism

14.0% Carbon sequestration

6.0% Coastal protection

0.2% Marine biotechnology

(data from 2015)

20.7%

DIRECT SERVICES ENABLED BY THE OCEAN

19.0% Marine tourism

0.8% Research & development

0.5% Security & control

0.2% Ocean survey

0.1% Cruise industry

0.1% Education & training

9.1%

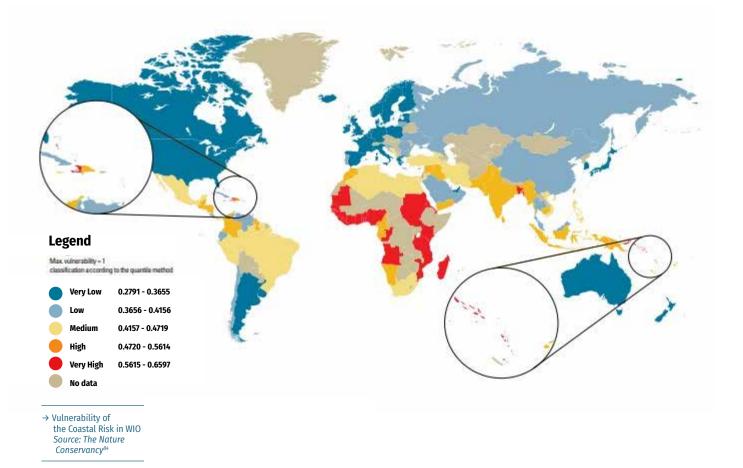
OF THE OCEAN

7.8% Industrial fisheries

1.2% Subsistence fisheries

0.1% Aquaculture / mariculture

<sup>→</sup> Ocean Asset Value of the Western Indian Ocean Source: WWF, Reviving the Western Indian Ocean Economy



#### **Vulnerability to climate change**

The effects of climate change on the coasts of WIO countries are already evident, especially in island areas. The risks faced by tourism due to climate change in these highly sensitive and vulnerable areas are related to<sup>85</sup>:

- increase in sea level, which threatens the very existence of low islands, its population and infrastructure:
- sea temperature rise and coral bleaching on coral reef systems, fundamental natural resources for tourism in this region and which can put food security at risk;
- decreased rainfall and intrusion of sea water into fresh water sources that will threaten drinking water reserves, increasing water stress;
- strong exposure to storms, storm surges, floods, tsunamis, erosion and sea level rise, and to a high degree of exposure of public and touristic infrastructure, nutrition, natural capital, income and economic capacity;
- lack of climate change adaptation policies that increases the vulnerability of this region.

In WIO region, Tanzania, Comoros, Kenya the average temperature has increased by 1.0 °C between 1960 and 2003, while in Madagascar, the data for the period 1950-2010 show an average increase of 2 °C in the minimum temperature and 1.1 °C for the maximum temperature. The sea level rise trend detected in the WIO region ranges from 0.4 to more that 1mm per year between 1980 and 2001 (in Madagascar, between 1955 and 2003, the average sea level rise varied between 0.8mm and 2.4mm per year). In Comoros, coral reefs are the most exposed in the region: their level of exposure to risk is 99%.86

### **North East Atlantic Ocean**

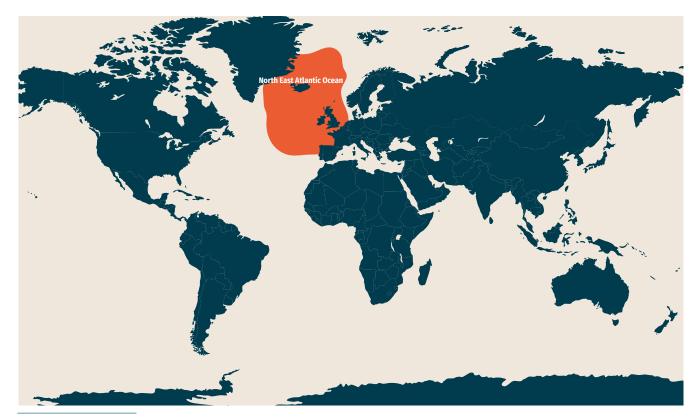
## Geographic, political and environmental profile

The North East Atlantic regional sea stretches across 5 maritime areas across South and Northern Western Europe, namely Arctic Waters, the Greater North Sea, Celtic Seas, the Bay of Biscay and the Iberian Coast, and the Wider Atlantic. It covers 20,585 km of coastline

The Nature Conservancy (2014):" Coasts at Risk: An Assessment of Coastal Risks and the Role of Environmental Solutions", 64 pp. Available at: <a href="https://www.nature.org/content/dam/tnc/nature/en/documents/CoastsatRisk.pdf">https://www.nature.org/content/dam/tnc/nature/en/documents/CoastsatRisk.pdf</a>

Africa Biodiversity Collaborative Group – Western Indian Ocean (2012): "Climate Change in the Western Indian Ocean: A Situation Assessment and Policy Considerations", 103 pp. Available at: <a href="http://wio-c.org/wp-content/uploads/2015/12/abcg\_wio\_stocktaking\_october\_20122.pdf">http://wio-c.org/wp-content/uploads/2015/12/abcg\_wio\_stocktaking\_october\_20122.pdf</a>

Africa Biodiversity Collaborative Group – Western Indian Ocean (2012): "Climate Change in the Western Indian Ocean: A Situation Assessment and Policy Considerations, 103 pp. Available at: <a href="http://wio-c.org/wp-content/uploads/2015/12/abcg\_wio\_stocktaking\_october\_20122.pdf">http://wio-c.org/wp-content/uploads/2015/12/abcg\_wio\_stocktaking\_october\_20122.pdf</a>



→ North East Atlantic Ocean Source: Google Maps

from very diverse countries. Indeed, the Atlantic area is characterized by a variable political and institutional framework, as 12 parties to the OSPAR Convention are members of the European Union , and three are part of the European Economic Area. With more than a thousand of recorded fish species , the Atlantic is a rich region in biodiversity, thanks to diversity in seasonal cycle, water depth and ecosystem specificities . Conservation of biodiversity is ensured by strong governance, and the deployment of a MPA network covers 285,000 km2, including areas beyond national jurisdiction. The North-East Atlantic covers a range of seas and a large climatic gradient. It is a highly productive area that hosts the most valuable fishing areas of Europe and many unique habitats and ecosystems. It is also home to Europe's largest oil and gas reserves.

#### Geographical of the Region

- States: Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, the Netherlands, Norway, Portugal, Spain, Sweden, the United Kingdom, Luxembourg.
- Population: 342 million
- Coastal population: 148 million (2009, Eurostat)
- Geographical sea extension: 13.5 million km2

#### **Governance framework**

The OSPAR Convention<sup>87</sup>

The Convention for the Protection of the Marine Environment of the North-East Atlantic (the 'OSPAR Convention') was developed in 1992 and came into force in 1998. The Convention has been ratified by Belgium, Denmark, the European Union, Finland, France, Germany, Iceland, Ireland, The Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom, Luxembourg and Switzerland. The OSPAR Convention includes a series of annexes following specific areas: pollution from land-based sources; pollution from dumping or incineration; pollution from offshore sources; assessment of the quality of the marine environment; protection and conservation of the ecosystems and biological diversity.

Additionally, several environmental conventions and political agreements applies to the region, being particularly relevant the EU regulation and policies on environmental protection, economic development and mobility freedom.

| Version and<br>Protocols | Relevance to tourism                      | Specific to Sustainable Tourism   |  |
|--------------------------|---|---|--|
| OSPAR<br>(1992)          | Tourism is not mentioned in the Agreement | • The OSPAR Commission<br>has published reports<br>to assess the role of<br>sustainable tourism in the<br>region.88 |  |

→ Table 18: The OSPAR Convention and its Relation with Tourism Management Source: eco-union

<sup>87 &</sup>lt;a href="https://www.ospar.org/convention">https://www.ospar.org/convention</a>

<sup>88</sup> OSPAR Commission (2008); "Assessment of impacts of tourism and recreational activities", OSPAR Commission, 34 pp. Available at: <a href="https://www.ospar.org/about/publications?q=tourism">https://www.ospar.org/about/publications?q=tourism</a> (accessed 20 February 2019).

Additionally, several environmental conventions and political agreements applies to the region, being particularly relevant the EU regulation and policies on environmental protection, economic development and mobility freedom.

| THEMES   | DESCRIPTION  | ACTION FOR TOURISM  | RELEVANT TOURIST POLICIES   |
|--|--|---|---|
| Regional Environ-<br>mental Conven-<br>tions   | mental Conven- Focuses on pollution, conservation of marine  |   | OSPAR Convention, Bern Convention, Lisbon<br>Agreement, North-East Atlantic Environment<br>Strategy (2013), Ramsar Convention, and the<br>ICES Convention   |
| Maritime Conven-<br>tions  |  |   | MARPOL, UNCLOS III, MARPOL, SOLAS, STCW,<br>Regulations on Port State Control inspections   |
| EU Environmental and<br>Climate Policies   | The EU Environmental Policies and legislation applies to air and water quality, and promotion of sustainable development at the regional level.  | Indirect: restriction over coastal development, wastewater management, emission control (cruises) waste management for ships, protection of biodiversity and definition of protected areas. | Natura 2000 Directive (92), Marine Strategy<br>Framework Directive (2008), Port Waste Recep-<br>tion Facilities Directive (2000), Maritime Spatial<br>Planning Directing (2014), MRV Regulation (2015),<br>Sulphur Emission Directive (2016), Ecolabel<br>Tourism Decision (2017) |
| The European mobility and home affairs regulation facilitate the circulation of goods services and people between Member State in the Schengen Area. |  | <b>Direct:</b> visa regulation, facilitation of operation of tourism businesses internationally and facilitation of tourism in Schengen Area  | Schengen Borders Code (2016), Visa Code (2009),<br>VIS Regulation (2008)  |
| EU Tourism Policies  | It aims to create a favourable environment<br>for the development of tourism and promote<br>cooperation between the Member States on<br>competitiveness, sustainability, and access<br>to financial tools. | <b>Direct</b> : orientation of European actions to encourage employment, competitiveness, quality and sustainability  | Blue economy communication (2014), Coastal<br>and Maritime tourism communication (2014),<br>Political framework for tourism communication<br>(2010), European Package Travel Directive (2015)   |

<sup>→</sup> Table 19: Tourism Policy and Regulatory Framework in the Atlantic Source: eco-union

#### **Relevant stakeholders**

The Atlantic Ocean tourism market is not a mass tourism market, consequently, there are a very few regional actors specialized in tourism. However, the EU institutions dealing with tourism also create regulations and implement actions in the Atlantic coastline.

| KEY ACTORS                                   | SHORT DESCRIPTION /  | IMPACT ON CMT  | POLITICAL ROLE / FLAGSHIP PROJECTS ON CMT   |  |  |
|--|--|--|---|--|--|
|  | [AREAS OF FOCUS]  PUBLIC SECTOR  |  |   |  |  |
|  |  | 1 oblic sector   |   |  |  |
| OSPAR Commission                             | International convention for<br>the protection of the marine<br>environment in North-Atlantic            | Cooperation for the protection of marine ecosystems  | Network of marine protected areas   |  |  |
| European Commission<br>(EC)                  | Sustainable tourism, economic<br>development, maritime and<br>coastal policy, environmental<br>policy    | Community policies and initiatives in<br>tourism; Promoting implementation of the<br>Protocol to the Barcelona Convention on<br>ICZM, MSP and Green Infrastructures; Tou-<br>rism Satellite Accounts (TSA) | DG GROWTH: virtual tourism observatory,<br>EDEN programme, Tourism Business portal,<br>European Tourism Indicators Systems for<br>sustainable destination management (ETIS) |  |  |
| European Environmental<br>Agency (EEA)       | European Agency providing<br>environmental studies, data,<br>analysis                                    | Monitoring of the environmental impacts of the tourism industry, environmental management processes, environmental policymaking and assessment, as well as citizen participation                           | Marine Litter Watch, Reports such as Tourism<br>and the environment - Towards a reporting<br>mechanism in Europe  |  |  |
|  | В  | JSINESS ASSOCIATIONS AND PRIVATE SECTOR  |   |  |  |
| European Travel Com-<br>mission              | Association of the travel sector representing National Tourism Organisations of the countries of Europe. | Research on European trends and prospects<br>for the tourism sector and economic oppor-<br>tunities; destination marketing, advocacy for<br>tourism policies   | Partnerships, lobby, marketing  |  |  |
| North Atlantic Tourism<br>Association (NATA) | Cooperation between Iceland,<br>Denmark and Faroe islands for<br>tourism marketing                       | Destination management and marketing   | Partnerships, lobby and marketing   |  |  |
| NGOs   |  |  |   |  |  |
| Осеапа                                       | NGO acting for the protection of marine resources in the oceans.   | Advocacy for the conservation of oceans.   | Partnership with the OSPAR convention: contribution to the Marine Protected Areas policy  |  |  |
| World Cetacean<br>Alliance                   | NGO for the protection of ceta-<br>ceans, including their actions to<br>tourism activities               | Protect critical habitat including breeding, feeding and migratory areas for cetaceans; promote responsible whale and dolphin watching   | WAOH Route, responsible whale watching, global best practices guidance for responsible whales and dolphins watching   |  |  |

<sup>→</sup> Table 20: Key Regional Tourism Actors in the Atlantic Ocean

### Tourism in the Atlantic: between traditional sea-sand-sun and nature-based tourism

#### **Indicators of Tourism**

- ITA: 303.044.000 (2016, WB)
- Average direct GDP contribution: 3,5% (2017, WTTC)
- Average total GDP contribution: 10,9% (2017, WTTC)
- Average direct employment contribution: 4,5% (2017, WTTC)
- Average total employment contribution: 12,5% (2017, WTTC)

The OSPAR region benefits from mature and highly frequented destinations such as the entire French coast, the Spanish Atlantic region, including the Basque country and Huelva and sections of the Portuguese littoral which bear the largest tourism pressure and have been marked by a large increase in arrivals since the early 2000s (STAT). The region is also marked by rising destinations such as Iceland, Northern European countries (Sweden, Norway, Finland, Denmark, etc.) and Northern Arctic tourism. Tourism products are therefore varied, with sea-sand sun destinations (France, Spain, and Portugal) and an important marine sector. According to the EUCC, 2 million people participate in whale and dolphin watching trip. These trips tend to concentrate in the OSPAR maritime region, with 30% of visitor in Iceland participating in whale watching activities in 2002.



#### **Environmental impact**

The development model in this region is based on a high level of land conversion (16%)89 to artificial surfaces, and it results in increasing coastal density. The construction of coastal infrastructure (harbours, marina, hotels, and coastal defence) has a negative impact on the marine habitat, because it dredges and modifies marine sediments. As a result of this coastal development, the environmental footprint over ecosystem is higher and coastal erosion increases, e.g. dunes in the United Kingdom<sup>90</sup>.

On the other hand, water consumption is also higher due to tourist demand —human use, golf courses, swimming pools, air conditioning—, and water stress can be problematic in countries such as Portugal or Spain<sup>91</sup>. Groundwater reserves are degraded through saline intrusion, the volume of wastewater discharged and the degradation of water quality —organic enrichment, pollution— is thus increased.

In addition, alternative maritime tourism—jet skis, power boats, whale watching, sea anglers, cruises— has increased the amount of underwater noise as well as the amount of stress of animals.

### **South Pacific Ocean**

## Geographic, political and environmental profile

Located in the biggest ocean of the world, countries in the South Pacific are home to 8 million people<sup>92</sup>. The South Pacific is characterized by its diversity, in its demography and levels of GDP per capita —\$53,800/capita in Australia to \$2,132/capita in the Solomon Islands<sup>93</sup>. This fragmentation, along with development constraints (small size, isolation), limits infrastructure provision and commercial exchange. The region remains fragile, with one in four Pacific islanders living under the poverty line and a global unemployment rate of 13%<sup>94</sup>. This situation is likely to worsen with climate change, because the region is highly vulnerable to sea level rise and natural disasters<sup>95</sup>. All these factors contribute to the economic and politic dependency of smaller countries on regional leaders such as Australia or New Zealand<sup>96</sup>.

89 OSPAR Commission, 2009. Trend analysis of maritime human activities and their collective impact on the OSPAR maritime area

- 90 OSPAR Commission, 2008
- 91 ibid., 2008
- 92 Moritz et al. (2018): "Status and Trends of Coral Reefs of the Pacific". Global Coral Reef Monitoring Network, 218 pp. Available at: <a href="https://www.sprep.org/sites/default/files/documents/publications/status-coral-reefs-pacific.pdf">https://www.sprep.org/sites/default/files/documents/publications/status-coral-reefs-pacific.pdf</a>
- 93 Data retrieved from the World Bank database for the year 2017
- Pacific Island Forum, 2018, First Quadrennial Pacific Sustainable Development Report, Executive Summary, 15 pp. Available at: <a href="https://www.forumsec.org/wp-content/uploads/2018/09/1st-Quadrennial-Pacific-Sustainable-Development-Report-2018.pdf">https://www.forumsec.org/wp-content/uploads/2018/09/1st-Quadrennial-Pacific-Sustainable-Development-Report-2018.pdf</a>
- 95 ibid, AFD, 2012
- 96 Agence Française de Développement, 2012, Stratégie de coopération régionale ultramarine de l'AFD Déclinaison sur le Pacifique Sud



→ South Pacific Ocean

The Pacific Ocean is a strategic space for marine biodiversity, because it contains the largest proportion of global coral reefs (40%)<sup>97</sup>, supporting regional protein supply and economic health of communities. Pacific States have been proactive in reef conservation, marine litter management and SDG14 implementation through initiatives to spur MPA development such as the Micronesia Challenge (including a target of 30% of coastal water under conservation management by 2020)<sup>98</sup> and tight national regulations of single use plastics<sup>99</sup>. Overall, the region hosts 204 protected marine and terrestrial areas, and 346 MPAs (covering 2,161,088 km²)<sup>100</sup>; but only 20% of these areas are considered to be enforced or effectively managed.<sup>101</sup>

#### Geographical Characteristics of the Region

- States: American Samoa, Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati\*, Marshall Islands, Nauru, New Caledonia, New Zealand, Niue\*, Palau\*, Papua New Guinea, Samoa, Solomon Islands, Tonga\*, Tuvalu\*, Vanuatu\*
- Tourism contribution to GDP:
- Population: 8 million inhabitants

\*not signing party of the Noumea Convention

#### **Governance framework**

Noumea Convention

The Convention for the Protection of Natural Resources and Environment of the South Pacific Region —also known as the Noumea Convention or the SPREP Convention— was adopted in 1986 and came into force in 1992. The Convention is the main international agreement for the protection of the marine environment of the South Pacific region. The Convention is ratified by 21 Pacific island states. Two additional protocols came into force in 1990. The Convention has developed two protocols: one on response to oil pollution, and another concerning response to pollution from hazardous and noxious substances.<sup>102</sup>

<sup>97</sup> AFD, 2012

<sup>98</sup> ibid.

<sup>99</sup> Vanuatu, Palau, Fiji and Samoa have integrated measures to disincentivize the use of single use plastics, and plastic bags have been banned in Northern mariana Islands, Guam, Federated States of Micronesia, Palau, and Marshall Islands. Source SPREP 2018 and SPREP website

<sup>100</sup> Statistics extracted from the Pacific Islands Protected Area Portal website

<sup>101</sup> GCRMN, 2018

<sup>102 &</sup>lt;a href="https://www.sprep.org/convention-secretariat/noumea-convention">https://www.sprep.org/convention-secretariat/noumea-convention</a>

| Version and Protocols   | Relevance to tourism   | Specific to Sustainable Tourism   |
|-------------------------|--|---|
| 11986 Noumea Convention | Tourism is not mentioned in the Agreement nor in its protocols | No relevant approach to sustainable tourism<br>The Secretariat has developed guidelines on EIA on coastal<br>tourism <sup>103</sup> |

<sup>→</sup> Table 21: Noumea Convention and its relations with tourism management Source: SPREP<sup>104</sup>

Other international and regional conventions applies to the region, in particular MARPOL, UNCLOS, Ramsar and CBD.

| THEMES  | DESCRIPTION   | IMPACT ON TOURISM  | RELEVANT POLICY & REGULATION  |  |
|---|---|--|---|--|
| Regional and<br>international<br>environmental<br>legislation | international environmental management. The Convention is the legal framework for the Action Plan for managing the National Postures and Environment of the South Paging adopted on |  | Noumea Convention, Dumping<br>Protocol (1990), Pollution Emergen-<br>cies Protocol (1990), Action Plan for<br>managing the Natural Resources and<br>Environment of the South Pacific<br>(1982), Ramsar Convention, Conven-<br>tion for Biological Diversity (CBD) |  |
| Maritime issues   | Focus on preventing marine pollution from ships.  | Indirect: control and regulation over ship discharges, training and employment in the shipping and cruising industry | MARPOL, SOLAS, STCW, UNCLOS III   |  |

<sup>→</sup> Table 22: Tourism Policy and Regulatory Framework in the South Pacific Ocean Source: eco-union

#### **Relevant stakeholders**

Due to the diversity of countries in this region and their limited size, the Pacific region is a space of important economic and political cooperation. The actors of tourism in the region are more likely to be very small and local actors since most of the territories are small islands. However, the cooperation between all these islands is currently developing with regards of diplomacy, economic and environmental concerns.

Tourism is an important economic sector for the Pacific region. The WTTC estimates it to contribute to over 12% of Pacific island economies' GDP and it anticipates an increase of 5-6% per annum between 2017 and 2027. This growth

is partly due to the geographic proximity of the region with the Asian clientele and the upsurge of these visitors over the past few years<sup>105</sup>. The largest destination of the Pacific region is Fiji, with over 842,000 visitors in 2017, concentrating 40% of total visitor arrivals at the Pacific<sup>106</sup>.

Although the importance of tourism varies across countries, it remains an important source of economic activity and revenue, through airports and hotel infrastructures<sup>107</sup>. It is a vital industry to some countries, such as Fiji contributing with a total of 40% of its GDP<sup>108</sup> or in French Polynesia where it is the first economic sector<sup>109</sup>. Tourism is also heavily dependent on the quality of the environment, because tourism products are mainly focused on leisure in guesthouse and luxury resorts, discovery of pristine areas and water activities<sup>110</sup>

<sup>103</sup> SPREP (2018): "Environmental impact assessment: guidelines for coastal tourism development in Pacific island countries and territories". Apia, Samoa: SPREP, 35 pp. Available at: <a href="https://www.sprep.org/sites/default/files/documents/publications/eia-guidelines-tourism-development.pdf">https://www.sprep.org/sites/default/files/documents/publications/eia-guidelines-tourism-development.pdf</a>

<sup>104 &</sup>lt;a href="https://www.sprep.org/convention-secretariat/noumea-convention">https://www.sprep.org/convention-secretariat/noumea-convention</a>

<sup>105</sup> UNTWO, 2018 and World Bank 2017 in GCRMN, 2018

<sup>106</sup> UNWTO, 2018, Asia and the Pacific Newsletter, issue 46, 57 pp. Available at: <a href="http://cf.cdn.unwto.org/sites/all/files/pdf/180608\_unwto46\_jeoyongryang.pdf">http://cf.cdn.unwto.org/sites/all/files/pdf/180608\_unwto46\_jeoyongryang.pdf</a>

<sup>107</sup> GCRMN, 2018

<sup>108</sup> Data retrieved from the WTTC country reports for 2017

<sup>109</sup> GCRMN, 2018

<sup>110</sup> ibid.

| KEY ACTORS  | SHORT DESCRIPTION /  | IMPACT ON CMT   | POLITICAL ROLE / FLAGSHIP PROJECTS ON CMT   |  |
|---|--|---|---|--|
|   |  | PUBLIC SECTOR   |   |  |
| The South Pacific Regional<br>Environment Programme<br>(SPREP)  | Intergovernmental<br>organization promoting<br>environmental cooperation<br>in the South Pacific Region<br>[wastes, climate change,<br>biodiversity]         | Cooperation on economic and environmental topics, biodiversity protection policies and regulation of economic activities. | BIOPAMA (Biodiversity and Protected Areas<br>Management) ; COSPPac (Climate and<br>Oceans Support Program in the Pacific)                                   |  |
| The South Pacific<br>Community (SPC)                            | International coopera-<br>tion, environment, energy,<br>pollution, shipping, training,<br>coordination   | Coordination for environmental protection, economic development and regulation including tourism.                         | Climate Change and Environmental Sustai-<br>nability programme: component 4 - sustai-<br>nable tourism and climate change                                   |  |
| Pacific Island Forum (PIF)                                      | Inter-governmental organization to enhance cooperation between countries and territories of the Pacific Ocean. [growth, economic and cooperation, diplomacy] | Economic development  | Cooperation   |  |
| Council of Regional Orga-<br>nizations in the Pacific<br>(CROP) | Advisory body of the South<br>Pacific Forum for key policy<br>and operational issues,<br>technical expertise   | Technical expertise and policy adviser for economic regulation and development  | Cooperation   |  |
|   |  | PRIVATE SECTOR  |   |  |
| The South Pacific Tourism<br>Organization (SPTO)                | Organization gathering<br>governments and private<br>structures for the governan-<br>ce of tourism in the region   | Destination management and marketing, coordination of actors, economic development  | Pacific Sustainable Tourism Network: exchange of good practices, online forum, monitoring programs for hotels.  |  |
| Pacific Islands Private Sec-<br>tor Organization (PIPSO )       | Association of the private<br>sector entities of Pacific<br>Islands  | Advocate for and drive private sector driven economic growth  | Lobby and partnerships  |  |
| Regional NGOs   |  |   |   |  |
| Sustainable Travel Inter-<br>national                           | International NGO<br>encouraging sustainable<br>practices for professionals<br>and destinations (local<br>cultures, climate change,<br>biodiversity).        | Evaluation and planning, education, standards development, impact monitoring.   | Pacific Sustainable Tourism Alliance (PSTA):<br>regional partnership, engaging local leaders<br>from the business community, NGOs and<br>local governments. |  |
| Conservation volunteers<br>Australia                            | Non-profit tour operators<br>engaging volunteers for<br>missions of conservation<br>during holidays in the<br>South Pacific region. [eco-<br>tourism]        | Development of news forms of tourism (voluntourism)   | Partnership with ecotourism Australia,<br>missions for conservation in Australia and<br>New-Zealand   |  |

<sup>→</sup> Table 23: Key regional tourism actors in South Pacific Ocean Source: eco-union



→ Scuba Diving

## Tourism in the South Pacific: a Cornerstone of the Economy

Indicators of Tourism

- ITA 12.892.400 (2016, World Bank Data)
- Average direct GDP contribution: 7,8% (2017, WTTC)
- Average total GDP contribution: 20,8% (2017, WTTC)
- Average direct employment contribution: 7,3% (2017, WTTC)
- Average total employment contribution: 19,7% (2017, WTTC)

#### **Environmental impact**

The main environmental pressures identified in this region are demographic pressure and demographic imbalance, marine pollution, overexploitation of resources and vulnerability to natural disasters<sup>111</sup>. With regard to tourism, the tendencies driving environmental degradation are runoffs from hospitality establishment, change in sediments and sediment runoffs, waste management and coastal development. These driving tendencies are enhanced by inadequate infrastructure, service provision, and shortage of land availability<sup>112</sup>.

### **Antarctic Ocean**

#### Geographic and environmental profile

The Antarctic Ocean —or Southern Ocean—is located at the Southern end of the Southern hemisphere and it stretches over approximately 22 million km² and 17.968 km of coastline. The Antarctic Ocean connects the Pacific, Atlantic and Indian Ocean basins, and it influences the climate of the entire globe through the Antarctic circumpolar current, the largest ocean current, which distributes heat and influences global rain patterns and temperatures.

Antarctic coasts are the habitats to great animal and plant biodiversity due to its milder climate. The entire Antarctic ice sheet contains about 68% of the world's fresh water (ASOC). The Antarctic Ocean is an extremely fragile environment, due to low levels of artificialization and its unique marine and terrestrial ecosystems<sup>13</sup>. The recent census of marine life of the Antarctic listed about 7,500 species of marine animals<sup>114</sup>, accounting for 70% of endemic marine species of the continent<sup>115</sup>. The relatively stable marine temperatures enable the installation of rich benthic populations on the seabed. The continent does not have a permanent population, and "inhabitants" are part of research stations, with frequentation oscillating between 1,000 (winter season) and 5,000 (summer season).

 <sup>-</sup>AFD (2012): "Stratégie de coopération régionale ultramarine de l'AFD - Déclinaison sur le Pacifique Sud", 11pp. . Available at: <a href="https://www.afd.fr/sites/afd/files/2018-01/strategie-cooperation-regionale-pacifique.pdf">https://www.afd.fr/sites/afd/files/2018-01/strategie-cooperation-regionale-pacifique.pdf</a>;
 - SPREP (2018): "Environmental impact assessment : guidelines for coastal tourism development in Pacific island countries and territories". Apia,

<sup>-</sup> SPREP (2018): "Environmental impact assessment: guidelines for coastal tourism development in Pacific Island countries and territories". Apia Samoa: SPREP, 35 pp. Available at: <a href="https://www.sprep.org/sites/default/files/documents/publications/eia-guidelines-tourism-development.pdf">https://www.sprep.org/sites/default/files/documents/publications/eia-guidelines-tourism-development.pdf</a>

<sup>112</sup> PIF (2018): "First Quadrennial Pacific Sustainable Development Report". Executive Summary, 15 pp. chttps://www.forumsec.org/wp-content/up-loads/2018/09/1st-Quadrennial-Pacific-Sustainable-Development-R

Hall, C. M. (1992): "Tourism in Antarctica: Activities, Impacts, and Management". In: Journal of Travel Research Vol. 30 nr. 4, pp. 2-9

<sup>114</sup> Coalition Antarctica and Southern Ocean https://www.asoc.org/explore/about-antarctica

<sup>115</sup> Hall, C. M. (1992): "Tourism in Antarctica: Activities, Impacts, and Management". In: Journal of Travel Research Vol. 30 nr. 4, pp. 2-9



→ South Pacific Ocean

## **Geographical Characteristics of the Region**

- States<sup>116</sup>: Argentina, Australia, Belgium, Brazil, Chile, China, France, Germany, India, Italy, Japan, Korea, Namibia, New Zealand, Norway, Poland, Russia, South Africa, Spain, Sweden, Ukraine, United Kingdom, USA, Uruguay
- Geographical sea extension: 22 million km²

## **Governance framework**

CCAMLR Convention

The Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) is part of the Antarctic treaty framework. The Convention, adopted in 1980 and came into force in 1982, aiming at preserving the marine life of the Antarctic region. It currently has 24 members. Tourism is not mentioned as such in the Convention but it appears in the Antarctic Treaty as the instrument that regulates tourism in the Antarctic continent. The decision of designating marine protected areas in the region has resulted in collaboration with the Antarctic Treaty in the regulation of tourism activities in the Ross region<sup>118</sup>.

| Version and Protocols | Relevance to Tourism   | Specific to Sustainable Tourism             |
|-----------------------|--|---|
| CCAMLR (1982)         | Tourism is not mentioned in the Agreement (only in the Antarctic Treaty) | No relevant approach to Sustainable Tourism |

→ Table 24: Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR) Source: CCAMLR<sup>117</sup>

<sup>116 &</sup>lt;a href="https://www.ccamlr.org/en/organisation/members">https://www.ccamlr.org/en/organisation/members</a>

<sup>117</sup> https://www.ccamlr.org/en/document/publications/basic-documents-december-2011

<sup>118</sup> CCAMLR (2018): "Schedule of Conservation Measures in Force 2018/19", P.238. Retrieved from: https://www.ccamlr.org/en/system/files/e-schedule2018-19\_0.pdf (Accessed 16 April 2019).

The Antarctic Treaty Secretariat (ATS) regulates cruise tourism in the Antarctic. The main outcomes are general guidelines and the establishment of required permits respective to tourism activity. In particular, it recommends a cap of 500 tourists per ship and the avoidance of any tourism activity that can contribute to the long-term degradation of the environment.

| THEMES                                  | DESCRIPTION   | IMPACT ON TOURISM   | RELEVANT POLICY & REGULATION   |
|---|---|---|--|
| Regional environ-<br>mental conventions | The environment of the Antarctic is protected through regulation of transport and activity development. It applies to all Antarctic marine living resources (fish, molluscs, crustaceans and seabirds, with particular protocols for albatross, petrels and shearwaters). | Indirect: conserva-<br>tion and preven-<br>tion of the marine<br>ecosystem. | Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), Protocol on the Environmental Protection of the Antarctic Treaty (Madrid Protocol), Agreement on the conservation of albatross and petrels (ACAP) |
| Maritime issues                         | The Antarctic Treaty regulates yacht and cruise tourism in the area.  | Direct: Recom-<br>mends a cap on<br>tourists per ship                       | General guidelines and permits for tourism activity <sup>119</sup>   |

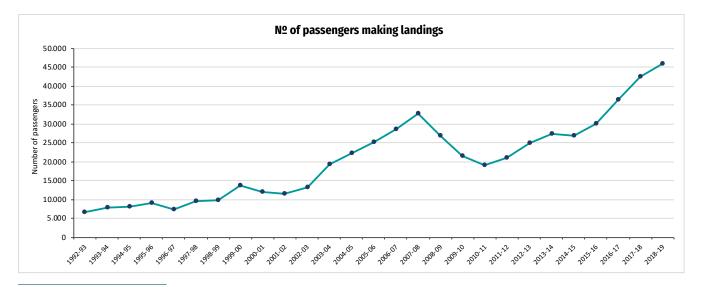
<sup>→</sup> Table 25: Tourism Policy and Regulatory Framework in Antarctic Source: own elaboration

## **Relevant Stakeholders**

The Antarctic region is a niche market for tourism. However, it is booming since the beginning of the century and the number of regulation bodies and economic actor is growing. Most tour operators belong to the International Association of Antarctica Tour Operators (IAATO), which participates in the Antarctic Treaty Consultative Meeting (ATSM).

| KEY ACTORS   | AREAS OF FOCUS   | IMPACT ON TOURISM  |  |  |  |  |
|--|--|--|--|--|--|--|
| PUBLIC SECTOR - IOG  |  |  |  |  |  |  |
| The Advisory Parties to the Antarctic Treaty<br>(ATCM)                             | Consultative meetings of the parties of the Antarctic treaty                           | Regulation of the tourism operators  | Environment Protocol and Tourism<br>Guidelines |  |  |  |
| Convention for the Conservation of Antarc-<br>tic Marine Living Resources (CCAMLR) | International commission<br>for the protection of marine<br>wildlife in the Antarctic. | Protection of biodiversity,<br>reduction of human activities<br>footprints     | Observer at the ATCM                           |  |  |  |
|  | PRIVATE SECTO  | R ASSOCIATIONS   |  |  |  |  |
| International Association Antarctica Tour<br>Operators (IAATO)                     | Association of tour operators in the Antarctic.  | Economic development of tourism sector in the Antarctic. Advocacy.             | Lobby ; Expert at the ATCM                     |  |  |  |
| NGOs   |  |  |  |  |  |  |
| Antarctic and Southern Ocean Coalition<br>(ASOC)                                   | Environmental observer<br>undertaking advocacy, public<br>awareness and assessments.   | Advocacy for a regulation of tourism in the Antarctic region; public awareness | Lobby and partnerships ; Expert at the ATCM    |  |  |  |

<sup>→</sup> Table 26: Key Regional Tourism Actors in Antarctic Ocean Source: own elaboration



→ Evolution of Antarctic seaborne Tourism (Cruise Only), 1992 - 2018 Source: Overview of Antarctic Tourism, IAATO, 2018

## Tourism in the Antarctic: the "last-frontier destination"

The main tourist attractions of Antarctica are its extreme climate conditions and wild environment<sup>120</sup>. The tourist season takes place during the Austral summer (from November to March), with tourist arrivals reaching up to 51.707 tourists in the 2017-18 season.<sup>121</sup> The geographical distribution of tourist activities in the region of the

Antarctic is concentrated in 6 specific areas<sup>122</sup>. Tourism flow tends to be spatially and temporally concentrated, because its destinations are conditioned by their accessibility.

The economy of this marine region is based on three main economic activities: fishing, tourism, and scientific research. The economic contribution benefits mainly to departure cities and ports of ships and cruises mainly —Chile, Argentina, Australia, New Zealand—, and to cruise lines and on the tour operators that organize trips. Ushuaia (Argentina), Port Stanley (Falkland Islands) or to a lesser extent from Punta Arenas (Chile), Buenos Aires (Argentina) or Puerto Madryn (Argentina). In the recent decades, Antarctic tourism has bloomed and transformed itself from a niche tourism to an emerging market, and is becoming an increasingly mainstream addition to tourist packages<sup>123</sup>. It has been subject to **strong annual increases**, geographical expansion and increased diversification of tourism activities. Maritime tourism accounted for 88% of tourist flows, and principal products were small boat landings (45%), small boat cruising (22%), cruising (18%), Kayaking, Swimming and Scuba Diving (3%)124.

## **Environment impact**

The Antarctic maritime and coastal environment is extremely sensitive to the slightest environmental change caused by human activity. Tourism is one of the main anthropogenic activities in the Antarctic Ocean, adding direct pressures on the marine environment and biodiversity, such as the invasion of alien species and, on a larger scale, climate change125.

The impact of tourism and high maritime traffic in Antarctica is increased by the low level of infrastructure on the island —waste management, efficient transportation, energy production etc. — and the sensitivity of the local ecosystems to anthropogenic impacts.



→ Antarctic Tourism

Hall, C. M. (1992): "Tourism in Antarctica: Activities, Impacts, and Management". In: Journal of Travel Research Vol. 30 nr. 4, pp. 2-9

IAATO (2018): "Overview of Antarctic Tourism: 2017-18 Season and Preliminary Estimates for 2018-19 Season", 26 pp. Available at: https://iaato.org/ documents/10157/2398215/IAATO+overview/bc34db24-e1dc-4eab-997a-4401836b7033

IAATO, https://iaato.org/home 122

ASOC, 2008 https://www.asoc.org/

IAATO, 2017-2018 Statistics - Number of Tourist Visits per Site/per Activity https://iaato.org/tourism-statistics-327mnsyd

<sup>125 ·</sup> Hall, C. M. (1992): "Tourism in Antarctica: Activities, Impacts, and Management". In: Journal of Travel Research Vol. 30 nr. 4, pp. 2-9

Aronson et al. (2011): "Anthropogenic impacts on marine ecosystems in Antarctica". In: Annals of the New York academy of sciences, Vol. 1223, pp. 82–107
 Kariminia et al. (2013): "Environmental Consequences of Antarctic Tourism from a Global Perspective". In: Procedia - Social and Behavioral Sciences, Vol. 105, pp. 781-791
 Verbitsky, J. (2018): "Ecosystem services and Antarctica: The time has come?". In. Ecosystem Services, Vol. 29, part B, pp. 381-394

## Overview of Coastal and Maritime Tourism Governance in Marine Regions

From the analysis of the six marine regions described previously, it becomes clear that the coastal and maritime tourism is not yet fully considered as a strategic activity to integrate into regional governance frameworks and sustainable development strategies. Although tourism has a strong impact —and it is dependent— on the quality of the marine environment and natural ecosystems, very few regional sea conventions actively monitor or influence tourism activities to reduce its ecological footprint and guarantee its environmental sustainability. Today, only the **Mediterranean Sea**, the world's nº1 tourist destination, has developed a specific action plan —Sustainable Consumption and Production Action Plan, 2016—, and a sustainable development strategy —Mediterranean Strategy for Sustainable Development, 2016-2025— explicitly targeting tourism sector.

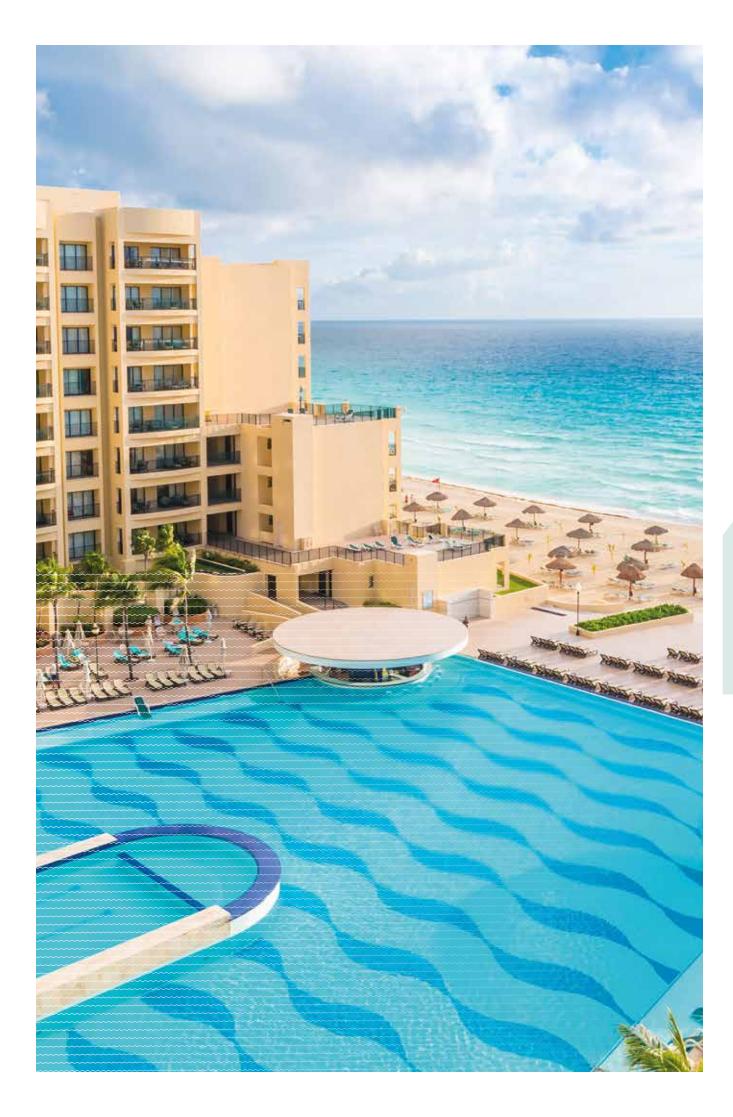
The **Caribbean**, despite being a major mass-tourism hotspot with a high dependency on resorts and cruises

incomes, has not yet launched any specific initiative to promote sustainable tourism. In the North East Atlantic Ocean, tourism is a relatively mature sector fairly managed through EU transversal policies such as MSP, blue economy strategies, MPAs and sustainable tourism initiatives. In the West Indian Ocean, there are currently no regional strategy or initiatives on coastal and maritime tourism, despite the development opportunity for emerging countries and the dependency of mature destinations. In the South Pacific Ocean, the disparity of tourism development between the countries does not provide an easy framework for a coordinated regional initiative, despite the need to protect fragile and critical marine ecosystems, in particular for the critical SIDS. In the **Antarctic**, a treaty is currently limiting tourism development although it must be carefully enforced and monitored against growing market pressures.

In general, the vulnerability and resilience of the tourism sector to **climate change** is not well addressed at the regional level, although marine regions are being the most sensitive areas impacted by the sea level rise, the temperature increase as well as climate events, in particular for the numerous SDIS states.

| Marine region                  | Sea extension<br>(km²) / Coastli-<br>ne (km) | Regional sea convention   | Signature date<br>(enforced) | No. states<br>(con-<br>tracting<br>parties) | Coastal popu-<br>lation<br>(estimation) | Tourism con-<br>tribution to<br>GDP (WTTC) | Regional tourism Initiatives   |
|--------------------------------|--|---|------------------------------|---|---|--|--|
| Mediterranean<br>sea           | 2.6 million km²<br>/ 46.000 km               | BARCELONA convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean   | 1976 (1978)                  | 21  | 170-200<br>million                      | 6.2% (direct)<br>- 15.4%<br>(total)        | Sustainable tourism<br>integrated in: ICZM<br>(2008)<br>SCP AP (2016)<br>MSSD (2016) |
| Caribbean sea                  | 2,7 million km²                              | CARTAGENA convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region   | 1983 (1986)                  | 25  | 41 million                              | 7,1% (direct)<br>21,6% (total)             | No relevant initiatives identified   |
| West Indian<br>Ocean           | 30 million km²<br>/ 15.000 km                | NAIROBI Convention<br>for the Protection,<br>Management and<br>Development of the<br>Marine and Coastal<br>Environment of<br>the Western Indian<br>Ocean Region | 1985 (1996)                  | 10  | 60 million                              | 7,8% (direct)<br>20,4% (total)             | Mentioned in the Blue<br>Economy and MSP<br>initiatives                              |
| North East Atlan-<br>tic Ocean | 13.5 million<br>km² / 20.585<br>km           | OSPAR Convention<br>for the Protection<br>of the Marine<br>Environment of the<br>North-East Atlantic  | 1992 (1998)                  | 15  | 148 million                             | 3,5% (direct)<br>10,8% (total)             | Reports on sustainable tourism   |
| South Pacific<br>Ocean         | -  | NOUMEA Convention<br>for the Protection of<br>Natural Resources<br>and Environment<br>of the South Pacific<br>Region  | 1986 (1990)                  | 12  | -                                       | 7,8% (direct)<br>20,8% (total)             | Guidelines on EIA of<br>coastal tourism  |
| Antarctic                      | 22 million km²<br>/ 17.968 km                | Convention for the<br>Conservation of An-<br>tarctic Marine Living<br>Resources (CAMLR)   | 1980 (1982)                  | -   | n/a                                     | n/a  | General guidelines and<br>permits for tourism<br>activity in the Antarctic<br>Treaty |

<sup>→</sup> Table 27: Comparative Table of Regional Seas (table or map/s) Source: eco-union



## State of Coastal and Maritime Tourism

This section focuses on the maritime & coastal tourism market and value chain in the different sub-sectors of the CMT: hotels and resorts, cruises and ecotourism. The socio-economic structure, the main economic externalities, the key environmental and social pressures as well as innovative sustainability practices are described.

## **Hotels and Resorts**

## Socio-economic structure of the market

The hotel and resort's sector is the most globalized and territorialized business in the international tourism system, at the same level as Tour Operators (TOs) and airlines industry. Hotels represent 47% of all beds available worldwide regarding all types of hotel accommodation (including 1-5 stars, unclassified, motels, beach hotels, etc.), while the figure from tourist resorts is around 2%<sup>1</sup>. The global hotel industry has grown rapidly in the last quarter of the century, due to the implementation of a global space distribution strategy for large hospitality corporations, which has allowed them to expand worldwide. The competitive segmentation strategy implemented in the last decades has also developed quickly, allowing large hotel chains to differentiate the product and the clientele, and to increase their profits<sup>2</sup>. The size of the global hotel industry and its distribution in coastal/maritime destinations is not easy to quantify. Emerging markets record faster tourist growth than consolidated destinations, making them an integral part of the expansion strategies of some of the world's leading hotel corporations. For example, in Mauritius, the

number of tourist arrivals increased by 11% in the year 2015-2016 alone, while revenues from rooms for five-star hotels in 2016 increased by 9% compared to 2015<sup>3</sup>.

**Emerging markets** are a popular destination for foreign investors, originated by the continuing need for new tourism infrastructure and thus investment. Furthermore, the invested capital in tourism does not only imply real estate investments (urbanization) and the construction of hotels and resorts complexes, but it also involves electricity production, commercial areas, by generating economic activity apart from tourism itself in the city or country. The hospitality sector ranges from small family businesses to large international groups, with sometimes over 600,000 rooms. The hotel industry can be divided into 2 segments4: independent hotels (85% of all hotels) and branded hotels composed of large hotel groups (15%). In addition, the hotel industry is characterized by a high fragmentation of the supply: it varies from luxury products to mass tourism, as well as ecotourism to fair tourism.

Globally, the demand for accommodation is modelled and controlled almost exclusively by companies **based in the US, Europe or China,** which are the same countries that generate most tourists, who have greater knowledge of the market and the latest technological innovations for bookings and marketing<sup>5</sup>. Hotel chains have extended widely to all regions of the world, thanks to the increasing benefits, lower financial risks and lesser committed relationship with risk capital. Many international hotel chains operate integrating global distribution systems into their functioning and using a variety of standardized marketing strategies. Due to the geographic phenomenon of globalization, large multinational companies of hotels and resorts have been able to increase investments and

<sup>1</sup> Gössling, S. (2002): "Global environmental consequences of tourism". In Global Environmental Change, volume 12, Issue 4, pp. 283-302

<sup>2</sup> Rogerson, J. M., (2013): "Market segmentation and the changing budget hotel industry in urban South Africa". In: Urban Planning Institute of the Republic of Slovenia, vol. 24, pp. 112-123

<sup>3</sup> Price water house Coopers, 2017

<sup>4</sup> Niewiadomsk, P. (2014): "Towards an economic-geographical approach to the globalisation of the hotel industry". In: Journal Tourism Geographies, Vol. 16 Issue 1, pp. 48-67

<sup>5</sup> Pérez-Calderón et al. (2011): "Sensitivity of listed European hotels with the sustainable tourism". In: International Journal of Environment Research, Vol.5 Issue 1, pp. 57-66

| Rank | Name Company  | Company head-<br>quarters | No. Rooms | No. Hotels | Countries | Main brands (CMT)  |
|------|---|---------------------------|-----------|------------|-----------|--|
| 1    | Marriott Interna-<br>tional                         | USA                       | 1.195.141 | 6.333      | 127       | Marriott Hotels &<br>Resorts, Le Meri-<br>dien, Sheraton |
| 2    | Hilton  | USA                       | 856.115   | 5.284      | 105       | Hilton   |
| 3    | IHG (InterCon-<br>tinental Hotels<br>Group)         | UK                        | 798.075   | 5,348      | 103       | Regent Hotels &<br>Resorts, Holiday<br>inn, Crowne plaza |
| 4    | Wyndham Hotel<br>Group                              | USA                       | 753.161   | 753.161    | 80        | Wyndham, Tryp,<br>Travelodge                             |
| 5    | Jin Jiang Interna-<br>tional Hotel Group<br>Co.     | PRC                       | 680.111   | 6,794      | +54       | Radisson, Tulip<br>(Louvre Group)                        |
| 6    | AccorHotels   | FR                        | 616.181   | 4.283      | 95        | Sofitel, Mercure,<br>Novotel                             |
| 7    | Choice Hotels<br>International                      | USA                       | 521.335   | 6.815      | +40       | -  |
| 8    | BTG Homeinns<br>Hotels (Group) Co.                  | PRC                       | 384.743   | 3.712      | -         | -  |
| 9    | China Lodging<br>Group (Huazhu<br>Hotels Group Ltd) | PRC                       | 379.675   | 3.746      | -         | Manxin Hotels &<br>Resorts                               |
| 10   | Best Western<br>Hotels & Resorts                    | USA                       | 290.787   | 3.595      | 102       | Best Western   |

<sup>→</sup> Table 28: Ranking of the Top 10 Hotels Corporations (2017) Source: Hotelsmag, 2018<sup>6</sup>

sales in different countries where hotels are marginal or underdeveloped; as well as areas with poor regulation of environmental and human resources.

## Market evolution of all-inclusive resorts

The all-inclusive resort experience has evolved significantly over the last 15 years. Once considered primarily a hospitality segment catering mostly to budget travellers, the major all-inclusive resort brands today have developed a sophisticated guest experience and wide spectrum of resort amenities and services catering to multiple consumer types within a single property. After taking a hit during the recession of 2008, a research firm forecasted that all-inclusive vacation revenue would increase at between 5% and 7% per year (lodging and leisure travel).

In the **Caribbean** only, there are more than 250 all-inclusive resorts spread over 20-plus Caribbean islands, with Cuba, the Dominican Republic and Jamaica among the top

three. **AMResorts**, a subsidiary of Apple Leisure Group, had in 2016 a total of 40 all-inclusive resorts covering six brands in the Caribbean, Mexico, Costa Rica and Panama with more than 15,000 rooms. **Sandals Resorts International**, which encompasses Sandals, Beaches and Grand Pineapple Resorts, includes 20 properties with 5,441 rooms on seven Caribbean islands. The Spain-based chain **Riu Hotels & Resorts**, in addition to its inventory in Europe and beyond, has all-inclusive hotels in Aruba, the Bahamas, Costa Rica, the Dominican Republic, Jamaica and Mexico. **Club Med,** the all-inclusive pioneer and market leader with over 65 premium resorts worldwide, has been welcoming guests since 1950 in the United States, Mexico, the Bahamas and the Caribbean to Asia, Africa, South America, Europe, the Indian Ocean and the Middle East.

## Traveller's evolution and market demand

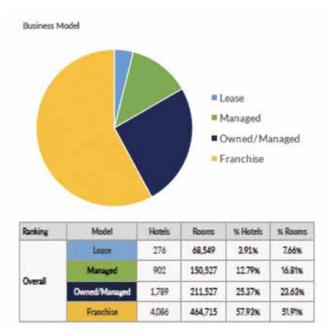
The challenge for all-inclusive resorts in today's market stems from the exponential rise in demand for authentic local travel experiences. All-inclusive experiences tend to keep most guests on-property for the bulk of their vacations, which leads to an emerging effort among hotel brands to develop higher quality travel programs, both on-property and off, that immerse guests in the local culture<sup>8</sup>.

<sup>6 &</sup>lt;a href="http://library.hotelsmag.com/publication/?i=511229&article\_id=3134065&view=articleBrowser&ver=html5#">http://library.hotelsmag.com/publication/?i=511229&article\_id=3134065&view=articleBrowser&ver=html5#</a>{%22issue\_id%22:%22511229%22,%22page%22:22}

<sup>7</sup> Yu et al. (2014): "Critical issues of globalisation in the international hotel industry". In: Current Issues in Tourism, Vol. 17, No. 2, pp. 114-118

<sup>8</sup> Club Med + Skift Present:The Evolution of the All-Inclusive Resort https://skift.com/2015/04/30/new-free-skift-report-the-evolution-of-the-all-inclusive-resort/





+Skift and Club Med surveyed 1,087 all-inclusive travelers

## **Financing and investors**

Hotel and resort financing comes from a variety of sources. The dominant financiers are even larger banks and financial institutions, but also equity funds, pension funds and private investors are important sources. Banks and financial institutions include multilateral development banks (MDBs), such as the European Investment Bank (EIB), the Caribbean Development Bank (CDB), the Inter-American Development Bank (IDB) and the World Bank<sup>9</sup>. A major transformation within the all-inclusive resort segment is under way, as large private equity investors dedicate capital in the sector. Large private equity investors are providing a wave of capital into this sizzling and growing sector that presents attractive return potential<sup>10</sup>.

## **Ownerships models**

In the space of a few short years, hotel chains have profoundly modified their asset owner strategy and are gradually moving those portfolios towards an asset-light model. The substantial development of franchised or management ownership models are less capital-intensive and enable an accelerated growth while reducing risks and allowing to amortize the growing fixed cost base that is connected with the required development of sales and marketing platforms<sup>11</sup>.

## **Corporate Social Responsibility (CSR)**

The activity of the hospitality sector have a strong link with territories and local communities. Therefore, the sector has much potential in contributing to sustainability processes; however, in reality, so far it has made a limited contribution to the promotion of sustainable development. Environmental and sustainable tourism policies for the hospitality industry have had little influence and have not contributed much to the sustainable development<sup>12</sup>. Very often, corporate commitments towards sustainability have been used as a stratagem, described as "greenwashing" (the term derives from the hotel industry, coined in 1986). It is designed to attract consumers increasingly concerned about the environmental impact and social implications of tourism, but ignoring —or only contributing to a small extent— the change of the touristic models and the reduction of negative environmental and social impacts.

## **Tour Operators**

Tour operators (TOs) are companies that connect the various suppliers in the tourism supply chain, combining the various elements of a trip —e.g. transport, accommodation, meals, entertainment, sightseeing— in a single product, called a tourist package "all inclusive" sold to consumers. TOs operate on an international scale and

<sup>→</sup> Travelers criteria for all-inclusive resort

Source: The Evolution of the All-Inclusive Resort. Club Med + Skift

<sup>→</sup> Business Model of Hotels Management in Europe (2018) Source: Horwath HTL, European Hotels & Chains Report, 2019

<sup>9</sup> International Union for Conservation of Nature IUCN (2011): "Impacts of hotel siting and design on biodiversity in the insular Caribbean: a situation analysis". Gland, Switzerland, 96 pp. https://portals.iucn.org/library/efiles/documents/Rep-2011-015.pdf

<sup>10 &</sup>lt;a href="http://www.hotelnewsnow.com/Articles/22591/Private-equity-dives-into-all-inclusives">http://www.hotelnewsnow.com/Articles/22591/Private-equity-dives-into-all-inclusives</a>

<sup>11</sup> Oliver Wyman (2012): "Hotels and resorts, Challenges of a digital revolution" - <a href="https://www.oliverwyman.com/content/dam/oliver-wyman/global/en/2015/oct/OW\_Hotels\_and\_Resorts.pdf">https://www.oliverwyman.com/content/dam/oliver-wyman/global/en/2015/oct/OW\_Hotels\_and\_Resorts.pdf</a>

Melissen et al. (2016): "Sustainable development in the accommodation sector: A social dilemma perspective". In Tourism Management Perspectives, Vol. 20, pp. 141-150

| Tour<br>Operator                      | Headquar-<br>ter | Travel<br>agen-<br>cies | Aircrafts | Cruise<br>lines | Hotels and resorts | Employees | Customers  | Coun-<br>tries | Turnover | Benefits |
|---------------------------------------|------------------|-------------------------|-----------|-----------------|--------------------|-----------|------------|----------------|----------|----------|
| TUI <sup>13</sup>                     | Germany          | 1600                    | 150       | 16              | 380                | 70.000    | 27 million | 180            | €19.5bn  | €1.1bn   |
| Thomas<br>Cook<br>Group <sup>14</sup> | UK               | -                       | 100       | -               | 200                | 20.000    | 21 million | 16             | £9.6bn   | £0.3bn   |

→ Table 29: Verticalized Tour Operators (2018) Source: eco-union (based on corporate websites)

their role as an intermediary gives them strong power both on individual suppliers, demand and destinations.<sup>15</sup> TOs do not only play the role of intermediary, but their activities vary and cover different functions within the tourism industry, such as developing and promoting tourist packages, influencing images of destinations and stimulating tourist demand, establishing mechanisms to make, confirming and paying for reservations, determining market trends, competitiveness, suppliers and impact on demand levels for destinations. <sup>16</sup>

Over time, the oligopoly of TOs has led to the homologation and standardization of maritime and coastal destinations, as well as a strong dependence of these from the TOs, linking the success of a destination to its presence in the tourist packages. Apart from homologating the offer, TOs also contribute to the massification and replication of the problems in the destinations, repeating the same model with the same gaps in different coastal/maritime destinations. Their key role in the supply chain provides TOs with a strong responsibility and a leading role in the sustainability of tourism. Compared to other sectors, such as housing, the tour operator sector is lagging behind in integrating sustainability into business practices<sup>17</sup>. TOs act like any commercial distributor, commodifying, transforming and changing the product (from territory to destination) according to market trends and needs. For this reason. TOs do not always consider the development of the destination at the long term, since their operations are spatially flexible with respect to suppliers, such as hotels

and resorts.<sup>18</sup> Furthermore, the low costs paid by TOs to suppliers limit the ability of a supplier to invest in the improvement, whereas the interest in sustainable tourist services of consumers turning to TOs is lower<sup>19</sup>. TOs can choose suppliers that have little or no environmental, economic and social impacts on coastal and maritime destinations and with clear sustainability policies.

## **Alternative accommodations**

Lately, there has been a high increase of alternative accommodation, mainly rooms or second homes made available as tourist accommodation in private online platforms. These peer-to-peer platforms work differently than traditional accommodation providers and traditional distribution channels in the hotel tourism industry and are distorting the traditional housing market<sup>20</sup>. They can be paid, such as Airbnb, HomeAway, or free of charge "hospitality networks", such as CouchSurfing. The advantages offered by these accommodations range from economic agreement, opportunities to interact with the local community, comfort, sleep in a residence (feel "at home"), trust mechanism (reviews) etc. These "hybrid" forms of housing have spread rapidly, on a global scale, in all tourist destinations, with a significant impact on a local scale on destinations and the hospitality industry. The best known and most successful example of this form of collaborative economy of hospitality is Airbnb. Airbnb in 2015 was estimated to produce \$ 25.5 billion, twice the value of Expedia and more than Marriott Hotels<sup>21</sup>.

To date, the regulatory and fiscal environment regarding alternative housing is ambiguous or inexistent. With no licensing requirements, the expansion of tourist accommodation is easier than hotels, aggravating crowding problems, rising house prices, tourist gentrification and dependence

<sup>13</sup> TUI corporate website (retrieved 17/04/19)

<sup>14</sup> Thomas Cook Group corporate website (retrieved 17/04/19) https://www.thomascookgroup.com/business

<sup>-</sup>Van Wijk, J. & Persoon, W. (2006): "A Long-haul Destination:: Sustainability Reporting Among Tour Operators". In: European Management Journal, Vol. 24, Issue 6, pp. 381-395

<sup>-</sup> ECORYS (2009): "Study on the Competitiveness of the EU tourism industry", 281 pp. Available at: https://ec.europa.eu/growth/content/study-competitiveness-eu-tourism-industry-0 en

<sup>-</sup> Zapata Campos et al. (2018): "Can MNCs promote more inclusive tourism? Apollo tour operator's sustainability work". In: Tourism Geographies DOI 10.1080/14616688.2018.1457074 Available at: <a href="https://mafiadoc.com/apollo-tour-operators-sustainability-work\_5b7ab100097c4707378b458c.html">https://mafiadoc.com/apollo-tour-operators-sustainability-work\_5b7ab100097c4707378b458c.html</a>

 <sup>-</sup>Bastakis, C. et al. (2004): "The perception of small and medium sized tourism accommodation providers on the impacts of the tour operators' power in Eastern Mediterranean". In Tourism Management, nr. 25, Vol. 2 pp. 151-170
 -Trunfio et al. (2006): "Tour operators and alternative tourism in Italy: Exploiting niche markets to increase international competitiveness". International Journal of Con-

<sup>-</sup>Trunfio et al. (2006): "Tour operators and alternative tourism in Italy: Exploiting niche markets to increase international competitiveness". International Journal of Contemporary Hospitality Management; Vol. 18, nr. 5, pp. 426-438. Available at: https://search-proquest-com-s.acces-distant.sciences-po.fr/docview/228374822/fulltextPDF/EA98F64C1430485APO/1?accountid=13739

Zapata Campos et al. (2018): "Can MNCs promote more inclusive tourism? Apollo tour operator's sustainability work". In: Tourism Geographies DOI 10.1080/14616688.2018.1457074 Available at: <a href="https://mafiadoc.com/apollo-tour-operators-sustainability-work">https://mafiadoc.com/apollo-tour-operators-sustainability-work</a> 5b7ab100097c4707378b458c.html

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>20</sup> Karlsson et al. (2017): "May I sleep in your bed? Getting permission to book" Annals of Tourism Research, Vol. 62, pp. 1-12

Carson, B. (2015): "Airbnb is worth \$25.5 billion after raising a massive \$1.5 billion round". Available at: <a href="https://www.businessinsider.com/airbnb-15-billion-round-values-the-company-at-255-billion-2015-6?IR=T">https://www.businessinsider.com/airbnb-15-billion-round-values-the-company-at-255-billion-2015-6?IR=T</a>

| <b>Economic Pressures</b>                     | Impacts  |
|---|--|
| Foreign investment and profits leakages       | Foreign economic enclaves, without a real contribution to the local economy; leakage phenomena; damage to the local economy and craft activities, that hinder endogenous, regional and local development |
| Economic specialization in tourism activities | Naturalization of local businesses, economic dependence of the monoculture tourism; territorial economics imbalances, social conflict  |
| Public investments in tourist services        | Decrease in the quality and quantity of public services for local residents (transport, etc.); privatization of services; corruption risks   |

<sup>→</sup> Table 30: Matrix of the pressures and economic impacts of hotels and resorts

on this type of activity. For example, in Barcelona, Airbnb holds a much larger than hotels, and its accommodation offer is mainly located in in traditional residential neighbourhoods.<sup>22</sup> The maritime/coastal destinations have an oversized second-home market; therefore, it could lead to the expansion of collaborative economies.<sup>23</sup>

## **Economic externalities**

Coastal and maritime tourism contribute to negative economic and social externalities at the local level related to the foreign investment patterns, value chain concentration, tourism dependency and opportunity cost.

Foreign investment and profits (all-inclusive model): the construction of hotels and resorts is often justified with the future economic benefits that these can bring to the value chain and in terms of jobs. In reality, hotels and resorts, especially large hotel groups and corporations, can develop few economic links at local and regional level. The economic profits of this industry are often repatriated to the countries of origin of investors, with little positive repercussions on the total GVA.

Strong economic specialization in tourism and related activities: The economic specialization in tourism causes serious problems and socio-economic destabilization. The tourism sector afflicts other sectors, in particular the traditional industries and agriculture, bringing them closer to failure and increasing even more the dependence on the tourism sector. These losses consequently influence the economic and social structure of the local population, increasing the number of unemployed and seasonal workers (for example, in the Balearic Islands, 50% of seasonal tourism workers), increasing the social conflict and destabilizing the economy local.

## Opportunity cost of public investments in tourist services:

the development of tourism can concentrate part of the public budgets for the construction of physical infrastructures, such as roads, airports and ports, as well as reduce the expenses allocated to the local community needs, such as housing, health, education or transport.

## **Environmental pressures**

Hotels and resorts cause a great impact on the environment<sup>24</sup> during the construction of tourist infrastructures —with occupation of land and public space, increasing coastal erosion and vulnerability—, and during the provision of supply services and tourist activities.

Consequently, water and marine and coastal habitats are polluted due to discharges in rivers and seas, resources, such as water, electricity, fish and agricultural lands, etc., are over-exploited<sup>25</sup>, and considerable amounts of garbage are produced.

## Solid waste generation

The generation and disposal of solid waste is one of the most negative environmental impacts caused by hotels and resorts. This sector uses large quantities of consumer goods as part of their operations<sup>26</sup>, producing tons of garbage each year and contributing to the production of 45% of solid urban waste<sup>27</sup>. Aluminium, plastic, glass, steel, cardboard and food waste are the main components of this industry's waste. In addition, other types of waste are also produced, such as bulky items (e.g. furniture), construction and demolition waste (e.g. cement, pipes, etc.), abandoned electronic equipment and used refrigeration equipment<sup>28</sup>. A guest in a hotel produces about 1 kg of waste per day<sup>29</sup>.

## Water use

Water is an essential production factor for the activities of hotels and resorts. The coastal areas are usually the Table

<sup>22</sup> Gutiérrez et al. (2017): "The eruption of Airbnb in tourist cities: Comparing spatial patterns of hotels and peer-to-peer accommodation in Barcelona". In: Tourism Management, Vol. 62, pp. 278-291

Moreno-Izquierdo et al.(2019): "Tourist environment and online reputation as a generator of added value in the sharing economy: The case of Airbnb in urban and sun- and-beach holiday destinations". In Journal of Destination Marketing & Management, vol. 11, pp. 53-66

<sup>24</sup> IUCN (2008): "Biodiversity: My hotel in action. A guide to sustainable use of biological resources". Gland, Switzerland,128 pp. Available at: <a href="https://cmsdata.iucn.org/downloads/iucn\_hotel\_guide\_final.pdf">https://cmsdata.iucn.org/downloads/iucn\_hotel\_guide\_final.pdf</a>

<sup>25</sup> Ibid.

Bohdanowicz, P. (2005): "European Hoteliers' Environmental Attitudes: Greening the Business in media". In Cornell Hotel and Restaurant Administration Quarterly, vol. 46, nr. 2, pp. 188-204

<sup>27</sup> Bacot et al., 2002 in Singh et al. (2014): "Green strategies for hotels: Estimation of recycling benefits". In: International Journal of Hospitality Management, vol. 43, pp. 13-22

Losanwe, 2013 in Pirani & Arafat (2014): "Solid waste management in the hospitality industry: A review". In Journal of Environmental Management, vol. 146, pp. 320-336 PwC - Price water house Coopers (2017): "African insights: Hotels outlook: 2017-2021" Available at: <a href="https://www.pwc.com/mu/en/pressroom/hotels-outlook-17/hotel-outlook-2017.pdf">https://www.pwc.com/mu/en/pressroom/hotels-outlook-17/hotel-outlook-2017.pdf</a>

<sup>29</sup> Ibid.

| Environmental Pressures   | Impacts   |
|---|---|
| Solid Waste Generation  | Increase of solid urban waste, congestion of the waste disposal system, pollution   |
| Water Use   | Natural primary resource depletion, hydric stress, physical supply problem, deterioration of water supplies, increase of infrastructure for water desalination.   |
| Grey Water and Water Discharge  | Marine pollution, ecosystem alteration, loss of biodiversity and ecosystem services, local eutrophication, contamination of the food chain, degradation of bathing water quality.   |
| Energy Consumption and Use of Heavy Fossil Fuels                            | Air pollution, greenhouse gas emissions, contribution to global warming.  |
| Land Use and Change: Construction of Buildings and Tourists Infrastructures | Soil degradations, land and ecosystem fragmentation, losses in ecosystems and ecosystem services, littoralization, coastal erosion, landscape destruction, vulnerability in front of climate change and coastal risk, contribution to global warming. |
| Maintenance of the Infrastructure: Establishment, Golf Courses, Lawns       | Water pollution (aquifer) from pesticides and fertilize,; degradation of aquatic ecosystems, alteration of coastal/maritime ecosystem and biodiversity losses   |

→ Table 31: Matrix of the Pressures and Environmental Impacts of Hotels and Resorts Sources: IPCC; Plan Bleu. 2017: Travel Foundation; ECPAT; Gössling; EEA; IUCN; European Commission

poorest regions for water, especially in the summer season —hot and dry climates, with irregular supplies of rainwater and season-based—. Hotels and resorts tend to increase the demand for fresh water, in the most critical period of the year, aggravating the problem of adequate water supply, both in quantity and quality. The consumption of water in accommodation facilities —in terms of total quantities and usage patterns—depends not only on the type of infrastructure (years, standards, category and dimensions), but also on the services and equipment offered, on local and regional irrigation, as well as on water conservation practices<sup>30</sup>. The consumption of a tourist staying in a hotel can be up to three times higher than the average consumption of the residents<sup>31</sup>. It is estimated that the direct water footprint of the hotels can vary between 84 L and 2425 L per tourist per day —including use of water in rooms and irrigation of gardens and pools<sup>32</sup>. The use of water by hotels and resorts can create or increase pressure on water usage in coastal tourist destinations, leading to the accentuation of water stress, creating conflicts with local populations, or with other activities such as, for example, agriculture.

## Grey water and water discharge

The wastewater generated by the accommodations can cause a level of pollution of the marine waters higher than the recommended for the human health and the protection of the environment. Many tourist destinations do not have sewage treatment plants. The waste and grey waters poured into the sea from hotels and resorts can interrupt the ecological balance within the ecosystem, generate alteration of the ecosystem, loss of biodiversity and ecosystem services, local eutrophication and trophic chain contamination.

## Energy consumption and use of fossil fuels

The hotel industry is among the sectors of the tourism industry that requires more energy<sup>33</sup>. A hotel needs 3-4 times more energy per tourist and night than a camping (16.5kWh)<sup>34</sup>. The quantity and intensity of the energy used varies according to the services provided. In the hotel sector, 85% of the total energy consumption derives mainly from the use of heating, ventilation, air conditioning, elevators, electrical equipment and the lighting of the building. In particular, air conditioning, as a dominant energy consumer in hotels, is directly related to hot climates, and it represents an annual increase in energy consumption of between 29% and 77%<sup>35</sup>. It is estimated that a typical hotel normally releases between 160 kg and 200 kg of CO<sup>2</sup>/m<sup>2</sup> for each room every year. However, this date will be conditio

Bohdanowicz, P. (2005): "European Hoteliers' Environmental Attitudes: Greening the Business in media". In Cornell Hotel and Restaurant Administration Quarterly, vol. 46, nr. 2, pp. 188-204

Erdogan, N. & Baris, E. (2007): "Environmental protection programs and conservation practices of hotels in Ankara, Turkey". In: Tourism Management, Vol. 28, Issue 2, pp. 604-614

Gössling et al. (2012): "Tourism and water use: Supply, demand, and security. An international review". In: Tourism Management, vol. 33, Issue 1, pp.

Bohdanowicz, P. (2005): "European Hoteliers' Environmental Attitudes: Greening the Business in media". In Cornell Hotel and Restaurant Administration Quarterly, vol. 46, nr. 2, pp. 188-204

ECOTRANS (2006): "Environmental initiatives by European tourism businesses Instruments, indicators and practical examples A contribution to the development of sustainable tourism in Europe". 39 pp. Available at: http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=SURTOUR\_initiatives\_EN.pdf

Filimonau et al. (2011): "Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation". In Journal of Cleaner Production, vol. 19, Issues 17–18, pp. 1917-1930

ned by the fuel used<sup>36</sup>. The energy used in hotels comes mainly from fossil fuels that result in emissions of air pollutants and greenhouse gases. The emissions of burning fuels<sup>37</sup> are dangerous for people's health, the ecosystem and the climate, by altering the composition of the atmosphere, influencing the biogeochemical cycles, causing complex effects on the biosphere —directly affecting the species and the physiology of the plants— and contributing to global heating. These impacts may worsen with climate change, having even more negative consequences for the local ecosystems.<sup>38</sup>

## Land use change

The CMT model imposes a radical territorial change in coastal areas, due to the urbanization of landscapes and soil alteration. Soil alteration is seen as the most important component of global environmental change affecting ecological systems. The development of tourism infrastructures in the coastal areas is often an important agent in this process, contributing to coastal erosion, land-loss and ecosystem fragmentation<sup>39</sup>. Furthermore, soil alteration releases GHG, such as CO2, methane (CH4) and nitrous oxide (NOx), thus interacting with other aspects of global environmental change. Land use for tourism can be particularly extended in developing countries and emerging tourist destinations, where land is often relatively inexpensive, leading to the construction of large hotels: the average use of land per bed varies from 30 m<sup>2</sup> for hotels and 100 m<sup>2</sup> for resorts. A study Unguja Island, in Tanzania, shows a use of 284 m<sup>2</sup> of land per bed<sup>40</sup>, which represents 0.3% of the total area of the island. Moreover, land use increases with hotel standards: a five-star hotel in the

Seychelles covering an area of 110 ha (including a golf course) represents more than 4,580 m² per bed (or around 2290 m² excluding the golf course). Luxury hotels and resorts can therefore occupy vast areas in both absolute and relative terms, especially in areas outside the city, or along the coast —where the cost of land is relatively cheaper—, leading, in some cases, to the creation of coastal tourist conurbations. Soil alteration contributes to the loss of ecological balances, hydrogeological structures, the increase of hydrogeological and coastal risk —over 70% of the global coast is currently undergoing erosion<sup>41</sup>—, the vulnerability of climate change and, on a global scale, the loss of climate balance. Therefore, land alteration can have detrimental consequences for biodiversity and ecosystem services.<sup>42</sup>

## **Maintenance of green infrastructures**

Water pollution from pesticides and fertilizers, due to the maintenance of golf courses, lawns and gardens, can filter in the ground and reach groundwater and the sea, caused by leachate. This activity contributes to the pollution of the subterranean waters and the degradation of the marine ecosystems.

## **Social pressures**

Negative social externalities caused by the hotel and resorts affect social equity, quality of life, health equity, community development, human and labour rights and social justice. The large hospitality corporations, including all-inclusive services, affect and modify the complexity of social and cultural behaviours in the receiving countries.

| Social Pressures  | Impacts  |
|---|--|
| Use, Privatization and Elitizacion of the Coastal and Littoral Area                               | Increasing private property, local population displacement, privatization of natural resources (e.g. hotels and resorts with private beach ,occupation of the coast, etc.), speculation, conflict for space use, degradation of quality of life, modification and destruction of the landscape.  |
| Precarious Jobs and Uncovered Basic Rights  | Exploitation of labour, decrease in the quality of work, degradation of quality of life, local poverty, minor labour, exploitation of women and immigrant labour, violation of humans rights, gender and racial inequality.  |
| Sexual Tourism  | Exploitation of women, violation of humans rights  |
| Use/Subtraction of Basic Environmental Resources (water, energy,<br>soil) to the Local Population | Over-exploitation of resources, deterioration of natural resources, increase in water and energy prices, increase of the cost-of-living, decrease of arable land, degradation of the quality of life, rising social conflict.  |
| All Inclusive Offer – Creation of Tourist Enclaves  | Social exclusion, petty crime phenomena, social deconstruction, modification of social and cultural structures and territorial models, degradation of traditional local culture (consumption of cultural heritage), decreasing of the attractive force of the destination, trivialising the culture and the territory (turning an exceptional place into an ordinary place). |

<sup>→</sup> Table 32: Matrix of the Pressures and Social Impacts of Hotels and Resorts Sources: Plan Bleu, Ilo, ECPAT International, The code, Tapper & Font, 2004, Blázquez et al., 2011

Bohdanowicz, P. (2005): "European Hoteliers' Environmental Attitudes: Greening the Business". In Cornell Hotel and Restaurant Administration Quarterly, vol. 46, nr. 2, pp. 188-204

When fossil fuels are burned, they produce emissions of carbon dioxide (CO2), nitrogen oxides (NOx), water vapor (H2O), hydrocarbons (HC), carbon monoxide (CO), soot (C), sulfur compounds (mainly SO 2) and non-methane volatile organic compounds (NMVOC).

<sup>38</sup> Gössling, S. (2002): "Global environmental consequences of tourism". In Global Environmental Change, volume 12, Issue 4, pp. 283-302

<sup>39</sup> Ibid.

<sup>40</sup> Ibid

<sup>41</sup> Davis & Fitzgerald (2004): "Beaches and Coasts". Blackwell Publishing, Malden (MA/USA) and Oxford (UK),1st Edition, 419 pp.

<sup>42</sup> Ibid.

## Use and privatization of the coastal and littoral area

The establishment of hotels and resorts affects the organization of space, transforming it into an exclusive, private and segregated space. The consequences are the concentration of land property in the hands of the investors of the hospitality sector, which involves an important transformation in the use of the territory, and on the social structure of local communities. This causes displacement of the local population, disappearance of traditional activities local, employment and privatization of public goods and spaces, such as water, beaches, and areas for public services. In addition, it modifies and degrades the cultural and heritage landscape. It gives the landscape cultural heritage and influences the decision-making power of the local population on the public good.

## Precarious jobs, lack of basic rights and rise of inequalities

In many cases, work in the hotel sector is a job of poor quality, precarious and underpaid; long hours, unstable work, low pay, poor training and qualification. There is a tendency to employ non-local labour, especially in large hospitality chains<sup>43</sup>. In developing countries, low level jobs, such as maids, gardeners and other physical work, are done by the local population; whereas high-level managerial jobs are generally assigned to people originating from the countries of origin of the accommodation, usually from Western countries<sup>44</sup>. Child labour in the hospitality industry is very common, especially in developing countries. Many boys and girls under the age of 12 are engaged in activities related to hotels and restaurants, the entertainment sector or souvenirs sales, as porters or street vendors. They are frequently subjected to harsh working and employment conditions. Approximately 13-19 million children and young people under the age of 18 (10-15% of all employed in tourism) are estimated to be employed in the tourism sector all over the world<sup>45</sup>.

### Sex tourism

Although hotels and resorts are not the direct cause of sexual exploitation, they provide easy access to it. Hotels are among the spaces used for meetings and exchanges of these "hidden" violations, even for minors. Sexual exploitation has become an industry of "entertainment", be it both in the form of "remunerated appointments" or, in worse cases, sexual slavery. There are cases of hotels and resorts that advertise sex tourism and hotel owners willing to put tourists in contact with people in prostitution<sup>46</sup>. It is estimated that 150 million girls and 73 million children under the age of 18 have experienced sexual exploitation or other forms of sexual violence<sup>47</sup>.

## (Mis-)use and subtraction of basic environmental resources

Hotels and resorts originate conflicts in the use of resources, such as competition between tourists and local populations for the use of primary resources like water or energy due to their lack of availability and/or scarcity. Stress for local communities can also result in environmental degradation and increased infrastructure costs for local communities, such as higher taxes to be paid in order to improve water supply or sanitation<sup>48</sup>.

## **Creation of tourist enclaves**

The "all inclusive" tourism model involving hotels and resorts (but also tour operators and cruises) in the maritime/coastal destinations has played a role in modifying the space in the coastal tourist destinations, transforming them into the tourist enclave "Sunny Bunker"<sup>49</sup>. The globalisation of this model has developed the tourist commercialization of territories and their elements, both natural and human, as a cause of the common impacts detected in all regional seas and reproduced in all coastal/maritime destinations.

Tapper & Font (2004): "Tourism Supply Chains Report of a Desk Research Project for The Travel Foundation". Final report, 23 pp. Available at: <a href="http://icrtourism.com.au/wpcontent/uploads/2012/09/TourismSupplyChains.pdf">http://icrtourism.com.au/wpcontent/uploads/2012/09/TourismSupplyChains.pdf</a>

<sup>44</sup> www.ilo.org

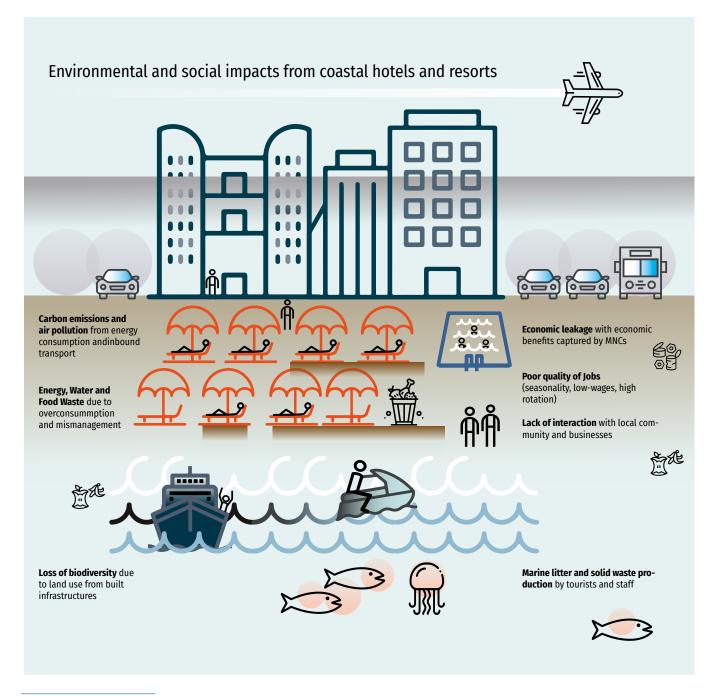
<sup>45</sup> http://www.sustainabletourismalliance.net

<sup>46</sup> ECPAT International (2016): "THE GLOBAL STUDY ON SEXUAL EXPLOITATION OF CHILDREN IN TRAVEL AND TOURISM", 152 p. Available at: <a href="https://www.protectingchildrenintourism.org/wp-content/uploads/2018/10/Global-Report-Offenders-on-the-Move.pdf">https://www.protectingchildrenintourism.org/wp-content/uploads/2018/10/Global-Report-Offenders-on-the-Move.pdf</a>

<sup>47 &</sup>lt;a href="http://www.thecode.org/csec/">http://www.thecode.org/csec/</a>

<sup>48 &</sup>lt;u>http://www.sustainabletourismalliance.net</u>

<sup>49</sup> Blázquez et al.. (2011): "Búnker playa-sol. conflictos derivados de la construcción de enclaves de capital transnacional turístico español en el Caribe Y Centroamérica". In: Scripta Nova - revista electrónica de geografía y ciencias sociales, Vol. XV, nr. 368 Available at: http://www.ub.edu/geocrit/sn/sn-368.htm



<sup>→</sup> Environmental and Social Impacts from Coastal Hotels & Resorts Source: eco-union

## Sustainability practices

The hotels and resorts operating on the coasts are more and more active by sustainable tourism and new management models respecting sustainability. The main companies often publish annual reports on their environmental progress and policies including water and energy consumption; charters on social and environmental responsibility, and they launch campaigns on their environmental action. Some of them also sign relevant partnerships with local NGOs. However, this type of documents are based on declarations difficult to fact-check, and its gaps with effective actions are difficult to evaluate. In addition, large industrial groups have a rationalized vision of their environmental mission oriented to their brand image and costs reduction.

Another issue regarding the industry-produced documents is the vague objectives that are fixed in terms of energy efficiency, water consumption, waste management and protection of biodiversity. The technical methods that are used, the indicators that are evaluated and the budget allocated to the environmental actions are also very little developed. On the other hand, small-size companies are more willing to create innovative business models and integrate niche market, specifically luxury tourism. Consequently, mass tourism is not the most innovative market sector of the coastal tourism regarding environmental and social progress.

Some of the relevant good practices identified in the Hotels and Resorts industry are described below.

| Name of Action  | Location  | Date | Actor Driving the<br>Initiative (Name<br>of Key Actor) | Scale of<br>Action                         | Key Area of Action   | Description [Outcome]   |
|---|---|------|--|--|--|---|
|   |   |      | Accommodation s  | tructures                                  |  |   |
| Serena Hotels' sustai-<br>nability programme                  | Africa (Kenya, Mozam-<br>bique, Tanzania) + Asia<br>(Pakistan, Tajikistan)    | -    | Industry (Serena<br>Hotel)                             | Local and regional                         | Human rights, ener-<br>gy, local sourcing  | Establishing partnerships<br>and charter for good prac-<br>tices [Mitigation]   |
| Chumbe National Coral<br>Park                                 | Tanzania(Zanzibar)  | 1998 | Industry (Chum-<br>be National<br>Coral Park)          | Local                                      | Ecosystems & biodiversity, awareness, eco-habitat  | Marine protected area combined eco-tourism infrastructures, education, staff training, eco-construction [Mitigation, prevention]  |
| Hostelling Internatio-<br>nal USA                             | USA   | -    | Industry (HI USA)                                      | Local                                      | Water savings  | Programme to save water in all their buildings (objective of 1 million gallons) by installing innovative showers and toilets, save the waters of the roofs, recycle water from washing machine. |
| Labels and certifications                                     |   |      |  |  |  |   |
| Global Ecosphere<br>Retreat Standard                          | Global  | 2015 | NGO (The Long<br>Run)                                  | Global                                     | Ecosystems and<br>biodiversity Local<br>community and<br>culture, fair trade                       | Labelling and promoting sustainable destinations via strict technical specifications [Prevention, mitigation]   |
| Ecolabel Toolbox  | Metropolitan France +<br>overseas regions                                     | 2015 | European Union,<br>ADEME, EU Ecola-<br>bel, ShMILE     | National (FR)                              | Energy, water, waste<br>   | Marketing tools, technical solutions, and labellisation for tourist accommodations (More than 140 accommodations certified) [Prevention, mitigation]  |
| Scandic Hotels envi-<br>ronmental policy<br>and certification | Ospar (Sweden, Den-<br>mark, Finland, Norway,<br>the Netherlands,<br>Belgium) | 1994 | Industry (Scan-<br>dic Hotels)                         | Europe (10<br>countries)                   | Energy use, water<br>consumption,<br>carbon<br>emissions and air<br>pollution, sourcing            | Strict chart of environmental policy applied to 180 hotels certified under Nordic Swan or EU ecolabel. [Mitigation]   |
|   |   |      | Indicators   | ;  |  |   |
| GSTC Industry Criteria<br>for Hotels                          | Global  | 2016 | NGO (GSTC)   | Global                                     | Land-use and,<br>eco-habitat, working<br>conditions, resour-<br>ces and wastes,<br>cultural impact | GSTC Hotel Criteria: sustainability planning, social and economic benefits for the local community, enhancing cultural heritage, reducing negative impacts to the environment. [Mitigation]     |
|   | Specific taxes  |      |  |  |  |   |
| Eco Tourism Tax   | Balearic Islands (Spain)  | 2016 | Government<br>of the Balearic<br>Islands               | Regional (Ba-<br>learic Islands,<br>Spain) | Contribution to envi-<br>ronmental budgets   | Varying rates based on the type of accommodation. Revenue used to compensate the environmental/social impacts of the tourism. [Mitigation]  |

<sup>→</sup> Table 33: Relevant Good Practices in Hotels and Resorts Source: eco-union (based on corporate websites and leaflets)

### Description

• After years of controversies and despite conflicts with the tourism local actors, the Balearic Government introduced in 2016 a new eco-tax on tourist accommodations. The rates of the tax vary depending on the type of accommodation (1-4€/person/night) with a reduction of 50% from the 9th day of stay. Funds collected from the tourist tax (107 million € in 2 years) have been streamed into various environmental projects throughout the Balearic Islands of Mallorca, Menorca Ibiza and Formentera. A Commission on Sustainable Tourism was set up to decide together with existing organizations how the money is to be spent every year. The main issues are environmental restoration, improving the quality of tourism offering, improving infrastructures for future tourism, promotional projects, cultural heritage projects and research.

### **Advantages:**

- · Funds raised for environmental and cultural projects
- · Economic regulation of the mass tourism

## **Obstacles and limits:**

- · Soft regulation, possibility of fraud
- · Makes tourism less affordable for lower classes
- · Lack of transparency in the use of funds



→ Global Ocean Cruise Passengers (in millions Source: CLIA, 2018<sup>51</sup>

## **Cruising**

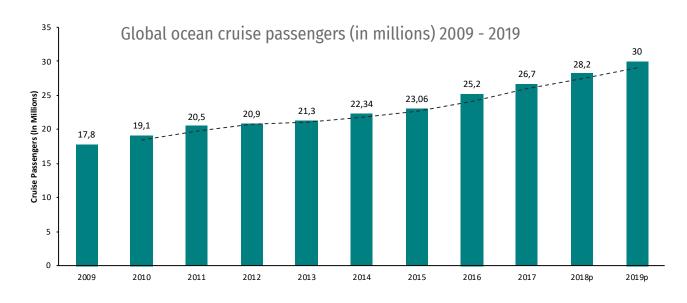
## Socio-economic structure of the market

## **Global overview**

Cruising has been increasingly the centre of attention of policy makers, as the sector has grown at a record pace, with a more than 30-fold growth between 1990 and 2011<sup>52</sup>. Worldwide, the ocean cruise industry has an annual passenger compound annual growth rate of 6.6% during the period 1990-2020<sup>53</sup>. Today, it is one of the most dynamic segment of the touristic sector<sup>54</sup> and concentrated 25.8 million passengers in 2017 with a projected 27 million in 2018<sup>55</sup>. The sector has proved its resilience to market threats, and sectoral growth is anticipated to continue. Indeed, passenger capacity is expected to increase by 110% annually up until 2023 through the launch of 47 new ships<sup>56</sup>.

The industry continues to grow by becoming more global in both itineraries and passenger sourcing, with the Caribbean headlined the industry's success. It accounted for more than a third (35%) of the global deployment capacity market share, followed by the Mediterranean (16%).

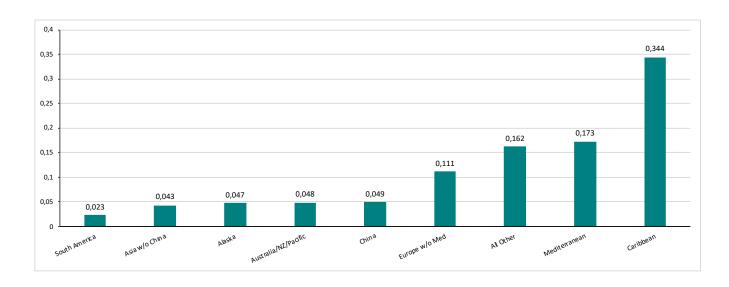
Member cruise lines have **50 vessels** on order between 2018-2025, representing 220,000 lower berths and an investment value of more than \$51 billion. And most of these vessels are large in both features and capacity, with the average new build on order tipping the scales at more than 155,000 GRT with more than 4,000 lower berths<sup>57</sup>.



- 50 <a href="https://www.ecotasa.es/en-gb/">https://www.ecotasa.es/en-gb/</a>
- 51 https://cruising.org/news-and-research/-/media/CLIA/Research/CLIA%202019%20State%20of%20the%20Industry.pdf
- 52 Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18, pp. 107-116
- 53 https://cruisemarketwatch.com/growth/
- 54 Margkogianni, A., PAPAEFTHIMIOU, S. (2015): "Evaluating the social cost of cruise ship air emissions in major ports of Greece". In Transportation Research Part D, vol. 36, pp. 10 17.
- 55 CLIA (2016). State of the Industry 2017. [online] Available at: <a href="https://www.cruising.org/docs/default-source/research/clia-2017-state-of-the-industry.pdf?sfvrsn=6">https://www.cruising.org/docs/default-source/research/clia-2017-state-of-the-industry.pdf?sfvrsn=6</a> [Accessed 28 Sep. 2018].
- 56 Weeden et al. (2017): "Conclusions and future directions". Cruise ship tourism, no Ed. 2, pp. 575-582
- 57 idem

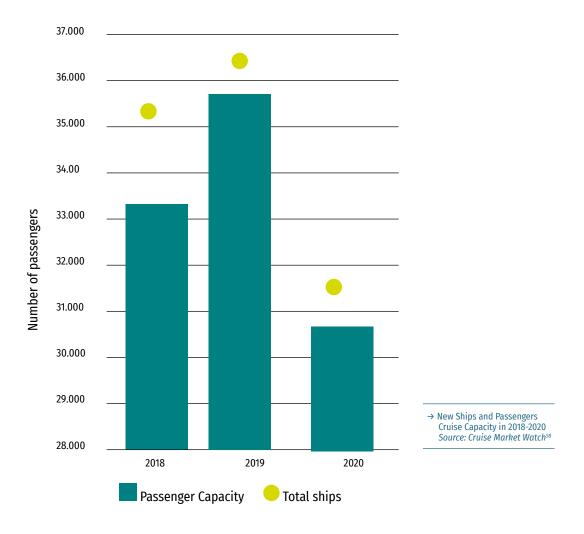


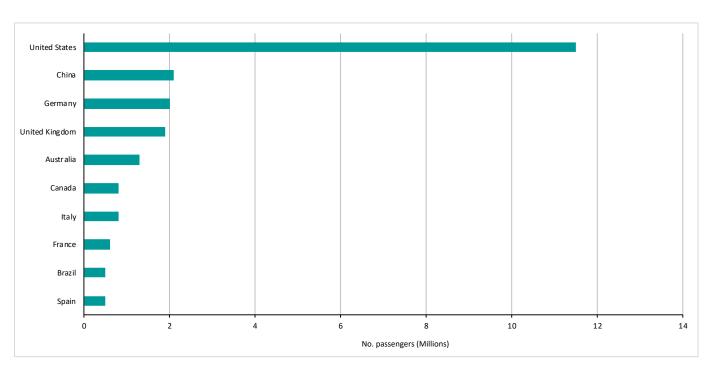
→ Cruisers



→ World Cruise Capacity Share (2018) Source: CLIA, 2018¹

CLIA 2019 Cruise trends & industry Outlook Report. Available at: https://cruising.org/news-and-research/-/media/CLIA/Research/CLIA%202019%20State%20of%20the%20Industry.pdf





→ Origin of Total Ocean Cruise Passengers 2016 (in millions) Source: CLIA, 2018<sup>59</sup> This growth has also been accompanied by profound modifications of the sector such as its massification<sup>60</sup> through the development of vessels capable of accommodating up to 5,000 guests, the diversification of on-board service provision and the targeting of a younger demographic. The average age of cruisers decreased from 65 years old in the 1970s to 46 in 2008<sup>61</sup>, with family and children market being the largest growth area for the industry<sup>62</sup>. Cruising is market by increased accessibility, as the overwhelming share of berths now fits into the "deluxe (55%) or standard (32%) portion of the market"<sup>63</sup>. Another significant trend is the emergence of new markets: though 54% of passengers originated from the USA or Caribbean in 2015, Chinese and Australian passengers represent important market segments<sup>64</sup>.

## Flags of convenience and cruise regulation

Overall, the regime of open registries and the ability for companies to use flags of convenience (FOC) creates a "free market approach" for the cruising industry. Though FOCs can limit itineraries because of cabotage laws for it largely reduces regulation of cruising operators (safety, labour and environmental laws). Indeed, flag states under which vessels are registered are responsible for certifying compliance to regulations This convenient use of FOC allows looser taxation over cruising companies. No global policy of responsibility exists for cruising and legislative requirements fluctuate depending on what regulations permit in a given time and place.

Some international conventions do apply to cruising operations, such as the United Nations Convention on the Law of the Sea (UNCLOS), the International Convention for the Prevention of Pollution from Ships (MARPOL), the International Convention for the Safety of Life at Sea (SOLAS) as well as the Convention of the Standards of training of Seafarers (STCW), with the IMO being the main actor responsible for this regulating framework<sup>68</sup>.

## **Main actors**

## This framework is reinforced by the economic and political

power of the industry. Overall, the cruising is dominated by a handful of actors, with Carnival, RCCL and NCL controlling 82% of passenger berths and 77% of earnings in 2015<sup>69</sup>. The industry is also very powerful politically speaking, and it spends large sums to influence legislators through lobbying<sup>70</sup>. The main political actor representing cruise companies is the association CLIA, which represents more than 90% of the global capacity<sup>71</sup>, with numerous regional and national branches.

## Value chain of the cruise industry

Carnival, a company of ten cruise line brands and more than 100 vessels, achieved \$16.4 billion in revenue in 2016, coming from total of 11,522,000 passengers carried around the world (Carnival annual report). The average passenger generated \$1,422 in revenue for Carnival on their cruise, 74% from passenger tickets and 25% from on-board and other spending. A remaining 1.4% — or about \$20 per passenger — is earned on tours through the company. When looking at expenses, it includes: commissions, transportation, and other fees (14%); on-board cruise items (3%); payroll (12%); fuel (6%); food (6%); maintenance, insurance and dry-dock expenses (15%); depreciation, interest on debt, and taxes (11%). After factoring in all expenses, Carnival —across all its brands around the world— saw net income of \$2.8 billion in 2016. That comes out to \$241 of profit per passenger, or about 17% of every dollar spent with the cruise line72.

## **Ship construction**

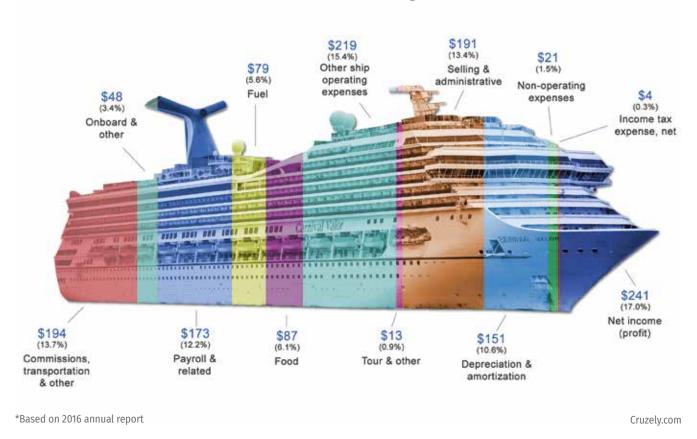
The actual cruise ship building takes 2 to 3 years, with the design plans usually started a year ahead. Shipbuilding takes place in shipyards responsible for piecing the mega ships together: Meyer Werft from Germany, STX Europe and Fincantieri from Italy are three of the major shipbuilders – responsible for the majority of the world's biggest cruise ships. As a technical measure aimed at reducing CO<sub>2</sub> emissions, the **Energy Efficiency Design Index** (EEDI), promoted by the IMO, prescribes a minimum level of

- 60 Wedden, C., Dowling, R., et al. (2017): "Conclusions and future directions". Cruise ship tourism, no Ed. 2, pp. 575-582, 2017

  -Johnson, D. (2002): "Environmentally sustainable cruise tourism: a reality check". In Marine Policy, vol. 26, pp. 261 270.
- 61 Lamber T. C.; Dowling, R., et al. (2017): "Children and the family market. Cruise ship tourism", no Ed. 2, p. 317-331
- 62 Cruise Market Watch 2014, in Lambert and Dowling 2017
- 63 Clancy (2017) segments the cruising market in five segments: super deluxe, deluxe plus (luxury), deluxe (premium), standard (contemporary) and economy (budget). See reference in bibliography.
- 64 Clancy, M., et al. (2017): "Power and profits in the global cruise industry. Cruise Ship Tourism". In book: Cruise Ship Tourism, Edition: 2d, Chapter 2, pp. 43-56
  - --Wedden, C., Dowling, R., et al. (2017): "Conclusions and future directions". Cruise ship tourism, no Ed. 2, pp. 575-582, 2017 Ellis et al. (2017): "Improving sustainable management of expedition cruise destinations in Australia: governance and management lessons from the -Great Barrier Reef, the Kimberley and Tasmania". In Cruise ship tourism, no. 2, pp. 465-483
- 65 Terry, W. C., et al. (2017): "Flags of convenience and the global cruise labour market". In Cruise Ship Tourism, pp. 72-86
- 66 Klein, R. A., et al. (2017): "Representation without taxation". In Cruise Ship Tourism, pp. 57-72
- Brida, J.G., Zapata, S. (2010): "Cruise tourism: economic, socio-cultural and environmental impacts". In International Journal Leisure and Tourism Marketing. vol 1 n° 3. pp. 205 225.
  - Marketing, vol 1 n°3, pp. 205 225.

     Terry, W. C., et al. (2017): "Flags of convenience and the global cruise labour market". In Cruise Ship Tourism, pp. 72-86
  - Johnson, D. (2002): "Environmentally sustainable cruise tourism : a reality check". In Marine Policy, vol. 26, pp. 261 270.
- 68 Hall et al. (2017): "Environmental reporting in the cruise industry".In Cruise Ship Tourism, 2nd ed.; Dowling, R., Weeden, C. ed. pp. 441-464
   Ellis et al., 2017
- Cruisemarketwatch.com, 2018;
  - Clancy, M., et al. (2017): "Power and profits in the global cruise industry. Cruise Ship Tourism". In book: Cruise Ship Tourism, Edition: 2d, Chapter 2, pp. 43-56.
     Dowling, R. & Weeden, C. (2017): "The world of cruising". Cruise ship tourism 2017 no.Ed.2 pp. 1-39.
- 70 Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18, pp. 107-116
- 1 Clancy, M., et al. (2017): "Power and profits in the global cruise industry. Cruise Ship Tourism". In book: Cruise Ship Tourism, Edition: 2d, Chapter 2, pp. 43-56
- 72 https://www.cruzelv.com/heres-how-much-money-carnival-makes-per-passenger-infographic/

## Of the \$ 1,422 in revenue Carnival earnms per passenger, here's where it goes\*...



<sup>→</sup> Revenue distribution per passenger Source: Carnival. 2016

efficiency per tonne mile. All vessels constructed after the regulation entered into force on 1 January 2013 need to be compliant with the standard, which mandates an initial CO<sup>2</sup> reduction level by 10% compared to a baseline. Requirements are tightened every five years in order to stay ahead of technological improvements. In that context, large size bulkers registered improved hull designs, which positively influence the EEDI (OECD, 2017)<sup>73</sup>.

## Ship dismantling

Cruise ships have a lifetime of more than 30 years. When ageing cruise ships become unseaworthy, outdated or too expensive to operate, they are handed down to more budget or small-scale company, eventually used as overnight car ferries, hotels or dismantled. Among many examples, Carnival's Tropicale, built in 1981, became Costa Cruises' Costa Tropicale (2001), P&O Australia's Pacific Star (2005) and Pullmantur's Ocean Dream (2008). Since 2012 it has been used by a Japanese NGO<sup>74</sup>. When finally dismantled, the disposable vessels comprise of a vast range of hazardous substances such as PCB, asbestos and waste oil products. As an attempt to improve the environmental management of ship waste, the **Hong Kong International** 

Convention for the Safety and Environmentally Sound Recycling of the Ships (2009) and the Basel Convention (1992) have developed with the International Maritime Organization (IMO) rules and regulations in order to prevent the environmental harm<sup>75</sup>.

The world's biggest ship breaking scrap yards are located in Pakistan (Gadani), India (Alang), Bangladesh (Chittagong) and Turkey (Aliaga) where only a fraction is handled in a safe and clean manner. The vast majority of the world's end-of-life fleet, full of toxic substances, is broken down —by hand— on the beaches of South Asia<sup>76</sup>. However for the cruise industry, the dismantling process is generally better controlled and monitored, as the owner and vessels are usually well identified and under public scrutiny. Yet, recently the dismantling of the 42-year-old iconic MS Pacific cruise ship, so called "The Love Boat," has provoked the death of two workers killed by toxic gas in its engine room77. On the other hand, the dismantling and recycling of the **Concordia** cruise ship, conducted under stricter European environmental and safety regulations, has been completed in Genoa (Italy) by 350 workers in 3 years. Approximately 90% of the materials were recycled, equal to more than 53,000 tons, requiring almost 4,000

<sup>73 &</sup>lt;a href="http://www.oecd.org/sti/ind/shipbuilding-market-developments-Q2-2018.pdf">http://www.oecd.org/sti/ind/shipbuilding-market-developments-Q2-2018.pdf</a>

<sup>74</sup> http://www.traveller.com.au/what-happens-to-old-cruise-ships-scrapped-sunk-or-turned-into-hotels-and-museums-h1280l

<sup>75 &</sup>lt;a href="http://www.basel.int/Implementation/ShipDismantling/Overview/tabid/2762/Default.aspx">http://www.basel.int/Implementation/ShipDismantling/Overview/tabid/2762/Default.aspx</a>

<sup>76 &</sup>lt;a href="https://www.shipbreakingplatform.org/resources/annual-reports/">https://www.shipbreakingplatform.org/resources/annual-reports/</a>

<sup>77</sup> https://www.foxnews.com/travel/dismantling-of-the-love-boat-takes-tragic-turn

trips to recycling facilities. 78 The European Waste Shipment Regulation forces ship-owners who want to export a ship from an E.U. port to sell their end-of-life ships for recycling in an OECD country.

## **Economic externalities**

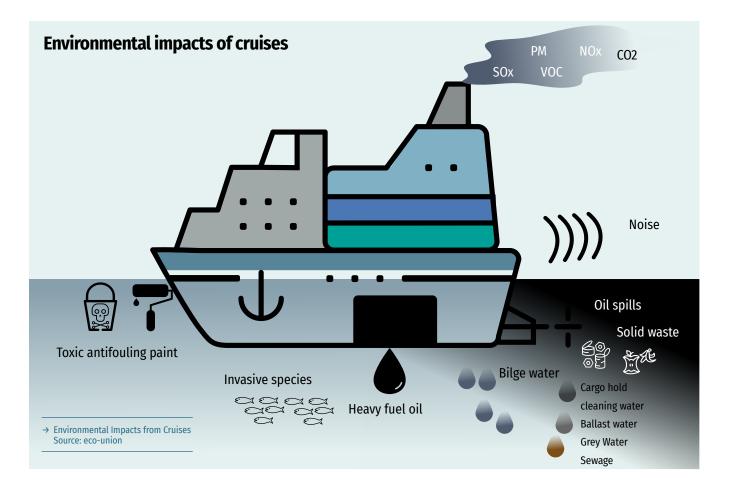
The cruising industry is a large economic sector, estimated at **45.6 billion US dollars** for 2018<sup>79</sup>, a number likely to increase in the future. Despite the scale of its economic activity, the economic contribution of cruising to recipient economies is limited. Economic multipliers of cruising have been found to be low<sup>80</sup> as cruises passenger have an average purchasing power 30% lower than land tourists<sup>81</sup>. Though cruise tourism is a source of revenue for ports of call, the extent of its economic contribution to local employment and activity is debated. The World Travel and Tourism Council qualified "the economic contribution of cruise tourism to Caribbean economies [as] arguably negligible" for instance, despite intense cruising traffic in the Caribbean82.

Cruising also results in unequal **repartition of economic benefits.** It is conditioned by the status of the port in the itinerary; with transport, hotels and resort, and the food sector from home ports benefitting much than ports of calls in which passengers spend on average less than 10 hours83. Passengers' consumption is rather limited, considering that food, accommodation; shopping and recreational activities are purchased on board. Boats themselves

become the destination, to the point that a significant portion of passengers does not disembark in ports of call<sup>84</sup>. In the Mediterranean, 25% of passengers and 50% of the crew remain on board85. Cruise companies collect a significant commission on selling on advertisement on board86.

Cruise ships require large amounts of infrastructure and **services** in order to operate ports (quays, passenger terminals, transportation infrastructure, and parking)87 through significant investments from governments. The increase in ship size puts more pressure over infrastructures that need to be upgraded to match new scales of operations. Through the threat of exit88, cruise operators have pressure over governments to undertake investments to cater to irregular cruising passenger fluxes (high seasonality and creation of artificial demand spikes) 89 while keeping rights of entry and operating costs low90. Increased passenger flow and maximum level capacity cause logistical and operation problems in Mediterranean ports91. In certain cases, higher traffic can overload sites beyond carrying capacity and threaten patrimony conservation, leading to caps on cruise passengers as in Dubrovnik or Venice, where sulphur emissions were thought to intensify rain acidification and threaten medieval buildings92. The contribution of the cruising industry is also limited in sending countries, as registration under FOC replaces income tax fillings in their headquartered country by gross tonnage fees for flag states<sup>93</sup> so that companies with important market shares pay very little state, local and foreign income tax94.

- http://www.seatrade-cruise.com/news/news-headlines/concordia-ship-recycling-project-completed.html
- http://www.cruisemarketwatch.com/market-share/
- Macneill, T., & Wozniak, D. (2018): "The economic, social, and environmental impacts of cruise tourism". In Tourism Management, 66, pp. 387-404. 80
- Brida, J.G. & Zapata, S. (2010): "Cruise tourism: economic, socio-cultural and environmental impacts". In International Journal Leisure and Tourism Marketing, vol 1 n°3, pp. 205 – 225.
- Brida, J.G. & Zapata, S. (2010): "Cruise tourism: economic, socio-cultural and environmental impacts". In International Journal Leisure and Tourism Marketing, vol 1 n°3, pp. 205 – 225.
- Macneill, T., & Wozniak, D. (2018): "The economic, social, and environmental impacts of cruise tourism". In Tourism Management, 66, pp. 387-404. • Johnson, D. (2002): "Environmentally sustainable cruise tourism: a reality check". In Marine Policy, vol. 26, pp. 261 – 270.
- · Sabato, G. (2017): "Cruise tourists on the mainland. Itineraries and interactions". Cruise Ship Tourism, pp. 424-438
- European Commission (2009): "Tourist facilities in ports The Environment Factor", Policy Research Corporation, 72 pp. Available at: <a href="https://ec.euro\_pa.eu/maritimeaffairs/sites/maritimeaffairs/files/docs/body/environment\_factor\_en.pdf">https://ec.euro\_pa.eu/maritimeaffairs/sites/maritimeaffairs/files/docs/body/environment\_factor\_en.pdf</a>
- Dowling, R. & Weeden, C. (2017): "The world of cruising". Cruise ship tourism 2017 no.Ed.2 pp. 1-39.
  - · Clancy, M., et al. (2017): "Power and profits in the global cruise industry. Cruise Ship Tourism". In book: Cruise Ship Tourism, Edition: 2d, Chapter 2, pp. 43-56
  - Klein, R. A., et al. (2017): "Representation without taxation". In Cruise Ship Tourism, pp. 57-72
- Plan Bleu (2011). Cruises and Recreational Boating in the Mediterranean. [online] Plan Bleu. Available at: https://planbleu.org/sites/default/files/ upload/files/2-1-EN Croisiere%26plaisance.pdf
- Clancy, M., et al. (2017): "Power and profits in the global cruise industry. Cruise Ship Tourism". In book: Cruise Ship Tourism, Edition: 2d, Chapter 2, pp.
- Sirocco (2018): "Port of Split Cruise Tourism Value Chain Action Plan". SIROCCO, Available at: https://sirocco.interreg-med.eu/fileadmin/user\_upload/Sites/Sustainable Tourism/Projects/SIROCCO/AP VC Split EN 10.6.2018..pdf
  - · Sirocco (2018): "Sustainable Cruise Value Chain Action Plan in Civitavecchia". Available at: https://sirocco.interreg-med.eu/fileadmin/user\_upload/Sites/Sustainable\_ Tourism/Projects/SIROCCO/D3.6.1 REPORT CIVITAVECCHIA.pdf
  - Sirocco (2018): "Demand Seasonality and Infrastructural Impact on VC". Available at: https://sirocco.interreg-med.eu/fileadmin/user\_upload/Sites/Sustainable Tourism/ Projects/SIROCCO/SIROCCO D3.5.5 Report Demand Seasonality Ifrastructural Impacts VCA final draft.pdf
- Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18,
- · Clancy, M., et al. (2017): "Power and profits in the global cruise industry. Cruise Ship Tourism". In book: Cruise Ship Tourism, Edition: 2d, Chapter 2, pp. 43-56
- Plan Bleu (2011). Cruises and Recreational Boating in the Mediterranean. [online] Plan Bleu. Available at: https://planbleu.org/sites/default/files/ upload/files/2-1-EN\_Croisiere%26plaisance.pdf
- Dowling, R. & Weeden, C. (2017): "The world of cruising". Cruise ship tourism 2017 no.Ed.2 pp. 1-39.
- Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18,
- Cheer, J. M. (2017): "Cruise Tourism in Small Island-High Yield and Low Impact?". Cruise Ship Tourism, pp. 408-423
- Dowling, R. & Weeden, C. (2017): "The world of cruising". Cruise ship tourism 2017 no.Ed.2 pp. 1-39.
- Clancy, M., et al. (2017): "Power and profits in the global cruise industry. Cruise Ship Tourism". In book: Cruise Ship Tourism, Edition: 2d, Chapter 2, pp. 43-56
   Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18, pp. 107-116
- Cheer, J. M. (2017): "Cruise Tourism in Small Island-High Yield and Low Impact?". Cruise Ship Tourism, pp. 408-423



## **Environmental pressures**

## Air pollution and carbon emissions

Cruise ships are more energy intensive than other touristic activities95. Estimates of the carbon emission factor range between 246 to 2500 g per passenger kilometres, confirming that cruising is the most carbon intensive means of transportation. Cruise ships produce on average three to four times as much CO<sup>2</sup> per kilometre than an economy class plane passenger, and an evaluated power consumption five times higher than the average energy use of luxurious hotel. Moreover, cruise ships operate on fuels rich in carbon and sulphur releasing sulphur oxides, nitrogen oxides, ozone depleting substances and PM97. These are linked to rain acidification, global warming and health impacts, especially when engine are kept running at berth close to city centres98. MARPOL Annex VI sets a global sulphur cap of 3.5% in fuel (0.5% as of January 2020)

and limits nitrogen oxides, though only for marine vessels constructed after 2016 when operating in Emissions Control Areas (ECA). Cruise ships are required to use fuels that do not exceed 0.1% of sulphur in ECAs or use equipment reducing emissions99. EU Directive 2012/33/EU limits sulphur content of fuels to 0.5% from January 2020 and requires use of fuel with a maximum 0.1% sulphur content when at berth<sup>100</sup>. The European Union also requires ships owners and operators to monitor and report CO<sup>2</sup> emissions for vessels over 5,000 gross tonnage when voyaging to and from EU (Regulation 2015/757)<sup>101</sup>. Similar regulations are being implemented in China and in Australia<sup>102</sup>.

## **Water pollution**

Cruise ships are the source of numerous streams of wastewater. Black wastewaters are especially damaging to ecosystems (bacterial and viral contamination) and causes

<sup>·</sup> Margkogianni, A. & Papaefthimiou, S. (2015): "Evaluating the social cost of cruise ship air emissions in major ports of Greece". In Transportation Research Part D, vol. 36, pp. 10 – 17.

\*Hall et al.(2017): "Environmental reporting in the cruise industry".In Cruise Ship Tourism, 2nd ed.; Dowling, R., Weeden, C. ed. pp. 441-464

<sup>•</sup> Howitt et al. (2010): "Carbon emissions from international cruise ship passengers' travel to and from New Zealand". In Energy Policy 38, pp. 2552 – 2560 · Hall et Al.(2017): "Environmental reporting in the cruise industry".In Cruise Ship Tourism, 2nd ed.; Dowling, R., Weeden, C. ed. pp. 441-464

<sup>•</sup> Friends of the Earth (2009). Getting a Grip on Cruise Ship Pollution. [online] Friends of the Earth. Available at: https://lbps6437gg8c169i0y1drtgz-wpengine.netdna-ssl. com/wp-content/uploads/2017/legacy/Getting-a-grip-on-cruise-ship-pollution.pdf
• Vidal, J. (2016): "The world's largest cruise ship and its supersized pollution problem". [online] the Guardian. Available at: https://www.theguardian.com/

environment/2016/may/21/the-worlds-largest-cruise-ship-and-its-supersized-pollution-problem

<sup>·</sup> Howitt et al. (2010): "Carbon emissions from international cruise ship passengers' travel to and from New Zealand". In Energy Policy 38, pp. 2552 – 2560

Klein, 2011; European Commission, 2009; Hall et al., 2017

CLIA (2016): "State of the Industry 2017". [online] Available at: https://www.cruising.org/docs/default-source/research/clia-2017-state-of-the-industry.pdf?sfvrsn=6

<sup>100</sup> CLIA, 2017; SIRROCCO 2018

<sup>101</sup> ibid.

<sup>102</sup> CLIA, 2017

eutrophication due to nutrient density<sup>103</sup>. Standard treatment is assured by Type II Marine Sanitation Devices (MSD) or Advances Water Treatment Systems (AWTS) prior to discharge to filter out solids. However, these systems are limited, as MSD have been found to fail "to meet current EPA standards"104 and treatment quality under AWTS is limited by space availability<sup>105</sup>. Treatment results in sewage sludge produced, which is dewatered and incinerated, disposed in ports, or dumped at sea as most jurisdiction permit sludge and raw sewage discharge beyond three nautical miles of shore<sup>106</sup>. Grey water, which contains pollutants, cannot be treated by AWTS due to high volumes and remains unregulated, as bilge water<sup>107</sup>. International standards forbid untreated disposal within 3 nautical miles offshore but MARPOL allows discharge of untreated sewage when travelling at a speed exceeding 4 knots when 12 nautical miles from land 108. However, enforcement of the protocol "depends on active enforcement by coastal and flag states"109. Cruising companies are also subject to national, state and port regulations (see Annex II), such as the US Clean Water Act, listing no-discharge zones (NDZs), and US National Marine Sanctuaries where discharge is also prohibited.

## Solid waste management

Though cruising represents less than 1% of the merchant fleet, it accounts for 25% of waste<sup>110</sup>. Annex V of MARPOL strictly prohibits disposal of plastic at sea, but other types of waste are not covered by the convention. Recyclable materials such as glass or metal are increasingly separated and kept apart for recycling onshore, but some disposal at sea still occurs<sup>111</sup>. In order to decrease the volume material on-board, solid waste is incinerated which produces aerial

emissions and ashes potentially carcinogenic and containing heavy metal and other toxic residues whose disposal is not covered by legislation<sup>112</sup>. Cruising companies are also responsible for handling hazardous waste, all dangerous for the marine biota<sup>113</sup>.

## **Introduction of invasive species**

Cruise ships transfer alien species through ballast water management and hull fouling114 which presents environmental and health risks115. The industry has addressed this issues by using antifouling paints, which are toxic to non-target species<sup>116</sup> and dissolve in seawater, releasing chemicals impairing vital functions and accumulating in marine sediments<sup>117</sup>.

## Anchoring and physical damage to the marine environment

Cruising damages marine habitats, with destruction of key biodiversity hotspots such as coral reefs or Posidonia Oceanica patches due to anchoring<sup>118</sup>. Damages include crushing and destruction of habitat and indirect effects, such as augmentation of turbidity, dredging and suspension sediments which result in the death of coral organisms with subsequent impact on fish stock<sup>119</sup>. Further environmental stresses include anthropization through the construction of infrastructure for cruise ships passage, as well as ports<sup>120</sup> with damages to benthonic ecosystems necessitating years to recover.

## Risk of collision with marine mammals<sup>121</sup>

Increase in traffic also intensifies noise pollution, which can disturb reproductive and growth cycles, elevate stress levels and change behavioural and migration patterns<sup>122</sup>.

<sup>103 -</sup>Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18, pp. 107-116

<sup>-</sup>Hall et al.(2017): "Environmental reporting in the cruise industry".In Cruise Ship Tourism, 2nd ed.; Dowling, R., Weeden, C. ed. pp. 441-464
-Friends of the Earth (2009): "Getting a Grip on Cruise Ship Pollution". [online] Friends of the Earth. Available at: https://lbps6437gg8c169i0y1drtgz-wpengine.netdna-ssl. com/wp-content/uploads/2017/legacy/Getting-a-grip-on-cruise-ship-pollution.pdf

<sup>104</sup> EPA, 2009 in Watson, B. (2015): "Murky waters: the hidden environmental impacts of your cruise". [online] the Guardian. Available at: https://www. theguardian.com/sustainable-business/2015/jan/05/cruise-ship-holidays-environmental-impact

<sup>105</sup> Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18, pp. 107-116

<sup>106</sup> Friends of the Earth (2009): "Getting a Grip on Cruise Ship Pollution". [online] Friends of the Earth. Available at: https://lbps6437gg8c169i0y1drtgz-wpengine.netdna-ssl.com/wp-content/uploads/2017/legacy/Getting-a-grip-on-cruise-ship-pollution.pdf

<sup>107</sup> Klein, 2011; Friends of the Earth, European Commission; Hall et al., 2017

<sup>108</sup> CLIA, 2017

<sup>109</sup> Friends of the Earth, 2009

<sup>110</sup> Herz, 2002; Butt, 2007 in Hall et al.(2017): "Environmental reporting in the cruise industry". In Cruise Ship Tourism, 2nd ed.; Dowling, R., Weeden, C. ed. pp. 441-464,

<sup>-</sup>Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18, pp. 107-116 -Didriech, A. (2010): "Cruise ship tourism in Belize: The implication of developing cruise ship tourism in an ecotourism destination". Ocean & Coastal Management 53, pp.234 - 244.

<sup>112</sup> Klein, 2011; Friends of the Earth, 2009; Diedrich, 2010

<sup>114</sup> Endressen and at., 2004 in Hall et al., 2017; Friends of the Earth, 2009

<sup>115</sup> Friends of the Earth, 2009

<sup>116</sup> Jones, 2011 in Beukering et al. (2015): "Bermuda's balancing act: The economic dependence of cruise and air tourism on healthy coral reef"s. Ecosystem Services 11, pp. 76 – 86.

<sup>117</sup> Caric et al. (2016): "Eco toxicological risk assessment of antifouling emissions in a cruise ship port". Journal of Cleaner Production 121, pp.159 – 168

<sup>118</sup> Beukering et al., 2015

<sup>119</sup> Jones, 2011 in Beukering et al., 2011

<sup>120</sup> Didriech, 2010, Brida and Zapata, 2010

<sup>121</sup> Laist et al., 2001

<sup>122</sup> European Commission, 2009;

<sup>-</sup>Sara et al. (2007): "Effect of boat noise on the behaviour of bluefin tuna Thunnus thynnus in the Mediterranean Sea". Marine Ecology Progress Series. 331, 243-253.

| Environmental pressures   | Impacts   |
|---|---|
| Construction and Maintenance of Ports<br>(extraction of marine solids, dumping of dredged material) | Alteration of benthonic marine ecosystems<br>Decrease of water quality  |
| Anchoring   | Negative impacts on benthonic ecosystems<br>Destruction or damaging of biodiversity hotspots<br>Damages to coral organisms: turbidity and sediment suspension   |
| Solid Waste Management  | Accumulation of waste on ocean floors, beaches and in water column<br>Increased threats for marine biodiversity<br>Air pollution linked to incineration of waste on board<br>Water pollution due to the disposal of incineration ashes at sea |
| Blackwater, Grey water, and Bilge Water Discharge   | Water pollution<br>Intensification of eutrophication<br>Introduction of pollutants  |
| Use of Heavy Fossil Fuels   | Air pollution : Cox, SOx and NOx emissions<br>Contribution to global warming, rain acidification and health issues  |
| Ballast Water Management and Hull Fouling   | Introduction and spreading of invasive species<br>Economic damage (seafood farming, fisheries, infrastructural damage)<br>Decrease in marine biodiversity (antifouling paints, biocide release)   |
| Collision with Marine Mammals   | Increase of marine mammal mortality   |
| Noise Pollution   | Species displacement, change in migration patterns<br>Changes in behaviour  |

<sup>→</sup> Table 34: Matrix of the Pressures and Environmental Impacts of Cruise Source: eco-union

## Social pressures

## Degradation of quality of life for local communities

Whilst cruise tourism can be a source of positive social impacts (increased economic activity, promotion of local culture<sup>123</sup>) it is generally a source of negative social externalities for receiving destinations. Increased maritime traffic exposes of residents to gases and Particular Matter (PM), which can in turn cause respiratory diseases, cancers and reduced life expectancy<sup>124</sup>. Though cruise companies often underline economic benefits brought to local communities,it mainly creates seasonal and precarious employment. Increase of frequentation and traffic in destinations can also decrease access to public services such as transportation, space, increase traffic and congestion,

noise pollution and increase costs of living as shops raise prices when cruise ships are in port<sup>125</sup>.

## Over-tourism

As vessel size increase, tourism flows are concentrated beyond the carrying capacity of receiving ports and coastal communities<sup>126</sup>. Another trend has been the reduced time spent during stopovers, with average visiting times inferior to 8 hours<sup>127</sup>, reducing passenger spending in local businesses. Important crowds, in addition to competition over space and services disrupt usual routines and activities, especially in smaller destinations<sup>128</sup>. Cruising has increasingly become a form of mass tourism; and has been accused of promoting cultural stereotypes through superficial communication and misinformation. This is particularly true for Caribbean islands, promoted as "paradise islands" – a culturally alienating tourism product<sup>129</sup>.

## Cruising, human rights and international labour

The registration of cruising companies under FOCs allows them to benefit from more lenient labour and safety regulations<sup>130</sup>. This legal regime allows cruising companies to

<sup>123</sup> Dowling and Weeden, 2017

<sup>124</sup> European Commission, 2009; IAPH, 2007 in Maragkogianni & Papaefthimiou, 2015

<sup>125</sup> Klein, 2011

<sup>-</sup>Dowling and Weeden, 2017

<sup>126</sup> Klein, 2011

<sup>-</sup>Dowling and Weeden, 2017

<sup>-</sup>Brida and Zapata, 2010

<sup>-</sup>Diedrich 2010

<sup>127</sup> Sabato, 2017

<sup>128</sup> Cheer, 2017

<sup>129</sup> Hil, N. (2015): "Floating abominations: Exposing the Cruise Ship Industry". Tourism Concern (website)

<sup>130</sup> Dowling and Weeden, 2017

<sup>-</sup>Clancy, 2017: Terry, 2017; Klein, 2017; Hil, 2015

| Social pressures   | Impacts   |  |  |
|--|---|--|--|
| Increase of Maritime Traffic and City Frequentation      | Degradation of overall quality of life Public health impacts linked to increased air pollution Lower access to public services Increased pressure on local businesses   |  |  |
| "Over-tourism"   | Frequentation beyond carrying capacity of destinations Disruption of usual routines and activities Negative impacts over traditions, community cohesion Decreased socio-cultural authenticity Negative impact over identities of local destinations |  |  |
| Deregulation of the Cruising Labour Market (use of FOCs) | Segmentation of labour on board<br>Poor working conditions<br>Infringement of human rights and violations of local labour regulations   |  |  |

→ Table 35: Matrix of the Pressures and Social Impacts of Cruises

employ young workers from developing countries without providing them with proper work permits and protection while subjecting them to poor working conditions<sup>131</sup>. Royal Caribbean's Oasis of the Seas was found to breach local labour laws and the International Maritime Labour Convention (MLC) upon labour inspection by Dutch authorities in Rotterdam, resulting in fining<sup>132</sup>. A 2003 US ruling against Filipino workers who attempted to sue their employer Norwegian Cruise Lines also exposed the vulnerability of workers within the cruise industry, as the case was not considered US jurisdiction due to the Filipino work permits of employees, despite the company being headquartered in the US<sup>133</sup>. Labour regulations on cruise ships are looser than national standards. Relevant international conventions protecting seafarers are the International Convention for the Safety of Life at Sea (SOLAS), the International Convention on Standard of Training Certification and Watchkeeping for Seafarers (STCW) and the MLC which introduces a cap on working hours at 14h on a given day, guarantees medical attention on board and ashore, paid annual leave, and improved social security<sup>134</sup>.

## Sustainability practices

The cruising industry is getting aware of sustainability concerns and an increasing number of cruising companies now consider their environmental impact through annual reporting. Most reported items include waste, energy consumption, and air quality both for cruising companies and port authorities<sup>135</sup>. However, voluntary CSR reports can be too focused on soft indicators. only partially disclosing methodology of their self-assessment and thereby transferring a business-oriented vision of sustainability where indicators that allow energy and cost reductions are given more importance<sup>136</sup>. As a result, selected indicators

generally reflect organization and operational structure of company rather than including all the social and economic indicators that external stakeholders value in their operation such as full carbon footprint, quality of employment or human rights enforcement. Actors all across the value chain in cruising are implementing measures in order to tackle environmental issues. An important group of actor in this transition is the port authorities, as the latter are also subject to national environmental targets and legislation.

## **Electrification of ports**

- Potential: Overall (for all maritime vessels and not cruising alone), SSE (Shore side electricity) technology is available in 24 berths in the US, 64 berths in Europe and 9 berths in Asia. In Europe alone, overall demand of cruises for SSE was evaluated at 3,543 GWh annually as of 2020, the equivalent of 0.1% of European electricity consumption in 2012. The electrification of European ports thereby has a potential of mitigation of 800,000 tons of CO2 emissions. Electrification is highly likely to decrease carbon emissions of corresponding member states, as the carbon intensity of electricity is lower than the electricity produced on board of ships. Moreover, 25 cruise vessels (9% of CLIA's fleet) are equipped with the necessary technology for shore power connections and at least 18 new more vessels are planned in the nearby future. vessels are planned in the nearby future
- Advantages:
  - Reduction in SOx, NOs and PM emissions
  - Reduction in carbon emissions
  - · Limitation of noise and vibrations
- Obstacles to implementation and limits:
  - Lack of maturity of SSE technology, requiring cooperation between cruise lines and port (adapted plugging infrastruc-
  - Requires important amounts of initial investment
    Need for retrofitting of cruising vessels
    Electricity provided needs to be from renewable sources
- - Gothenburg & Hamburg, Germany (high voltage)
    Bergen, Norway (low tariffs, high renewable energy mix)

<sup>131</sup> Terry, 2017; Dowling and Weeden, 2017; Clancy, 2017

<sup>132</sup> Dowling and Weeden, 2017

<sup>133</sup> Terry, 2017; Klein, 2017

<sup>134</sup> Hil, 2015; Clancy, 2017

<sup>135</sup> ESPO 2018 Environmental Annual Report. Available at: https://www.espo.be/news/espo-publishes-environmental-report-2018-top-10-en

<sup>-</sup>Macneill, T., & Wozniak, D. (2018): "The economic, social, and environmental impacts of cruise tourism". In Tourism Management, 66, pp. 387-404. -Bonilla, M. J. (2017): "Corporate social responsibility in the cruise sector". Cruise Ship Tourism, pp. 86-10

| Name of action  | Location                    | Date    | Actor Driving the<br>Initiative             | Scale of<br>Action | Key Areas<br>of Action   | Description [Outcome]   |  |  |
|---|-----------------------------|---------|---|--------------------|--|---|--|--|
|   | Financial incentives        |         |   |                    |  |   |  |  |
| Differentiated<br>tariffs in Port<br>of Gothenburg        | Sweden                      | 2015    | Port authority<br>of Gothenburg             | Port               | Air<br>emissions<br>Noise<br>Waste                             | Vessels with good environmental performances (ESI and CSI scores) receive a 10% on the port tariff (Vessels on LNG get an extra 20% discount for each call [Prevention Mitigation]  |  |  |
|   | Monitoring and transparency |         |   |                    |  |   |  |  |
| Air quality<br>management<br>system in Port<br>of Tallinn | Estonia                     | 2015    | Government of<br>Estonia                    | Port               | Air<br>emissions<br>Noise                                      | Identification of sensitive sites and implementation of seasonal speed restriction in order to preserve hotspots and avoid collisions during periods when risks of collision are high. [Mitigation]   |  |  |
| Legislation and Planning                                  |                             |         |   |                    |  |   |  |  |
| California<br>Ballast Water<br>Management                 | U.S.A.                      | 2017    | Government of<br>California                 | State              | Invasive<br>species  | Vessel operators must retain all ballast water; exchange by 100-300% volumetric replacement; discharge at the same location where it originated; use approved method of treatment; discharge to approved reception facility [Prevention]  |  |  |
|   |                             |         |   | Infrastructure p   | rovision   |   |  |  |
| Onshore Power<br>Supply Ham-<br>burg                      | Germany                     | 2015    | Port authority<br>of Hamburg                | Port               | Air<br>emissions<br>Noise                                      | Building shore power facility supplying three cruise vessels with power. [Prevention]   |  |  |
| Electrification of<br>fleet in ferries<br>in Norway       | Norway                      | Ongoing | Industry led<br>(Norled)                    | Local              | Air<br>emissions<br>Noise                                      | Development and launch of technology for electric powered ferries and very small cruising ships: 2 fully operational ferries and 10 new ferries to be launched in 2018, 60 by 2021 and full fleet all electric or hybrid by 2023; 2 expedition cruise liners to be launched. [Prevention]                               |  |  |
| Trainings   |                             |         |   |                    |  |   |  |  |
| Econavigation<br>charter (La<br>Méridionale)              | France                      | 2018    | Industry and<br>governmental<br>partnership | Local              | Training<br>Waste<br>Emissions<br>Biodiversity<br>interactions | Partnership between la Méridionale and MPA networks as well as the French Governmental Agency for Biodiversity to diminish the impact of shipping of marine ecosystems, develop an internal business culture of environmental stewardship and increase the amount of knowledge available on these impacts. [Mitigation] |  |  |

<sup>→</sup> Table 36: Relevant Good Practices in Cruising Sector Source: own elaboration based on corporate websites

| Index/Certification                              | Managing body   | Description  | Pros   | Cons   |
|--|---|--|--|--|
| Environmental Ship Index<br>(ESI) <sup>137</sup> | International Association<br>of Ports and Harbours<br>(World Ports Climate<br>Initiative) | Score from 0 (Full<br>compliance with current<br>standards) to 100 (no<br>emissions whatsoever)  | Easy-to-use  | Only focused on air quality and CO <sub>2</sub> emissions.   |
| Blue Angel eco-label <sup>138</sup>              | Blue Angel (Germany)  | Eco-friendly ship design<br>and Environment-Cons-<br>cious Ship Operation  | For merchant ships, research and authority ships                             | Only. Excluding fishing and naval ships, sport boats.        |
| Green Award <sup>139</sup>                       | Green Award Foundation,<br>(independent Dutch<br>foundation)                              | 50 criteria (exhaust<br>emissions, water ballast,<br>anti-fouling, ship breaking,<br>navigation in 'sensitive<br>areas', waste manage-<br>ment). | Exhaustive environmental assessment  | Only for oil tankers, chemical<br>tankers, dry bulk carriers |
| Shipping Efficiency label™                       | The Carbon War Room and<br>RightShip NGOs   | Measures the ship's CO2<br>emissions per nautical<br>mile travelled.   | Use of standard European<br>A - G energy efficiency<br>scale                 | Not yet widely implemented                                   |
| EcoPorts <sup>w1</sup>                           | European Sea Ports Orga-<br>nisation (ESPO)   | Self-Diagnosis or certified<br>assessment of the envi-<br>ronmental management<br>of ports   | Flexible (self-diagnosis or<br>certification) and scalable<br>(benchmarking) | Focus in European ports                                      |

<sup>→</sup> Table 37: Environmental Certification Schemes for Ships and Ports

## **Environmental schemes**

Although a number of environmental schemes and certification are available for ships and ports, they are not specific to the cruise vessels or ports and remains therefore poorly used by the industry. Also there are currently none eco-label schemes targeting the cruise vessels environmental management. A new Environmental Port Index is being developed by the Norwegian cruise port associations focusing on the air emissions of cruises while at port.

## **Differentiated Tariffs in Ports**

Differentiated port infrastructure charges aims to promote environmentally friendly maritime transport activities and sustainable transportation. The vast majority of schemes are rebates on port dues, which range from 0,5% to 20% for vessels that take part in environmental indexes or certification programmes (Environmental Ship Index, Green Award, Clean Shipping Index, Blue Angel). These initiatives assign scores to chips that comply with certain environmental initiatives assign scores to ships that comply with certain environmental standards.

- Advantages:
  - Flexible and applicable to varied impact management issues (air pollution, waste management etc.)
  - Low cost of implementation
  - Easily expandable
- Obstacles to implementation and limits:
   Selected variable may be limited by available tracking or evaluation schemes
  - · Loss of revenue for ports
- Best practices:
  - Port of Stockholm (inclusion of waste management variable)



<sup>137</sup> http://www.environmentalship<u>index.org/Public/Home</u>

<sup>138</sup> https://www.blauer-engel.de/en/products/business-municipality/schiffsbetrieb

<sup>139</sup> https://www.greenaward.org/



→ ©Ecotourism Mozambique Source: Anvil Bay (https://anvilbay.com/)

## **Ecotourism**

## **Perspectives on ecotourism**

Ecotourism can be defined at once as a **tourism model,** an ecological or socio-economic concept and as a label depending on the objective and nature of the entity employing it. Ecotourism contributes to the nature conservation and local community living in areas with high valuable ecosystems and landscapes. It is seen as a model of tourism promoting sustainable development<sup>142</sup>. Promoting a responsible tourism based on nature, usually following a distinct set of principles and good practices aims at protecting ecologically fragile natural areas through a set of restrictions in the area or the financial returns of ecotourism activities<sup>143</sup>. The main characteristic of ecotourism is its objective to promote nature conservation through a sustainable management regime under a 'protection through usage' approach<sup>144</sup>.

Moreover, ecotourism is a concept linked with **nature tourism** in natural protected areas (NPAs), where tourism is seen as a solution and a problem for nature conservation at the long-term. It aims at creating a greener tourism industry as well as increasing the ecological and socio-cultural awareness and behaviour of tourists. In some areas, ecotourism has been used as strategy to mitigate poaching

and other mining extraction<sup>145</sup>. This new trend in the tourism industry is often considered as a tool for conservation of natural and cultural resources, such as the biodiversity, and an instrument for sustainable development for local communities, particularly in rural areas. However, there is no absolute distinction between ecotourism and other forms of tourism because the different types of tourism actually take part of a continuum<sup>146</sup>. In practice, many tourists combine conventional tourism activities with ecotourism concepts and good practices by creating linkages introducing responsible tourism to impactful and less sustainable forms of tourism.

Additionally, ecotourism often displays the characteristics of a **community based tourism**, seen as an organizational model where local communities control the tourism activities and network by providing the basic services like accommodation, tourism operator and guiding. Community-based tourism can be defined as a form of responsible tourism that supports local communities and improves livelihoods by allowing locals to manage tourism destinations by themselves<sup>147</sup>. In certain cases of ecotourism, the natural protected areas concerned also incorporate this aspect, making the nature-based approach and protection of natural and cultural resources come together with the concept of local socio-economic development<sup>148</sup>. Therefore, community-based ecotourism addresses the well-being

Proyecto PRA (2000): "Ecoturismo: una alternativa para el desarrollo". Proyecto PRA Boletin November, Lima, Peru. Available at: <a href="http://www.chemonicspe.com/boletin2/Ecoturismo/ecoturismo.html">http://www.chemonicspe.com/boletin2/Ecoturismo/ecoturismo.html</a>

<sup>143</sup> Stefanica, M. & Vlavian-Gurmeza, M. (2010): "Ecotourism – model of sustainable tourist development". Studies and Scientific Researches. Economics Edition, "Vasile Alecsandri" University of Bacau, Faculty of Economic Sciences, issue 15.

<sup>144</sup> Idem

<sup>145</sup> Proyecto PRA (2000).

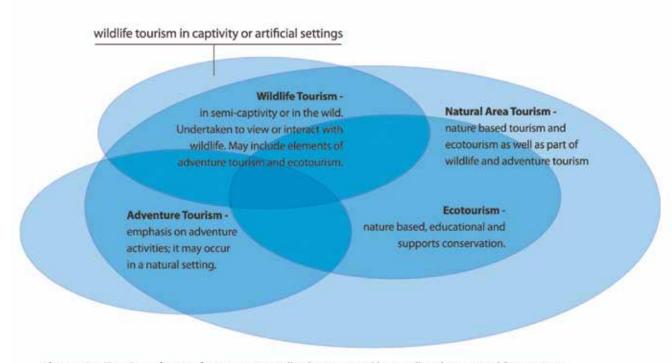
<sup>146</sup> Stefanica, M. & Vlavian-Gurmeza, M (2010).

<sup>147</sup> Moren Tibabo Stone (2015): "Community-based ecotourism: a collaborative partnerships perspective". Journal of Ecotourism, 14:2-3, 166-184, DOI: 10.1080/14724049.2015.1023309

<sup>148</sup> Idem.

## **TOURISM**

Mass Tourism - large numbers of people seeking replication of their own culture in institutionalised settings.



Alternative Tourism - forms of tourism generally characterised by small scale sustainable activities.

of the community as well as the surrounding environment by placing collaboration, social capital and the common interest at heart<sup>150</sup>.

Finally, ecotourism has been used as a **label** for nature-based activities, referring to products, segments and operators<sup>151</sup>. Many organizations are proclaiming theirs parks and programmes "eco-touristic" to answer the new trends of the touristic demand and popularity of ecotourism. However, this label does not always come with considerable eco-friendly policies and only using it as a marketing ploy.

The common characteristic of ecotourism destinations of nature-based tourism is the little to inexistent interaction of their ecosystems with human societies<sup>152</sup>. Ecotourism became, over the past decades, one of the fastest growing model of tourism worldwide. Its growth pace is of more than 20% annually, equivalent to almost two to three times faster than the tourism industry overall<sup>153</sup>. This trend can also be found, to a lesser extent, when analysing coastal and maritime tourism. Considering the excessive isolation of these kinds of coastal and maritime areas, encountering ways to take advantage of the wild environment and breathtaking natural landscapes in order to stimulate eco-

nomic activity, while protecting them from big industrial or residential corporation projects and raising awareness about environmental protection is the main objective of ecotourism.

However, ecotourism implies some **structural changes** to the natural area that might be detrimental. Opening-up these isolated maritime and coastal areas to ecotourism requires, like any other form of tourism, the creation of infrastructure and the influx of tourists from different countries and with different cultures and values. Therefore, if the host community, developers and resources protectors do not work actively jointly to counteract potential negative effects, ecotourism might have considerable negative environmental as well as socio-economic consequences. Thereby, the question of safeguarding coastlines and oceans while promoting economic and social progress in the region remain particularly relevant.

## Nature-based tourism in coastal and maritime areas

Ecotourism in coastal and maritime areas can be defined as tourism of unexplored or/and endangered environments with the purpose of supporting conservation efforts done in the area and scientific research developments. By definition, ecotourism in coastal and maritime areas seeks to reduce the impacts and pressures generated by conventional tourism by promoting good practices and/

<sup>→</sup> Ecotourism and Alternative Forms of Tourism Source: Tuğba Kiper, Hill & Gale, 2009<sup>149</sup>

<sup>149</sup> https://www.intechopen.com/books/advances-in-landscape-architecture/role-of-ecotourism-in-sustainable-development

<sup>150</sup> Samantha Jones (2005): "Community-Based ecotourism: The Significance of Social Capital". Annals of Tourism Research Volume 32, Issue 2, Pages 303-324. Available at: <a href="https://doi.org/10.1016/j.annals.2004.06.007">https://doi.org/10.1016/j.annals.2004.06.007</a>

Black, R. (2007): "Ecotourism series, Number 5: quality assurance and certification in ecotourism". Retrieved April 10, 2008 from UNLV Library Website.

Available at: <a href="http://site.ebrary.com/lib/unlv/Doc?id=10060509%ppg=264">http://site.ebrary.com/lib/unlv/Doc?id=10060509%ppg=264</a>

<sup>152</sup> Balmford, A. et al. (2009): "A Global Perspective on Trends in Nature-Based Tourism". Accessible at: https://journals.plos.org/plosbiology/article/file?id=10.1371/journal.pbio.1000144&type=printable

<sup>153</sup> FAO (2011): "Ecotourism can play vital role in maintaining healthy forests". Accessible at: http://www.fao.org/news/story/en/item/90192/icode/

<sup>154</sup> Marafa, L. M. & Chau, K. C. (2014): "Framework for Sustainable Tourism Development on Coastal and Marine Zone Environment". Tourism, Leisure and Global Change, volume 1, p.TOCS-1.

or prohibiting bad practices. Yet, nature-based activities, though controlled and monitored, still generate direct impacts on the protected ecosystems that need to be contained and deflected using the resources generated.

## **Economic impacts**

Seen as a way of increasing the value of wildlife, ecotourism has a positive impact on the economic performance of the region and to a certain extent to the country. Countries such as Ecuador, Nepal, Madagascar or Costa Rica rely on tourism to build their economies<sup>155</sup>. Ecotourism is expected to return higher revenues back to local communities than regular tourism generating local jobs and entrepreneurship. These revenues can come in the form of taxes on recreational activities prohibited in the protected area, or as entrance fees to these areas. These revenues are often used to fund nature conservation initiatives aiming at deflecting the negative impacts of eco-touristic activities locally.

Some countries such as Mexico, Australia, Malaysia and Ecuador have created **national ecotourism strategies** and plans with the objective of conserving environments and sustaining communities, promoting local businesses and culture<sup>156</sup>. Tourism, in general, and ecotourism, in particular, generate economic activity locally in maritime and coastal regions by creating jobs for inhabitants living near conservation areas. This economic boost is also seen as beneficial for efforts in conservation. Money spent on ecotourism is often reinvested in conservation efforts such as reforestation and endangered species repopulation project. Moreover, local communities benefit directly from the improvements generated by eco-touristic activities in infrastructures. However, it seems that these benefits take time to become consistent and are not directly invested in the protection of the ecosystem. In Costa Rica, with 1 million visitors per year, approximately 60% of visitors choose Costa Rica for its ecotourism activities. 157 It shows that ecotourism offers new job opportunities and higher revenues for local communities. Yet, benefits only become consistent after many years and at the short term, revenues generated by ecotourism activities are insufficient to finance the environmental protection.

Moreover, the unstable tourism demand related to the nature of maritime and coastal tourism in general can have **adverse economic consequences** in these areas where the economy is not diversified and jobs are often precarious and with low wages.<sup>158</sup> Seasonality creates pics of tourist flux that generate an exponential increase in demand for local products at periods with inflationist pressures. Therefore, the diversification of the economy is essential to allow ecotourism to generate stable sustainable local revenues. Inversely, ecotourism can allow these areas to diversify their economies through expanding key industries to peripheral regions without falling into mass tourism. However, in Costa Rica, the links between local production and tourism consumption are very low.

| Economic Pressures   | Impacts   |
|--|---|
| Strong Economic Specializa-<br>tion in Tourism and Related<br>Activities | Naturalization of local businesses<br>Economic dependence of the mono-<br>culture tourism           |
| Public Investments Directed<br>Towards Tourist Services                  | Decrease in the quality and quantity<br>of public services (transport)<br>Privatization of services |

→ Table 38: Matrix of the Pressures and Economic Impacts of Ecotourism Source: eco-union

## **Environmental impacts**

In spite of ecotourism being designed to specifically counter environmental degradation, sometimes it can cause it. Ecotourism involves taking tourists to ecosystems that are relatively untouched by humans. However, human presence can disturb the ecosystems scaring off preys and disrupting hunting patterns for predators, but also, cause soil erosion and habitat loss if the number of travellers increase rapidly. Uncontrolled recreational activities also threaten the wildlife.

| Environmental pressures  | Impacts  |
|--------------------------|--|
| Water Use                | Natural primary resource depletion<br>Hydric stress<br>Physical supply problem<br>Deterioration of water supplies<br>Increase of infrastructure for water<br>desalination. |
| Corruption and Deviation | Deterioration of the ecosystem<br>Waste generation   |

→ Table 39: Matrix of the Pressures and Environmental Impacts of Ecotourism Source: eco-union

To estimate whether ecotourism allows the protection of ecosystems or their destruction, the WTO developed three indicators to measure the ecological costs and benefits of the pressures generated by ecotourism in sites. These instruments are: changing the capacity indicator, site disturbance indicators and ecological interest indicator. They are particularly relevant for the monitoring ecotourism products and understanding new trends. Ecotourism needs a low flux of tourists at the same time to be beneficial. Carrying capacity is therefore a key instrument to prevent/mitigate negative impacts.

<sup>155</sup> Elizabeth Joy Matthews (2002): "Ecotourism: Are current practices delivering desired outcomes? A comparative case study analysis". Blacksburg, Virginia, p.19-71. Accessible at: <a href="https://vtechworks.lib.vt.edu/bitstream/handle/10919/37108/ElizabethMatthews.pdf">https://vtechworks.lib.vt.edu/bitstream/handle/10919/37108/ElizabethMatthews.pdf</a>

<sup>156</sup> Idem.

<sup>157</sup> Froger, G. (2010): "La mesure des effets des formes de tourisme responsable dans différents territoires". Cahier du Cemotev, n° 2010-03. p. 93-114. Accessible at : <a href="https://hal.archives-ouvertes.fr/hal-00845223/document">https://hal.archives-ouvertes.fr/hal-00845223/document</a>

| Ecotourism Activities   | Bad practices  | Impacts  |  |  |
|---|--|--|--|--|
| Skin diving   | Damaging corals<br>Perturbing sediments<br>Touching and feeding fish<br>Littering.                       | <ul> <li>Damaging reefs, shifting species makeup in coral reefs</li> <li>Decimating fish species and shifting species makeup; Impacting photosynthesis due to clouding of water; Shifting species makeup and stressing/ disturbing certain fish species;</li> <li>Causing eutrophication and threatening animals.</li> </ul> |  |  |
| Swimming  | Water contamination from sun-blocks, suntan oil and soap   | Generating the eutrophication of coastal waters and lagoons.   |  |  |
| Sightseeing such as un-<br>derwater or glass botto-<br>med boats activities | Generating wake waves and propeller effects, perturbing sediments and contaminating waters with chemical | <ul> <li>Stressing animal species in coastal waters, lagoons and river mouths;</li> <li>Damaging shore and underwater vegetation; Risk of contaminating waters with heavy metals and poisoning animals and plants; Risk of damaging coral reefs and eelgrass meadows.</li> </ul>   |  |  |
| Nature observation on<br>foot or boat and visiting<br>natural reserves      | Disturbing the biodiversity with physical presence and noise   | Stressing animal species.  |  |  |
| Hiking and cycling  | Litter, faecal matter; Breaking plants; Noise and presence disturbance                                   | <ul> <li>Affecting plant communities in Sandy beaches through eutrophication, fire hazard and threat to animals; Damaging vegetation and soil erosion;</li> <li>Stressing and disturbing animal species such as turtles laying eggs.</li> </ul>  |  |  |

→ Table 40: Impact of Principal Nature-Based Activities in Coastal and Maritime Areas
Source: eco-union

## Impact on local culture and communities

Ecotourism seeks to promote and preserve traditional practices and activities of local communities such as locally grown food or crafted goods. Sharing cultural elements with tourists helps raising awareness on the importance of local crafts and traditions. Therefore, in theory, ecotourism prevents altering native customs while educating travellers and reducing cultural ignorance. However, ecotourism causes the displacement of locals from their homes. In some cases of creation of ecotourism natural parks, local groups of people are reallocated to leave space to the construction of eco-friendly resorts or other infrastructures of ecotourism expansions. On the pretext of making these territories more accessible to tourists, governments ousted local populations.

Ecotourism can be at once a blessing and a curse. To meet its desired goals, it must direct its profits towards local communities or compensate them when displaced. In addition, to achieve sustainable tourism without negative impacts, tourist density should be constrained. In Costa Rica, ecotourism generated a loss of land for local populations to Manuel Antonio on the 59 km of littoral zone from which 50 km belong to foreign investors.<sup>159</sup> The majority of

the profits from this tourism, often referred to as ecotourism, are returned to foreign investors and therefore benefit insufficiently to the country's development and force locals to move away.

Therefore, through displacements, ecotourism can also threaten indigenous cultures and traditional practices. Locals that are displaced near the protected areas of ecotourism, start giving up on their ancient practices. Facing stereotyping and objectifying of culture groups done by tourists, natives tend to reject their cultural expression, especially when they are thrown in tourist circuits without being prepared for it. An example would be, the commercialization of traditional cultural rites like observing religious ceremonies.<sup>160</sup>

In less radical situations, the interaction between tourists and natives creates a gradual shift in local culture and behaviours which pace depends on the exposure of locals to travellers. The exotic aspect of local traditions could also imply a commodification of local culture threatening the relationship between tourists and locals being seen as tourist sites. Moreover, the creation of a park or protected area shakes practices sometimes, prohibiting them in these areas (hunting, fishing). These socio-cultural impacts are difficult to identify and quantify on the short and medium terms.

Moreover, ecotourism models imply that local activities such as fishing or hunting are constrained or prohibited. This could influence local communities both from an economic perspective, restricting their sources of revenues, and from a welfare perspective making their homes a destination for an increasing number of tourists and their economic activities more and more dependent on the equality of the environment.<sup>161</sup>

<sup>159</sup> Geraldine Froger (2010): "La mesure des effets des formes de tourisme responsable dans différents territoires". Cahier du Cemotev, n° 2010-03. p. 93-114. Accessible at : <a href="https://hal.archives-ouvertes.fr/hal-00845223/document">https://hal.archives-ouvertes.fr/hal-00845223/document</a>

<sup>160</sup> https://www.researchgate.net/publication/228957604 The Politics of Ecotourism and the Developing World

<sup>161</sup> https://www.academia.edu/37176994/Ecotourism after Nature Anthropocene Tourism as a New Capitalist Fix 2018

| Social pressures  | Impacts  |
|---|--|
| Precarious and seasonal jobs                                | Unstable quality of life; Local poverty  |
| All Inclusive offer – Creation of<br>tourist enclaves       | <ul> <li>Social exclusion; Petty crime phenomena; Social deconstruction; Modification of social and cultural structures and territorial models;</li> <li>Degradation of traditional local culture (consumption of cultural heritage); Decreasing of the attractive force of the destination;</li> <li>trivializing the culture and the territory (turning an exceptional place into an ordinary place).</li> </ul> |
| Observation of locals communi-<br>ties: "exotic exhibition' | Either a rejection of the other or<br>a structural change in norms to fit<br>western trends.   |
| Local population displacement                               | <ul> <li>Conflict for space use; Touristification<br/>of historical areas and cultural sites;</li> <li>Degradation of quality of life.</li> </ul>  |

## Tourism management in Marine Protected Areas: the ecosystem approach

→ Table 41: Matrix of the Pressures

Source: eco-union

and Social Impacts of Ecotourism

Marine Protected Areas (MPAs) refers to the protective management of certain natural areas in the aim at keeping them in their natural state<sup>162</sup>. MPAs can be chosen for a multiple of causes namely economic resources, biodiversity conservation, and/or species protection. A MPA is created by delineating zones in which certain identified activities are non-permitted<sup>163</sup>. In order to identify the boundaries of a MPA and the objectives of the conservation, in depth knowledge of the area is needed. MPAs require as well the establishment of surveillance and monitoring mechanisms for compliance<sup>164</sup>. Environmental conservation initiatives such as MPAs have been proliferating in recent decades. MPAs often seek to both ensure the conservation of marine biodiversity and foster sustainable development<sup>165</sup>. A key aspect of MPAs and its direct impact on tourism is regarding the limitation of the number of tourists that can access the area. The carrying capacity can be set within a MPA to establish a limit of the maximum number of tourist that can enter at once or per hour or per day. This means intend to reduce overcrowding of wild areas. While it is difficult sometimes to measure the ideal number of tourists to reduce negative environmental externalities without harming extensively the local economy this type of practices helps at least set rules that constrain mass tourism and negative derives of eco-tourism.

To estimate the **environmental and socio-economic** impacts of MPAs, a series of tools exist, namely socialecological systems, impact evaluation, and common-pool resource governance. These three complementary scientific frameworks aim at documenting and explain both the ecological and social impacts of several conservation interventions such as MPAs166. This impact evaluation of governance in social-ecological systems shows that MPAs have a positive impact on ecological dynamics and on the ecosystem in general<sup>167</sup>. MPAs also influence, directly and indirectly, well-being of the population through multiple channels. For instance, introducing new systems of marine resource governance into MPAs result in an enhanced or reshaped services in flows of marine ecosystem such as provisioning services (fishery), infrastructures, regulatory services (carbon sequestration) and cultural services (tourism) as well as supporting services<sup>168</sup>.

Moreover, MPAs allow a more transparent distribution of resources within and among social group while reallocating the benefits of ecosystem services. They determine at once the size of the marine economy generated by the ecosystem services, the distribution of property rights and the size of each individual dividend. When accounting for the spill overs of tourism in MPAs, especially from the ecological perspective, one should look at the shift in behaviour of tourists not only in MPAs but also in the peripheral areas, where recreational activities, such as fishing or swimming, are allowed.

The **social impacts of MPAs** can be measured using different frameworks and indicators such as the UN Human Development Index or SDGs. Well-being is usually defined as a combination of economic well-being, health, security and political empowerment, education, and culture<sup>169</sup>. MPAs are shown to have ripple effects in space, time, and among outcomes. For instance, redistributing the revenues from fishing of an MPA to other regions (fishing being often prohibited in MPAs), could increase the cost of fishing and lower profitability, given that travel distance might increase, as well as exploratory fishing and the aggregation of fishing pressure in non-MPA locations<sup>170</sup>. Yet, prohibiting fishing in MPA would also result in the increase of the fish abundance in the area, benefiting fishable areas, therefore mitigating some or all of the previously mentioned costs. However, the concept of MPAs implies a protection of a particular areas that leaves surrounding areas particularly exposed to the negative impacts of tourism. Establishing MPAs increases potential environmental impacts in near areas. With some activities being illegal within the MPA and touristic final destination, tourists as well as cruise ships tend to refrain from these activities only when they reach the destinations contaminating and polluting nearby regions.

<sup>162</sup> https://www.iucn.org/theme/marine-and-polar/our-work/marine-protected-areas

<sup>163</sup> Idem.

<sup>164 &</sup>lt;u>Idem.</u>

<sup>165 &</sup>lt;a href="https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/nyas.13428">https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/nyas.13428</a>

<sup>166</sup> Idem

<sup>167</sup> https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/nyas.13428

<sup>168 &</sup>lt;u>Idem</u>.

<sup>169 &</sup>lt;u>Idem.</u>

<sup>170 &</sup>lt;u>Idem</u>.

## Sustainability practices

| Name of action   | Location                  | Date | Leader  | Scale of<br>action                    | Key area of<br>action  | Description  |  |
|--|---------------------------|------|---|---------------------------------------|--|--|--|
|  | Legislation and Planning  |      |   |                                       |  |  |  |
| Great Barrier<br>Reef Marine<br>Park                         | Australia                 | 2004 | Great Barrier<br>Reef Marine<br>Park Autho-<br>rity               | Regional                              | Planning,<br>policy and<br>guidelines  | Various instruments has been put in place such as a financial contribution paid by every visitor in the Park, implementation of the Reef 2050 plan for sustainability, participation of local communities and government for the conservation of the Park.   |  |
| Posidonia<br>regulation<br>in Balearic<br>Islands            | Spain                     | 2018 | Government<br>of Balearic<br>Islands                              | Regional                              | Planning, Local<br>management,<br>conservation   | Through the creation and incorporation of a cartography of location of posidonia meadows in the nautical charts, it seeks to organize nautical activities in maritime spaces, with the aim of conserving and preserving the <i>Posidonia Oceanica</i> . It limits the access and anchorage to the boats, especially to the recreational boats.                   |  |
| Panama's<br>Guna Yala<br>territory™                          | Panama                    | 2008 | Guna General<br>Congress,<br>Secretariat<br>of Tourism<br>Affairs | Regional                              | Local mana-<br>gement, regu-<br>lation, rights,<br>socio-cultural<br>values, protec-<br>tion of natural<br>resources   | Total prohibition on the transfer of possession rights over islands and land to non-Kuna; Control of tourism projects, investment plans and licenses for tourist activities; 100% of the Kuna workforce; Limitation of the number of sailboats and foreign ships in the Kuna territory; taxes to the entrance of tourists to the territory.                      |  |
|  |                           |      |   | Carı                                  | rying Capacity   |  |  |
| Lord Howe<br>Island<br>Management<br>Plan                    | Australia                 | 2007 | NSW go-<br>vernment,<br>Australia                                 | Regional                              | Conservation,<br>management<br>action  | Strict tourism oversight (limited to 400 tourists on the island at any time)   |  |
| Diving tourism<br>in Medes<br>islands<br>(Catalonia)         | Spain                     | 2017 | Government<br>of Catalonia  | Local                                 | Planning, Local<br>management,<br>conservation   | The instrument allows planning the management of the protected area based on ensuring the conservation and improvement of the natural values of this area, regulating tourism, recreational, sports, educational and scientists, as well as professional fishing.  |  |
|  |                           |      |   | Labels                                | and certifications   |  |  |
| ECO Certifica-<br>tion <sup>172</sup>                        | Australia                 | 1996 | ecotourism<br>Australia   | National                              | management,<br>community,<br>conservation  | The ECO Certification program assures travellers that certified products are backed by a strong, well-managed commitment to sustainable practices and provides high quality nature-based tourism experiences.  |  |
| Blue flag certi-<br>fication <sup>173</sup>                  | Global                    | 2001 | Foundation<br>for Envi-<br>ronmental<br>Education                 | Local                                 | Marina and<br>boating tour<br>operators  | The Blue Flag Programme promotes sustainable development in freshwater and marine areas with local authorities and beach operators to achieve high standards in water quality, environmental management, environmental education and safety.   |  |
| EUROPARC<br>Sustainable<br>Tourism<br>Charter <sup>174</sup> | Medite-<br>rranean<br>Sea | 1995 | Europarc  | Interna-<br>tional<br>(Euro-<br>pean) | Land use plan-<br>ning, conserva-<br>tion integrated<br>management   | Governance and certification tool for management of sustainable tourism in protected areas, structured in three parts: sustainable destination and protected areas, sustainable local tourism businesses within the charter area, and sustainable tour operators bringing visitors in the areas.   |  |
| Destination/Product development                              |                           |      |   |                                       |  |  |  |
| Makuleke<br>Ecotourism<br>Project - Pa-<br>furi Camp         | South<br>Africa           | 1998 | Communal<br>Property<br>Association                               | Local                                 | Energy source<br>and provision,<br>solid waste<br>management<br>(recycling),<br>environmental<br>education,<br>food sourcing,<br>employment<br>practices and<br>training | The project generates revenues for the local population with involvement of the community when managing the heritage of land ownership rights. This has allowed a closer partnership and a more precise environmental and social management and positive impacts through investment in community development projects and biodiversity conservation initiatives. |  |

<sup>171</sup> https://www.savethewaves.org/programs/world-surfing-reserves/

 $<sup>\</sup>underline{172\ https://www.ecotourism.org.au/our-certification-programs/eco-certification/}$ 

<sup>173</sup> https://www.blueflag.global/criteria

<sup>174</sup> https://www.europarc.org/sustainable-tourism/

| Mediterranean<br>Experien-<br>ce of Eco<br>Tourism<br>(MEET) <sup>175</sup> | Medite-<br>rranean<br>Sea | 2013 | IUCN                     | Interna-<br>tional<br>Med | Management<br>and coordina-<br>tion, charter  | Project aiming to promote low impact and sustainable tourism experience in natural areas and parks of the Mediterranean region, through the development of sustainable ecotourism products and tools for destination management. |
|---|---------------------------|------|--------------------------|---------------------------|---|--|
|   |                           |      |                          | Pr                        | otected area  |  |
| World Surfing<br>Reserve <sup>776</sup>                                     | Portugal                  | 2009 | Save the Waves Coalition | Global                    | Protection and conservation of the coastal environment, economics and social values | The program serves as a global model for preserving wave breaks and their surrounding areas by protecting the key environmental, cultural, and economic and community attributes of surfing areas.                               |

<sup>→</sup> Table 42: Relevant Good Practices in Ecotourism Source: eco-union

## Case Study: World Surfing Reserve Ericeira (Portugal)

## **Description:**

This World program identifies, designates and preserves outstanding waves, surf zones and surrounding environments, by recognizing and protecting the key environmental, cultural, and economic and community attributes of surfing areas. The WSR recognizes not only the environmental, but also the social, cultural and economic benefits of the waves. It is governed by a global five-member Executive Committee with the assistance of a Vision Council, which takes care of the selection of sites based on a series of specific criteria. After applying and being selected, each WSR location creates a Local Stewardship Council and site-specific Stewardship plan to implement and manage the reserve.

## **Advantages:**

 Long-term conservation programmes monitored by non-profit organizations, transversal approach to the value of the territory, community-based conservation (surfers), involvement of local decision-makers, high capacity of mobilisation.

## Obstacles to implementation and limits:

· Long process of selection, funds.

# World Surfing Reserves Ericeira, Portugal

## Case Study: Caribe Panama's Guna Yala territory

## **Description:**

 It regulates the development of a tourism model to benefit the community, protect its identity, and collaborate in the financing of its autonomy, through community management. It involves the total prohibition on the transfer of possession rights over islands and land to non-Kuna; control of tourism projects, investment plans and licenses for tourist activities; 100% of the Kuna workforce; limitation of the number of sailboats and foreign ships in the Kuna territory; taxes to the entrance of tourists.

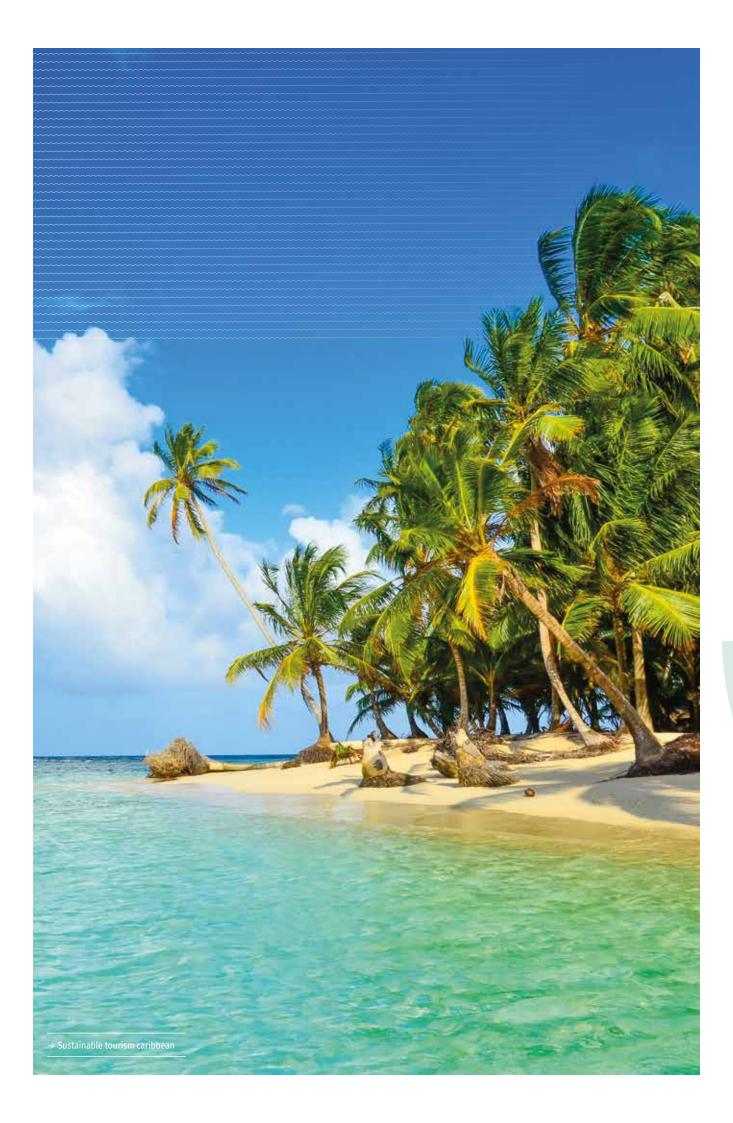
## Advantages:

Community-based and collective regulation, high legitimacy and acceptance

## **Obstacles to implementation and limits:**

• Strong engagement of the local community, legal framework for community-based policies for tourism, size of the territory and .





# The Transition towards Sustainable Coastal and Maritime Tourism

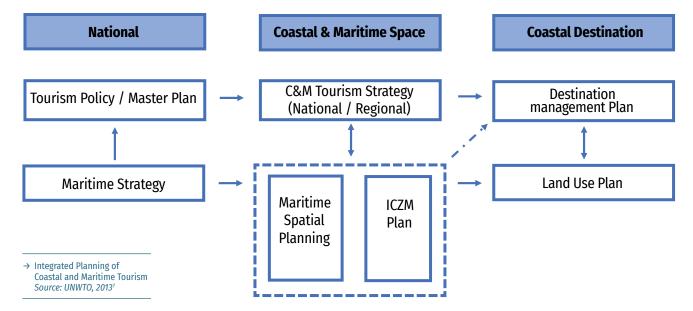
By analysing existing practices and institutional frameworks, key levers for a sustainable tourism industry have been identified, with recommendations for governments, public and private actors, focused on preventing and mitigating spatial, social and environmental impacts of coastal and maritime tourism around the marine regions. It covers governance mechanisms, environmental regulations and management issues, as well as promoting initiatives limited not only to alternative tourism and niche market segments, but also covering the entire mass-tourism sector including cruise and resorts<sup>1</sup>.

### Global Actions for a Sustainable Coastal and Maritime Tourism

Sustainable coastal and maritime tourism policies must acknowledge the impacts of tourism activities on the coastal territories, the vulnerability and complexity of the coastal and maritime ecosystems and its interactions with the different sub-components of the CMT.

- 1.1. Promote policy coherence, stakeholders collaboration and cooperation mechanisms
- a. Ensure coherent, integrated and consistent policies at all political, geographic and sectoral levels, by designing and implementing sustainable tourism strategies and policies taking into account all sustainable development aspects of blue tourism and its impacts, links and contributions to the global environmental commitments such as the Agenda 2030, in particular SDG 12 (Sustainable Consumption and Production), 13 (Climate Change) and 14 (Oceans' Conservation); Paris Agreement or CBD<sup>2</sup>.

- b. Promote effective collaboration and innovative partnerships among all relevant stakeholders, by encouraging multi-stakeholders initiatives—such as Sustainable Ocean Labs³— for all relevant public and private actors of the value chain, including IOGs, authorities, industry, NGOs or academia, in order to identify and address the major environmental and social challenges faced by the maritime and coastal tourism sector, in particular related to climate change, biodiversity protection and natural resources conservation.
- c. Foster policy dialogue and technical cooperation within and between marine regions, through the sharing of knowledge, expertise and resources from different marine regions, in particular those with similar challenges and issues, such as the Caribbean and the Mediterranean, as well as transnational and inter-regional partnerships, networks and strategies. It could be based on existing multilateral agreements, such as regional seas conventions<sup>4</sup>, or on new voluntary initiatives, such as the PROG initiative<sup>5</sup>, with a special focus on CMT issues.
  - 1.2. Support an integrated maritime & coastal planning through an ecosystem-based approach
- a. Implement transversal planning instruments, such as Integrated Coastal Zone Management (ICZM) and Marine Spatial Planning (MSP), in order to involve all levels of government, administrative and planning authorities in coastal management plans with an integrated vision of CMT impacts. This process must include a comprehensive land-sea planning process based on an ecosystem-based approach (EBA)<sup>6</sup>.
- 1 Giulietti et al. (2018): "Tourism and the environment Towards a reporting mechanism in Europe". EEA Report, European Topic Centre on Urban Land and Soil Systems (ETC/ULS), 112 p.
- 2 <a href="http://www2.unwto.org/content/tourism-2030-agenda">http://www2.unwto.org/content/tourism-2030-agenda</a>
- 3 <a href="http://www.sustainableoceanslab.org/">http://www.sustainableoceanslab.org/</a>
- 4 https://www.unenvironment.org/explore-topics/oceans-seas/what-we-do/working-regional-seas/regional-seas-programmes/regional-seas
- 5 https://www.prog-ocean.org/
- 6 https://www.msp-platform.eu/fag/ecosystem-based-approach



- b. Promote transboundary planning and international cooperation among different countries, including national and local institutions and stakeholders, by sharing information and a common vision, planning and actions to facilitate sustainable tourism. This process is especially relevant to manage maritime mobility (recreation boating, yachting and cruise ships), and to develop coherent frameworks for MSP at a subregional sea scale<sup>8</sup>.
- c. Encourage inclusive planning and collaborative management with all stakeholders, in particular by actively involving local communities at all development stages and all spatial, administrative and political levels, to ensure that the local population, including public and private actors, are actively involved in the management of its territorial resources, and that they effectively benefit from its economic impact by maximizing the sustainable community development<sup>9</sup>.

### 1.3. Develop comprehensive monitoring, evaluation and statistics schemes

a. Measure and monitor the impacts of maritime and coastal tourism to natural ecosystems in order to ensure that tourism is appropriately controlled as a source of high territorial pressure in sensitive areas, on the administrative, political and environmental scale. This measure could be implemented through blue tourism observatories<sup>10</sup> in each marine regions, to collect relevant, robust and consistent data at national and regional level.

- b. Promote quantitative instruments and assessment tools to evaluate the carrying capacity of destinations or territories through an adjustable by territory methodology of "acceptable limits" shared globally. CMT's contribution to sustainable development goals at both regional, national and sub-national levels should also be particularly tracked for SDG12 (SCP), SDG 13 (Climate) and SDG 14 (Ocean)<sup>11</sup>.
- c. Integrate socio-economic and environmental statistics at a national and regional level based on the UNWTO statistics schemes —yet in development— to integrate the tourism satellite accounts (TSA) with the System of Environmental-Economic Accounting (SEEA)<sup>12</sup>. A simpler, easy-to-use version of these indicators could be developed and promoted at the local/national level to facilitate its localization. A set of indicators common to all marine regions should also be promoted and shared in open platforms accessible to all relevant stakeholders.

# 1.4. Identify, support and disseminate sustainable practices, responsible businesses and green skills

a. Promote sustainable business practices by private and public actors through support mechanisms to CSR strategies, environmental management schemes and Environmental, Social and Governance (ESG) reporting<sup>13</sup>. Simplified environmental and sustainability guidelines for tourism SMEs should be developed and promoted to facilitate sharing and dissemination of reports and good practices.

<sup>7</sup> World Tourism Organization (2013): "Sustainable Tourism Governance and Management in Coastal Areas of Africa", 100 pp

<sup>6</sup> González et al.. (2018): "Hacia una ordenación espacial marítima del turismo con enfoque ecosistémico en la Demarcación Levantino-Balear". Informe técnico. eco-union. Barcelona, 125 pp. Available at: <a href="http://www.ecounion.eu/wp-content/uploads/2019/03/InformeTe%CC%81cnico\_PLANMED-TUR-1.pdf">http://www.ecounion.eu/wp-content/uploads/2019/03/InformeTe%CC%81cnico\_PLANMED-TUR-1.pdf</a>

<sup>9 &</sup>lt;a href="https://www.msp-platform.eu/projects/european-portal-iczm">https://www.msp-platform.eu/projects/european-portal-iczm</a>

<sup>10 &</sup>lt;u>http://insto.unwto.org/about/</u>

<sup>11 &</sup>lt;u>http://www2.unwto.org/content/tourism-2030-agenda</u>

<sup>12 &</sup>lt;a href="https://seea.un.org/">https://seea.un.org/</a>

<sup>13</sup> https://www.wttc.org/priorities/sustainable-growth/sustainability-reporting/sustainability-reporting-in-travel-and-tourism/

- b. Strengthen the integration of local private actors from different economic sectors along the sustainable tourism value chain to reduce the economic 'leakage' captured by large tourism enterprises; ensure that the added value from blue tourism activities is better retained at the local level; and support local industries, such as agriculture, manufacturing, crafts, etc.<sup>14</sup>
- c. Encourage high-quality education and vocational trainings integrating the principles of sustainability and inclusiveness in all its programmes and products with the objective of preparing and empowering the blue tourism leadership, management and personnel with updated skills, in the whole value chain, targeting public and private organizations with the support of academia and training agencies<sup>15</sup>.

# 1.4, Implement sectoral strategies and action plans to green and decarbonize the whole tourism industry

- a. Develop sectoral actions plans to decarbonize the whole tourism industry by tracking carbon emissions from tourism on global, national, and sectoral levels; agreement on absolute emission reduction levels, for various timelines (e.g. 2025, 2030, 2050) and transport mode (aviation, cars, and cruises); develop national targets for all sub-sectors of tourism and translate emission targets into business-specific action plans with incentives and disincentives to ensure meeting of targets<sup>16</sup>.
- b. Mainstream the use of eco-labels and environmental certifications in the whole tourism value chain through Environmental Management Systems (EMS), voluntary/mandatory environmental certifications and labelling approaches, because they are efficient and effective tools to implement and communicate environmental sustainability at the destination and product levels<sup>17</sup>. Such tools would help private enterprises to contribute in the achievement of the global environmental commitments by investing in energy efficiency and zero-emission transport, in the promotion of local and sustainable markets, and in the publication of data on their ecological or carbon footprint<sup>18</sup>.

- 1.5. Facilitate the financing of sustainable blue tourism activities, strategies and actors
- a. Guarantee the alignment of development aid and cooperation schemes with the needs and priorities of CMT at the regional, national and local levels by capitalizing trade-related technical assistance frameworks (such as Aid for Trade<sup>19</sup>) assigned to sustainable tourism activities; identifying and supporting tourism projects most relevant to NDCs<sup>20</sup> climate allocation; integrating innovative financing mechanisms (blended, crowdfunding, etc.) in the mobilization of resources; focusing on strategic and systemic environmental and climate issues identified in the Agenda 2030 VNRs such as renewable energy, water use, food security, capacity building, etc.<sup>21</sup>
- b. Design and implement environmental incentives and policies aiming at influencing the behaviour of blue tourism enterprises, travellers and investors, e.g. tradable rights for environmental compensation; water, carbon and financial incentives, such as tax deductions for eco-certification, local eco-taxes for hotels, airlines passengers or cruise travellers, etc.<sup>22</sup>
- c. Ensure sustainable and efficient Public Private Partnerships (PPPs) in the development of critical tourism facilities and services —transport infrastructures, public amenities, information and climate services, etc.—, through carefully designed, implemented and monitored collaboration schemes, based on recommended guidelines and best practices to avoid negative economic, social or environmental externalities<sup>23</sup>.

#### 1.6. Involve, prepare and empower travellers, the industry and key stakeholders

a. Partner with the private sector by sensitizing blue tourism companies, hotels and resorts, cruises and tours operators to better understand and interiorize the cost-saving benefits of resource-efficient allocation, branding and reputation improvement and the long-term security of green investment, through capacity-building and

- 14 <a href="http://icr.unwto.org/content/guidebook-sustainable-tourism-development">http://icr.unwto.org/content/guidebook-sustainable-tourism-development</a>
- 15 <a href="https://ec.europa.eu/maritimeaffairs/policy/blue\_growth\_en">https://ec.europa.eu/maritimeaffairs/policy/blue\_growth\_en</a>
- 16 Scott et al.(2016): "A report on the Paris Climate Change Agreement and its implications for tourism: why we will always have Paris". In Journal of Sustainable Tourism, vol. 24, no. 7, pp. 933-948
- 17 <a href="http://www.greentourism.eu/en/GreenLabel/IndexPublic">http://www.greentourism.eu/en/GreenLabel/IndexPublic</a>
- Scott, D. & Gössling, S. "The Paris Climate Change Agreement and its implications for Tourism". Available at: <a href="http://cf.cdn.unwto.org/sites/all/files/docpdf/presentationmaterialsustainabletourismwebinar2.pdf">http://cf.cdn.unwto.org/sites/all/files/docpdf/presentationmaterialsustainabletourismwebinar2.pdf</a> (slide 30).
- 19 OECD; UNWTO & WTO (2013): "Aid for trade and value chains in tourism", 50 pp. Available at: <a href="https://www.oecd.org/dac/aft/AidforTrade\_Sector-Study Tourism.pdf">https://www.oecd.org/dac/aft/AidforTrade\_Sector-Study Tourism.pdf</a>
- 20 <a href="http://sdt.unwto.org/en/content/climate-change-tourism">http://sdt.unwto.org/en/content/climate-change-tourism</a>
- 21 OECD (2018): "Tourism Trends and Policies 2018". Publishing, Paris, 375 pp. Available at: <a href="https://www.oecd.org/cfe/tourism/oecd-tourism-trends-and-policies-20767773.htm">https://www.oecd.org/cfe/tourism/oecd-tourism-trends-and-policies-20767773.htm</a>
- 22 <a href="http://www.oecd.org/environment/tools-evaluation/">http://www.oecd.org/environment/tools-evaluation/</a>
- Eagles, et al. (2017): "Guidelines for tourism partnerships and concessions for protected areas: generating sustainable revenues for conservation and development". Report to the Secretariat of the Convention on Biological Diversity and IUCN, 59 pp. Available at: <a href="https://portals.iucn.org/library/node/46956">https://portals.iucn.org/library/node/46956</a>

Corporate Social Responsibility programs such as Transforming Tourism Value Chain initiative<sup>24</sup>.

- b. Educate travellers and tourists by increasing public awareness regarding the ecological, socio-economic and human health impacts of tourism industry and travel and promoting more responsible and sustainable consumption patterns, through initiatives such as the 10 Years framework for Sustainable Consumption and Production also known as One Planet Network<sup>25</sup>.
- c. Engage with civil society by guaranteeing the active participation of local communities, NGOs, academia, travellers and other social actors both from destinations and place of origin— at the monitoring, dialogue and decision-making processes through education (Education for Sustainable Development) or research programs (participative science such as Reef Check ecodiver program<sup>26</sup> or Panete Mer Biolit initiative<sup>27</sup>).

# 2. Specific Recommendations for Hotels and Resorts

Hotels and Resorts have a major ecological footprint mainly due to land-use, operational management, energy, and water and food consumption on-site but also in the whole value chain. Therefore greening this massive tourism sector require ambitious, coordinated and innovative actions starting from the eco-conception of infrastructures, capacity-building programmes, low-carbon management and biodiversity protection schemes.

# 2.1. Mainstream sustainability certifications, eco-labelling and environmental initiatives

- a. Identify, adapt and implement a shared and standardized certification system for hotels and resorts at the regional and national levels, as an integral part of sustainable tourism policies in coastal and maritime areas. The scheme system must be identified and disseminated by all stakeholders —authorities, companies, research institutes and universities, NGOs, etc.—, and it should consider the three dimensions of sustainability (environmental, social and economic) while guaranteeing the transparency of the certification criteria and the information about the results. SwitchMed eco-label guide is an interesting attempt.<sup>28</sup>
- b. Ensure accessibility of certification schemes to all kind of destinations and businesses in order to include even small and medium-sized enterpri-

- ses or destinations, through simplified toolboxes, online self-assessment or incremental processes. The European EMAS toolbox is an example of easy-to-use certification scheme that could be adapted to non-EU destinations and business actors<sup>29</sup>.
- c. Promote good practices of information sharing, capacity-building and awareness actions, with short-term results such as staff training in the sustainable management of resources and information campaigns and environmental awareness campaigns for hotel and resort clients. The UN One Planet initiative on sustainable tourism<sup>30</sup> is a good example to adapt to the regional, national, local levels.

#### 2.3. Implement sustainable and comprehensive tourism planning, monitoring and management tools

- a. Develop regional and national policies to redistribute tourism on a spatial and temporal scale, according to the tourism reception capacity of destinations, measured by recognized indicators, such as ecosystem resilience, natural resources availability, population density, carbon emissions, and transport system. Such a scheme should be developed, approved, implemented and monitored through intergovernmental bodies and based on multilateral agreements.
- b. Integrate sustainable coastal, marine and urban planning tools (ICZM, MSP, LUP) to regulate the construction of tourist accommodation facilities and the development of recreational activities related to the first 500 meters from the sea line. The use of ecosystem-based approach (EBA) will help to have a more accurate and sensitive planning and management schemes. Such approach should be integrated into the existing multilateral environmental agreements, such as regional seas conventions, national and local policies and regulation.
- c. Restrain or control the development of high-resources (water, land or energy) consuming facilities such as golf courses, swimming pools and gardens and other leisure spaces. The need and environmental impact assessments of such sensitive infrastructures should be carefully, professionally and transparently undertaken by independent third-parties. The results should be openly published and discussed ted with all the relevant stakeholders, including local communities, NGOs and academia, in order to insure a well-informed decision process. If eventually approved, a reliable monitoring schemes should be put into practice in order to avoid deviations from original plans and mitigate any unexpected impacts.

<sup>24</sup> https://www.thetravelfoundation.org.uk/project/international-climate-initiative/

<sup>25 &</sup>lt;a href="http://www.oneplanetnetwork.org/">http://www.oneplanetnetwork.org/</a>

<sup>26 &</sup>lt;a href="https://reefcheck.org/tropical/overview">https://reefcheck.org/tropical/overview</a>

<sup>27 &</sup>lt;a href="http://planetemer.org/actions/biolit">http://planetemer.org/actions/biolit</a>

<sup>28</sup> https://www.switchmed.eu/en/e-library/the-new-sustainable-tourism-labels-guidebook

<sup>29 &</sup>lt;a href="https://www.ecolabeltoolbox.com/en/">https://www.ecolabeltoolbox.com/en/</a>

<sup>30</sup> http://sdt.unwto.org/about-oneplanet-stp

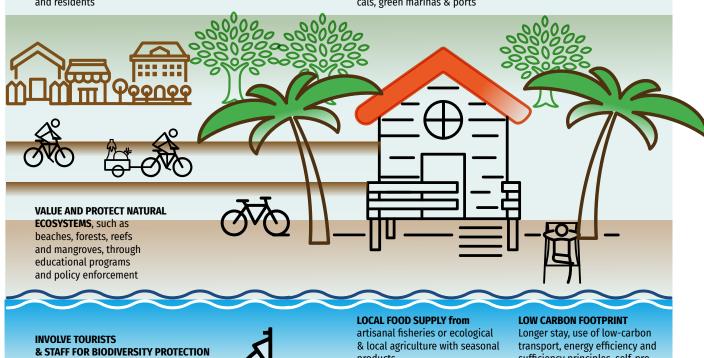
#### Sustainable coastal resorts & hotels

#### **CLOSE RELATIONSHIP WITH** LOCAL COMMUNITIES

Exchange and collaboration with local businesses, NGOs, schools and residents

#### **ECO-DESIGNED FACILITIES**

low-carbon material, net-zero energy building, local furniture, advanced water treatment, no toxic chemicals, green marinas & ports

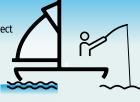


Sustainable Coastal Resorts & Hotels Source: eco-union

#### Promote Citizen-science instruments to collect

environmental data; implement financing instruments (eco-tax, entry fee, etc.)





products

#### **ZERO WASTE**

No single-use plastics, no food waste, biomass schemes, recycling waste schemes



sufficiency principles, self-production of solar/wind/biomass

#### **LOW WATER FOOTPRINT**

Reuse of grey water, treatment of black water and recuperation of rain water

#### 2.4 Increase investments in energy efficiency, water treatment and waste recycling schemes

- a. Promote industry management plans of natural resources for the use of energy, water and food in hotels and resorts, with the aim of reducing environmental pressures and impacts on local resources and fragile ecosystem. This plan must include a program of energy efficiency, waste management and water use limitation, waste prevention, setting maximum consumption limits and/or economic incentives as well as educational training programs for staffs and travellers, ideally with the support of local communities and NGOs.
- b. Accelerate the implementation of environmental technologies and resource-efficient solutions, prioritizing the local production of renewable energy and ambitious energy efficiency schemes on-site.

- Self-production of renewable energy (prosumerism)31 through the installation of PV panels, biomass facilities or wind turbines should be actively promoted to reduce carbon footprint, increase energy reliability and showcase environmental good practices. Fossil-fuel generators, often used as backup in locations with unreliable electricity networks, should be progressively decommissioned.
- c. Eliminate the use of non-recycling items such as single-use plastics, plastic bags, water bottle, plastic straws and single-use amenities (cotton buds, shower and shampoo kits). The whole supply and value chain, both at destinations or country of origin, should be involved in order to be able to provide cost-effective, reliable and sustainable alternatives. Also industry actors, staff and travellers should be educated to understand the impact of plastic and marine pollution and the need to change behaviours and consumption patterns at a higher speed and scale.

### 3. Specific Recommendations for Cruises and Ports

Cruise and ports are growing on a global scale at an impressive rate, moving from a luxury niche market to a significant tourism activity, accessible and affordable to the rising middle-class. Comprehensive actions are therefore required to monitor, mitigate and manage the associated environmental impacts, through the development of innovative governance mechanisms and regulatory schemes.

# 3.1. Provide sound regulation, technical support and financial incentives to green ports and cruises practices

- a. Develop green tax schemes in ports and cruises such as environmental maluses/bonuses to incentivize, but also sanction companies in regard to their sustainability performances. Such mechanisms, already emerging in European ports<sup>32</sup>, should be designed, implemented and monitored at regional —through enhanced regional sea conventions— or international level —through IMO regulation or CBD enforcement— to ensure a coherent and consistent position in front of the industry, build a level-playing field between destinations, and avoid free-riders and tax evasion.
- b. Support investment for Onshore Power Supply (OPS) through e.g. tax exemption, as it is currently covered by EU taxation, in contrast to fuel for auxiliary engines. This would enhance the economic profitability of OPS use for cruise companies against Heavy Fuel Oil (HFO) or Marine Gas Oil (MGO). The use of Liquified Natural Gas (LNG) barges could be a first step to provide low-carbon energy-supply to cruise while at call. The economic and technical barriers to the grid connection should also be reviewed and removed, prioritizing the self-production of low-carbon or renewable energy on site<sup>33</sup>.
- c. Implement stringent environmental legislation controlling air pollution such as Emissions Control Areas (ECA) to improve the quality of fuel used, support cleaner technologies, and reduce exposure of coastal population to toxic emissions. The ECAs, limiting NOx and SOx emissions, are already enforced in the North Sea, Baltic Sea, English Channel and East/West coast of North America, and should be extended to other world marine regions with dense coastal population, with a particular focus on the Mediterranean Sea where a political and social consensus is already emerging<sup>34</sup>.

#### 3.2. Leverage zoning, integrated planning and risk mitigation in sensitive marine areas

- a. Reduce and monitor cruise traffic in or near Marine Protected Areas (MPAs) through stringent legislation and appropriate zoning tools, such as ICZM and MSP, for assessment and identification of sensitive hotspots for marine biodiversity. In the Mediterranean Pelagos sanctuary<sup>35</sup>, a sea basin map depicting areas of high ecological value greatly helps in planning cruise and shipping routes. Other instruments such as speed reduction or cetacean detection could be used to mitigate collision, water and noise pollution<sup>36</sup>.
- b. Identify, regulate and enforce Particularly Sensitive Sea Areas (PSSAs)<sup>37</sup> protecting natural areas of high ecological or biological value, particularly vulnerable to cruise/shipping environmental impacts such as noise or waste pollution, through management measures based on areas to be avoided, compulsory pilotage or discharge prohibition. Currently, only 16 PSSAs have been approved in few marine regions, such as Western European waters, Baltic Sea, Florida keys, etc. It should be extended to other sensitive areas within each world marine regions through a transparent, efficient and science-based mechanism.

#### 3.3. Monitor, manage and regulate passengers and cruise flows

- a. Redistribute cruises disembarkation away from the city centres and dense areas in order to provide appropriate low-carbon public transportation for passengers between terminals and touristic spots. It will contribute to the reduction of exposure of local population to air emissions (Nox, Sox, PMs) as well as help to redistribute the passengers in larger areas outside the overcrowded tourist sites, usually in the city center.
- b. Develop a comprehensive database and planning of passengers and cruise flows to anticipate and, if needed, redistribute vessels disembarkation in advance, through sharing data between local governments, ports authorities and cruise operators. Temporal or spatial concentration of vessels and passengers should be avoided to reduce overcrowding and saturation of public spaces. The adjustment of port/passengers fees can be used to create financial (dis-)incentives for cruise operators.

<sup>32</sup> EC (2017): "Study on differentiated port infrastructure charges to promote environmentally friendly maritime transport activities and sustainable transportation". Available at: https://ec.europa.eu/transport/modes/maritime/news/2017-06-27-study-differentiated-port-infrastructure-charges-promote\_en

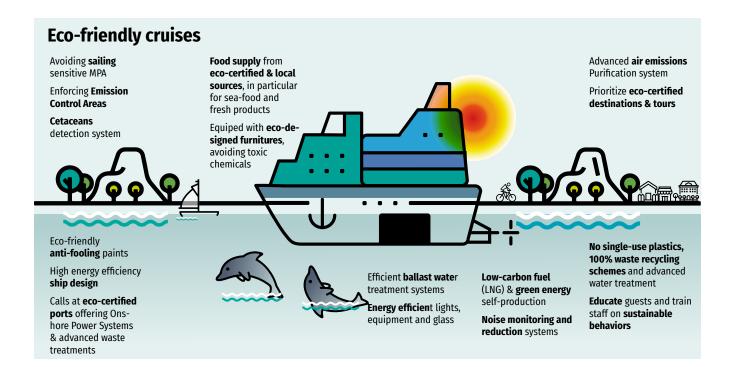
<sup>33 &</sup>lt;u>http://www.greencruiseport.eu/Home.html</u>

<sup>34</sup> INERIS (2019): "ECAMED: a Technical Feasibility Study for the Implementation of an Emission Control Area (ECA) in the Mediterranean Sea, 90pp. Available at: - <a href="https://www.ineris.fr/sites/ineris.fr/files/contribution/Documents/R\_DRC-19-168862-00408A\_ECAMED\_final\_Report\_0.pdf">https://www.ineris.fr/sites/ineris.fr/files/contribution/Documents/R\_DRC-19-168862-00408A\_ECAMED\_final\_Report\_0.pdf</a>

<sup>35 &</sup>lt;u>https://www.sanctuaire-pelagos.org/en/</u>

Conflict fiche 4: Maritime transport and area-based marine conservation, European MSP Platform. Available at: <a href="https://www.msp-platform.eu/sites/default/files/4">https://www.msp-platform.eu/sites/default/files/4</a> transport conservation kg-3 1.pdf

<sup>37 &</sup>lt;a href="http://pssa.imo.org/">http://pssa.imo.org/</a>



Eco-friendly Cruises Source: eco-union

# 3.4. Promote environmental conception, construction, operation and dismantling of cruise vessels

- a. Implement eco-design tools such as Life Cycle
  Assessment (LCA) when designing and building
  new ships, to reduce the ecological footprint of
  the vessels, prioritize low-carbon materials and
  guarantee recycling of all valuable materials, in
  particular harmful components and devices when
  dismantling old ships. LCA software and similar
  tools should be adapted to the need of the cruise
  industry with the support of regulators, governments and industry players<sup>38</sup>.
- b. Invest in resources-efficient technologies and environmental practices such as low-carbon engines, waste collection and recycling schemes, waste-water reuse, energy efficient lightings, heating and cooling systems. A multi-stakeholders platform integrating academia, NGOs, regulations, technology providers, shipyard, financers and cruise operators could be promoted to enhance innovation and market delivery of green solutions, following the example of the Italian Blue Growth cluster<sup>39</sup> or the global maritime energy efficiency partnerships<sup>40</sup>.

# 4. Specific Recommendations for Ecotourism

Sustainable ecotourism contributes to create socio-economic benefits for the local community while preserving natural ecosystems. However the main challenge remains to be able to scale it up (by increasing the size of the projects) and out (through dissemination in other territories) without losing the right balance between the economic, social and environmental pillars of sustainability.

# 4.1. Develop integrated monitoring & planning, ecotourism strategies and networking platforms

a. Put in place integrated monitoring and planning tools to assess the impact of ecotourism activities and flows in natural ecosystems (MPAs, Carrying Capacity, etc.), taking into account both the protected area and its surrounding, including areas under different authorities or management. This could involve creating buffer zones around sensitive natural areas, integrating environmental, social or economic hotspots<sup>41</sup>.

<sup>38</sup> Boatcycle Project, <a href="http://fundacionmar.org/wp-content/uploads/2014/01/folder-ecodesign-baixa.pdf">http://fundacionmar.org/wp-content/uploads/2014/01/folder-ecodesign-baixa.pdf</a>

<sup>39 &</sup>lt;a href="http://www.clusterbig.it/">http://www.clusterbig.it/</a>

<sup>40</sup> https://glomeep.imo.org/

<sup>41 &</sup>lt;a href="https://sdt.unwto.org/content/ecotourism-and-protected-areas">https://sdt.unwto.org/content/ecotourism-and-protected-areas</a>

- b. Design medium and long-term ecotourism development strategies to support its growth, consolidation and sustainability at local, national and regional level, based on the need of the local communities, through participative workshops, capacity-building activities and inclusive processes<sup>42</sup>.
- c. Create national and regional networks of ecotourism destinations to exchange best practices as well to disseminate innovative products and services. This would help to identify, scale-up and mainstream good practices between and within marine regions. It will also contribute to market visibility, communication and attractiveness of ecotourism industry and destinations, following the example of the Mediterranean MEET network<sup>43</sup>.

## 4.2. Maximise economic and social benefits for and by local communities

- a. Support community-based businesses by setting up networks of local producers and promoting green and social entrepreneurships in the community through the development of sustainable goods and services meeting the needs of visitors while putting in value the natural, social or cultural heritage of the destination<sup>44</sup>.
- b. Develop strategic economic sectors of the local community interlinked with the tourism sector, such as production of food specialities, cultural services and handicrafts and promote local purchasing of goods and services through sustainable procurement schemes in the whole value chain, including public and private sector.
- c. Reinvest generated revenues by eco-tourism activities in the protection of the region's natural ecosystem and local biodiversity through eco-tax or equivalent revenue schemes. This should be undertaken in a transparent, reliable and consistent way, by involving all relevant stakeholders, including local communities, NGOs, industry and authorities<sup>45</sup>.

### 4.3. Disseminate sustainable practices and environmental initiatives

- a. Enhance sustainability certifications and eco-labels for eco-tourism facilities related to noise, water and waste management as well as the involvement of local community and protection of natural ecosystems. It could be based on existing environmental schemes or specific labels, such as Australian ecotourism<sup>46</sup> or Rainforest Alliance<sup>47</sup>.
- b. Educate, prepare and empower eco-tourism staff, visitors and local population about the value of historical, cultural and natural heritage; the need to preserve them over the long term; as well as sharing a better understanding and knowledge of in nature conservation and interpretation of ecosystems services and local culture<sup>48</sup>.

# 4.4. Monitor ecotourism through data collection and participatory science

- a. Develop and implement integrated indicators to measure ecotourism development, such as level of conservation of natural resources and biodiversity; satisfaction of local populations; participation of local communities; preservation of heritage and diversity; load capacity; site disturbance; ecological interest, etc.
- b. Promote scientific research on local ecosystems to better identify and protect endangered habitats and species, through innovative schemes such as participatory science education (Education for Sustainable Development) or research programs (participative science such as Reef Check ecodiver program<sup>49</sup> or Panete Mer Biolit initiative<sup>50</sup>).

Dehoorne, O. & Tătar, C. (2013): "Ecotourism development strategies for Caribbean tourism destinations". In .Tourismos: an international multidisciplinary journal of tourism Volume 8, no. 1, pp. 283-299. Available at: <a href="http://www.chios.aegean.gr/tourism/VOLUME\_8\_No1\_art15.pdf">http://www.chios.aegean.gr/tourism/VOLUME\_8\_No1\_art15.pdf</a>

<sup>43 &</sup>lt;a href="https://www.meetnetwork.org/">https://www.meetnetwork.org/</a>

<sup>44</sup> https://sdt.unwto.org/content/ecotourism-and-protected-areas

<sup>45 &</sup>lt;a href="http://icr.unwto.org/content/guidebook-sustainable-tourism-development">http://icr.unwto.org/content/guidebook-sustainable-tourism-development</a>

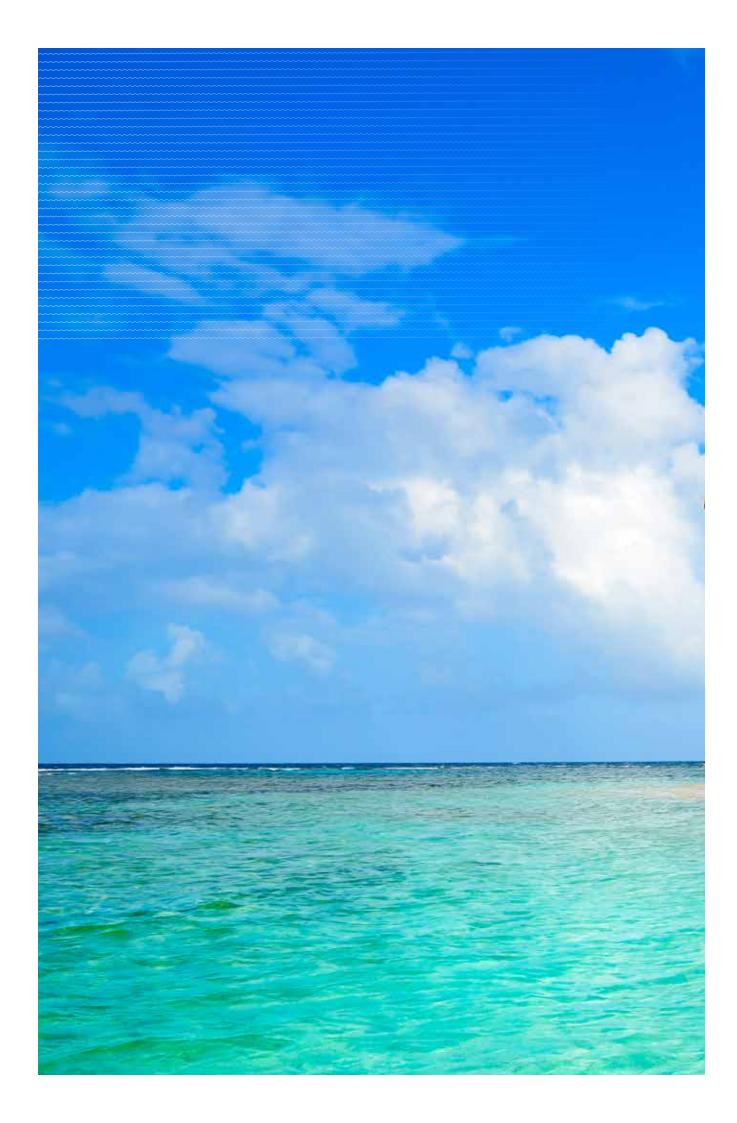
<sup>46 &</sup>lt;a href="https://www.ecotourism.org.au/our-certification-programs/eco-certification/">https://www.ecotourism.org.au/our-certification-programs/eco-certification/</a>

<sup>47 &</sup>lt;u>https://www.rainforest-alliance.org/latest?keyword=tourism</u>

<sup>48</sup> https://www.ltandc.org/

<sup>49 &</sup>lt;u>https://reefcheck.org/tropical/overview</u>

<sup>50</sup> http://planetemer.org/actions/biolit



# Conclusions

This report intends to understand and define better the ecological footprint of coastal and marine tourism in the Mediterranean, the Caribbean, the North East Atlantic, the South Pacific Ocean, and the Western Indian Ocean, the major global marine regions, in order to disseminate field learnings and develop common policy recommendations for policy-makers, tourism stakeholders and other relevant institutional and civil society actors. The main conclusions of this in-depth assessment are described below in a nutshell.

The emerging destinations are becoming emergency territories due to its rising vulnerability to environmental risks, in particular, climate change, dependency to natural resources, quality of ecosystems, putting in danger coastal territories and local communities and requesting urgent policy answers. It is also necessary to take into account the long-term trends in tourism production and consumption patterns to anticipate growth scenarios and increase resilience to natural, social and economic shocks for local communities and socio-economic structures.

Finally Improvement of data collection and monitoring tools, both globally and locally, is strongly needed to allow a full vision of the reality of maritime and coastal tourism. The use of participatory tools such as citizen science are therefore very useful to collect data at a very low cost while involving local communities and educate visitors and industry.

- Governance mechanisms among and within tourism sectors should be improved to allow a proper planning, monitoring and regulation, and ensure the contribution of tourism towards the Agenda 2030, in particular, to SDG 12 (SCP) and 14 (Ocean's Conservation).
- Innovative practices, present in many territories at a local level, have to be scaled up and out on the national, regional and global scale, to upscale and mainstream best initiatives having a real impact on tourism sustainability. Sharing, replicating and disseminating good practices —through adequate financial schemes—is therefore critical.

# References

#### **Bibliography**

- Africa Biodiversity Collaborative Group Western Indian Ocean (2012): "Climate Change in the Western Indian Ocean: A Situation Assessment and Policy Considerations", 103 pp. Available at: http://wio-c.org/wp-content/uploads/2015/12/abcg\_wio\_stocktaking\_october\_20122.pdf
- African Union (2012): "2050 Africa's Integrated Maritime (AIM) Strategy". Available at: https://cggrps.com/wp-content/uploads/2050-AIM-Strategy\_EN.pdf
- Agence Française de Développement (2012): "Stratégie de coopération régionale ultramarine de l'AFD - Déclinaison sur le Pacifique Sud", 11pp. . Available at: https:// www.afd.fr/fr/strategie-de-cooperation-regionale-ultramarine-de-lafd-pacifique-sud
- Agence Française de Développement (2012): "Stratégie de coopération régionale Caraïbe de l'AFD". Available at: https://www.afd.fr/fr/strategie-de-cooperation-regionale-caraibe-de-lafd
- Andrew Balmford et al. (2009): "A Global Perspective on Trends in Nature-Based Tourism". Accessible at: https:// journals.plos.org/plosbiology/article/file?id=10.1371/ journal.pbio.1000144&type=printable
- Aronson, R. B.; Thatje, S.; Mcclintock, J. B., & Hughes, K. A. (2011): "Anthropogenic impacts on marine ecosystems in Antarctica". In: Annals of the New York academy of sciences, Vol. 1223, pp. 82–107
- Augier, D. (2010): "Les écosystèmes marins de la Caraïbes: identification, diffusion et mode de gestion".
  Études caribéennes (On line). Available at: https://journals.openedition.org/etudescaribeennes/4343
- Balmford, A. et al. (2009): "A Global Perspective on Trends in Nature-Based Tourism". Accessible at: https:// journals.plos.org/plosbiology/article/file?id=10.1371/ journal.pbio.1000144&type=printable
- Baltic Marine Environment Protection Commission
  (2017): "Economic and Social Analysis within the UN
  Environment/Mediterranean Action Plan-Barcelona
  Convention system". Available at: https://portal.helcom.
  fi/meetings/HELCOM%20ESA%20WS%201-2017-480/
  MeetingDocuments/Document\_3\_ESA\_in\_UN\_Environment MAP Barcelona Convention.pdf

- Bastakis, C.; Buhalis, D., & Butler, R. (2004): "The perception of small and medium sized tourism accommodation providers on the impacts of the tour operators' power in Eastern Mediterranean". In Tourism Management, nr. 25, Vol. 2 pp. 151-170.
- Batinić, I. (2013): "The role and importance of the internet in contemporary tourism in travel agencies business". In International Journal of Cognitive Research in science, engineering and education Vol. 1, no. 2
- Becken, S. (2010): "The importance of climate and weather for tourism". In Leap Land Environment and people, 23 pp. Available at: http://www.lincoln.ac.nz/ PageFiles/6750/WeatherLitReview.pdf
- Becken, S. (2014): "Water equity Contrasting tourism water use with that of the local community". In Water Resources and Industry, vol. 7–8, pp. 9-22
- Beukering P.; Sarkis S.; Putten LI., & Papyrakis E. (2015): "Bermuda's balancing act: The economic dependence of cruise and air tourism on healthy coral reef"s. Ecosystem Services 11, pp. 76 – 86.
- Black, R. (2007): "Quality assurance and certification in ecotourism". In Ecotourism series, Number 5: Retrieved April 10, 2008. Available at: http://site.ebrary.com/lib/unlv/Doc?id=10060509&ppg=264
- Black, R. (2007): "Ecotourism series, Number 5: quality assurance and certification in ecotourism". Retrieved April 10, 2008 from UNLV Library Website. Available at: http://site.ebrary.com/lib/unlv/Doc?id=10060509&ppg=264
- Blázquez, M; Cañada, E., & Murray, I. (2011): "Búnker playa-sol. conflictos derivados de la construcción de enclaves de capital transnacional turístico español en el Caribe Y Centroamérica". In: Scripta Nova revista electrónica de geografía y ciencias sociales, Vol. XV, nr. 368 Available at: http://www.ub.edu/geocrit/sn/sn-368. htm
- Bohdanowicz, P. (2005): "European Hoteliers' Environmental Attitudes: Greening the Business". In Cornell Hotel and Restaurant Administration Quarterly, vol. 46, nr. 2, pp. 188-204
- Bonilla, M. J. (2017): "Corporate social responsibility in

- the cruise sector". Cruise Ship Tourism, pp. 86-10
- Brida, J.G., & Zapata, S. (2010): "Cruise tourism: economic, socio-cultural and environmental impacts". In International Journal Leisure and Tourism Marketing, vol 1 n°3, pp. 205 225.
- Burgin, S. & Hardiman, N. (2015): "Effects of non-consumptive wildlife-oriented tourism on marine species and prospects for their sustainable management". In Journal of Environmental Management, Vol. 151, pp. 210-220.
- Caribbean Development Bank (2017): "Caribbean Economic Review, 2018 Outlook", 22 pp. Available at: https://issuu.com/caribank/docs/cdb\_2017\_caribbean\_economic review
- Caric, H.; Klobucar, G., & Stambuk, A. (2016): "Eco toxicological risk assessment of antifouling emissions in a cruise ship port". Journal of Cleaner Production 121, pp.159 168.
- Carson, B. (2015): "Airbnb is worth \$25.5 billion after raising a massive \$1.5 billion round". Available at: https://www.businessinsider.com/airbnb-15-billion-round-values-the-company-at-255-billion-2015-6?IR=T
- CBD (2004): "Guidelines on Biodiversity and Tourism Development". CBD Guidelines, Montreal: Secretariat of the Convention on Biological Diversity, 29 pp. Available at: https://www.cbd.int/doc/publications/tou-gdl-en. pdf
- CBD (2005): "Handbook of the Convention on Biological Diversity Including its Cartagena Protocol on Biosafety".
   CBD Guidelines, 3rd edition, Montreal: Secretariat of the Convention on Biological Diversity, 1258 pp. Available at: https://www.cbd.int/doc/handbook/cbd-hb-all-en.pdf
- Cheer, J. M. (2017): "Cruise Tourism in Small Island-High Yield and Low Impact?". Cruise Ship Tourism, pp. 408-423
- Christian, M. K.; Fernandez-Stark, G.; Ahmed, & Gereffi, G. (2011): "The Tourism Global Value Chain: Economic Upgrading and Workforce Development. Duke Center on Globalization, Governance & Competitiveness (Duke CGGC).
- Clancy, M., et al. (2017): "Power and profits in the global cruise industry. Cruise Ship Tourism". In book: Cruise Ship Tourism, Edition: 2d, Chapter 2, pp. 43-56.
- Claudet, J. & Fraschetti, S. (2010): "Human-driven impacts on marine habitats: A regional meta-analysis in the Mediterranean Sea". Biological Conservation Vol.143, nr. 9, pp. 2195-2206 Available at: https://ac-els-cdn-com.sire.ub.edu/S0006320710002703/1-s2.0-S0006320710002703-main.pdf?\_tid=6d968234-6791-44d8-9002-1f09da4bfe5e&acd-nat=1541673504\_960661bda185d662a8dea318854bacc3
- CLIA (2016): "State of the Industry 2017". Available at: https://www.cruising.org/docs/default-source/research/ clia-2017-state-of-the-industry.pdf?sfvrsn=6
- Coll, M.; Piroddi, C.; Steenbeek, J.; Kaschner, K.; Ben Rais Lasram, F.; Aguzzi, J. et al. (2010): "The Biodiversity of the Mediterranean Sea: Estimates, Patterns, and Threats". PLoS ONE vol. 5, no. 8 e11842. https://doi.org/10.1371/

- journal.pone.0011842 https://journals.plos.org/ploso-ne/article?id=10.1371/journal.pone.0011842
- Commission de l'Océan Indien (2007): Strategic environmental assessments at national and regional levels. Final Report, 100pp. Available at: http://www. commissionoceanindien.org/fileadmin/resources/RE-COMAP%20Reports/Strategic%20environmental%20assessments%20at%20national%20and%20regional%20 levels.pdf
- Daby, D. (2003): "Effects of seagrass bed removal for tourism purposes in a Mauritian bay". In Environmental Pollution, Vol. 125, Issue 3, pp. 313-324
- Dangi, T. B., & Jamal, T. (2016): "An Integrated Approach to "Sustainable Community-Based Tourism." In Sustainability, vol. 8, no. 5. Available at: https://www.mdpi. com/2071-1050/8/5/475/htm
- Davis, A. & Fitzgerald, Jr. (2004): "Beaches and Coasts".
   Blackwell Publishing, Malden (MA/USA) and Oxford (UK),1st Edition, 419 pp.
- Dehoorne O.; Murat C., & Petit-Charles N. (2009): "Le tourisme de croisière dans l'espace caribéen: évolutions récentes et enjeux de développement", Etudes Caribéennes
- Dehoorne, O., & Tătar, C. (2013): "Ecotourism development strategies for Caribbean tourism destinations". In Tourismos: an international multidisciplinary journal of tourism Volume 8, no. 1, pp. 283-299.
- Didriech, A. (2010): "Cruise ship tourism in Belize: The implication of developing cruise ship tourism in an ecotourism destination". Ocean & Coastal Management 53, pp.234 244.
- Dowling, R., & Weeden, C. (2017): "The world of cruising".
   Cruise ship tourism 2017 no.Ed.2 pp. 1-39.
- Eagles, P. F. J.; Snyman, S. & Spenceley, A. (2017): "Guidelines for tourism partnerships and concessions for protected areas: generating sustainable revenues for conservation and development". Report to the Secretariat of the Convention on Biological Diversity and IUCN, 59 pp. Available at: https://portals.iucn.org/library/node/46956
- EC (2016) The European Tourism Indicator System: ETIS toolkit for sustainable destination management. Available at: ec.europa.eu/DocsRoom/documents/21749/ attachments/1/translations/en/renditions/pdf
- EC (2017): "Study on differentiated port infrastructure charges to promote environmentally friendly maritime transport activities and sustainable transportation". Available at: https://ec.europa.eu/transport/ modes/maritime/news/2017-06-27-study-differentiated-port-infrastructure-charges-promote\_en
- Ecorys & Executive Agency for Small and Medium-sized Enterprises (European Commission) (2016): "Study on specific challenges for a sustainable development of coastal and maritime tourism in Europe". Final Report, European Commission. Available at: https://publications.europa.eu/en/publication-detail/-/publication/ ab0bfa73-9ad1-11e6-868c-01aa75ed71a1
- Ecorys (2009): "Study on the Competitiveness of the EU

- tourism industry", 281 pp. Available at: https://ec.euro-pa.eu/growth/content/study-competitiveness-eu-tourism-industry-0\_en
- Ecorys (2013): "Study in support of policy measures for maritime and coastal tourism at EU level". Available at: https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/docs/body/study-maritime-and-coastal-tourism\_en.pdf
- Ecotrans (2006): "Environmental initiatives by European tourism businesses Instruments, indicators and practical examples A contribution to the development of sustainable tourism in Europe". 39 pp. Available at: http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=file&fil=SURTOUR\_initiatives\_EN.pdf
- ECPAT International (2016): "The global study on sexual exploitation of children in travel and tourism", 152 p. Available at: https://www.protectingchildrenintourism. org/wp-content/uploads/2018/10/Global-Report-Offenders-on-the-Move.pdf
- EEA UNEP/MAP (2014): "Horizon 2020 Mediterranean report Toward shared environmental information systems". EEA Technical report No 6, 142 pp. Available at: https://www.eea.europa.eu/publications/horizon-2020-mediterranean-report
- EEA (2015): "European briefings Tourism". Available at: https://www.eea.europa.eu/downloads/578eb-30914fe45e1a274b8562e255c13/1479205845/tourism.pdf
- EEA (2017): "Climate change, impacts and vulnerability in Europe 2016. An indicator-based report" Available at: https://www.eea.europa.eu/publications/climate-change-impacts-and-vulnerability-2016
- EEA and UNEP (1999): "State and pressures of the marine and coastal Mediterranean environment". European Environment Agency, Copenhagen.
- Elizabeth Joy Matthews (2002): "Ecotourism: Are current practices delivering desired outcomes? A comparative case study analysis". Blacksburg, Virginia, p.19-71. Accessible at: https://vtechworks.lib.vt.edu/bitstream/ handle/10919/37108/ElizabethMatthews.pdf
- Ellis, Claire, Scherrer, Pascal, Walker, Kaye, et al. (2017): "Improving sustainable management of expedition cruise destinations in Australia: governance and management lessons from the Great Barrier Reef, the Kimberley and Tasmania". In Cruise ship tourism, no. 2, pp. 465-483
- Energy and Environmental Research Associates, LLC for CLIA (2017): "Evaluation of Cruise Industry: Global Environmental Practices and Performance". Available at: https://cruising.org/docs/default-source/research/ environment-research-2017.pdf
- Enzenbacher, D. J. (1992): "Antarctic tourism and environmental concerns". In: Marine Pollution Bulletin Vol. 25, Issues 9–12, pp. 258-265.
- Erbe, C. (2002): "Underwater noise of whale-watching boats and potential effects on killer whales (Orcinus orca), based on an acoustic impact model". In Marine Mammal Science, Vol. 18, pp. 394-418.
- Erdogan, N. & Baris, E. (2007): "Environmental protec-

- tion programs and conservation practices of hotels in Ankara, Turkey". In: Tourism Management, Vol. 28, Issue 2, pp. 604-614
- ESPO (2018): "Environmental Annual Report". Available at: https://www.espo.be/news/espo-publishes-environmental-report-2018-top-10-en
- European Commission (2009): "MEDSTAT II: 'Water and Tourism' pilot study", 33 pp. Available at: https://ec.europa.eu/eurostat/documents/3888793/5844489/KS-78-09-699-EN.PDF/04c900a4-6243-42e0-969f-fc04f184a8b6
- European Commission (2009): "Tourist facilities in ports

   The Environment Factor", Policy Research Corporation,
   pp. Available at: https://ec.europa.eu/maritimea-ffairs/sites/maritimeaffairs/files/docs/body/environment\_factor\_en.pdf
- European Environment Agency (2008): "Biogeographical regions in Europe: The North-East Atlantic Ocean - huge, deep and heavily exploited". Available at: https://www. eea.europa.eu/publications/report\_2002\_0524\_154909/ regional-seas-around-europe/nea\_ocean.pdf/view
- European Parliamentary Research Service (EPRS) (2017): "Sustainable tourism. The environmental dimension".
   Briefing March 201, European Union, 10pp. Available at: http://www.europarl.europa.eu/RegData/etudes/ BRIE/2017/599327/EPRS\_BRI(2017)599327\_EN.pdf
- Eurostat Statistics Explained (2017). "Archive: Maritime economy statistics coastal regions and sectoral perspective", Data extracted in July 2015 and updated in December 2017. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Maritime\_economy\_statistics\_-coastal\_regions\_and\_sectoral\_perspective
- FAO (2011): "Ecotourism can play vital role in maintaining healthy forests". Accessible at: http://www.fao.org/news/story/en/item/90192/icode/
- Filimonau, V; Dickinson, J.; Robbins, D. & Huijbregts, M.
   A. J. (2011): "Reviewing the carbon footprint analysis of hotels: Life Cycle Energy Analysis (LCEA) as a holistic method for carbon impact appraisal of tourist accommodation". In Journal of Cleaner Production, vol. 19, Issues 17–18, pp. 1917-1930
- Fletcher, R. (2019): "Ecotourism after nature: Anthropocene tourism as a new capitalist "fix". In Journal of Sustainable Tourism, vol. 27 no. 4, pp. 522-535. Available at: https://www.academia.edu/37176994/Ecotourism\_after\_Nature\_Anthropocene\_Tourism\_as\_a\_New\_Capitalist\_Fix\_2019\_
- Forbes (2018): "Luxury resort owner takes going green to the extreme". Accessible at: https://www.forbes.com/ sites/pamelaambler/2018/07/10/luxury-resort-ownertakes-going-green-to-the-extreme/
- Fosse, J. & Le Tellier, J. (2017) "Tourisme durable en Méditerranée: état des lieux et orientations stratégiques".
   Plan Bleu. Valbonne. (Cahier du Plan Bleu, 17), 55 pp.
   Available at: https://planbleu.org/sites/default/files/publications/cahier17\_tourisme\_en\_web.pdf
- Fosse, J. & Le Tellier, J. (2017): "Sustainable Tourism in the Mediterranean: State of Play and Strategic Direc-

- tions". Plan Bleu. Valbonne. (Plan Bleu Paper, 17)
- Friends of the Earth (2009): "Getting a Grip on Cruise Ship Pollution". [online] Friends of the Earth. Available at: https://lbps6437gg8c169i0y1drtgz-wpengine.netdna-ssl.com/wp-content/uploads/2017/legacy/Gettinga-grip-on-cruise-ship-pollution.pdf
- Froger, G. (2010): "La mesure des effets des formes de tourisme responsable dans différents territoires". Cahier du Cemotev, n° 2010-03. p. 93-114. Accessible at : https://hal.archives-ouvertes.fr/hal-00845223/document
- Gabrié C.; Lagabrielle E.; Bissery C.; Crochelet E.; Meola B.; Webster C.; Claudet J.; Chassanite A.; Marinesque S.; Robert P.; Goutx M., & Quod C. (2012): "The Status of Marine Protected Areas in the Mediterranean Sea". MedPAN & RAC/SPA. Ed: MedPAN Collection. 256 pp.
- GCRMN, 2018
- Geen, R. & Giese, M. (2004): "Negative effects of wildlife tourism on wildlife". In "WILDLIFE TOURISM impacts, management and planning", CRC for Sustainable Tourism, pp. 81 – 93;
- Giulietti, S.; Romagosa, F.; Fons Esteve, J. & Schröder, C. (2018): "Tourism and the environment Towards a reporting mechanism in Europe". EEA Report, European Topic Centre on Urban Land and Soil Systems (ETC/ULS), 112 p.
- Gómez-Martín, M. B. (2005): "Weather, climate and tourism a geographical perspective". In Annals of Tourism Research, Vol. 32, nr. 3, pp. 571-591
- González, D. A.; Grimalt, V. M.; Tonazzini, D., & Fosse, J. (2018): "Hacia una ordenación espacial marítima del turismo con enfoque ecosistémico en la Demarcación Levantino-Balear". Informe técnico. eco-union. Barcelona, 125 pp. Available at: http://www.ecounion.eu/ wp-content/uploads/2019/03/InformeTe%CC%81cnico\_PLANMEDTUR\_-1.pdf
- Gössling, S. (2002): "Global environmental consequences of tourism". In Global Environmental Change, Vol. 12, Issue 4, pp. 283-302
- Gössling, S (2015): "New performance indicators for water management in tourism". In Tourism Management, vol. 46, pp. 233-244.
- Gössling, S.; Hall, C. M., & Scott, D. (2009): "The Challenges of Tourism as a Development Strategy in an Era of Global Climate Change". In Rethinking Development in a Carbon-Constrained World. Development Cooperation and Climate Change, pp. 100-119
- Gössling, S; Peeters, P.; Hall, C. M.; Ceron, J. P.; Dubois, G.; La Vergne Lehmann, L. V., & Scott, D. (2012): "Tourism and water use: Supply, demand, and security. An international review". In: Tourism Management, vol. 33, Issue 1, pp. 1-15
- Gutiérrez, J.; García-Palomares, J. C.; Romanillos, G. & Salas-Olmedo, M. H. (2017): "The eruption of Airbnb in tourist cities: Comparing spatial patterns of hotels and peer-to-peer accommodation in Barcelona". In: Tourism Management, Vol. 62, pp. 278-291
- Hall, C. M. (1992): "Tourism in Antarctica: Activities, Im-

- pacts, and Management". In: Journal of Travel Research Vol. 30 nr. 4, pp. 2-9
- Hall, C. Michael, Wood, Hannah, Wilson, Sandra, et al. (2017): "Environmental reporting in the cruise industry". In Cruise Ship Tourism, 2nd ed.; Dowling, R., Weeden, C. ed. pp. 441-464,
- Hil, N. (2015): "Floating abominations: Exposing the Cruise Ship Industry". Tourism Concern (website)
- Honey M. & Krantz D. (2007): "Global Trends in Coastal Tourism. Center on Ecotourism and Sustainable Development". Available at: https://www.responsibletravel. org/docs/Global\_Trends\_in\_Coastal\_Tourism\_by\_CESD\_ Jan\_08.pdf
- Howitt O.; Revol, V.; Smith I., & Rodger, C. (2010): "Carbon emissions from international cruise ship passengers' travel to and from New Zealand". Energy Policy 38, pp. 2552 – 2560.
- IAATO (2012): "Draft Report CEP Tourism Study. Tourism and Non-governmental Activities in the Antarctic: Environmental Aspects and Impacts"
- IAATO (2018): "Overview of Antarctic Tourism: 2017-18 Season and Preliminary Estimates for 2018-19 Season", 26 pp. Available at: https://iaato.org/documents/10157/2398215/IAATO+overview/bc34db24-e1dc-4eab-997a-4401836b7033
- IEMED (2017): "Naturaleza y sostenibilidad. Convivir en el Mediterráneo". Quaderns de la Mediterrània, Nr. 25.
- INERIS (2019): "ECAMED: a Technical Feasibility Study for the Implementation of an Emission Control Area (ECA) in the Mediterranean Sea, 90pp. Available at: - https:// www.ineris.fr/sites/ineris.fr/files/contribution/Documents/R\_DRC-19-168862-00408A\_ECAMED\_final\_Report 0.pdf
- IUCN (2008): "Biodiversity: My hotel in action. A guide to sustainable use of biological resources". Gland, Switzerland,128 pp. Available at: https://cmsdata.iucn.org/ downloads/iucn\_hotel\_guide\_final.pdf
- IUCN (2011): "Impacts of hotel siting and design on biodiversity in the insular Caribbean: a situation analysis".
   Gland, Switzerland, 96 pp. Available at: https://portals.iucn.org/library/efiles/documents/Rep-2011-015.pdf
- IUCN: "Red List of Mediterranean Marine Fish", Available at: https://www.iucn.org/sites/dev/files/content/documents/fact\_sheet\_mediterranean\_marine\_fish\_en.pdf
- Interreg Mediterranean SCIROCCO (2017): "D.3.7 Policy coherence analysis" Available at: https://sirocco.interreg-med.eu/fileadmin/user\_upload/Sites/Sustainable\_Tourism/Projects/SIROCCO/SIROCCO\_D3.7.pdf
- Interreg Mediterranean sustainable tourism (2017):
   "Identifying challenges and gaps towards sustainable
   and responsible coastal and maritime tourism in the
   Mediterranean" Available at: http://planbleu.org/sites/
   default/files/upload/files/BTM\_1st\_thematic\_paper\_
   Sustainable Tourism 2017.pdf
- IPCC (2014): "Climate Change 2014: Impacts, Adaptation, and Vulnerability". Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1132 pp.

- Jay, S. (2017): "Marine Spatial Planning Assessing net benefits and improving effectiveness". Issue paper 21 & 22 November OECD: Paris, 35pp. Available at: https://www.oecd.org/greengrowth/GGSD\_2017\_Issue%20Paper\_Marine%20Spatial%20Planning.pdf
- Johnson, D. (2002): "Environmentally sustainable cruise tourism: a reality check". In Marine Policy, vol. 26, pp. 261 – 270.
- Jones, S. (2005). Community-Based ecotourism: The Significance of Social Capital, Annals of Tourism Research Volume 32, Issue 2, Pages 303-324. https://doi. org/10.1016/j.annals.2004.06.007
- Jones, S. (2005): "Community-Based ecotourism: The Significance of Social Capital". Annals of Tourism Research Volume 32, Issue 2, Pages 303-324. Available at: https://doi.org/10.1016/j.annals.2004.06.007
- Kariminia, S.; Ahmad, S. S.; Hashim, R., & Ismail, Z. (2013):
   "Environmental Consequences of Antarctic Tourism from a Global Perspective". In: Procedia Social and Behavioral Sciences, Vol. 105, pp. 781-791
- Karlsson, L.; Kemperman, A., & Dolnicar, S. (2017): "May I sleep in your bed? Getting permission to book" Annals of Tourism Research, Vol. 62, pp. 1-12
- Klein, R. A., et al. (2017): "Representation without taxation". In Cruise Ship Tourism, pp. 57-72
- Klein, R.A (2011): "Responsible Cruise tourism: Issues of Cruise Tourism and Sustainability", Journal of Hospitality and Tourism Management, vol. 18, pp. 107-116
- Lai, J. H. K. (2015): "Carbon footprints of hotels: Analysis of three archetypes in Hong Kong". In Sustainable Cities and Society, vol. 14, pp. 334-341
- Laist, D.W.; Knowlton, A.R.; Mead, J.G.; Collet, A.S., & Podesta, M. (2001): "Collisions between ships and great whales". Mar. Mamm. Sci. 17 (1), 35e75
- Lamber T. C.; Dowling, R., et al. (2017): "Children and the family market. Cruise ship tourism", no Ed. 2, p. 317-331
- Leijzer, M. & Denman, R. (2013): "Tourism development in coastal areas in Africa: promoting sustainability through governance and management mechanisms". Available at: https://www2.unwto.org/sites/all/files/ article\_sustainable\_tourism\_governance\_in\_coastal\_ areas\_final\_version\_oct\_2013.pdf
- Lenzen, M.; Sun, Y. Y.; Faturay, F.; Ting, Y. P.; Geschke, A., & Malik, A. (2018): "The carbon footprint of global tourism". In Nature Climate Change, vol. 8, pp. 522–528. Available at: https://www.nature.com/articles/s41558-018-0141-x
- Ligget, D., & Stewart, E. J. (2017): "Sailing in icy waters: Antarctic cruise tourism development, regulation and management". Cruise ship tourism, (Ed. 2), pp. 484-504, DOI:10.1079/9781780646084.0001.
- Macneill, T., & Wozniak, D. (2018): "The economic, social, and environmental impacts of cruise tourism". In Tourism Management, 66, pp. 387-404.
- Manzanera, M.; Pérez, M., & ROMERO, J. (1998):
   "Seagrass mortality due to oversedimentation: an experimental approach". In Journal of Coastal Conservation;

- Vol. 4 Nr. 1, pp. 67-70.
- Marafa, L. M., & Chau, K. C. (2014): "Framework for Sustainable Tourism Development on Coastal and Marine Zone Environment". Tourism, Leisure and Global Change, volume 1, p.TOCS-1.
- Margkogianni, A., & Papaefthimiou, S. (2015): "Evaluating the social cost of cruise ship air emissions in major ports of Greece". In Transportation Research Part D, vol. 36, pp. 10 – 17.
- Markham, A.; Osipova, E.; Lafrenz Samuels, K., & Caldas, A. (2016): "World Heritage and Tourism in a Changing Climate". United Nations Environment Programme, Nairobi, Kenya and United Nations Educational, Scientific and Cultural Organization, Paris, France, 104 pp. Available at: https://www.ucsusa.org/sites/default/files/ attach/2016/05/world-heritage-and-tourism-in-a-changing-climate.pdf
- Med Maritime Integrated Projects (2015): "Challenges and perspectives for coastal and maritime tourism in Europe: the outcome of MITOMED Final Conference", Palazzo Medici Riccardi in Florence on 12th May. Available at: http://www.medmaritimeprojects.eu/article/challenges-and-perspectives-for-coastal-and-maritime-tourism-in-europe-the-outcomes-of-mitomed-final-conference
- MedPAN UN Environment/MAP SPA/RAC, ACCOBAMS, Conservatoire du littoral, French MPA Agency, GFCM, IUCN Mediterranean, WWF Mediterranean (2016): "The 2016 status of Marine Protected Areas in the Mediterranean: Main findings". Brochure MedPAN & UN Environment/MAP - SPA/RAC. Available at: https://drive.google. com/file/d/0Bw8D-TFFFccxRFNyZ21yMjEtenc/view
- Melissen, F.; Koens, K.; Brinkman, M., & Smit, B. (2016): "Sustainable development in the accommodation sector: A social dilemma perspective". In Tourism Management Perspectives, Vol. 20, pp. 141-150
- Ministerio de Medio Ambiente (2007): "El Agua en la Economía Española: Situación y Perspectivas. Informe Integrado del Análisis Económico de los Usos del Agua Artículo 5 de la Directiva Marco del Agua".
- Stefanica, M., & Vlavian-Gurmeza, M. (2010): "Ecotourism model of sustainable tourist development, Studies and Scientific Researches". Economics Edition, "Vasile Alecsandri" University of Bacau, Faculty of Economic Sciences, issue 15.
- Molenaar, E.J, & Oude Elferink, A.G (2009): "Marine protected areas beyond national jurisdiction: The pioneering efforts under the OSPAR Convention". In Utrecht Law Review, vol. 5, no. 1, pp. 5–20. Available at: https://www.utrechtlawreview.org/articles/abstract/10.18352/ulr.92/
- Moreno, A., & Becken, S. (2009): "A climate change vulnerability assessment methodology for coastal tourism". In Journal of Sustainable Tourism Vol. 17, nr. 4, pp. 473-488
- Moreno-Izquierdo, L.; Ramón-Rodríguez, A. B.; Such-Devesa, M. J., & Perles-Ribes, J. F. (2019): "Tourist environment and online reputation as a generator of added value in the sharing economy: The case of Airbnb in

- urban and sun- and-beach holiday destinations". In Journal of Destination Marketing & Management, vol. 11, pp. 53-66
- Moritz, C.; Vii J.; Lee Long, W.; Tamelander, J.; Thomassin, A., & Planes, S. (2018): "Status and Trends of Coral Reefs of the Pacific". Global Coral Reef Monitoring Network, 218 pp. Available at: https://www.sprep.org/sites/default/files/documents/publications/status-coral-reefs-pacific.pdf
- Niewiadomsk, P. (2014): "Towards an economic-geographical approach to the globalisation of the hotel industry". In: Journal Tourism Geographies, Vol. 16 Issue 1, pp. 48-67
- Obura, D. et al. (2017): "Reviving the Western Indian Ocean Economy: Actions for a Sustainable Future". WWF International, Gland, Switzerland, 64 pp. Available at: https://sustainabledevelopment.un.org/content/documents/13692WWF2.pdf
- OCDE (2013): "The Way Forward for Indian Ocean Island Economies: Is there a Role for Regional Integration?" Available at: https://openknowledge.worldbank. org/bitstream/handle/10986/16641/820230WPOP-12800Box0379855B00PUBLICO.pdf?sequence=1&isAllowed=y
- OECD (2016): "The Ocean Economy in 2030", Powerpoint, Workshop on Maritime Clusters and Global Challenges 50th Anniversary of the WP6, 1 December 2016. Available at: https://www.oecd.org/sti/ind/Session%20 1\_b%20-%20Claire%20Jolly%20-%20Web.pdf
- OECD (2018): "Tourism Trends and Policies 2018". OECD Publishing, Paris, 375 pp. Available at: https://www. oecd.org/cfe/tourism/oecd-tourism-trends-and-policies-20767773.htm
- OECD (2018): "Tourism Trends and Policies 2018". Publishing, Paris, 375 pp. Available at:
- OECD; UNWTO & WTO (2013): "Aid for trade and value chains in tourism", 50 pp. Available at: https://www. oecd.org/dac/aft/AidforTrade\_SectorStudy\_Tourism.pdf
- Orams, M. B. (1997): "Biodiversity and Tourism: Conflicts on the World's Seacoasts and Strategies for their Solution". Bonn: German Federal Agency for Nature Conservation, pp. 51-.53
- OSPAR Commission (2008); "Assessment of impacts of tourism and recreational activities", OSPAR Commission, 34 pp. Available at: https://www.ospar.org/about/publications?q=tourism (accessed 20 February 2019).
- OSPAR Commission (1992): OSPAR Convention
- OSPAR Commission (2009): "Biodiversity series Trend analysis of maritime human activities and their collective impact on the OSPAR maritime area"
- OSPAR Commission (2010): "Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010-2020"
- Pacific Island Forum (2018): "First Quadrennial Pacific Sustainable Development Report". Executive Summary, 15 pp. Available at: https://www.forumsec.org/wp-content/uploads/2018/09/1st-Quadrennial-Pacific-Sustai-

- nable-Development-Report-2018.pdf
- Papageorgiou, M. (2016): "Coastal and marine tourism: A challenging factor in Marine Spatial Planning". Ocean & Coastal Management, vol. 129, pp. 44-48
- Papathanassis, A.; Katsios, S., & Dinu, R. N. (2017):
   "Yellow Tourism" Crime & Corruption in Tourism". In Journal of Tourism Futures, vol. 3 nr. 2, pp. 200-202
- Pérez-Calderón, E.; Milanés-Montero, P., & Ortega-Rossell, F. (2011): "Sensitivity of listed European hotels with the sustainable tourism". In: International Journal of Environment Research, Vol.5 Issue 1, pp. 57-66
- Petrick, K.; Fosse, J.; Lammens, H., & Fiorucci, F. (2017):
   "Blue economy in the Mediterranean". UfM, 71 pp.
   Available at: http://www.ecounion.eu/wp-content/
   uploads/2018/01/UfMS\_Blue-Economy\_Report\_Template-UFM\_FINAL.pdf
- Pirani, S. I., & Arafat, H. A. (2014): "Solid waste management in the hospitality industry: A review". In Journal of Environmental Management, vol. 146, pp. 320-336
- Plan Bleu (2010): "Management of energy air transport and tourism in the Mediterranean", Final report, 77 pp. Available at: https://planbleu.org/sites/default/files/ publications/1-1-en\_transport\_aerien\_0.pdf
- Plan Bleu (2011). Cruises and Recreational Boating in the Mediterranean. [online] Plan Bleu. Available at: https:// planbleu.org/sites/default/files/upload/files/2-1-EN\_ Croisiere%26plaisance.pdf
- PNUE/ PAM (2012): "Etat de l'environnement marin et côtier de la Méditerranée". PNUE/PAM - Convention de Barcelone. Athènes
- Proyecto PRA (2000): Ecoturismo: una alternativa para el desarrollo. Proyecto PRA Boletin November, Lima, Peru. Available at: http://www.chemonicspe.com/boletin2/ Ecoturismo/ecoturismo.html
- Proyecto PRA (2000): "Ecoturismo: una alternativa para el desarrollo". Proyecto PRA Boletin November, Lima, Peru. Available at: http://www.chemonicspe.com/boletin2/Ecoturismo/ecoturismo.html
- Pulwarty, R. S.; Nurse, L. A., & Trotz, U. O. (2010): "Caribbean Islands in a changing climate". In Environment Magazine, Vol. 52, N° 6, pp. 16-27.
- PwC Price water house Coopers (2017): "African insights: Hotels outlook: 2017-2021" Available at: https://www.pwc.com/mu/en/pressroom/hotels-outlook-17/hotel- outlook2017.pdf
- Randone et al. (2017): "Reviving the Economy of the Mediterranean Sea: Actions for a Sustainable future", WWF Mediterranean Marine Initiative, Rome, 64 pp. Available at: http://awsassets.wwfffr.panda.org/downloads/170927\_rapport\_reviving\_mediterranean\_sea\_economy.pdf
- Reap, J.; Roman, F.; Duncan, S., & Bras, B. (2008): "A survey of unresolved problems in Life Cycle Assessment - Part 2: impact assessment and interpretation". In The International Journal of Life Cycle Assessment, vol 13, no. 5, pp. 374-388
- Rico, A.; Martínez-Blanco, J.; Montlleó, M.; Rodríguez, G.;

- Tavares, N.; Arias, A. & Oliver-Solà, J. (2019): "Carbon footprint of tourism in Barcelona". In Tourism Management, vol. 70, pp. 491-504
- Rogerson, J. M. (2013): "Market segmentation and the changing budget hotel industry in urban South Africa".
   In: Urban Planning Institute of the Republic of Slovenia, vol. 24, pp. 112-123
- Sabato, G. (2017): "Cruise tourists on the mainland. Itineraries and interactions". Cruise Ship Tourism, pp. 424-438
- Sánchez-Quiles, D., & Tovar-Sánchez, A. (2015): "Are sunscreens a new environmental risk associated with coastal tourism?". In Environment International, Vol. 83, pp. 158–170.
- Sara, G.; Dean, J. M.; Amato, D.; Buscaino, G.; Oliveri, A.; Genovese, S., & Mazzola, S. (2007): "Effect of boat noise on the behaviour of bluefin tuna Thunnus thynnus in the Mediterranean Sea". Marine Ecology Progress Series, 331, 243-253.
- Scott, D., & Gössling, S. (2016) "The Paris Climate Change Agreement and its implications for Tourism". Available at: http://cf.cdn.unwto.org/sites/all/files/docpdf/presentationmaterialsustainabletourismwebinar2.pdf
- Scott, D.; Amelung, B.; Becken, S.; Ceron, J. P.; Dubois, G.; Gössling, S.; Peeters, P., & Simpson, M. C. (2008): "Climate Change and Tourism – Responding to Global Challenges". UNWTO, UNEP and WMO, Madrid, 256 pp. https://sdt.unwto.org/sites/all/files/docpdf/climate2008.pdf
- Scott, D.; Hall, C. M., & Gössling, S. (2016): "A report on the Paris Climate Change Agreement and its implications for tourism: why we will always have Paris". In Journal of Sustainable Tourism, vol. 24, no. 7, pp. 933-948 http://dx.doi.org/10.1080/09669582.2016.1187623
- Scott, D.; Simpson, M. C., & Sim, R. (2012): "Vulnerability of Caribbean tourism to scenarios of climate change related sea level rise". In Journal of Sustainable Tourism, vol. 20, no. 6, pp. 883–898
- Secretariat for the Nairobi Convention, Vision: A Prosperous Western Indians Ocean Region with Healthy Rivers, Coasts and Oceans. Available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/11328/nairobi\_convention\_final\_print\_6sep.pdf?sequence=1&isAllowed=y
- Shah, R. M. (2013): "Mitigating the Impact of Human Activities in Antarctica for Better Quality of Life". In: Procedia - Social and Behavioral Sciences, Vol. 101, pp. 284-291
- Simpson, M.C.; Gössling, S.; Scott, D.; Hall, C.M., & Gladin, E. (2008): "Climate Change Adaptation and Mitigation in the Tourism Sector: Frameworks, Tools and Practices". UNEP, University of Oxford, UNWTO, WMO: Paris, France, 136 pp. http://www.unep.fr/shared/publications/pdf/DTIx1047xPA-ClimateChange.pdf
- Singh, N.; Cranage, D., & Lee, S. (2014): "Green strategies for hotels: Estimation of recycling benefits". In: International Journal of Hospitality Management, vol. 43, pp. 13-22
- Sirocco (2017): Deliverable 3.7: Policy Coherence Analysis. Available at: https://sirocco.interreg-med.eu/filead-

- min/user\_upload/Sites/Sustainable\_Tourism/Projects/ SIROCCO/SIROCCO\_D3.7.pdf
- Sirocco (2018): "Demand Seasonality and Infrastructural Impact on VC". Available at: https://sirocco.interreg-med.eu/fileadmin/user\_upload/Sites/Sustainable\_Tourism/Projects/SIROCCO/SIROCCO\_D3.5.5\_Report\_Demand\_Seasonality\_\_\_Ifrastructural\_Impacts\_VCA\_\_\_\_\_final\_draft.pdf
- Sirocco (2018): "Port of Split Cruise Tourism Value Chain Action Plan". SIROCCO, Available at: https://sirocco.interreg-med.eu/fileadmin/user\_upload/Sites/ Sustainable\_Tourism/Projects/SIROCCO/AP\_VC\_Split\_ EN\_10.6.2018.pdf
- Sirocco (2018): "Sustainable Cruise Value Chain Action Plan in Civitavecchia". Available at: https://sirocco. interreg-med.eu/fileadmin/user\_upload/Sites/Sustainable\_Tourism/Projects/SIROCCO/D3.6.1\_REPORT\_CIVITAVECCHIA.pdf
- Smith, S. H. (1988): Cruise Ships: A Serious Threat to Coral Reefs and Associated Organisms. Ocean & Shoreline Management no. 11 p.231 – 248
- SPREP (2018): "Environmental impact assessment: guidelines for coastal tourism development in Pacific island countries and territories". Apia, Samoa: SPREP, 35 pp. Available at: https://www.sprep.org/sites/default/ files/documents/publications/eia-guidelines-tourism-development.pdf
- Stefanica, M., & Vlavian-Gurmeza, M. (2010): "Ecotourism

   model of sustainable tourist development". Studies
   and Scientific Researches. Economics Edition, "Vasile
   Alecsandri" University of Bacau, Faculty of Economic
   Sciences, issue 15.
- Tapper, R., & Font, X. (2004): "Tourism Supply Chains Report of a Desk Research Project for The Travel Foundation". Final report, 23 pp. Available at: http://icrtourism.com.au/wpcontent/uploads/2012/09/TourismSupply-Chains.pdf
- Terry, W. C., et al. (2017): "Flags of convenience and the global cruise labour market". In Cruise Ship Tourism, pp. 72-86
- The Nature Conservancy (2014):" Coasts at Risk: An Assessment of Coastal Risks and the Role of Environmental Solutions", 64 pp. Available at: https://www. nature.org/content/dam/tnc/nature/en/documents/ CoastsatRisk.pdf
- The World Bank Group data (2018): Number of arrivals. Available at: https://data.worldbank.org/indicator/ ST.INT.ARVL
- Tibabo Stone, M., (2015): "Community-based ecotourism: a collaborative partnerships perspective". In Journal of Ecotourism, 14:2-3, 166-184
- Trunfio, M.; Petruzzellis, L., & Nigro, C. (2006): "Tour operators and alternative tourism in Italy: Exploiting niche markets to increase international competitiveness". International Journal of Contemporary Hospitality Management; Vol. 18, nr. 5, pp. 426-438.
- Tudorache, D. M. et al. (2017): "Difficulties and Challenges in Applying the European Tourism Indicators System

- (ETIS) for Sustainable Tourist Destinations: The Case of Bras, ov County in the Romanian Carpathians". In Sustainability 2017, 9, 1879
- UNEP & UNWTO (2005): "Making Tourism More Sustainable: A Guide for Policy Makers". Available at: www.unep. fr/shared/publications/pdf/DTIx0592xPA-TourismPolicyEN.pdf
- UNEP & UNWTO (2017): "Tourism and the Sustainable Development Goals Journey to 2030". 108 pp. Available at: https://www.e-unwto.org/doi/book/10.18111/9789284419401
- UNEP (2016): "Development of an international legally-binding instrument on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction under the United Nations Convention on the Law of the Sea". Available at: www. un.org/depts/los/biodiversity/prepcom\_files/UNEP\_ and\_BBNJ\_PrepCom2.pdf
- UNEP/MAP (2012). State of the Mediterranean marine and coastal environment. Athens: UNEP/MAP – Barcelona Convention. Available at: http://www.grida.no/ publications/med/
- UNEP-Nairobi Convention and WIOMSA (2015): "The Regional State of the Coast Report: Western Indian Ocean". UNEP and WIOMSA, Nairobi, Kenya, 546 pp. Available at: http://wedocs.unep.org/bitstream/ handle/20.500.11822/9668/-Regional\_State\_of\_the\_ Coast\_Report\_Western\_Indian\_OceanRSOCR\_Final.pdf. pdf?sequence=2&isAllowed=y
- Union for the Mediterranean (2018): "Climate change impact on the tourism sector in the southern Mediterranean. Foreseen developments and policy measures". Final Report, 83 pp. Available at: https://ufmsecretariat. org/wp-content/uploads/2018/11/UfMReport\_Climate-ChangeAndTourism.pdf
- United Nations (2012): "Outcome document of the United Nations Conference on Sustainable Development".
   Rio de Janeiro, Brazil, 20–22 June 2012, 72 pp. Available at: https://sustainabledevelopment.un.org/content/documents/733FutureWeWant.pdf
- United Nations Economic Commission for Africa (2014): "Unlocking the full potential of the blue economy: Are African Small Island Developing States ready to embrace the opportunities?", 33 pp. Available at: http:// repository.uneca.org/bitstream/handle/10855/23170/ b11564040.pdf?sequence=1
- UNWTO-GCET (1999): "Global Code of Ethics for Tourism". Retrieved from: http://www.gdrc.org/uem/ecotour/principles.html
- UNWTO & EuropeAid (2013): Sustainable Tourism for Development Guidebook. Available at: http://icr.unwto. org/content/guidebook-sustainable-tourism-development
- UNWTO & Global Compact Network Spain (2016): "The Tourism Sector and the Sustainable Development Goals: Responsible tourism, a global commitment", UNWTO, Madrid, 50 pp. Available at: http://cf.cdn.unwto.org/ sites/all/files/pdf/turismo\_responsable\_omt\_acc.pdf

- UNWTO (2012): "Challenges and Opportunities for Tourism Development in Small Island Developing States". Available at: https://www.e-unwto.org/doi/ book/10.18111/9789284414550
- UNWTO (2013): "Sustainable Tourism Governance and Management in Coastal Areas of Africa". Available at: http://www2.unwto.org/publication/sustainable-tourism-governance-and-management-coastal-areas-africa
- UNWTO (2018): "Asia and the Pacific Newsletter", issue 46, 57 pp. Available at: http://cf.cdn.unwto.org/sites/all/files/pdf/180608\_unwto46\_jeoyongryang.pdf
- UNWTO (2018), "UNWTO Tourism Highlights".
   Available at: https://www.e-unwto.org/doi/pdf/10.18111/9789284419876
- UNWTO (2016): "Measuring Sustainable Tourist: Developing a statistical framework for sustainable tourism".
   October 2016 Discussion Paper #1
- USGCRP (2018): "Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment", vol. II, Chapt. 20, U.S. Caribbean. Available at: https:// nca2018.globalchange.gov/chapter/20/
- Van Wijk, J., & Persoon, W. (2006): "A Long-haul Destination: Sustainability Reporting Among Tour Operators".
   In: European Management Journal, Vol. 24, Issue 6, pp. 381-395
- Verbitsky, J. (2018): "Ecosystem services and Antarctica: The time has come?". In. Ecosystem Services, Vol. 29, part B, pp. 381-394
- Vidal, J. (2016): "The world's largest cruise ship and its supersized pollution problem". The Guardian. Available at: https://www.theguardian.com/environment/2016/ may/21/the-worlds-largest-cruise-ship-and-its-supersized-pollution-problem
- Watson, B. (2015): "Murky waters: the hidden environmental impacts of your cruise". The Guardian. Available at: https://www.theguardian.com/sustainable-business/2015/jan/05/cruise-ship-holidays-environmental-impact
- Wedden, C.; Dowling, R., et al. (2017): "Conclusions and future directions". Cruise ship tourism, no Ed. 2, pp. 575-582.
- World Bank (2016): "Toward a blue economy: a promise for sustainable growth in the Caribbean: main report". Available at: http://documents.worldbank.org/curated/en/965641473449861013/pdf/AUS16344-REVI-SED-v1-BlueEconomy-FullReport-Oct3.pdf
- World Ocean Council (2016): "Marine Spatial Planning: Case Studies", 35 pp. Available at: http://oceancouncil. org/wp-content/uploads/2016/05/WOC-MSP-Case-Studies-Mar-2016.pdf
- World Tourism Association (2013): "Tourism in the Americas". Available at: http://cf.cdn.unwto.org/sites/all/files/pdf/tourism\_in\_the\_americas.pdf
- Wright, G.; Schmidt, S.; Rochette, J.; Shackeroff, J.; Unger, S.; Waweru, Y., & Müller, A. (2017): "Partnering for a Sustainable Ocean: The Role of Regional Ocean Governance

- in Implementing SDG 14". PROG: IDDRI, IASS, TMG & UN Environment,73 pp. Available at: https://www.prog-ocean.org/wp-content/uploads/2017/03/PROG\_Partnering-for-a-Sustainabe-Ocean\_Report.pdf
- WTTC; UNWTO, & EC (1995): "Agenda 21 for Travel and Tourism Industry: Towards Environmentally Sustainable Development". A Report. Available at: http://wwwv1. agora21.org/johannesburg/rapports/omt-a21.html
- WTTC (2015): "Travel & Tourism Economic Impact 2015 Mediterranean". Available at: https://zh.wttc.org/-/media/files/reports/economic-impact-research/regional-2015/mediterranean2015.pdf
- WTTC (2017): "Travel & Tourism Economic Impact North Africa 2017". Available at: https://zh.wttc.org/-/media/ files/reports/economic-impact-research/regional-2015/ africa2017.pdf
- WTTC Country Reports (2017). Available at: https://www. wttc.org/economic-impact/country-analysis/country-reports/

- WTTC (2017): "Travel & Tourism Economic Impact 2018 Caribbean". Available at: https://www.wttc.org/economic-impact/country-analysis/region-data/
- Wyman, O. (2012): "Hotels and resorts, Challenges of a digital revolution" - Available at: https://www.oliverwyman.com/content/dam/oliver-wyman/global/en/2015/ oct/OW\_Hotels\_and\_Resorts.pdf
- Yu, Y.; Byun, W. H., & Jeonglyeol L. T. (2014): "Critical issues of globalization in the international hotel industry". In: Current Issues in Tourism, Vol. 17, No. 2, pp. 114-118
- Zapata Campos, M. J.; Hall, C. M. & Backlund, S. (2018): "Can MNCs promote more inclusive tourism? Apollo tour operator's sustainability work". In: Tourism Geographies. Available at: https://mafiadoc.com/apollo-tour-operators-sustainability-work\_5b7ab-100097c4707378b458c.html

# Webliography

- AFRICAN UNION: https://au.int
- ASOC: https://www.asoc.org/explore/about-antarctica
- ASSOCIAZIONE CLUSTER TECNOLOGICO NAZIONALE BLUE ITALIAN GROWTH: http://www.clusterbig.it
- BIO HOTELS: https://www.biohotels.info/
- BIOSPHERE TOURISM: https://www.biospheretourism. com/en/biosphere-certification/83
- BOATCYCLE PROJECT: http://fundacionmar.org/wp-content/uploads/2014/01/folder-ecodesign-baixa.pdf
- · BLUE FLAG: https://www.blueflag.global/criteria
- CARIBBEAN TOURISM ORGANIZATION: Key Data for 2017 https://create.piktochart.com/embed/27958259-key-stats-from-the-caribbean-tourism-organization - http://travelmarketsinsider.net/ cto-caribbean-tourism-performance-report-2017-some-growth-after-hurricane-impact-recovery-underway/
- CCAMLR: https://www.ccamlr.org/en/organisation/ convention - https://www.ccamlr.org/en/document/publications/basic-documents-december-2011 - https:// www.ccamlr.org/en/organisation/members
- CEP: http://www.cep.unep.org/cartagena-convention; http://www.cep.unep.org/publications-and-resources/ technical-reports/technical-reports; http://www.cep. unep.org/pubs/legislation/cartstatus.html
- CLIA: 2019 Cruise trends & industry Outlook Report.
   Available at: https://cruising.org/news-and-research/-/media/CLIA/Research/CLIA%202019%20State%20of%20the%20Industry.pdf
- COMESA: http://www.comesa.int
- COMMISSION OCEAN INDIEN: http://commissionoceanindien.org/accueil/ - http://commissionoceanindien. org/publications/archives/
- CONGRESO GENERAL GUNA: http://www.gunayala.org. pa/Reglamento%20de%20Turismo.htm http://onmaked. nativeweb.org/capitulo\_viii.htm
- CRITICAL ECOSYSTEM PARTENRSHIP FUND: https://www.cepf.net/our-work/biodiversity-hotspots/madagas-car-and-indian-ocean-islands/species
- · CROWDFUNDUP: https://crowdfundup.com/blog/85/

- crowdfunding-platforms-and-innovative-tourism-developments
- CRUISE MARKET WATCH: https://cruisemarketwatch. com/growth/ - http://www.cruisemarketwatch.com/ market-share/
- CRUZELY: https://www.cruzely.com/heres-how-much-money-carnival-makes-per-passenger-infographic/
- CRUISING.ORG: https://cruising.org/docs/default-sour-ce/research/environment-research-2017.pdf https://cruising.org/news-and-research/-/media/CLIA/Research/CLIA%202019%20State%20of%20the%20Industry.pdf https://cruising.org/news-and-research/-/media/CLIA/Research/CLIA%202019%20State%20of%20the%20Industry.pdf
- ECOFYS: https://www.ecofys.com/files/files/ecofys-2014-potential-for-shore-side-electricity-in-europe. pdf
- ecolabels/?st=category,tourismhttps://ec.europa.eu/ commission
- ECOLABEL TOOL BOX: https://www.ecolabeltoolbox. com/en/
- ECOPORTS: https://www.ecoports.com/
- ECOTAX BALEARIC: https://www.ecotasa.es/en-gb/
- ECOTOURISM AUSTRALIA: https://www.ecotourism.org. au/our-certification-programs/eco-certification/
- EEA: https://www.eea.europa.eu/soer-2015/europe/tourism https://www.eea.europa.eu/soer-2015/countries/mediterranean
- ENVIRONMENTAL SHIP INDEX: http://www.environmentalshipindex.org/Public/Home
- EUROPEAN COMMISSION: https://ec.europa.eu/maritimeaffairs/policy/blue\_growth\_en https://ec.europa.eu/maritimeaffairs/policy/coastal\_tourism\_en https://ec.europa.eu/maritimeaffairs/policy/maritime\_spatial\_planning\_en https://ec.europa.eu/maritimeaffairs/publications/european-strategy-more-growth-and-jobs-coastal-and-maritime-tourism\_en https://ec.europa.eu/transport/modes/maritime/

news/2017-06-27-study-differentiated-port-infrastructure-charges-promote\_en - http://ec.europa.eu/ environment/ecolabel/ - http://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/marine-strategy-framework-directive/index\_en.htm - http:// ec.europa.eu/growth/sectors/tourism/policy-overview/ index\_en - http://register.consilium.europa.eu/doc/ srv?l=EN&f=ST%209864%202010%20INIT

- EUROPEAN MSP PLATFORM: https://www.msp-platform. eu/faq/ecosystem-based-approach - https://www. msp-platform.eu/practices/priority-actions-program-me-regional-activity-centre-paprac - https://www.msp-platform.eu/projects/european-portal-iczm - https://www.msp-platform.eu/sites/default/files/4\_transport\_conservation\_kg-3\_1.pdf
- EUROPEAN TOURISM MANIFESTO: http://www.tourismmanifesto.eu
- EUROPEAN UNION LAW: https://eur-lex.europa.eu/le-gal-content/EN/TXT/?uri=LEGISSUM%3Al28084
- EUROPARC FEDERATION: https://www.europarc.org/sustainable-tourism/
- FOXNEWS: https://www.foxnews.com/travel/dismantling-of-the-love-boat-takes-tragic-turn
- GLOBAL CONSTRUCTION REVIEW: http://www.globalconstructionreview.com/news/egyptian-developers-pl7an-17bn-tou7rist-res7ort/
- GLOBAL SUSTAINABLE TOURISM COUNCIL (GSTC): https:// www.gstcouncil.org/
- GREEN AWARD: https://www.greenaward.org/
- GREEN CRUISE PORT: http://www.greencruiseport. eu/files/public/download/studies/Opportunities%20and%20Limitations%20for%20Connecting%20Cruise%20Vessels%20to%20Shore%20 Power\_04.01.2018\_Bergen.pdf
- GREEN IDEAS FOR TOURISM: http://www.greentourism. eu/en/GreenLabel/IndexPublic
- GREEN KEY: https://www.greenkey.global/
- GREEN SEAL: https://www.greenseal.org/
- HOTELANALYST: http://hotelanalyst.co.uk
- HOTELS MAG: www.hotelsmag.com
- HOTEL NEWS NOW: http://www.hotelnewsnow.com/Articles/22591/Private-equity-dives-into-all-inclusives
- IAATO: https://iaato.org/home; https://iaato.org/tourism-statistics-327mnsyd
- ILO: www.ilo.org
- IMO: http://www.imo.org/en/OurWork/Environment/ SpecialAreasUnderMARPOL/Pages/Default.aspx http://pssa.imo.org/ - https://glomeep.imo.org/
- INTERGOVERNAMENTAL AUTHORITY ON DEVELOPMENT: https://www.igad.int
- INTECH OPEN: https://www.intechopen.com/books/ advances-in-landscape-architecture/role-of-ecotourism-in-sustainable-development
- IUCN: https://www.iucn.org/regions/mediterranean/

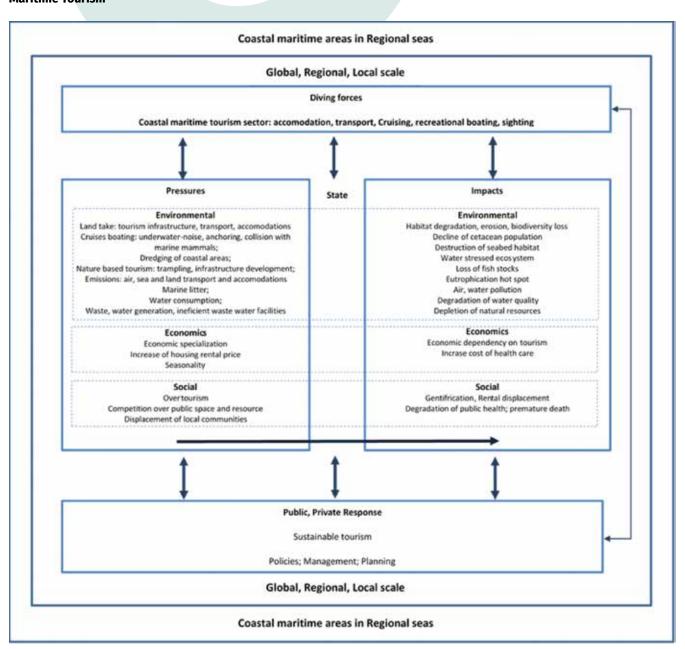
- about https://www.iucn.org/theme/marine-and-polar/our-work/marine-protected-areas - https://www. iucn.org/commissions/commission-ecosystem-management/our-work/cems-specialist-groups/island-ecosystems
- LINKING TOURISM & CONSERVATION: https://www. ltandc.org/
- MEDITERRANEAN EXPERIENCE OF ECOTOURISM NE-TWORK: https://www.meetnetwork.org/http://www2. unwto.org/content/tourism-2030-agenda
- MEDPAN: https://medpan.org/ensuring-a-sustainable-future-for-the-mediterranean-sea/
- NGO SHIPBREAKING PLATFORM: https://www.shipbrea-kingplatform.org/resources/annual-reports/
- NOUMEA CONVENTION: https://www.sprep.org/convention-secretariat/noumea-convention
- OCEAN HEALTH INDEX: http://www.oceanhealthindex. org/region-scores/scores/high-seas:-atlantic-northeast
- OECD: http://www.oecd.org/environment/tools-evaluation/ http://www.oecd.org/sti/ind/shipbuilding-mar-ket-developments-Q2-2018.pdf
- ONEPLANET NETWORK: http://www.oneplanetnetwork. org/ - http://www.oneplanetnetwork.org/sites/default/ files/10yfp-stp-brochure-en.pdf - http://www.oneplanetnetwork.org/sustainable-tourism
- PACIFIC ISLANDS PROTECTED AREA PORTAL: https://pipap.sprep.org
- PAP/RAC: https://www.pap-thecoastcentre.org/
- PARTNERSHIP FOR REGIONAL OCEAN GOVERNANCE: https://www.prog-ocean.org/
- PIF: http://www.forumsec.org
- PLANBLEU: http://planbleu.org https://planbleu.org/ sites/default/files/upload/files/Barcelona\_convention\_and\_protocols\_2005\_eng.pdf
- PLANETE MER: http://planetemer.org/actions/biolit
- PROSEU: https://proseu.eu/
- PWC: www.pwc.com
- QUÉBEC DECLARATION ON ECOTOURISM: https://www. gdrc.org/uem/eco-tour/quebec-declaration.pdf
- REEF CHECK FOUNDATION: https://reefcheck.org/tropical/overview
- SANCTUAIRE PELAGOS: https://www.sanctuaire-pelagos. org/en/
- SAVE THE WAVES COALITION: https://www.savethewaves.org/programs/world-surfing-reserves /
- SEATRADE CRUISE NEWS: http://www.seatrade-cruise. com/news/news-headlines/concordia-ship-recycling-project-completed.html
- SECRETARIAT OF THE ANTARCTIC TREATY: https://www.ats.aq/devAS/info\_measures\_listitem.aspx?lan-g=e&id=385 https://www.ats.aq/e/ats\_other\_tourism.htm
- SECRETARIAT OF THE BASEL CONVENTION: http://www.

- basel.int/Implementation/ShipDismantling/Overview/tabid/2762/Default.aspx
- SHIPPING EFFICIENCY: http://shippingefficiency.org/
- SKIFT: https://skift.com/2015/04/30/new-free-skift-report-the-evolution-of-the-all-inclusive-resort/
- SOLOMON TIMES ONLINE: https://www.solomontimes. com/news/australia-supports-sustainable-ecotourism-project-in-western-province/5772
- SOUTHERN AFRICA DEVELOPMENT COMMUNITY: https:// www.sadc.int
- SPC: https://www.spc.int
- SPREP: article on single use plastic bans in the Pacific region: https://www.sprep.org
- SPTO: https://corporate.southpacificislands.travel
- SUSTAINABLE TOURISM ALLIANCE AFRICA: http://www.sustainabletourismalliance.net
- SWICHMED: https://www.switchmed.eu/en/e-library/ the-new-sustainable-tourism-labels-guidebook
- THE CODE: http://www.thecode.org/csec/
- THE GUARDIAN: https://www.theguardian.com/environment/2018/jun/08/domestic-tourism-to-great-barrierreef-falls-in-wake-of-coral-bleaching; https://www. theguardian.com/world/2018/jan/18/norway-aims-forall-short-haul-flights-to-be-100-electric-by-2040
- THE NEW YORK ACADEMY OF SCIENCES: https://nyaspubs.onlinelibrary.wiley.com/doi/full/10.1111/nyas.13428
- THE INDIAN OCEAN RIM ASSOCIATION: http://www.iora.int/en
- THE RAINFOREST ALLIANCE: https://www.rainforest-alliance.org/latest?keyword=tourism
- THE SUSTAINABLE OCEANS LAB: http://www.sustainableoceanslab.org/
- THOMAS COOK GROUP CORPORATE: https://www.thomascookgroup.com/business
- TRAVEL FOUNDATION: https://www.thetravelfoundation. org.uk/project/international-climate-initiative/
- TRAVEL MARKETS INSIDER: http://travelmarketsinsider.net/cto-caribbean-tourism-performance-report-2017-some-growth-after-hurricane-impact-recovery-underway/
- TRAVELLER.COM: http://www.traveller.com.au/whathappens-to-old-cruise-ships-scrapped-sunk-or-turnedinto-hotels-and-museums-h1280l
- TUI corporate: https://www.tuigroup.com/en-en
- UFM: https://ufmsecretariat.org/

- UN ENVIRONMENT: https://www.unenvironment.org/ explore-topics/oceans-seas/what-we-do/working-regional-seas/regional-seas-programmes/regional-seas - https://www.unenvironment.org/nairobiconvention/ - https://www.unenvironment.org/nairobiconvention/ nairobi-convention
- UNEP: http://web.unep.org/unepmap/1-barcelona-convention-and-amendments; http://web.unep. org/unepmap/8-iczm-protocol; http://web.unep.org/ unepmap/mediterranean-strategy-sustainable-development-mssd-2016-2025; http://web.unep.org/ unepmap/regional-action-plan-sustainable-consumption-and-production-mediterranean; http://www.unep. fr/shared/publications/pdf/DTIx0592xPA-TourismPolicyEN.pdf - http://wedocs.unep.org/bitstream/id/53143/ convention\_eng.pdf - http:// wedocs.unep.org/ bitstream/handle/20.500.11822/25759/CP9.2\_Work\_Programme\_EN.pdf?seq
- UNITED NATIONS: https://seea.un.org/ https://sustainabledevelopment.un.org/sdg14 - https://www. blauer-engel.de/en; https://www.blauer-engel.de/en/ products/business-municipality/schiffsbetrieb
- UNWTO: http://icr.unwto.org/content/guidebook-sustainable-tourism-development; http://www2.unwto.org/content/tourism-2030-agenda https://www.e-unwto.org/doi/pdf/10.18111/9789284419876 https://sdt.unwto.org/content/ecotourism-and-protected-areas http://www2.unwto.org/content/tourism-2030-agenda http://cf.cdn.unwto.org/sites/all/files/docpdf/presentationmaterialsustainabletourismwebinar2.pdf http://icr.unwto.org/content/guidebook-sustainable-tourism-development http://sdt.unwto.org/about-one-planet-stp http://sdt.unwto.org/en/content/climate-change-tourism http://insto.unwto.org/about/
- WESTMED MARITIME INITIATIVE: http://www.westmed-initiative.eu/
- WTTC: https://www.wttc.org/economic-impact/country-analysis/country-reports/ https://www.wttc.org/priorities/sustainable-growth/sustainability-reporting/sustainability-reporting-in-travel-and-tourism/ Country reports: https://www.wttc.org/economic-impact/country-analysis/country-reports/
- WORLD BANK: Open data platform https://data. worldbank.org - https://blogs.worldbank.org/voices/ Sustainable-Tourism-Can-Drive-the-Blue-Economy - https://openknowledge.worldbank.org/bitstream/ handle/10986/16641/820230WP0P12800Box0379855B-00PUBLICO.pdf?sequence=1&isAllowed=y
- WWF: http://wwf.panda.org/?uNewsID=290410; http://wwf.panda.org/wwf\_news/?334171/Importan-ce-of-the-marine-biodiversity-of-the-Western-In-dian-Ocean

# **Annexes**

Annex I: Key Impacts and Pressures of Coastal and Maritime Tourism



<sup>→</sup> Source: eco-union, based in DPSIR framework

#### Annex II: List of Relevant Regulations Governing Cruising Operations

#### **International Conventions**

- United Nations Convention on the Law of the Sea ("UNCLOS")
- International Convention for the Safety of Life at Sea ("SOLAS")
- International Safety Management Code ("ISM CODE") contained in Chapter IC of SOLAS
- International Ship and Port Facility Code ("ISPS" CODE) contained in Chapter XI-2 of SOLAS
- International Convention for the Prevention of Pollution from Ships ("MARPOL")
- International Convention for the Control and Management of Ships Ballast Water and Sediments (IMO "Ballast Water Convention")
- International Convention on Standard of Training Certification and Watchkeeping for Seafarers ("STCW")
- International Code for Ships Operating in Polar Waters ("Polar Code")
- Maritime Labour Convention ("MLC")

#### **European Regulations**

- EU Monitoring, Reporting, Verification (MRV): requires operators of vessels larger than 5000 gross tonnage conducting commercial voyages and calling at any EU and EFTA (Norway and Republic of Iceland) port to annually monitor, report and verify CO<sub>2</sub> emissions.
- Directive 2000/59/EC1 of the European Parliament and of the Council 27 November 2000: definition of requirements intended to reduce the discharges of ship generate waste and cargo residues at sea

#### **North American Regulations**

- Canadian Ballast Water Control and Management Regulations – Transport Canada (TP 13617 E)
- US National Marine Sanctuaries Act ("NSMA"): requires permits for certain commercial operations and includes more stringent discharges restrictions
- US Oil Pollution act of 1990 (33 U.S.C 2701-2761)
   ("OPA 90"): amendment of the Clean Water Act to
   create prevention, response, liability and com pensation regime regarding oil pollution in US
   waters.
- US Environmental Protection Agency Vessel General Permit ("VGP"): pursuant to the Clean Water Act regulating discharges incidental to the nor-

- mal operation of vessels (regulation of 27 specific discharges streams)
- US Resource Conservation and Recovery Act ("RCRA"): hazardous waste management regulation and framework for management of non-hazardous solid wastes.
- US Coast Guard Ballast Water Regulations: standard for allowable concentration of living organisms in ship's ballast water discharged in US waters.
- US Maritime Transportation Security Act of 2002 ("MTSA"): legislation implementing the International Ship and port Facility Security Code ("ISPS"): establishes a maritime security framework and provide for US Coast Guard enforcement of such provisions
- US Intelligence Reform and Terrorism Prevention Act of 2004: requirement of cruise ship operators to provide certain passenger and crew information to the US Department of Homeland Security
- US Cruise Vessel Security and Safety Act ("CVS-SA") of 2010
- US Alaska Cruise Ship Legislation; Title XIV –
   "Certain Alaska Cruise Ship Operations": effluent
   standards for treated sewage and grey water and
   allows continuous discharge if treatment standards are met and confirmed via sampling
- US Endangered Species Act ("ESA") and Marine Mammal Protection Act ("MMPA"): prohibition of the take of certain species and limits of speed in certain sensitive areas
- US Alaska State Cruise Ship Legislation: Alaska state Law, ES 46.03.490 "Commercial Passenger Vessel Environmental Compliance Program": effluents limits for grey and black water, non-hazardous and hazardous waste requirements
- US Alaska State Regulation 18 AAC 50.070 Marine Vessel Visible Emission Standards: state visible emissions requirements for marine vessels operating within three miles of the Alaska coastline
- US Alaska Ocean Ranger program: require US Coast Guard licensed marine engineers to act as independent observers monitoring state environmental and marine discharge requirements.
- US Hawaii State Cruise Ship Legislation Discharges from Commercial Passenger Vessels 2005
   Hawaii Laws Act 217 (H.B. 422) and HI ST 342D-101,
   et seq.: establishes standards of treated sewage
   and air emissions from cruise ships and commercial passenger vessels.
- US State Ballast Requirements: California Code of Regulations, Title 2, Division 3, Chapter 1, Articles 4.5 – 4.9
- US California State Limits on Sulphur Content in Fuel – 13 CCR 2299.2 and 17 CCR 93118.2: requires use of marine gas oil with 1.0 percent sulphur or less or marine diesel oil with 0.5 percent sulphur

- or less within 24 nautical miles of California's coast. Effective 1<sup>st</sup> January 2014 the limit for both reduced to 0.10 percent
- US California Sewage Discharge Requirements: establishment of a no-discharge zone prohibiting large passenger vessel of 300 gross tons of greater from discharging all sewage while in California marine water.
- US California at-Berth Requirements 11 CCR 93118.3: requirement of the use of shore power or equivalent emissions reductions for vessels at all California port with target goals of 50% reduction by 2014, 70% by 2017 and 90% by 2020.
- US California Bio fouling Management Requirements: in support of California's Marine Invasive Program (MISP) (2 CCR 2298.1 et seq.): beginning January 1 2018, operators must implement a vessel specific Bio fouling Management Plan and Biofouling Record Book. And must submit a Marine Invasive Species Program Annual vessel Reporting Form must be submitted annually.

#### Annex III.I. Hotels, Resorts and Tour Operators

| Name of action  | Name of action Location   |                     | Actor driving the initiative<br>(NAME of key actor) |  |  |
|---|---|---------------------|---|--|--|
|   | Accor   | nmodation structure | es  |  |  |
| Serena Hotels' sustainability programme   | Africa (Kenya, Mozambique, Tan-<br>zania) + Asia (Pakistan, Tajikistan)     | -                   | Industry (Serena Hotel)                             |  |  |
| Scandic Hotels environmental policy and certification                               | Ospar (Sweden, Denmark, Fin-<br>land, Norway , the Netherlands,<br>Belgium) | 1994                | Industry (Scandic Hotels)                           |  |  |
| Gîtes Panda   | France  | Since 1993          | ONG-Industry partnership (WWF + Gites de France)    |  |  |
| Tanja Lagoon Camps  | Mimosa Rocks National Park (AUS)  | 2018                | Industry (Tanja lagoon camps)                       |  |  |
| Chumbe National Coral Park  | Tanzania (Zanzibar)   | 1998                | Industry (Chumbe National Coral Park)               |  |  |
| Hostelling International USA  | USA   | -                   | Industry (HI USA)                                   |  |  |
| Kudadoo Maldives  | Maldives  | -                   | Industry (Kudadoo Maldives)                         |  |  |
|   | Labels and certifications   |                     |   |  |  |
| Global Ecosphere Retreat Standard   | All   | 2015                | NGO (The Long Run)                                  |  |  |
| Ecolabel Toolbox  | Metropolitan France + overseas<br>regions                                   | 2015                | European Union, ADEME, EU Ecolabel,<br>ShMILE       |  |  |
| Green Globe   | All   | 1992                | Industry organization                               |  |  |
| Green Key   | All   | 1994                | Industry associations and governmental institutions |  |  |
|   | Ind   | icators             |   |  |  |
| GSTC Industry Criteria for Hotels   | All   | 2016                | NGO   |  |  |
| European Tourism Indicators System for sustainable<br>destination management (ETIS) | Barcelona (EU + overseas terri-<br>tories)                                  | 2013                | European Commission                                 |  |  |
|   | Spec  | ific taxes          |   |  |  |
| Environmental contribution tax  | Malta   | 2016                | Government of Malta                                 |  |  |
| Eco Tourism Tax   | Balearic Islands (Spain)  | 2016                | Government of Balearic Islands                      |  |  |

| Scale of action                                  | Key area of action   | Description [outcome]   |  |  |  |
|--|--|---|--|--|--|
|  | Accommodation structures   |   |  |  |  |
| Local and regional                               | Human rights, energy, local sourcing   | Establishing partnerships and charter for good practices [Mitigation]   |  |  |  |
| Europe (10 countries)                            | Energy use, water consumption,<br>carbon<br>emissions and air pollution, sourcing    | Strict chart of environmental policy applied to 180 hotels certified under Nordic Swan or EU ecolabel. [Mitigation]   |  |  |  |
| National (FR)                                    | Energy, eco-habitat, awareness,  | Partnership for eco-construction and eco-renovation, campaigns of awareness for clients. [Mitigation prevention]  |  |  |  |
| Local  | Citizen science, biodiversity, food, local culture                                   | Environmental education [Mitigation prevention]   |  |  |  |
| Local  | Ecosystems & biodiversity, awareness, eco-habitat                                    | Marine protected area combined eco-tourism infrastructures, education, staff training, eco-construction [Mitigation prevention]   |  |  |  |
| Local  | Water savings  | Programme to save water in all their buildings (objective of 1 million gallons) by installing innovative showers and toilets, save the waters of the roofs, recycle water from washing machine. |  |  |  |
| Local  | Energy   | First fully sustainable energy supply property in the Maldives thanks to solar panels installed on the roof of the main building.   |  |  |  |
|  | Labels an  | d certifications  |  |  |  |
| Global   | Ecosystems and biodiversity Local community and culture, fair trade                  | Labelling and promoting sustainable destinations via strict technical specifications [Prevention, mitigation]   |  |  |  |
| National (FR)                                    | Energy, water, waste   | Marketing tools, technical solutions, and labelling for tourist accommodations (More than 140 accommodations certified) [Prevention, mitigation]  |  |  |  |
| Global   | Water, energy, wastes  | International certification tool for sustainability achievements: 10% water and energy saved. [Prevention, mitigation]  |  |  |  |
| Global, declined in seve-<br>ral national groups | Energy, wastes, water, labour conditions   | Supply chain, energy and water saving, wastes, awareness. 3000 Establishments. [Prevention, mitigation]   |  |  |  |
|  | Indi   | cators  |  |  |  |
| Global   | Land-use and, eco-habitat, working conditions, resources and wastes, cultural impact | Mitigation  |  |  |  |
| EU + overseas territories                        | Destination management, social and cultural impact                                   | Mitigation  |  |  |  |
|  | Specif   | ic taxes  |  |  |  |
| National (Malta)                                 | Destination management, contribution to environmental budgets                        | Accommodation taxing, revenue dedicated to tourism infrastructures. [Regulation and counting of the number of tourists, budget increase]  |  |  |  |
| Regional (Balearic<br>Islands, Spain)            | Contribution to environmental budgets  | Varying rates based on the type of accommodation. Revenue used to compensate the environmental impacts of the tourism. [Regulation and counting the number of tourists, budget increase]        |  |  |  |

| Name of action  | Location                | Date              | Actor driving the initiative  |
|---|-------------------------|-------------------|---|
|   | Financial               | incentives        |   |
| Differentiated tariffs in Port of Hamburg               | Germany                 | 2011, update 2014 | Port authority of Hamburg   |
| Differentiated tariffs in Port of Stockholm             | Sweden                  | 1998, update 2015 | Port authority of Stockholm   |
| Differentiated tariffs in Port of Rotterdam             | Netherlands             | 2011, update 2015 | Port authority of Rotterdam   |
| Differentiated tariffs in Port of Bremen                | Germany                 | 2012              | Port authority of Bremen  |
| Differentiated tariffs in Port of Gothenburg            | Sweden                  | 2015              | Port authority of Gothenburg  |
| Monitoring and transparency                             |                         |                   |   |
| Environmental Ship Index                                | ental Ship Index Global |                   | Industry-led (International Associa-<br>tion of Ports and Harbours) |
| Air quality management system in Port of<br>Tallinn     | Estonia                 | 2015              | Government of Estonia   |
| Royal Caribbean Ballast Water Initiative                | Caribbean Sea           | -                 | Industry-led  |
|   | Legislation             | and Planning      |   |
| California Ballast Water Management                     | U.S.A.                  | 2017              | Government of California  |
| Limitation of access depending on vessel size in Venice | Italy                   | -                 | Government  |
| Respect the City Dubrovnik Plan                         | Croatia                 | 2017              | City authorities of Dubrovnik                                       |
| Cruise passenger rationing in Santorini                 | Greece                  | 2016              | Government of Greece  |

| Scale of action             | Key area of action                        | Description [outcome]  |  |
|-----------------------------|---|--|--|
|                             | Financial                                 | incentives   |  |
| Port                        | Air emissions<br>Noise<br>Water pollution | Fee incentive for very low emission ships coming to port and enlarging of the system with additional sustainability factors according to Environmental Sustainability Index and Green Award Foundation guidelines [Prevention Mitigation]  |  |
| Port                        | Air emissions<br>Noise<br>Waste           | Differentiated port fees for shipping companies reducing environmental impact for reduced emission of nitrogen oxides; vessels with reduced nitric oxide emissions; discount fee for waste disposal (1/3 of fee for each passenger if waste is sorted); OPS subject to tax reduction in Sweden and environmental bonus for vessels carrying refitting work to enable vessel connection to electricity at quayside; Discount on port fee for LNG vessels [Prevention Mitigation]                            |  |
| Port                        | Air emissions<br>Noise                    | Clean seagoing ships which score 31 or more on the Environmental Ship Index receive 10% discount on the GT portion of their port fees.  Malus for ships not meeting CCNRII emission requirement; discount for ships with valid Green Award Certificate; discount for ships with engine more than 60% cleaner than CCN-RII emissions requirement; discount for vessels scoring high on the ESI; discount doubled when vessels also have low NOx emissions (LNG or large catalysts)" [Prevention Mitigation] |  |
| Port                        | Air emissions<br>Noise                    | Environmentally friendly ships can be granted a discount: - Total of 25 with best ESI score over 40 will receive 15% discount - LNG or methanol powered ships + ESI SOx score >98 discount of 20% per port call [Prevention Mitigation]  |  |
| Port                        | Air emissions<br>Noise                    | Vessels that report good environmental performance receive a 10% on the port tariff (depending on ESI and CSI scores)  Vessels running on LNG receive an extra discount of 20% for each call [Prevention Mitigation]   |  |
| Monitoring and transparency |   |  |  |
| World                       | Air emissions<br>Noise                    | Indicator evaluating performance of ships in air emission reduction beyond IMO emission standards. Evaluation for NOX and SOX emissions, carbon emissions and PM emissions. Can also be used for port with the inclusion of presence of OPS. [Mitigation]  |  |
| Port                        | Air emissions<br>Noise                    | Identification of sensitive sites and implementation of seasonal speed restriction in order to preserve hotspots and avoid collisions during periods when risks of collision are high. [Mitigation]  |  |
| World                       | Biodiversity                              | Royal Caribbean Cruises Ltd. maintains a policy of no ballast water discharges in port unless the water is from a similar ecological area, or from an area at least 200 miles (322 km) offshore [Prevention]   |  |
|                             | Legislation                               | and Planning   |  |
| State                       | Invasive species                          | The State of California has put in place stringent standards for ballast water management as part of its marine invasive species program. Vessel operators must retain all ballast water; exchange ballast water by 100% volumetric replacement or 300% volumetric replacement; discharge ballast water at the same location where it originated; use alternative SLC o US Coast Guard approved method of treatment; discharge to approved reception facility [Prevention]                                 |  |
| City                        | Air pollution<br>Dredging<br>Erosion      | Prevention   |  |
| City                        | Overcrowding<br>Environmental pressure    | Placing a cap on cruise tourism to 4000 + letter to CLIA to spread out arrivals throughout the week [Mitigation]   |  |
| City                        | Overcrowding<br>Environmental pressure    | Implementation of a limit of cruise passengers<br>allowed in Santorini during peak season [Mitigation]   |  |

| <del></del>   |                          |         |  |  |  |
|---|--------------------------|---------|--|--|--|
|   | Infrastructure provision |         |  |  |  |
| Onshore Power Supply in Gothenburg                          | Sweden                   | 2000    | Port Authority of Gothenburg   |  |  |
| Onshore Power Supply in Bergen                              | Norway                   | 2020    | Port Authority of Bergen   |  |  |
| Onshore Power Supply Hamburg                                | Germany                  | 2015    | Port authority of Hamburg  |  |  |
| Electrification of fleet in ferries in Norway               | Norway                   | Ongoing | Industry led (Norled)  |  |  |
| Diversification of fleet through LNG (new<br>vessel orders) |                          |         | Industry led (Le Ponant, MSC Cruise<br>Line, , RCCL, Carnival, Disney Cruises) |  |  |
| Training  |                          |         |  |  |  |
| Blue Wave Initiative in Turkey Turkey                       |                          | -       | NGO (Travel Foundation)  |  |  |
| Econavigation charter (La Méridionale) France               |                          | 2018    | Industry and governmental part-<br>nership                                     |  |  |

#### Annex. III.III. Ecotourism

| Name of action                            | Location  | Date | Actor driving the initiative<br>(NAME of key actor)                         |
|---|-----------|------|---|
|   |           |      | Legislation   |
| Great Barrier Reef Marine Park            | Australia | 2004 | Great Barrier Reef Marine Park<br>Authority                                 |
| Posidonia regulation Balearic Islands     | Spain     | 2018 | Government of Balearic Islands  |
| Panama's Guna Yala territory              | Panama    | 2008 | Guna General Congress, Secretariat<br>of Tourism Affairs                    |
|   |           |      | Carryin   |
| Lord Howe Island Management Plan          | Australia | 2007 | Department of Environment and<br>Climate Change                             |
| Diving tourism Medes Islands in Catalonia | Spain     | 2017 | Government of Catalonia - De-<br>partment of the Environment and<br>Housing |

|       | Infrastructure p  | provision   |
|-------|---|---|
| Port  | Air emissions<br>Noise  | Installation of OPS for seagoing vessels. Particularity of the system is that it transforms the standard European frequency of 50 Hertz to 60 Hertz, which is used by the majority of ships. Power supplied by renewable and clean source like wind power. 2016: 35% of ships able to connect to OPS [Prevention]       |
| Port  | Air emissions<br>Noise  | Building shore power facility supplying three cruise vessels with power.<br>Aim for completion: 2020.<br>Establishment of a joint company with BKK (largest renewable energy provider in Norway)<br>to assure clean energy supply. [Prevention]   |
| Port  | Air emissions<br>Noise  | Building shore power facility supplying three cruise vessels with power. [Prevention]   |
| Local | Air emissions<br>Noise  | Development and launch of technology for electric powered ferries and very small cruising ships: 2 fully operational ferries, and 10 new ferries to be launched in 2018, 60 by 2021 and full fleet all electric or hybrid by 2023; 2 expedition cruise liners to be launched. [Prevention]                              |
| World | Air emissions<br>Noise  | [Prevention]  |
|       | Trai  | ining   |
| Local | Waste, interaction with<br>marine life, fuel and energy<br>management | Edition of training and sensitization material towards tourists and actor of recreational nautical and maritime tourism, both in English and Turkish (local language). Material geared towards children is also available. [Mitigation]   |
| Local | Training<br>Waste<br>Emissions<br>Biodiversity interactions           | Partnership between la Méridionale and MPA networks as well as the French Governmental Agency for Biodiversity to diminish the impact of shipping of marine ecosystems, develop an internal business culture of environmental stewardship and increase the amount of knowledge available on these impacts. [Mitigation] |

| Scale of action | Key area of action   | Description [outcome]   |
|-----------------|--|---|
| and Planning    |  |   |
| Regional        | Planning, policy and gui-<br>delines   | Various instruments has been put in place such as a financial contribution paid by every visitor in the Park, implementation of the Reef 2050 plan for sustainability, participation of local communities and government for the conservation of the Park.  |
| Regional        | Planning, Local manage-<br>ment, conservation  | Regulation on the conservation of the Oceanic Posidonia in the Balearic Islands. Creation and incorporation of a cartography of location of Posidonia meadows in the nautical charts to organize nautical activities. Limit the access and anchorage to recreational boats.   |
| Regional        | Local management, regulation, rights, socio-cultural values, protection of natural resources | Regulation for the protection of community identity, financing of its autonomy through community management. Prohibition of the transfer of possession rights over islands and land to non-Kuna; Control of tourism projects, investment plans and licenses for tourist activities; Limitation the number of sailboats and foreign ships in the Kuna territory. |
| g Capacity      |  |   |
| Regional        | Conservation, management action  | Strict tourism oversight (limited to 400 tourists on the island at any time)  |
| Local           | Planning, Local manage-<br>ment, conservation  | Planning tools and objectives aiming at conserving and improving the natural values of this area, regulating tourism, recreational, sports, educational and scientists, as well as professional fishing.  |

| $\rightarrow$                                     |   |      |                                  |  |  |
|---|---|------|----------------------------------|--|--|
|   |   |      | Labels and                       |  |  |
| EUROPARC Sustainable Tourism Charter              | Mediterranean Sea   | 1995 |                                  |  |  |
| Destination/Pro                                   |   |      |                                  |  |  |
| Makuleke Ecotourism Project - Pafuri Camp         | South Africa  | 1998 | Communal Property<br>Association |  |  |
| Mediterranean Experience of Eco Tourism<br>(MEET) | Mediterranean Sea (Italy, France,<br>Spain, Jordan, Lebanon,<br>Egypt, Malta, Cyprus,<br>Greece, Tunisia) | 2013 | IUCN +                           |  |  |
| Prote   |   |      |                                  |  |  |
| World Surfing Reserve                             | Portugal  | 2009 | Save the Waves Coalition         |  |  |

<sup>→</sup> Source: eco-union

| certifications           |  |   |
|--------------------------|--|---|
| International (European) | Land use planning, conservation (revenue investments), and reduction of carbon footprint, pollution and resource use, accessibility quality of infrastructures, integrated management over social effects, local products promotion, training and capacity building. | Governance and certification tool for management of sustainable tourism in protected areas. Structured in three parts: sustainable destination and protected areas, sustainable local tourism businesses within the charter area, and sustainable tour operators bringing visitors in the areas.          |
| duct development         |  |   |
| Local                    | Energy source and provision, solid waste management (recycling), environmental education (Children in the Wilderness and Elderly in the Wilderness Programs), food sourcing, employment practices and training,  | Involvement of the community through a partnership between the community, private sector and the state. The project generates revenues for the local population and manage the heritage of land ownership rights. Investment in community development projects and biodiversity conservation initiatives. |
| International Med        | Management and coordination, variable covered in the European Charter for Sustainable Tourism (baseline)   | Promotion of low impact and sustainable tourism experience in natural areas of the Med region. Development of a specific programme to improve the seasonal distribution of tourism flows. Development of sustainable ecotourism products and tools for destination management.                            |
| ted Area                 |  |   |
| Global                   | Protected and preserving<br>the coastal environment,<br>economics and direct action<br>with a focus on the surf<br>zone  | The WSR recognizes the environmental, social, cultural and economic benefits of the waves. Selection of sites based on a series of specific criteria.   |
|                          |  |   |

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#### Annex IV: Cruise Ships Development (2018-20)

| Carnival         Carnival Horizon         1/1/2018         4.000           AIDA         AIDAnova         2/1/2018         5.186           Holland America         Nieuw Statendam         3/1/2018         2.650           Norwegian         Norwegian Bliss         4/1/2018         4.200           Royal Caribbean         Symphony of the Seas         5/1/2018         5.400           Celebrity         Celebrity Edge         6/1/2018         2.900           MSC         MSC Seaview         7/1/2018         4.140           Hurtigruten         MS Roald Amundsen         8/1/2018         530 |     |  |
|---|-----|--|
| Holland America         Nieuw Statendam         3/1/2018         2.650           Norwegian         Norwegian Bliss         4/1/2018         4.200           Royal Caribbean         Symphony of the Seas         5/1/2018         5.400           Celebrity         Celebrity Edge         6/1/2018         2.900           MSC         MSC Seaview         7/1/2018         4.140           Hurtigruten         MS Roald Amundsen         8/1/2018         530   |     |  |
| Norwegian         Norwegian Bliss         4/1/2018         4.200           Royal Caribbean         Symphony of the Seas         5/1/2018         5.400           Celebrity         Celebrity Edge         6/1/2018         2.900           MSC         MSC Seaview         7/1/2018         4.140           Hurtigruten         MS Roald Amundsen         8/1/2018         530  |     |  |
| Royal Caribbean         Symphony of the Seas         5/1/2018         5.400           Celebrity         Celebrity Edge         6/1/2018         2.900           MSC         MSC Seaview         7/1/2018         4.140           Hurtigruten         MS Roald Amundsen         8/1/2018         530   |     |  |
| Royal Caribbean         Symphony of the Seas         5/1/2018         5.400           Celebrity         Celebrity Edge         6/1/2018         2.900           MSC         MSC Seaview         7/1/2018         4.140           Hurtigruten         MS Roald Amundsen         8/1/2018         530   |     |  |
| Celebrity         Celebrity Edge         6/1/2018         2.900           MSC         MSC Seaview         7/1/2018         4.140           Hurtigruten         MS Roald Amundsen         8/1/2018         530   |     |  |
| MSC         MSC Seaview         7/1/2018         4.140           Hurtigruten         MS Roald Amundsen         8/1/2018         530   |     |  |
|   |     |  |
| 20.00   |     |  |
| Ponant Le Champlain 9/1/2018 184  |     |  |
| Ponant Le Laperouse 10/1/2018 184   |     |  |
| American Cruise Lines American Constitution 11/1/2018 175   | 175 |  |
| Viking Cruises Viking Orion 12/1/2018 930   |     |  |
| TUI Cruises Mein Schiff 1 1/13/2018 2.900   |     |  |
| Subtotal 13 33.379  |     |  |
| 2019 New Ships Est. Date Passenger Capaci   | ty  |  |
| MSC MSC Bellissima 1/1/2019 4.500   | _   |  |
| Royal Caribbean Spectrum of the Seas 2/1/2019 4.180   |     |  |
| Saga Cruises Spirit of Discovery 3/1/2019 1.000   |     |  |
| MSC MSC Grandiosa 4/1/2019 4.900  |     |  |
| Norwegian Norwegian Cruise Line 5/1/2019 3.900  |     |  |
| Costa Cruises Costa Smeralda 6/1/2019 5.176   |     |  |
| Princess Cruises (Unnamed) 7/1/2019 3.560   |     |  |
| Carnival (Unnamed) 8/1/2019 3.934   |     |  |
| Ponant Le Bougainville 9/1/2019 184   |     |  |
| Ponant Le Dumont d'Urville 10/1/2019 184  |     |  |
| Hapag Lloyd Hanseatic Inspiration 11/1/2019 100   |     |  |
| Hapag Lloyd Hanseatic Nature 12/1/2019 100  |     |  |
| Lindblad Expeditions National Geographic Venture 1/13/2019 100  |     |  |
| Saga Cruises Spirit of Discovery 1/14/2019 999  |     |  |
| TUI Cruises Mein Schiff 2 1/15/2019 2.900   |     |  |
| Subtotal 15 35.717  |     |  |
| 2020 New Ships Est. Date Passenger Capaci   | ty  |  |
| Virgin Voyages         (Unnamed)         1/6/2020         2.860   |     |  |
| Celebrity Celebrity Beyond 1/3/2020 2.900   |     |  |
| <b>P&amp;O Cruises</b> (Unnamed) 1/3/2020 5.200   |     |  |
| Saga Cruises Spirit of Adventure 1/6/2020 1.000   |     |  |
| MSC MSC Meraviglia Plus 2 1/9/2020 4.900  |     |  |
| Princess Cruises         (Unnamed)         1/11/2020         3.560  |     |  |
| Royal Caribbean         (Unnamed)         1/11/2020         4.180   |     |  |
| Carnival         (Unnamed)         1/6/2020         5.200   |     |  |
| Saga Cruises Spirit of Adventure 1/6/2020 999   |     |  |
| Subtotal 30.799   |     |  |
| Total 37 99.895   |     |  |

<sup>ightarrow</sup> Source: Cruise market watc

#### **Annex V: Stakeholders' Consultation**

#### INTRODUCTION

In the framework of the Blue Tourism report, eco-union has consulted practitioners and experts of the tourism industry and sustainable practices in order to collect different points of view on the subject. Our questions were mainly focused on relevant good practices implemented by public or private actors, the listing of the main actors involved in these good practices and the identification of opportunities and obstacles of the transition of the tourism industry. The consultation is not supposed to be exhaustive but has as main purpose to enrich our study with new examples, recommendations and analyses. This consultation was divided in two parts: online consultation (e-survey) and semi-structured interviews led by phone.

#### ONLINE CONSULTATION

#### **Methodology and Calendar**

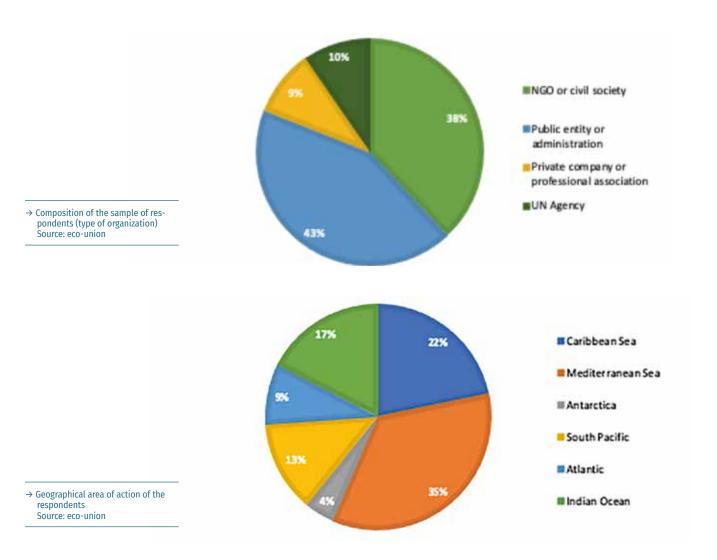
This survey has been done between February and March 2019. The database used to contact the targets has been

created specifically for this work. It gathers global and local actors from different sectors (public institutions, public agencies, NGOs, business associations...) from the regions which the Blue Tourism study focus on (Caribbean, Indian Ocean, Mediterranean Sea, Pacific Ocean, Antarctic Ocean). In total, around 70 people have been contacted by email or telephone and 21 answers have been registered. All relevant regional and global key actors of the Blue Tourism have been contacted. Actors from cruising sector and coastal tourism have been solicited to participate to the survey, but a majority of them are part of the coastal tourism sector.

#### RESPONDENT'S PROFILE

The composition of the sample of respondents is quite heterogeneous regarding the region of origin and the type of organization, mainly public entities (43%) and NGOs (38%). The private structures were less inclined to answer the survey than public actors and associations.

Regarding the geographical origin of the respondents, the most represented regions are Mediterranean Sea (35%), Caribbean Sea (22%) and Indian Ocean (17%).



#### RESULTS

Concerning the environmental, social and economic issues, the respondents had to rank different issues according to their level of priority (very high, high, moderate, low, no answer).

- Ranking of environmental issues (% of very high and high priority):
  - Water pollution and consumption (100%)
  - Waste management (93%)
  - Land use change (76%)
  - Energy consumption (70%)
- Ranking of social issues (% of very high and high priority):
  - Over tourism, overcrowding and massification (82%)
  - Saturation of public spaces (71%)
- Ranking of economic issues (% of very high and high priority):
  - Limited economic benefice to local populations (82%)
  - Economic dependence on tourism sector (76%)
  - Opacity and lack of data (65%)
  - Seasonality of activities (58%)

While the ranking of the environmental issues were quite homogeneous, the economic and social issues were disparate, as they depend a lot on the geographic origin of the respondent. However, the common issues highlight the structural challenges of the tourism industry, in particular related to the **regulation of tourists flows** (geographical and temporal repartition), which is a problem in every touristic hotspot.

### Actions implemented by the respondents to tackle these environmental, social and economic issues:

Strategical, economic and technical support to environmental projects; participation and support to local projects;

Research in the field of eco-tourism;

Creation of new touristic offers (Vanilla Islands); promotion of ecotourism packages, ecological accommodation and nature educational trips (WWF).

### Most relevant policies to promote sustainable coastal tourism

In the following questions on obstacles and relevant policies, multiple options were presented with the possibility to choose several answers.

#### Most important obstacles to sustainable coastal tourism

The answers reveal an important lack of coordination and cooperation among the different actors of the tourism. The governance of the sector seems to be the main weak point as well as the monitoring of the activities. The promotion of a cooperative governance, a better monitoring and

Multi-stakeholders governance and decision-making propcesses

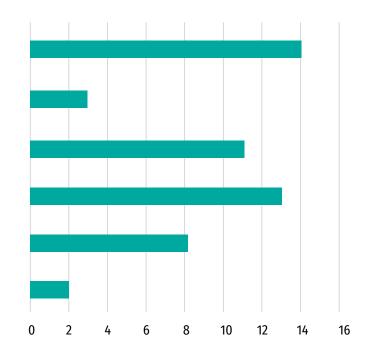
Improvement of economic regulation

Monitoring and transparency of the sector

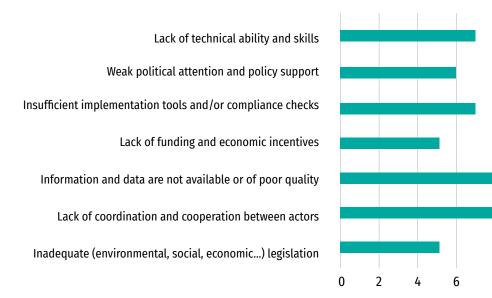
Enforcement of environmental regulation

Consultation and implication of local communities

Improvement of workers' rights social benefits



<sup>→</sup> Most relevant policies to promote sustainable coastal tourism Source: eco-union



<sup>→</sup> Most important obstacles to sustainable coastal tourism Source: eco-union

deeper environmental regulations appear to be the most relevant solutions to improve the tourism sector

#### STAKEHOLDERS MAPPING

#### Key blue tourism actors identified

The answers of this question were quite vague, mentioning most of the time local and national authorities and governments, chambers of commerce, ministries and port authorities as well as private actors such as businesses, hotels, tour operators, travel agencies, clusters of professional federations. NGOs have been cited a very few times.

### Structures and/or forums allowing exchanges, cooperation and coordination:

#### · Caribbean Region:

- Caribbean Tourism Organization
- Organization of American States annual conference for tourism ministries
- Intergovernmental technical and political meetings

#### • Antarctica:

- ATCM (Antarctic Treaty Consultative Meeting)
- CEP (Committee for Environmental Protection)
- CCAMLR (Commission for the Conservation of Antarctic Marine Living Resources)
- COMNAP (Council of Managers of National Antarctic Program)

#### • Mediterranean region:

Plan Littoral 21 (Région Occitanie - FR)

PPI-OSCAN (Programme des petites initiatives pour les organisations de la société civile d'Afrique du Nord - UICN,

MAVA, FFEM programme)

Greening the Islands Observatory

### Best practices related to cruising, hospitality/resorts and eco-tourism.

R

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The question about best practices received various answers, from very local initiatives to long-term projects. We have classified these good practices by scale of actions.

#### · Local scale:

Hotel Meridien in Tahiti: energy diagnosis, heat recovery on a cold unit for domestic hot water. Projects on reducing food waste (for employees and customers) and composting. Capitalization on this experience for other hotels.

Six senses hotels: luxury and sustainable hotel chain in Europe, Asia, Caribbean, Indian ocean, Africa and Middle East.

Coastal climate change adaptation projects in the Maldives, Samoa and Mauritius

#### Regional scale:

Sirocco project (Interreg Med 2014-2020): "'Sustainable Cruise Value Chain Action Plans' and 'Sustainable Cruise Tourism Joint *Action Plan*' to incorporate operational solutions for reducing the negative impacts of cruise maritime/coastal tourism in the MED.

Partnership between the WWF and Royal Caribbean focusing on carbon emissions

Tourist flow regulation in the Occitanie region (FR)

DestiMED and MEET Network from Interreg Med programme (2014-2020)

#### **Global scale:**

Labelization (GSTC Criteria, Blue Flag, EU ecolabel, Green Globe, Green Key)

Watch-dog activities for cruise tourism (CREST)

#### INTERVIEWS

In parallel to the online consultation, we have led 8 phone interviews with members of organization having activities in tourism between November and March 2019 with the following organizations:

- UNEP
- Medcruise
- ClubMed
- OECD
- HOTREC
- · French Ministry of Ecological transition
- World Ocean Council
- GIZ

They have been questioned about the main challenges they identify for a sustainable tourism industry, the main actors involved, obstacles, opportunities and best practices.

### Main challenges they identified for sustainable coastal tourism:

- Over tourism
- Waste: litter, food
- Water
- Coastal zone development (urbanization)
- Seasonality
- Raising awareness of tourists and professionals
- Economic competition
- Contribution to local economies and development

This list shows that the main challenges of the sustainable coastal tourism are linked to the regulation of tourist flows (over tourism and seasonality) and resources management (water, wastes, energy, food, local-sourcing). These challenges must be tackled in cooperation between public and private actors for spatial planning, logistic flows and economic regulation.

#### Main actions implemented by the interviewed organizations

The most common actions cited by the people interviewed are capitalization on good practices, creation of exchange forums and cooperation strategies and capacity building. The Club Med has also developed its actions through its foundation for example for the funding of projects for local communities and its efforts on raising awareness, reduction of wastes and plastic consumption. We can see that the actions concern mainly governance and less onthe-ground projects.

#### Main actors of the sustainable tourism sector

The following table summarize the main actors cited during the interviews. The actors specifically related to cruising sector have been separated for a better comprehension. Sustainable tourism act<u>ors</u>

**UNWTO** 

UICN Conservation Internatio-

TNC Natural Conservancy

Eco-labelling structures

**European Commission** 

ETOA: European Tourism Association

Specific to cruising sector

**Ports** 

Cruise line groupings

DG Mare (EC)

European Sea Ports Organization

International Maritime Organization

Cruise Line International Association

#### CONCLUSIONS

In conclusion, the main obstacles and challenges for the transition of the tourism industry are basically the same for the online consultation and the interviews. The **governance of the tourism sector** appears as the main lever to make it evolve as well as the pro-activeness of the private actors (transport companies, tour operators, hotels and resorts etc.). From those results we can extract 4 axes of consideration:

- The involvement of the private sector is fundamental in the transition since they have the capacity to change rapidly their own practices. They are most of the time pushed by the legal regulation but also by the willingness to distinguish their business in a positive way, compared to other competitors. Actually, the sustainability of the tourism activities is becoming a strong marketing point for customers. However, this point concerns more niche and luxury tourism so far. One of the key challenges of the private sector is to make sustainability for mainstream tourism as well.
- The governance of the tourism sector, at every political and administrative scale, is too much fragmented. During the interviews and in the online consultation, many respondents noticed that the tourism governance need a clearer and more transversal approach since tourism links economic, trade, social, heritage, climate and environmental issues. The cooperation between public and private, local and global actors was mentioned as a key challenge several time. The structure of the governance and regulation bodies creates strictness and suffers from a lack of agility and cooperation dynamics.
- Labelling actions, discussion forums and cooperation structures are usually the main environmental and social good practices. The respondents were not field actors, which can explain the fact that the examples cited concern more governance and regulation mechanisms,

- but these practices can help on-the-ground structures to make an efficient transition towards sustainability. Moreover, cooperation, structured governance and exchange of practices answer a central question: how to change the mainstream good practices implemented by local and isolated actors? How to capitalize on the successful experiences?
- Finally, soft regulations are very often mentioned, in particular for environmental and economic regulations, because the economic pressure on tourism is very high and the competitiveness of the market has to be maintained. However, voluntary actions and regulations can be powerful up to a certain point, but when it comes to biodiversity and climate conservation, heritage care or social protection, strong regulations must be considered as well.



#### eco-union (Technical Coordinator)

eco-union is a citizen Think and Do tank working to accelerate the transition of our society towards sustainable development, with a strong focus in the areas of green and blue economy, responsible tourism, clean mobility, renewable energy and climate change.

www.ecounion.eu



#### **Iddri (Strategic Support)**

IDDRI is an independent policy research institute and a multi-stakeholder dialogue platform who identifies the conditions and proposes tools to put sustainable development at the heart of international relations and public and private policies. www.iddri.org

#### ADEME



Agence de l'Environnement et de la Maîtrise de l'Energie

#### **ADEME (Financial Support)**

ADEME is the French public agency active in the implementation of public policy in the areas of environment, energy and sustainable development, providing expertise and advisory services to businesses, local authorities and communities, government bodies and the public at large.

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