ESPON

GREECO

Territorial Potentials for a Greener Economy

Applied Research 2013/1/20

(Draft) Final Report | Version 22/11/2013

Sector Report

Vol. 3.8. Tourism

EUROPEAN UNION
Part-financed by the European Regional Development Fund
INVESTING IN YOUR FUTURE

This report presents the draft final results of an Applied Research Project conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

This report does not necessarily reflect the opinion of the members of the Monitoring Committee.

Information on the ESPON Programme and projects can be found on www.espon.eu

The web site provides the possibility to download and examine the most recent documents produced by finalised and ongoing ESPON projects.

This basic report exists only in an electronic version.

List of authors

Nordregio (Sweden)

Berit C. Kaae (**bck@life.ku.dk)**

Contents

List of figures, tables and maps

1 Introduction

The tourism sector is one of the fastest growing economic activities in the world. The sector has experienced a significant growth since the 1950s and turned into one of the world's most important drivers of economic development by contributing to a significant proportion of world production, trade, investments and employment.

Tourism is the third largest economic activity (after oil and automobiles), and thus a major contributor to the world's economy, accounting for more than nine per cent of the global GDP and almost nine per cent of jobs globally, thus making it one of the largest categories of international trade (Batta, 2009). Tourism is also a key sector of the European economy. It produces more than 5% of the GDP in the EU and employs roughly 5.5 % of the total labour force with approximately 9.7 million jobs. Together with the linked sectors, the projected contribution of tourism to GDP is higher. Accordingly, tourism makes more than 10% of the EU's GDP and is responsible for about 12% of the labour force (EU COM, Enterprise and Industry, 2012).

Forecasted growth

The Tourism 2020 Vision (World Tourism Organisation (WTO) 2001) provides a long-term forecast and assessment of the development of tourism world-wide up to the year 2020. As seen in ***figure 1***, tourism world-wide has grown from around 25 million international arrivals in 1950 to approximately 763 million in 2004, corresponding to an average annual growth rate of 6.5 per cent. The substantial growth of tourism marks it as one of the most remarkable economic and social phenomena of the past century

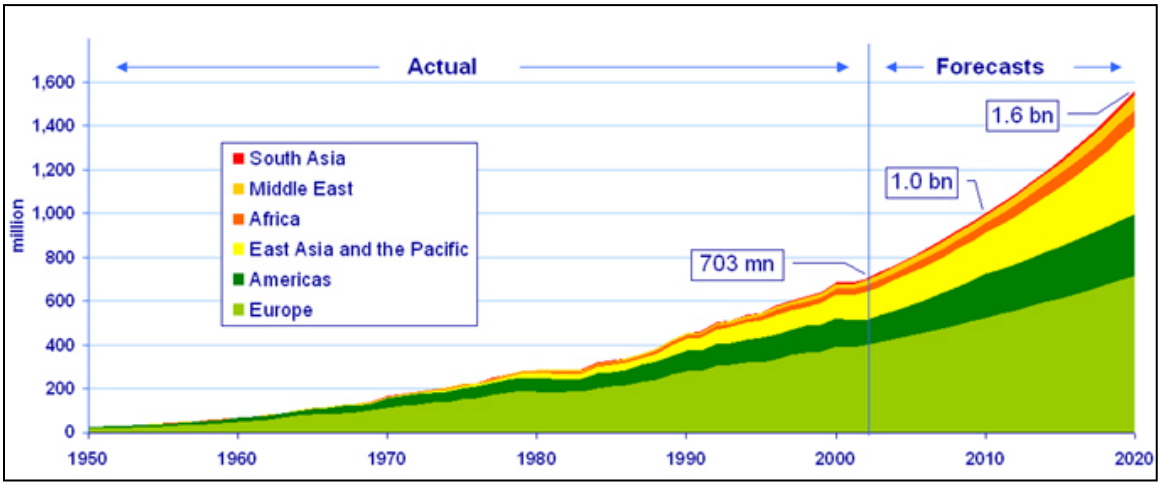


Figure 1: The forecasted growth of tourism until 2020 (World Tourism Organisation (WTO) 2001)

The growth of tourism is forecasted to continue and according to the Tourism 2020 Vision forecast (WTO, 2001, UNWTO 2006), international arrivals world-wide are expected to reach over 1.56 billion by the year 2020. Of these world-wide arrivals in 2020, 1.2 billion will be intraregional and 0.4 billion will be long-haul travelers. The forecast shows, that by 2020 Europe will remain the top receiving regions with 717 million tourist arrivals followed by East Asia and the Pacific (397 million tourist

arrivals) and the Americas (282 million tourist arrivals), while Africa, the Middle East and South Asia will still receive far less tourists.

European growth trends

As a more 'mature' region, Europe is expected to have a slower growth rate of 3.1% compared to the world average of 4.1%. Although, Europe will maintain the highest share of world arrivals, there will be a decline in market share from 60 % in 1995 to 46 % by 2020 (WTO, 2001, UNWTO 2006). The uneven distribution of tourism among European regions is predicted to continue (***figure 2***). The Southern, Central/ Eastern and Western European regions are those receiving the highest numbers of International tourists, while the Northern region and the Eastern Mediterranean region receive fewer. In terms of tourist generating regions the majority of the outbound European tourists are still expected to originate from Western and Northern European regions. However, these predictions may be influenced by the political changes in Europe and the integration of many Central/Eastern European countries into the EU. Tourism growth rates are higher in these countries.

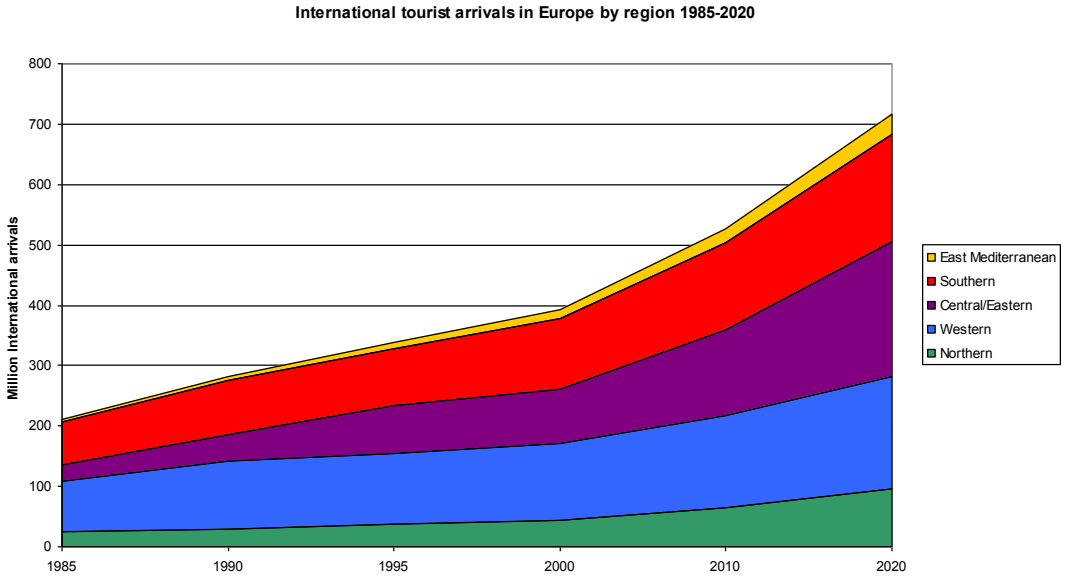


Figure 2: The predicted numbers for international tourist arrivals by European regions (based on numbers from the WTO 2020 vision).

The high growth rate of the tourism sector, the inter-linkages to other sectors, and the dependency on natural environment places the tourism sector in a unique position from a green growth perspective. Consequently, tourism has been identified as one of the ten sectors (agriculture, buildings, energy supply, fisheries, forestry, industry, tourism, transport, waste management, water) that can make the transition to a low carbon and green economy.

2. Conceptual elements of the tourism sector

2.1 Definition of the tourism sector

Tourism is not considered as a specific good or service but it is rather referred as “an activity” since tourists make choices and purchase accordingly from a diverse range of businesses also serving local residents.

Definition of tourism

Tourism, in a statistical context, refers to the activity of visitors taking a trip to a destination outside their usual environment, for less than a year. It can be for any main purpose, including business, leisure or other personal reasons other than to be employed by a resident person, household or enterprise in the place visited. Tourism statistics are currently limited to at least an overnight stay; as of 2014, outbound same-day visits will be covered as well.

Få fat I præcise **kilde** for definition

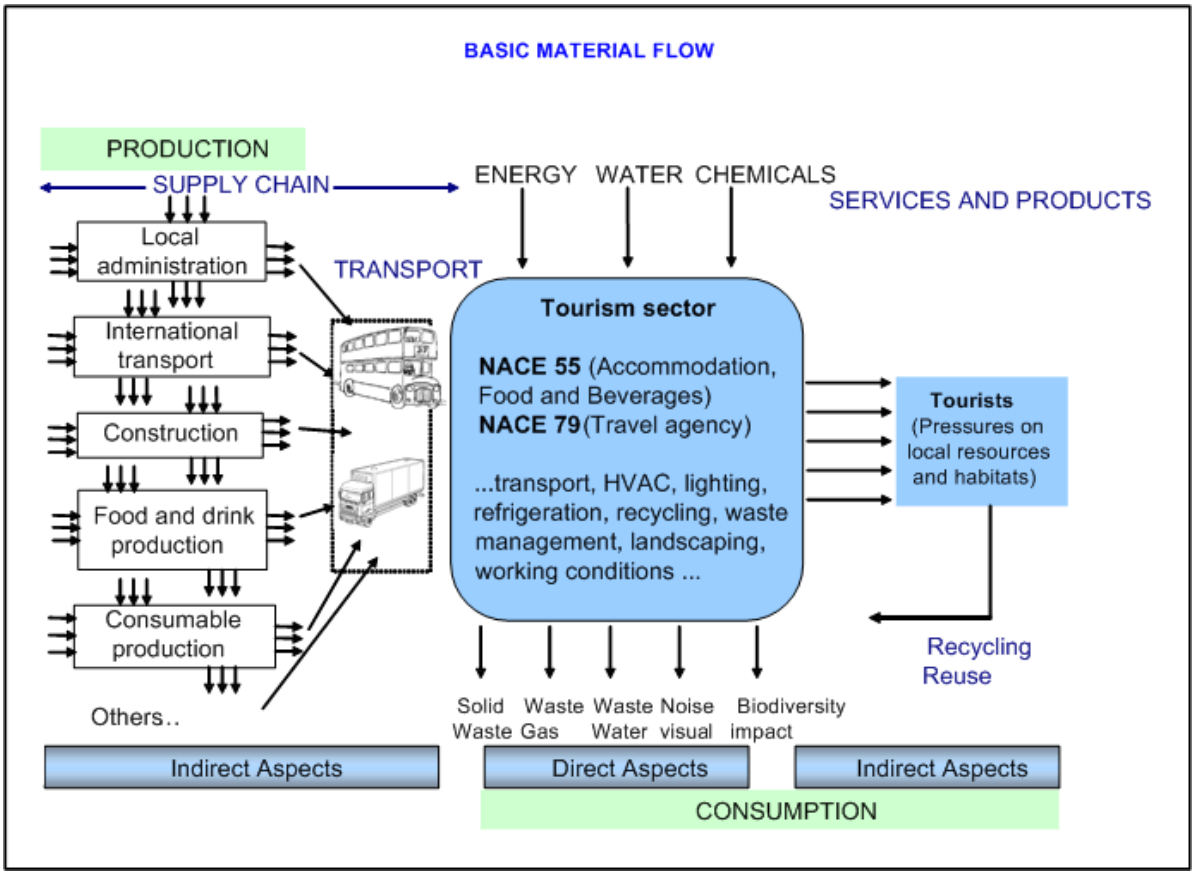


Figure 3: Basic material flow in the tourism sector (source: Joint Research Centre, 2012).

Tourism is a cross-sectorial activity (***figure 3***) and is related to many of the sectors in the GREECO project. Tourism involves being away from the regular home environment and hereby using different types of transport to and from the destination as well as transport within the destination (transport sector). Different accommodation facilities are used which is closely linked to construction and

operation of buildings (buildings sector). During the visit, tourists consume food and drink (agricultural sector and supply chain) and tourists use water, energy, produce wastewater and waste and put pressure on local resources and habitats (water, energy, waste, and biodiversity sectors). At the same time, these natural resources, biodiversity and landscape assets are also key attraction factors for tourism along the cultural attractions and sustaining these is highly relevant for tourism.

As a personal activity, tourism is experienced by a diverse range of the population; as an industry, it has a multi-sectoral nature and as a means of economic and cultural exchange, it has many aspects and forms (Mowforth and Munt 2003)

The sector also involves wide-ranging products and destinations as well as numerous stakeholders, from both public and private spheres, with different areas of competence at regional and local levels. Any comprehensive analysis of the tourism sector must therefore be multidisciplinary.

Measuring the performance of the tourism sector

The existing measures of the performance of the tourism industry at national and EU-level are primarily of the socio-economic aspects, while environmental aspects are not reported systematically. Tourism statistics in the EU primarily consist of statistics relating to capacity and occupancy in collective tourist accommodation and statistics relating to tourism demand respectively. Overall, the 'greenness' of the tourism sector does not appear to not systematically measured at national level in any consistent way and not reported to the EU.

Input-Output analysis are used for calculation of the direct, indirect and induced value added effects resulting from visitor expenditure and triggered by marketing expenditure. Input-Output analysis produces estimates of economic contribution and multiplier values relating to transactions, output, income and employment.

The **Tourism Satellite Account (TSA)**, is an accounting framework linked to the national accounts, which has improved the information available on tourism at EU level. It measures the impact of visitor consumption expenses on the economy and provides reliable data concerning the scale and significance of tourism in the economy. By defining the "tourism industries" it estimates tourism's direct contribution to GDP for the country in question. At the national level, the TSA-system relies on detailed reporting by tourism accommodations on tourists staying overnight at facilities over a certain size (data includes length of stay, nationality, etc.). This data is collected at the national level, analysed and reported to the TSA-system in the EU.

Data quality

However, the TSA data collection framework does not cover all types of overnight facilities and particularly the omitance of the over 10 million second homes in the EU pose a problem in reporting overnight stays. These facilities are not included in the tourism statistics as they do not represent types of "collective accommodations" and the use of these facilities are not included in tourist number. In France second homes represent 73% of total tourism lodging capacity, and 18% of all nights spent by residents in 1999 were in second homes. The number of second houses has dramatically increased since the 1990s and notably on the most environmentally sensitive areas, on coastal zones and ski areas. In France, the construction of second homes has increased by 10% during a 10-year period, covering more than 22 million m^2 of land (EEA et al. 2004). Also from a territorial perspective are the second homes a highly relevant issue as they take up large areas of land. Some

countries have significant numbers of second homes - particularly Spain with 3.36 Million and France with 2.9 Million. Approximately every sixth dwelling in Spain is a second home/seasonal dwelling. Some regions in Spain have over 40 % second homes/ seasonal dwellings.

Separating tourism from other activities

Separating tourism from other activities require calculations. Tourism use services by different businesses also serve local clients and business customers. This raises a challenge when trying to measure the impact that tourists have on the economy. However, based on the studies of tourist behavior, there are certain fields of activities covered by the theme (EUROSTAT 2012) and based on this information; it is possible to detect the effect of tourism on various industries.

A percentage, of varying degree by sector, of the following industries is included in the tourism sector:

- Accommodation services
- Food & beverage services
- Transportation & warehousing
- Retail trade
- Finance, insurance, real estate & leasing
- Various other service industries where there is a big or small tourist-related element (i.e. visit to museums, zoos, gardens, ski hills, golf courses, and other similar venues and related activities are included in the tourism sector)

In short, the tourism sector covers a broad array of hospitality and recreational activities. The key elements of the tourism are tour operators, accommodation and food facilities, and destination managers (e.g. local authorities as public tourism organizations have a key role in promoting and co-ordinating the tourist destinations).

The NACE Rev.2 codes covered in this report are shown in ***table 1***. For the qualitative analysis of this study the sector definition has been extended to include those parts of the transport sector relevant for tourism, especially the aviation industry.

Table 1: Economic activities in the tourism sector (NACE Rev.2 classification) (EUROSTAT, 2008)

51	Air Transport	This division includes the transport of passengers or freight by air
55	Accomodation	This division includes the provision of short-stay accommodation for visitors and other travelers. Also included is the provision of longer term accommodation for students, workers and similar individuals. Some units may provide only accommodation while others provide a combination of accommodation, meals and/or recreational facilities. This division excludes activities related to the provision of long-term primary residences in facilities such as apartments typically leased on a monthly or annual basis classified in Real Estate.
56	Food and beverage service activities	This division includes serving activities providing complete meals or drinks fit for immediate consumption, whether in traditional restaurants, self-service or take-away

		restaurants, whether as permanent or temporary stands with or without seating. Decisive is the fact that meals fit for immediate consumption are offered, not the kind of facility providing them.
79	Travel agency, tour operator and other reservation service and related activities	This division includes the activity of agencies, primarily engaged in selling travel, tour, transportation and accommodation services to the general public and commercial clients and the activity of arranging and assembling tours that are sold through travel agencies or directly by agents such as tour operators; and other travel-related services including reservation services. The activities of tourist guides and tourism promotion activities are also included.
90-92	Creative, arts and entertainment activities; libraries, archives, museums and other cultural activities; gambling and betting activities	This group includes activities in the creative and performing arts and related services.
93	Sports activities and amusement and recreation activities	This division includes the provision of recreational, amusement and sports activities.

Employment in the accommodation industry is almost completely driven by tourism activity and more than a fifth of the jobs in the food & beverage service industry are due to tourism. Therefore, they provide a good input in understanding the business structure in the sector.

2.2. Sustainable tourism

Tourism is a resource dependant sector and it needs to sustain its natural, social and cultural resource base for its survival. Since the rise of mass tourism in the late 1950s and 1960s, tourism development has been through several distinct phases, from simple planning with an eventual aim to produce economic benefit, the inundation stage in the late 1980s with tourism implications impacts assessments and the recent phase of sustainable tourism development characterized by increasing number of innovative models and methods (Gössling et. al, 2008).

Over the course of time, much work has been carried out on sustainable tourism however new developments concerning global climate change and its relationship to tourism have revealed a gap in the existing knowledge. The tourism sector and its activities are considered as 'pollutants' and they can create complex environmental problems (Holden, 2008). International travel for recreational and leisure activities as well as business purposes has become one of the fastest growing economic activities at the global scale. The number of international tourist arrivals rose from 25 million in 1950 to 980 million in 2011, and is estimated to reach 1 billion in 2012 (UNWTO 2011) and 1.56 billion by 2020 (World Tourism and Travel Council, 2012).

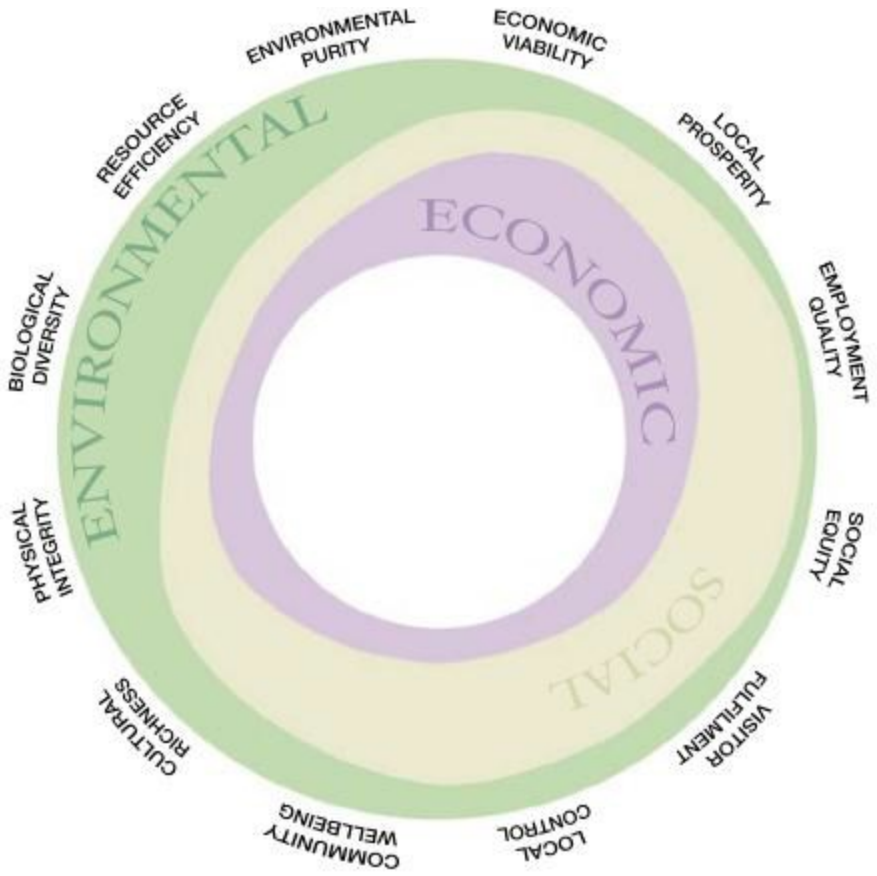


Figure 4: Within three pillars of sustainable tourism are 12 key principles central to the development of sustainable tourism. (United Nations Environment Programme & World Tourism Organization, 2005).

The World Tourism Organization's definition of Sustainable Tourism

Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche-tourism segments. Sustainability principles refer to the environmental, economic and social-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability. Thus, sustainable tourism should:

1) Make optimal use of environmental resources that constitute a key element in tourism development, maintain essential ecological processes and help to conserve natural resources and biodiversity

2) Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance

3) Ensure viable, long-term economic operations, proving socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income earning opportunities and social services to host com-munities, and contributing to poverty alleviation

Sustainable tourism development requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary. Sustainable

tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices amongst them.

Source: UNEP & WTO (2005) Making Tourism more sustainable; A guide for policy makers.

Sustainable tourism is the main focus in the debate of environmentally integrated tourism development and green tourism is considered as an important component of sustainable tourism. As seen in the ***figure 4*** and the text box above, sustainable tourism meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support systems. UNWTO defines sustainable tourism as an industry which attempts to make a low impact on the environment and local culture, while helping to generate income, employment, and the conservation of local ecosystems. It is responsible tourism which is both ecologically and culturally sensitive.

A clear distinction should be made between sustainable tourism and 'greening of tourism' which are overall approaches to all types of tourism and on the other hand a range of special type of 'green' niche tourism products for example 'nature tourism' and 'ecotourism'. The International Ecotourism Society (TIES) defines ecotourism as 'responsible travel to natural areas that conserves the environment and improves the well-being of people.' The role of these niche tourism products with a focus on nature and environmental behaviour should be recognized as contributing to awareness raising and greening of the tourism industry. However, greatly increasing the tourism based on nature areas and parks and protected nature areas may be harmful to the environment and result in crowding, trampling and overexploitation of natural resources - the concept of 'loving them to death'.

In summary - sustainable tourism development is applicable to all forms of tourism in all types of destinations including mass tourism and the various niche-tourism segments. The 'greening' of tourism in relation to the green economy is primarily focusing on the environmental aspects of tourism but also resulting in social and economic benefits as a result.

2.3 The green economy in the tourism sector

Tourism in a green economy refers to tourism activities that can be maintained, or sustained, indefinitely in their social, economic, cultural, and environmental contexts; also referred as "sustainable tourism". Sustainable tourism is not a special form of tourism; rather, all forms of tourism may strive to be more sustainable. Green tourism concerns tourism operations proceeding in a way that do not harm the environment (Font and Tribe, 2001).

All types of tourism can contribute towards a green economy transition and reduce environmental and social impacts from tourism. Studies comparing green growth scenarios with a BAU scenario (Business As Usual) up to 2050 find that under the alternative greener investment scenarios tourism can grow steadily within the next decades while saving significant amounts of resources and enhancing its sustainability. Furthermore, the growth in GDP in the greener tourism growth scenario is 3-7% above the BAU scenario (UNEP & UNWTO 2012).

Analysis of tourism in a green economy (UNEP & UNWTO 2012) concludes that the tourism industry faces a multitude of significant sustainability-related challenges and specific challenges that need to be resolved through the greening of the industry include:

- energy and greenhouse gas (GHG) emissions
- water consumption
- waste management
- loss of biological diversity
- effective management of built and cultural heritage, and
- planning and governance

The study of tourism in the green economy (UNEP & UNWTO 2012) summarizes that the move toward more sustainable tourism enhance local development potential through several mechanisms such as its ability to harness biodiversity, landscape and cultural heritage which can enhance incomes and employment opportunities. Also, since tourism products are a combination of different activities and inputs produced by many sectors, enhanced spending by tourists can benefit a wide range of sectors such as agriculture, handicrafts, transport, water and waste management, energy efficiency and other services. Furthermore, as tourism development at destinations requires investment in facilities like road, water supply, and energy, it improves the basic common infrastructure facilities required for development of other sectors and improvement of quality of life. Tourism also have positive social impacts by being a relatively labour intensive sector traditionally dominated by micro and small enterprises with activities particularly suited for women, young people and disadvantaged groups hereby providing economic benefits and independence to these groups. For the Greeco-study, particularly the environmental issues are in focus.

Environmental impacts of tourism

UNEP&UNWTO (2011) acknowledge that given the rising global trend for travel and the growing energy intensity of most trips, future emissions from the tourism sector are expected to increase substantially, even considering current trends in technological energy-efficiency gains in transport (air and ground) and accommodation. The tourism sector is susceptible to significant challenges related to sustainability and green development. Most important problems related to its greening include energy and GHG emissions, water consumption, waste management, loss of biological diversity; and effective management of cultural heritage. The challenges of the sector are briefly described below:

–**Energy and GHG emissions**: the tourism sector is a significant contributor to rising greenhouse gas (GHG) emissions. It produces significant emissions from transportation and accommodation (e.g. from air-conditioning and heating systems).

–Water consumption: tourism increases pressure on the issue of water scarcity and put the local populations' needs at risk even though water use by tourism, on a global scale, is far less significant than agriculture, industry, or urban domestic use, in some countries and regions, tourism can be the main factor in water consumption; especially in the Southern Europe (e.g. the main water-consuming factors are golf courses, irrigated gardens, swimming pools, spas, guest accommodation and wellness facilities).

–Waste management: a large amount of waste is generated through tourist activities. Particularly, wastewater management systems are creating considerable impacts as it is commonplace for hotels to discharge untreated sewage directly into the sea, especially in the Mediterranean region where only 30 % of municipal waste water from coastal towns receives any treatments before discharge (UNEP 2011).

–Loss of biological diversity: Main driver of urbanization and land take is tourist infrastructure, especially in the Mediterranean region (This relates to the territorial dimension of the sector towards coastal regions which will be further extended under the section 4; drivers and enablers and is currently under revision). Tourism has damaging effects on biodiversity, including coral reefs, coastal wetlands, rainforests, arid and semi-arid ecosystems and mountainous areas (UNWTO 2010a). Additionally, the sector creates harmful effects on natural environment if biodiversity concerns are not incorporated in destination planning. Destinations will inevitably become overused, experience declining to use (Tommasini 2011). Conflicts may increase with local communities which then lead to reduced value creation potential both for destination and investors.

–Effective management of cultural heritage: threats may be posed to cultural integrity from unplanned and unmanaged tourism.

Measuring 'green' aspects of tourism

As described, tourism is an activity within different sectors – for example a certain part of transport is due to tourism. Measurement of the greening of transport for tourism is linked to the overall measurement of greening of transport. This data can be combined with TSA-based information on the transport modes and distances traveled by tourists.

Measurements of the greenness of the tourism sector mainly involve the effectiveness of its management and efficiency of the resources. A number of case-based measures of for example consumption of water, production of waste, etc. exist but are not very consistent and difficult to use for calculations at an EU-wide scale – see UNEP & UNWTO report. (However, given the existence of the TSA-reporting system, en expansion of the reporting to key environmental data could be considered. Key information on consumption of water usage, energy consumption, waste production, and so on could possibly be collected from the accommodation establishments as part of the TSA reporting.)

Also the participation in environmental labelling schemes by enterprises in the tourism industry is measured in some countries (e.g. in Denmark) and participation in EU-labelling schemes by tourism enterprises is measured by the EU.

A newly introduced indicator toolkit for sustainable destinations includes a number of indicators to be measured at the destination level. However, the indicator framework has just been released and the use is still not clear.

2.4 Good examples of greening in tourism

Example: 'REAP Tourism' - tourism foot printing tool
In 2006, the Stockholm Environmental Institute (SEI) launched a Resource, Energy and Analysis Program (REAP) which incorporates a methodology of foot printing into a software tool designed to track materials, carbon dioxide emissions and the Ecological Footprint through the UK economy by industrial sector, geographical area and socio-economic group. In cooperation with South West Tourism, this tool was further developed in 2008 into a tourism foot printing tool 'REAP Tourism' to look at the environmental consequences and impacts associated with visitor and tourism activities.

REAP Tourism is a software tool designed to calculate the environmental footprint of visitors to any area in the UK. The basic foundation of the tool is a calculator which uses day visitor and staying visitor data combined with data on visitor expenditure, accommodation choices and recreational behavior for any user-defined area. At a more advanced level REAP Tourism also provides users with the means to build scenarios, create footprint profiles for different visitor types and estimate the footprint of specific events. The tool can

- Measure the environmental impact of visitor behaviour in a consistent fashion at all spatial levels
- Identify areas of visitor behaviour with a high environmental impact
- Demonstrate the impact of attracting different types of visitor to your area
- Explore the impact of promoting particular visitor behaviours
- Understand the impact of tourism in the context of lifestyles as a whole

Measurements of tourists – both staying visitors and day visitors as well as local residents, indicate a significantly higher footprint of the staying visitors compared to residents and day visitors and that the footprint is primarily linked to the transport to and from the destination. The tool can be used for calculating current footprint as well as the footprints associated with different future growth scenarios. Although SWT is no longer in existence, the tool is still highly relevant.
For more information: http://resource-accounting.org.uk/reap-tourism

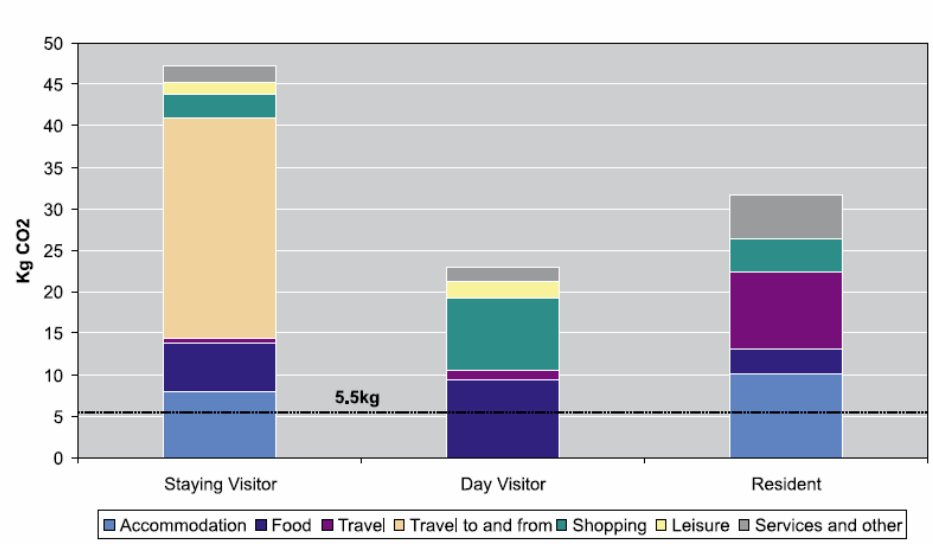


Figure 5: Average per visitor day Carbon Footprint of staying visitors, day visitors, and residents in the South West of the UK compared to the UK 2050 target. (Source:

Environmental management & labeling programs

As described the EU flower label and the EMAS environmental management system are viewed by the EU as important tools for greener management of the many tourism accommodation facilities. But across Europe, a wide range of green labeling programs have been established in relation to tourism facilities: Grüne Koffer, Green Leaf, Green Key etc. just to mention a few. The many labels are somewhat confusing to tourists and to the industry.

Currently, the EU is harmonizing the different quality labels in tourism. It could be considered by the EU to 'harmonize' the many eco-labels in tourism and possibly use the flower as an overarching international recognition of the mostly national or company-based eco-labels that are compatible (or could be with a few changes). This dual labeling could possibly help expand the EU-wide labeling scheme without undermining the existing labels and their recognition at for example a national level or within a company. It could also stimulate an upgrade of criteria in labels that do not quite qualify for the Flower. Currently, around 300 of the approximately 260.000 accommodation facilities in Europe have been labeled with the EU Flower.

A wide range of other labeling programs exist that have more participants than the EU Flower – for example the Green Key which also have developed criteria for a wide range of tourism facilities.

Example: Green Key
The Green Key initially started as a national label in the mid 1990ies but has now grown to over 2,100 certified tourism establishments in 41 countries (Green Key 2013). The Green Key has also experienced that internal labels from a larger hotel chain (Scandic Hotels) has decided to merge into the Green Key program. The Green Key has developed eco-labels for a range of tourism facilities including hotel and conference centers, hostels, campgrounds, tourist offices, mountain stations, restaurants and sports facilities.

Example: Green Destination Management programs in Finland
There are two quality programs for sustainable tourism destinations in Finland: Green Destination Quality Net (Green DQN®) and Green Destination Management Net (Green DMN®). Levi Ski Resort in Finland with a tourist bed capacity of 23,000 has been a pilot area and gone through an extensive green destinations management program. Levi has very good experiences with the environmental program and now use environmental quality as a tool for attracting tourists. New areas have started in the green destination management programs to become greener.

Example: Developing environmental competences in small tourism enterprises
A cooperative project in Northern Denmark focused on developing the environmental competences in small tourism enterprises. Coaching and training of 60 employees of 42 enterprises has increased the environmental competences significantly and 12 of the enterprises were awarded the EU Flower and one the Green Key label. In particular the supportive functions of the environmental coordinator and the opportunity to be pioneering were stimulating the enterprises to become environmentally certified. The results indicate that with a joint training and development program, a number of local tourism businesses may be stimulated to apply for labeling.

Example: Natures Best – labeling of nature tours

Nature´s Best is a quality label for ecotourism in Sweden and the first national quality label for nature tours in Europe. It was launched in 2002 – the UN International Year of Ecotourism. To qualify, the tour operators have to apply to the basic criteria, have an environmental plan, have a destination analysis plan, apply with special criteria if your company is into fishing, hunting, riding etc., and fulfill a course in ecotourism and Nature´s Best. The program currently has 128 quality labeled tours – all in Sweden. However, due to international interest, The Swedish Ecotourism Society is now working in partnership on a small scale with other countries and their organizations, to translate the model so it can apply to other countries.

Example: Global Sustainable Tourism Criteria

The proliferation of certification schemes in tourism is confusing to both tourists and the tourism industry. Currently, there are over 140 tourism supply chain certification schemes and initiatives have been taken to establish global criteria for sustainable tourism. The different certifications can then achieve GSTC recognition if their standards align with the Global Sustainable Tourism Criteria and approx. 15 standards have achieved this recognition.

In 2008, the Partnership for Global Sustainable Tourism Criteria (GSTC Partnership) - a coalition of more than 50 organizations working together to foster increased understanding of sustainable tourism practices and the adoption of universal sustainable tourism principles- developed a set of baseline criteria organized around the four pillars of sustainable tourism: effective sustainability planning; maximizing social and economic benefits to the local community; reduction of negative impacts to cultural heritage; and reduction of negative impacts on the natural environment. The Partnership was initiated by the Rainforest Alliance, the United Nations Environment Programme (UNEP), the United Nations Foundation, and the United Nations World Tourism Organization (UNWTO) in an effort to come to a common understanding of sustainable tourism.

The Global Sustainable Tourism Criteria are the minimum requirements that any tourism business should aspire to reach in order to protect and sustain the world's natural and cultural resources while ensuring tourism meets its potential as a tool for poverty alleviation. To develop these criteria, the GSTC Partnership consulted with sustainability experts and the tourism industry and reviewed more than 60 existing certification and voluntary sets of criteria already being implemented around the globe. In all, more than 4,500 criteria were analyzed and the resulting draft criteria received comments from over 2000 stakeholders. Since the launch of the criteria in October 2008, the GSTC Partnership focused on engaging all tourism stakeholders – from purchasers to suppliers to consumers – to adopt the criteria. The process for consultation on the development and adaptation of criteria will adhere to the ISEAL code of conduct and follow a multi-stakeholder approach, striving to include a balanced constituency from key industry branches as well as relevant UN agencies, industry associations, selected industry members, academia, and NGOs.

Some of the expected uses of the universal principles are to serve as basic guidelines for businesses of all sizes to become more sustainable, and help businesses choose sustainable tourism programs that fulfill these global criteria; to adapt or create relevant standards for all to tourism industry sectors and destinations; and to ensure the standards are understood and adopted by a wide constituency.

Awareness raising

Increasing tourist's awareness of greener tourism practices includes higher visibility of green experiences and services used by tourists as well as residents. A number of 'green maps' compiling the environmentally friendly accommodation and green services have been established in a number of countries and cities.

Example: Green Maps

Figure 6: Green Map Iceland.

The Icelandic »Green Map« is a mapping of environmentally friendly facilities and experiences in Iceland. The map is based on the international Green Map system and is connected to a large database on eco-friendly information about Icelandic companies and tourism. It is published in Icelandic and English with a range of general information and covers the entire country including villages and rural areas.

Another somewhat similar mapping concept is the GoGreen mapping organized by GoGreenGlobe. This also compiles the credible green enterprises and uses a range of media (including social media) to inform tourists and residents of these options.

Example – TUI Travels Sustainable Holiday Plan 2012-2014

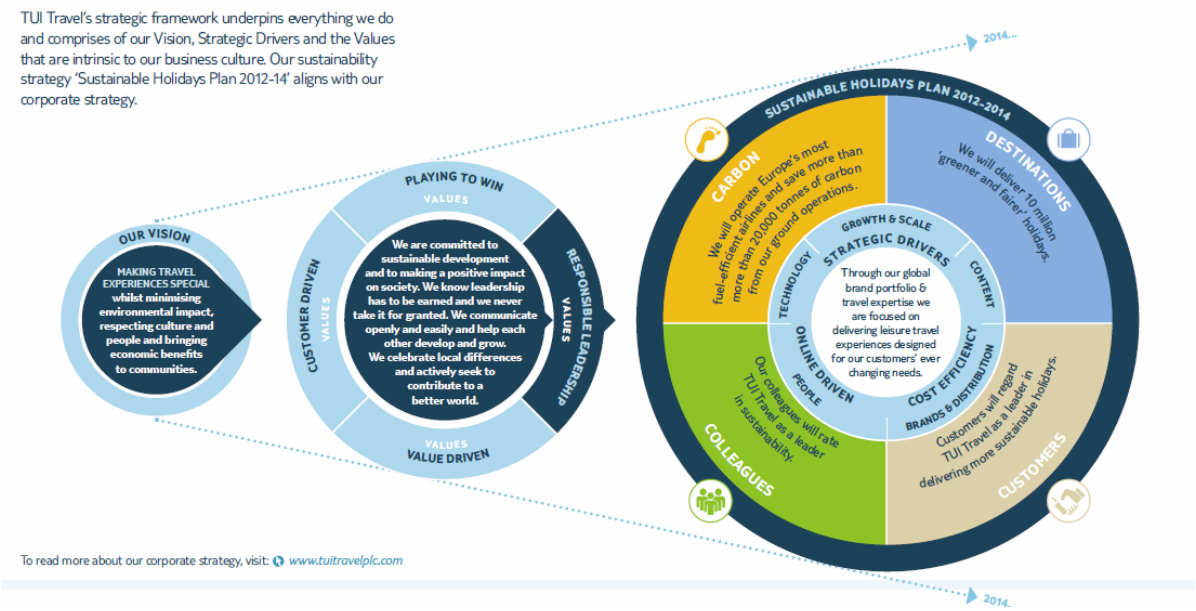


Figure 7: The strategic framework of TUI travels Sustainable Holiday Plan 2012-2014. (Source: TUI 2012).

TUI Travel PLC is one of the world's leading leisure travel companies, with over 240 brands in 180 countries and over 30 million customers and employing approx. 54,000 people. In 2012, the TUI Travel PLC launched a three-year Sustainable Holidays Plan as an industry initiative towards greening of tourism. The Plan comprises 20 measurable commitments linked to four goals – to operate Europe's most fuel-efficient airlines, to reduce carbon on the ground by 20,000 tonnes of CO2, to take 10 million customers on 'greener and fairer' holidays, and to be considered a leader in sustainable holidays by colleagues and customers. The TUI sustainability ambitions are: minimizing environmental impact, respecting culture and people, and bringing economic benefit to communities. This will improve the quality of holidays, and help preserve the destinations. The performance towards sustainability has been integrated into the annual strategy development process of TUI, and has led to significant investment in cutting-edge aviation technology to ensure a continued reduction of the TUI carbon footprint over the next decade. The performance data for the 2012 financial year (1st October 2011 to 30 September 2012) is published in the Sustainable Holidays Report 2012, and show good progress.

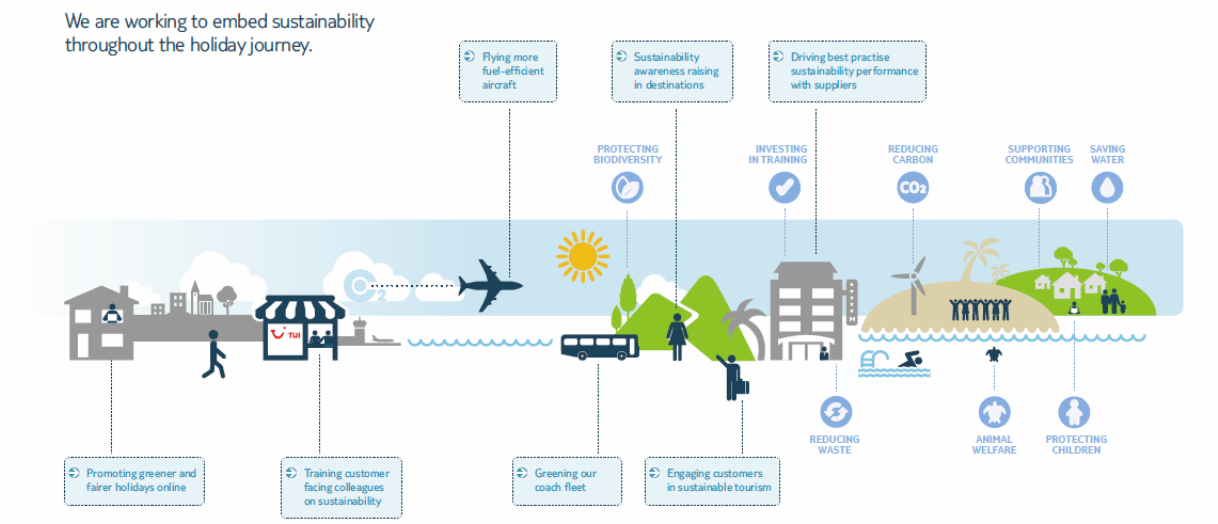


Figure 8: Visualisation of the TUI-initiatives taken at different stages of the holiday journey to increase sustainability (Source: TUI 2012).

Managing tourism in parks and protected areas

Tourists are attracted to areas of high natural quality to enjoy the recreational and scenic qualities. This may results in high pressure on the ecosystems and infrastructure. Naturally, the declaration of new parks – for example national parks or other types of protections, can increase protection and establishment of visitor management. However, specific certification schemes have been developed to help balance the protection and the use of parks and protected areas: the Europarc Federations' 'European charter for sustainable tourism in protected areas', and the Pan Parks certification of wilderness areas while also the Earth Check certification scheme has been applied to larger nature area in and around the Snaefellsjokull National Park in Iceland.

Example: European Charter for Sustainable Tourism in Protected Areas

The European Charter for Sustainable Tourism in Protected Areas is a practical management tool for ensuring that tourism contributes to a balanced economic, social and environmental development of protected areas in Europe. The Charter is a voluntary agreement and aims to encourage good practice by recognizing protected areas, which are meeting agreed requirements for the sustainable development and management of tourism. The Charter and its methodology were developed by a group representing protected areas, the tourism industry and their partners, led by the Federation of Regional Nature Parks in France under the umbrella of the EUROPARC Federation. The Charter and the Charter Network is managed by the EUROPARC Federation, a pan-European and non-governmental umbrella organization of protected areas in Europe. The Europarc certification currently includes 107 protected areas in 13 countries (Europarc 2013).

Example: Pan Parks certification system

The Pan Parks certification system under the WCPA (World Commission on Protected Areas) has a stronger focus on wilderness and the PAN Parks Foundation works to safeguard the remaining European wilderness, the continent's most undisturbed areas of nature for future generation. The Pan Parks Foundation encourage the Certified PAN Parks to develop a Sustainable Tourism Development Strategy and work together with local municipalities and tourism businesses to minimize negative impacts of tourism and maximize the social and economic benefits. While visitors need careful management and guidance, tourism can also offer a good opportunity for raising awareness and engaging people in wilderness protection. Interestingly, a study carried out by the PAN Parks Foundation carried out in 2011 showed that the managers of wilderness areas do not consider tourism as part of the top 3 management challenges. Currently, there are 13 certified Pan Parks in Europe. (Pan Parks 2013).

2.5 The tourism sector in the GREECO approach

Tourism is one of the ten sectors included in the GREECO project. As seen in ***figure 9***, the bio-economic sectors of agriculture, forestry and fisheries as well as the energy sector form the base category focusing on maintaining and developing a green territorial base. Ensuring and developing a green livable environment is linked to the sectors of waste, water and building while the transport sector is maintaining and developing the territorial connections. Tourism is an experience product linked to the near-top category of 'enhancing the green territorial experience'. Finally the top category of ensuring future green development is linked to the sectors of green research and innovation as well as manufacturing.

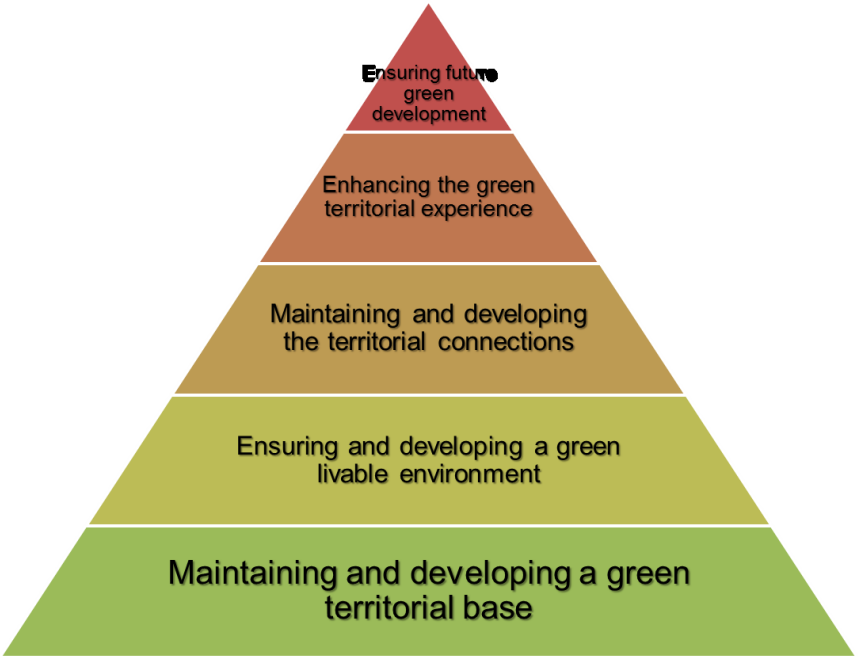


Figure 9: Territorially relevant sectors in the green economy

However, tourism is strongly dependent on the presence of the functions found in the levels below and above. A prerequisite of tourism is the presence of an well-functioning territorial base (base level of figure) with attractive natural qualities (seas, forests, landscape, biodiversity etc.) and long-term maintenance of the base through for example waste and wastewater handling, nature protection etc. so is does not deteriorating over time. Tourism also depends on an attractive liveable environment (level two from bottom) with attractive cultural environments with buildings for tourists, energy

supplies and manufactured products to supply the tourism sector. Furthermore, tourism is highly dependent on mobility and the transport connections linked to the territorial connections (level 3 in figure) but tourism is also a high contributor to emissions – in particular through aviation.

Tourism is part of the experience economy which is a rapidly growing sector around the world with many countries being dependent on it as the dominant driver of economic growth and development. The tourism sector holds a unique territorial relationship with the green economy because of the environmental paradox where, on one hand, it relies on the preservation of natural (as well as social and cultural) capital for its survival, but, on the other hand, touristic infrastructure is the dominant contributor to land take for many regions in Europe. Another key territorial issue is the tourism sectors dependency on the spatial distribution of the natural environment, coastal areas, lakes and rivers, forest, and not least, particular climatic conditions.

Greening of tourism

Within the tourism sector, there are linkages to a number of issues (***figure 10***)

Natural and cultural environment
The base of tourism is the natural and cultural environment which forms the attraction qualities that attract the tourist to experience the place. Maintaining the ecological and socio-cultural functions of these areas is important. As described, if this base deteriorates due to for example over-development, pollution, cultural changes etc. tourism will decline and move on to better locations.

Figure 10: Greening of tourism in relation to key topics in the GREECO project.

Environmental management and eco-labeling

A key environmental relation of tourism to the greening are through adopting more environmental management in the tourism sector including the use of eco-labeling schemes to support these processes.

Land use planning

In relation to green planning and management of tourism, land use planning is a key issue for maintaining a balance between tourism development and maintaining the qualities, ecological functions, and experiential attractiveness of the resource base. Compact land-use may reduce sprawl and infrastructure development needs to consider that tourism is often highly seasonal and should be dimensioned to exceed peak loads. Also issues of nature protection and establishing more parks and protected areas for biodiversity and visitor experiences and interpretation facilities is an issue here including marine parks as tourism is highly oriented to the sea.

Sustainable management of water, waste, etc.

In relation to the responsiveness to changes, a more sustainable management of water, waste and energy consumption in destinations and similar green management practices are likely to be the most responsive. Naturally, these initiatives in tourism should be integrated with greening for other users such as the local residents and generally depend on the same facilities such as water suppliers, waste treatment and wastewater treatment facilities.

Green transport and buildings

Similarly, the energy relations of tourism are also linked to adopting more 'green' energy systems in buildings to reduce consumption and GHG-emissions (and hereby to sustainable management). However, the highest environmental pressures from tourism are from transport to and from the destinations and adopting greener transport in tourism is probably the biggest environmental issue. However, the technological development of greener transport is not a task of the tourism industry but of the transport sector. But adopting and integrating the greener transport systems when available is needed by the tourism industry.

'Greener' food and beverages

Tourists are high consumers of foods and beverages during their holidays – often exceeding the everyday consumption at home. An increased integration of local and organic products would reduce the 'food miles' and the environmental costs by stimulating organic agriculture. Altogether, the ecological footprint would be greener. However, in particular greener transport and management of tourism facilities would contribute to a greener footprint.

Changing behaviour

In terms of user behaviour, there is both a task in raising the awareness of tourists and the awareness of the enterprises in the tourism sector of the impacts of tourism and improved environmental practices. Especially in Europe, awareness of climate change contribute to travelers' choices in demanding environmentally sustainable destinations (Lane 2009; Battaglia et al 2010; Ringbeck et al 2011). Smaller segments of 'green' tourists and tourism products already exist such as 'ecotourism' focused on taking tourists into nature. But significantly increasing this type of niche tourism would elevate the pressures on nature. The more 'conventional' tourists are often seeking a

break from everyday life and responsibilities and their holidays are often associated with higher consumption patterns and more wasteful practices than in their home environment. So the greening efforts to ensure future green development are likely to have the highest effect if focusing on the greening of mass tourism facilities and transport hereby reducing the consumption of energy, water, land for construction etc. as well as reduce the emissions, waste production etc.

Noticing the demand, leading tour operators are focusing on marketing preference to such localities as tourism destinations comprehend that becoming environmentally sustainable is key to staying competitive in the market; especially in key source markets such as Western Europe. As tourists are demanding the greening of tourism, the private sector can be mobilized to support green tourism development. However, the fragmented structure of the tourism industry and the very high number of microenterprises makes it difficult to ensure the awareness and resources (time, finances, knowledge etc.) for greening.

Economic aspects

Growth of the experience economy including tourism is naturally linked on the consumption of natural resources in other sectors, not least in terms of buildings, transport and water and waste management. As such, it is linked to significant environmental challenges including GHG emissions from transport and accommodations, water and waste consumption, and loss of biodiversity – both on land and in water. Tourism is considered as the main component of the green economy initiative as tourism and environmental sustainability have gradually become entwined.

The “greening” of tourism also have linkages to mobilizing investments in this sector. In order to mobilize and capitalize on these investments, better access to tools and instruments and finance for SMEs is essential. The role of governments and international organizations through public-private partnerships will be crucial in this regard. Public policies and support schemes for instance subsidies to encourage private investment in green tourism would provide the conditions for the further development of sustainable tourism. In this connection, destination planning and development strategies are considered as the first step towards the greening of tourism.

Investments in greener and sustainable tourism are emphasized as a means to create employment opportunities and reduce poverty while also improving resource efficiency, biodiversity conservation leading to better environmental outcomes. Investing in greening of tourism can also reduce costs in a long term perspective. Structural changes in tourism practices can motivate change towards green practices within the tourism supply chain as well as in other sectors. Additionally, green investments and innovation have potential to improve the sector’s resilience and increase competitiveness.

Recognizing these potential benefits, tourism businesses and policy-makers are favoring green innovation to enhance environmental, economic and social performance of the sector. Innovation in tourism refers to problem solving, value adding and/or identifying more efficient ways of delivering goods and services.

The potential of tourism for growth, in an uncertain economic environment, is prominent especially in emerging tourism economies. As tourism is currently experiencing a rapid growth worldwide, it has a wide-ranging and important impact on socio-cultural, economic and environmental

development of every region at the global scale. The environmental impacts of tourism is remarkable since the industry is highly dependent on the natural resources for much of its continuation, thus it can also alter the natural environment and local cultural heritage.

While mostly developed countries have experienced an increasing intensity of tourism and leisure activities in recent years, they also managed to take substantial measures to manage tourism in a sustainable manner.

On the other hand, emerging economies which are considered as having rather weak institutional structures, political instability and social and economic structures have faced difficulties in incorporating sustainability principles in their governance of sectors such as tourism which have significant economic potential. The shift towards greening of tourism would create employment and revenue in local communities and also respond to changing consumer demands for a more sustainable travel experience. The added value would be the increase in competitiveness and decrease in operating costs for tourism businesses.

Many tourism operators in Europe have already adopted 'green' practices and ecotourism is a fast growing tourism segment. Internationally recognized eco-certification programmes, such as Green Globe provides a framework for tourism operators to green their business by measures such as developing clean energy and waste management practices, using locally grown organic produce and by marketing their services as "green" and incorporating into the growing eco-tourism market.

2.6 Key tourism aspects from a green growth perspective

As described in the previous sections, the greening of tourism is centered on a number of key aspects such as energy and climate change, water, waste, biodiversity, cultural heritage and these naturally have links to the local economy.

In the UNEP & UNWTO 2012 study on the greening of tourism, a table (***Table 2 below***) summarise the key drivers and likely implications of investment in sustainable tourism strategic areas. As seen, the drivers are diverse (economic, technologic, resource scarcity political, regulatory and consumer driven etc.). However, the likely implications are generally beneficial (reducing management cost, increasing customer satisfaction, higher efficiency etc.).

Table 2: Key drivers and likely implications of investment in sustainable tourism strategic areas (Source: UNEP & UNWTO, 2012).

Strategic area	Sustainability drivers	Likely implications
Energy	• Increased energy costs • Likely carbon surcharges • Customer expectations (particularly from Europe and North America) driving operators and entire supply chain • Availability of low-carbon technology • Possible government incentives • Decreasing costs of renewable energy technologies • Eco-labels and/or voluntary standards • Regulations/legislation on energy efficiency and performance of buildings	• Maintain or reduce operating costs for tourism operators through energy efficiency • Increased customer satisfaction • Investment in energy efficiency (retrofits, improvements) • New energy-efficient investment stock • Investment in more energy efficient features and services (such as efficient refrigeration, television and video systems, air conditioning and heating, and laundry) • Differentiation of operators and their value chains • Modest shift toward short-haul versus long-haul tourism, with the effect increasing with energy costs (and offset to the extent efficiency is increased)
Climate change	• Costs of GHG emissions (driven by post-Kyoto rules) • Concern of customer base about footprint • Host government policies and priorities (climate change mitigation and energy) • Uptake of Corporate Social Responsibility (CSR) • Climate change impact on tourism sites	• Same as for energy efficiency • Increased substitution of fuels toward electricity, particularly increased investment in passive solar collectors and PV, alternative fuels for vehicles • Increased number of project developers orienting business strategies toward lower-carbon footprint • Expectations of broader stakeholder base • Demand for carbon offsets and other mechanisms to compensate for residual emissions
Water	• Water scarcity • Price for water and conflicts • Expectations from travellers for responsible water management • Expectations from major tour operators	• Reduction in water costs from internal water efficiency • Investments in water saving technology in rooms, facilities (such as laundry and swimming pools) and attractions (such as golf courses, gardens, and water-based attractions) • Increase in number of rooms/visitors in water-constrained destinations • Slight advantage to destinations with more abundant water supplies in terms of variety of activities and cost of water resources • Increased use of water treatment systems, at firm/project level and destination

Strategic area	Sustainability drivers	Likely implications
Waste	• Customer demand for clean destination • Public opinion • Degradation of water resources owing to waste dumping and waste water • Pressure from major tour operators	• Lower pollution and natural resource • Improved solid waste management • Reduction of open waste dumping sites and poorly managed landfills • Investments in waste water management equipment, treatment and disinfection. • Investment in sanitary landfills and solid waste recycling capacity • Lower sewage and clean-up fees
Biodiversity	• Increased tourist preference for experiences that involve contact with wildlife and pristine (or near pristine) ecosystems • Expectations from guests that operators protect the natural resource base • Government regulations regarding sensitive ecosystems such as coral reefs, coastal wetlands and forests • National policies to attract resources through tourism capable of protecting critical biological habitat • Ecosystem services potential for tourism revenue generation	• Demand for nature-based tourism likely to accelerate as pristine areas become increasingly rare • Increased number of policies and related practices in mainstream tourism to more effectively protect sensitive ecosystems • Improved design of individual projects and destinations incorporating biodiversity protection *in situ,* and through compensatory mechanisms • Increased incorporation of natural areas in tourism development and greater transfer of benefits toward natural areas through entrance fees and Payment for Environmental Service (PES) schemes
Cultural heritage	• Tourist preference for experiences that involve contact with authentic cultural landscapes • Expectations from guests that their tourism operators respect and protect traditional culture • Increased awareness of World Heritage Sites • Recognition and appreciation for cultural diversity	• Respect and recognition of traditional culture, particularly in context of assimilation into a dominant culture. Help to community members to validate their culture, especially when external influences of modern life cause the young to become dissociated from traditional life and practices. • Protection of traditional lands and natural resources on which the culture has traditionally relied. • Help to reduce poverty within a community or cultural group; Increased opportunities for young to remain in community instead of seeking alternative opportunities in cities and towns; Meeting needs of cultural group, such as health care, access to clean water, education, employment, and income. • Reduced risk of losing unique cultural attributes

Strategic area	Sustainability drivers	Likely implications
Linkages with local economy	• Demand for more contact with local communities • Greater number and variety of excursions in a given destination • "Buy local" movement in food and beverages sector • CSR uptake • Public and private initiatives of local workers training • Growth of specialized niches (ecotourism, rural tourism, adventure tourism, sports fishing, agrotourism, and community-based tourism) • Development of infrastructure and supporting industries	• Concerted efforts by tourism authorities, local officials and civil society organizations to increase local content • Responses by tourism operators and increasing use of indicators to track local contribution (which feed into tourism satellite accounts) • Deepening of supply chain in local economy, generating increased indirect employment • Increased spending in local economy from income effects in direct and indirect employee consumption and purchases • Improved income distribution among industry stakeholders • Decreased leakage (imports of intermediate goods and foreign workers)

Source: Compilation.

Expected effects from investments in sustainable tourism

Furthermore the UNEP & UNWTO 2012 study summarizes the expected effects from investments in sustainable tourism (***Table 3 below***). As seen, the investments in sustainable tourism creates a number of business opportunities, there is also a related job creation in different sectors, the investments and capital developments are generally positive and for all sectors the investments leads to positive local development

Table 3: Expected effects from investments in sustainable tourism. (Source: UNEP & UNWTO, 2012).

Impact / Key area	Business opportunities	Job creation	Investment and capital formation	Local development
Energy	• Reduction of operating costs leading to bottom line profits. • Potential for certification and differentiation based on energy performance. • Productivity improvements through efficient equipment use.	• Neutral net effect on job creation within the tourism sector from differentiation (consumers preferences would shift from one destination to another). • Increased local job creation in energy efficiency technicians and related personnel. • Indirect job creation in related businesses.	• Investment in retrofit of existing assets. • Increased physical capital from investment in new energy efficient infrastructure and equipment. • Reduced pressure in natural capital through less fossil fuels generated energy.	• Increased job creation in related businesses (energy retrofits and renewable energy production and installation). • Energy efficiency in related businesses (across value chain, from suppliers to customers). • Lower vulnerability of local economy to oil shocks. • Contribution to climate change mitigation.
Climate change	• Potential for certification and differentiation based on climate change strategy. • Savings from fossil fuel substitution (reduced volatility, perhaps long-term savings). • Local and global carbon markets. • Integration with forest and biodiversity conservation projects. • Payments for Environmental Services (PES).	• Neutral net effect on job creation within the tourism sector from differentiation (consumers preferences would shift from one destination to another). • Indirect job creation in related businesses.	• Investment in low-carbon technology. • Increased physical capital from fixed investment in low emissions technology. • Increased natural capital depending on energy source being reduced. • Intangible capital increases with knowledge and expertise in low-carbon efficiency, installation, operation and management.	• Increased job creation in related businesses (energy, climate change mitigation). • Contribution to resilience strengthening in local economy. • Contribution to climate change mitigation projects. • Attraction of investment for mitigation projects.

Impact / Key area	Business opportunities	Job creation	Investment and capital formation	Local development
Water	• Reduction of operating costs leading to bottom line profits. • Potential for certification and differentiation based on water consumption and management. • Integration with water resource management and conservation initiatives. • Payments for Environmental Services (PES).	• Neutral net effect on job creation within the tourism sector from differentiation (consumers preferences would shift from one destination to another). • Indirect job creation in related businesses.	• Increased physical capital from fixed investment in pipelines, dams and water production technology. • Increased natural capital from water reservoirs maintenance and improvements. • Intangible capital increases with knowledge and expertise in sustainable water resources use.	• Increased job creation in related businesses (water management). • Possible reduction in water sales from local suppliers. • Reduction of water stress. • Lower prices of water services.
Waste	• Reduction of operating costs leading to bottom line profits. • Potential for differentiation based on clean site reputation. • Market opportunities for biogas energy. • Recycling business growth.	• Neutral net effect on job creation within the tourism sector from differentiation (consumers preferences would shift from one destination to another). • Indirect job creation in related businesses.	• Increased physical capital from fixed investment in sanitary landfills and energy cogeneration. • Increased natural capital from water reservoirs maintenance and improvements. • Intangible capital increases with knowledge and expertise in waste management.	• Growth of new businesses and jobs related to solid waste management, collection, disposal and recycling. • Reduction of aquatic pollution and disease risk. • Increase of safe water supply. • Reduction of destination's sewage and clean-up fees.
Biodiversity	• Potential for certification and differentiation based on natural attractions and biodiversity conservation. • Payments for Environmental Services (PES). • Integration with biodiversity based businesses.	• Neutral net effect on job creation within the tourism sector from differentiation (consumers preferences would shift from one destination to another). • Indirect job creation in related businesses.	• Increased physical capital from fixed investment in necessary infrastructure. • Increased natural capital from natural resources conservation. • Intangible capital increases with sound conservation attitudes.	• Increased job creation in related businesses. • Visitation of natural attractions in accordance to carrying capacity. • Protection of buffer zones. • Ecosystem restoration. • Mitigation of climate change impacts. • Investment on biodiversity based businesses (i.e. bioprospection).

Impact / Key area	Business opportunities	Job creation	Investment and capital formation	Local development
Conservation of cultural heritage	• Potential for certification and differentiation based on cultural landscapes. • Increased business with traditional micro and small enterprises. • Increased business of authentic goods and cultural services.	• Neutral net effect on job creation within the tourism sector from differentiation (consumers preferences would shift from one destination to another). • Indirect job creation in related businesses.	• Increased physical capital from fixed investment in necessary infrastructure. • Increased natural capital from cultural landscapes conservation. • Intangible capital increases with sound conservation attitudes.	• Increased job creation in related businesses. • Visitation of cultural attractions in accordance to carrying capacity. • Ecosystem restoration. • Investment on local culture based businesses. • Competitive positioning of authentic destinations.
Linkages with local economy	• Reduction of operating costs through local procurement and hiring. • Potential for certification and differentiation based on stronger community based business. • Scale effect on local business opportunities because of built reputation. • Reduction of turnover and better human resource management.	• Positive net effect on job creation within the tourism sector. • Indirect job creation in related businesses and support industries.	• Increased physical capital from fixed investment in infrastructure. • Increased natural capital due to sustainable clusters neutral environmental impact. • Intangible capital increases with knowledge and awareness to promote the sustainable use of natural resources.	• Creation of tourism clusters and strengthening of support industries. • Reduction of leakage and increase of income in the local economy. • Development of micro and small locally owned businesses. • Recruitment and training of local employees.

Source: Compilation.

3. Current State of the Tourism Sector in Europe

Tourism is an activity affecting all regions of Europe to a varying degree. The key economic indicators such as overnight stays, international arrivals and, employment etc. are measured and reported by Eurostat. Key highlight of the current state of tourism is found below, but more detailed information can be obtained from Eurostat. It should be noted that the data is describing outbound travel patterns by Europeans, not the inbound which would be better from a territorial perspective.

General trends

Despite the economic crisis, the number of holiday trips made by EU residents has remained more or less stable for the last four years at just over one billion trips (***table 4 and figure 11***) and 5.6 billion overnight stays by holiday tourists but trips were slightly shorter than before. For business trips, both the number of trips as well as their length fell steadily. Europeans made fewer work-related trips than before the start of the crisis and the trips they did make were shorter. Business travel dropped from 166 million in 2008 to 145 million in 2011, contracting by -12.7 %.

Table 4: Trends in number of trips, nights spent and average duration of the trips made by EU-27(1) residents, 2005-2011. (Source: Eurostat 2013).

	Trips			Nights			Average duration		
	All trips	Holiday trips	Business trips	Total	Holiday	Business	Total	Holiday	Business
2005	1.086.737.387	950.172.036	136.565.352	6.043.317.294	5.552.723.916	490.593.378	5,6	5,8	3,6
2006	1.082.022.035	944.603.872	137.418.164	6.046.578.989	5.583.551.284	463.027.705	5,6	5,9	3,4
2007	1.149.835.962	986.306.764	163.529.198	5.996.783.542	5.442.654.549	554.128.992	5,2	5,5	3,4
2008	1.211.089.881	1.045.304.956	165.784.925	6.462.584.221	5.902.963.869	559.620.352	5,3	5,6	3,4
2009	1.207.469.502	1.049.178.114	158.291.388	6.246.483.291	5.739.964.558	506.518.733	5,2	5,5	3,2
2010	1.187.119.216	1.036.050.603	151.068.612	6.148.641.885	5.664.582.167	484.059.718	5,2	5,5	3,2
2011	1.186.324.938	1.041.352.370	144.972.569	6.111.846.580	5.656.967.639	454.878.942	5,2	5,4	3,1

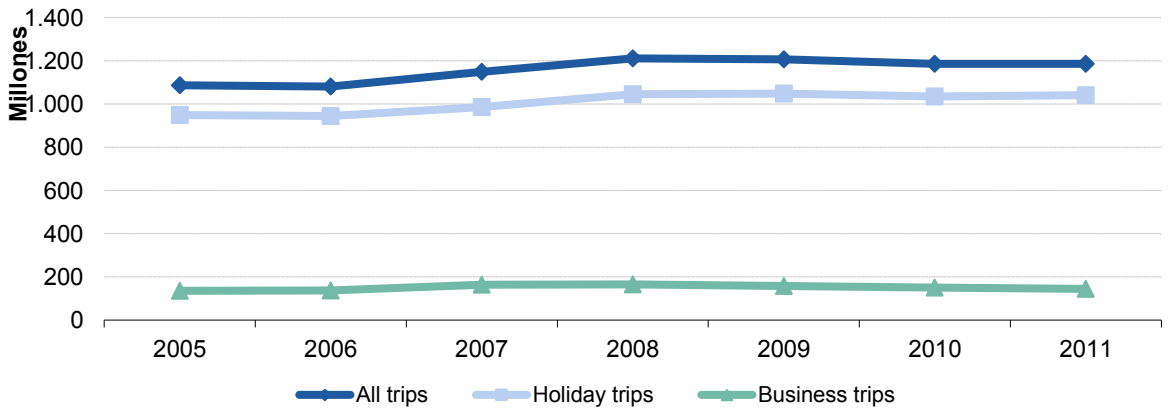


Figure 11: Trends in number of trips of EU-27(1) residents, 2005-2011 (source Eurostat 2013).

When comparing 2010 and 2011 statistics (***table 5***) there is a small growth of 0.5 % in the total number of holiday trips but a small drop in the nights spent (-0.1%) by holiday tourists. Overall, the Europeans made 5 million more holiday trips in 2011. Spending on an average trip rose by 0.5 %. Expenditure per night grew by 1.4 %. Both spending per trip and per night rose relatively more for domestic trips than for outbound trips.

Table 5: Holiday trips made by EU residents, EU-27(1), 2011 compared with 2010. (Source: Eurostat 2013).

		All holiday trips			Long holiday trips			Short holiday trips		
		Total	Domestic	Outbound	Total	Domestic	Outbound	Total	Domestic	Outbound
Number of trips made (millions)	2010	1.014	775	238	452	268	185	561	508	53
	2011	1.019	778	241	457	269	188	562	509	53
	% change	0,5	0,3	1,2	1,0	0,5	1,7	0,1	0,2	-0,7
Number of nights spent (millions)	2010	5.529	3.361	2.167	4.456	2.408	2.048	1.073	954	119
	2011	5.522	3.338	2.183	4.443	2.379	2.064	1.079	959	119
	% change	-0,1	-0,7	0,7	-0,3	-1,2	0,8	0,5	0,6	0,1
Average length of trips (nights)	2010	5,5	4,3	9,1	9,8	9,0	11,1	1,9	1,9	2,2
	2011	5,4	4,3	9,1	9,7	8,8	11,0	1,9	1,9	2,2
	% change	-0,6	-1,0	-0,4	-1,3	-1,7	-0,9	0,4	0,3	0,8
Tourist expenditure(2) (in million euro)	2010	310.496	139.490	171.006	237.864	83.406	154.458	72.632	56.084	16.548
	2011	312.760	140.353	172.398	239.854	84.514	155.345	72.891	55.839	17.052
	% change	0,7	0,6	0,8	0,8	1,3	0,6	0,4	-0,4	3,1
Average expenditure per trip (in euro)	2010	347	210	746	575	355	867	151	130	324
	2011	349	211	745	577	360	858	151	130	339
	% change	0,5	0,6	-0,1	0,2	1,5	-1,1	0,4	-0,5	4,7
Average expenditure per night (in euro)	2010	63	49	82	59	40	79	79	70	146
	2011	64	50	82	60	42	78	79	69	151
	% change	1,4	2,2	0,2	1,7	3,7	-0,2	0,3	-0,7	4,0

(1) EU-27 estimate made for the purpose of this publication, not including IE, EL and MT.

(2) EU-27 estimate for expenditure made for the purpose of this publication, not including IE, EL, ES and MT.

From a territorial perspective, there is a significant difference in the distribution of domestic and outbound travel by country within the EU. In 2011, most trips Europeans made were to a destination within the Member State where they live (76 %), with fewer than one in four trips abroad (24%) (see ***Table 6***). However, big differences were observed across the EU. Some residents spent less than half of their holidays in their own country. That was the case for Belgium (26 %), Luxembourg (less than 1 %), the Netherlands (48 %) and Slovenia (44 %). Others stayed 'at home' for more than nine out of 10 holiday trips in 2011. That was very much the case for residents of Spain (92 %), Portugal (91 %) and Romania (93 %). Also for some other large tourism countries for example France and Italy, the domestic tourism is generally high.

Table 6: Holiday trips made by EU-residents by country, 2011. (Source: Eurostat 2013).

	All holiday trips			Long holiday trips			Short holiday trips		
	Total ('000)	% share on total		Total ('000)	% share on total		Total ('000)	% share on total	
		Domestic	Outbound		Domestic	Outbound		Domestic	Outbound
EU-27[1]	*1.019.269*	*76*	*24*	*457.070*	*59*	*41*	*562.199*	*91*	*9*
BE	11.280	26	74	6.980	15	85	4.299	43	57
BG	5.573	88	12	2.458	79	21	3.115	94	6
CZ	33.985	84	16	11.475	63	37	22.510	95	5
DK	*28.931*	*78*	*22*	*7.652*	*40*	*60*	*21.278*	*92*	*8*
DE	214.999	66	34	107.023	44	56	107.976	89	11
EE	2.236	63	37	688	28	72	1.548	79	21
IE	:	:	:	:	:	:	:	:	:
EL	:	:	:	:	:	:	:	:	:
ES	121.535	92	8	40.929	83	17	80.606	96	4
FR	203.851	89	11	98.292	82	18	105.559	95	5
IT[2]	71.264	81	19	37.591	72	28	33.673	90	10
CY	1.705	52	48	921	20	80	784	89	11
LV	4.187	78	22	909	34	66	3.277	90	10
LT	3.423	63	37	1.214	32	68	2.209	81	19
LU	1.340	<1	>99	811	<1	>99	529	<1	>99
HU	19.272	80	20	5.759	61	39	13.513	89	11
MT	429	52	48	182	12	88	247	81	19
NL	30.269	48	52	18.970	34	66	11.299	71	29
AT	16.393	50	50	8.851	35	65	7.542	68	32
PL[3]	*30.759*	*86*	*14*	*14.329*	*76*	*24*	*16.430*	*95*	*5*
PT	11.096	91	9	3.553	80	20	7.543	96	4
RO	12.490	93	7	5.165	85	15	7.325	99	1
SI	4.249	44	56	1.789	24	76	2.460	59	41
SK	6.855	60	40	3.856	47	53	2.999	78	22
FI	37.090	84	16	8.330	68	32	28.760	89	11
SE	42.198	75	25	14.951	55	45	27.247	87	13
UK	116.925	62	38	60.451	37	63	56.475	88	12
NO	17.318	61	39	7.473	41	59	9.846	77	23
HR	7.039	71	29	3.181	70	30	3.858	73	27

[1] EU-27 estimate made for the purpose of this publication, not including IE and EL.

[2] IT: 2010 data

[3] PL: estimated data was used for the 4th quarter 2011.

Accommodation on trips by EU residents

As seen in ***figure 12,*** most trips by EU residents in 2011 were spent at so-called private tourist accommodation. This type of accommodation includes rented rooms in family homes, dwellings rented from private individuals or professional agencies, but also second homes and accommodation provided for free by friends or relatives. Stays at hotels or similar establishments accounted for about a fourth (26 %) of holiday trips, while other collective accommodations such as holiday dwellings, campsites or youth hostels were used for nearly 10 % of holiday trips (Eurostat 2013).

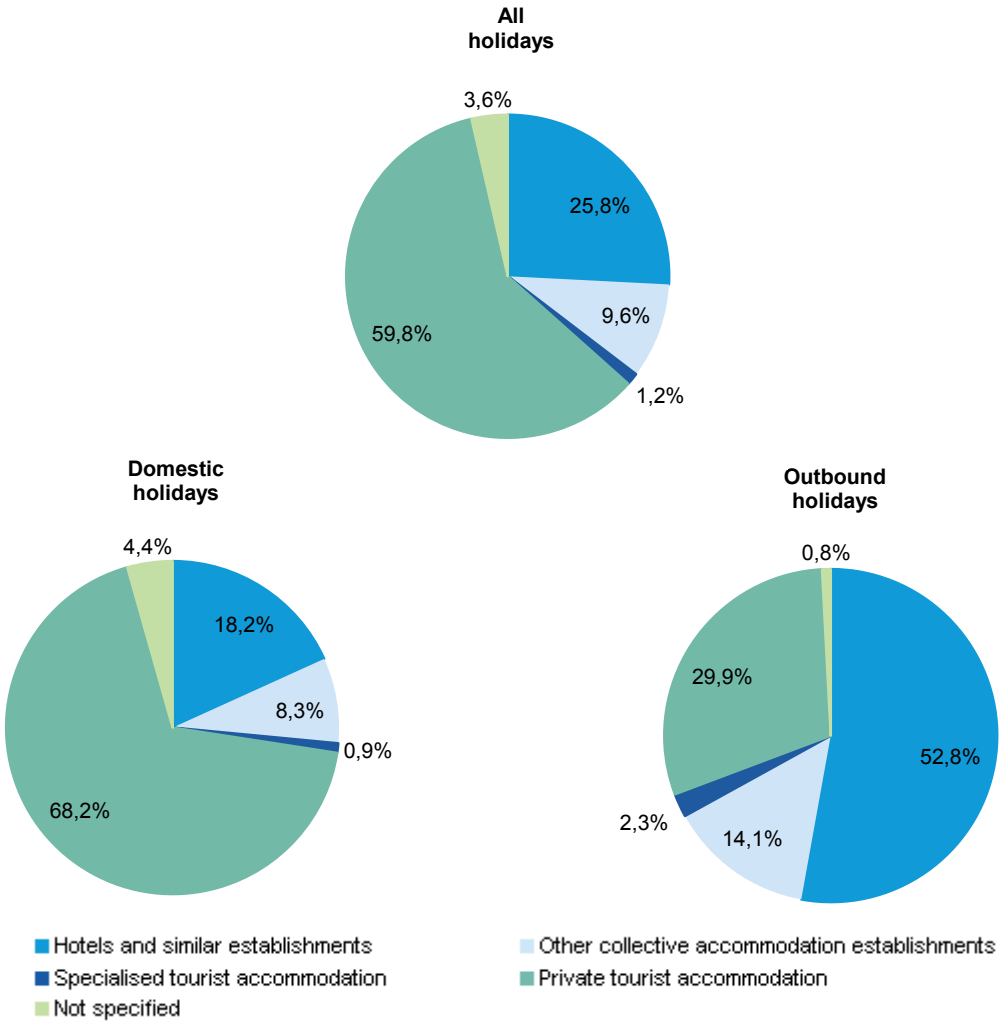


Figure 12: Share of holiday trips of EU (1) residents by main means of accommodation, 2011(2)

For domestic trips, more than two-thirds (68.2 %) of the holidays were spent at private accommodation and less than 20 % at hotels or similar establishments. For outbound trips, the opposite was the case, with hotels or similar establishments accounting for 52.8 % and a significant 14.1 % of holiday trips spent in rented holiday dwellings, at campsites or youth hostels (Eurostat 2013).

From a territorial perspective, this is highly relevant information, as the majority of the tourism accommodation is basically not accounted for in terms of spatial location or more detailed statistics, as the overnight facilities are private or not specified. In some countries (e.g. Denmark), there are special calculations made on overnight stays and economics of tourists using these facilities that are not included in the Tourism Satellite Account system.

When looking at the trend between 201-2011 in nights spent in collective tourist accommodation (hotels, campgrounds, hostels and similar collective types of facilities) there are some fluctuations with a smaller decline after the economic crisis but also a trend of recovery (***figure 13***). In fact the 2.364 billion overnight stays in collective tourism accommodation in 2011 exceed the 2007 peak of 2.314 billion overnight stays in collective tourism accommodation, which are generally the types of facilities monitored through the Tourism Satellite Accounting as the registered tourism overnight stays. But as seen in ***figure 12*** above, the collective tourism accommodation still only represents around 35% of the tourism accommodation used by tourists.

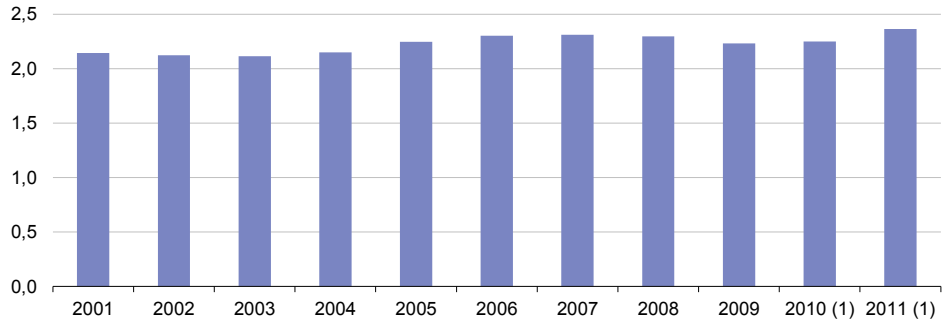


Figure 13: Number of nights spent in collective tourist accommodation, EU-27, 2001-2011. (1 000 million nights spent by residents and non-residents) (Source Eurostat 2013b).

The trends in hotels may provide a more detailed view of the fluctuations in tourism before and after the economic crisis. ***Table 7*** shows the registered tourist nights spent in hotels and similar establishments in EU-27 and ***Figure 14*** indicates the growth compared to year 2000. As seen, the tourism accommodation sector show clear signs of recovery, as the number of nights in 2011 were well above the previous peak registered in 2007. Also, considering nights spent by residents and by non-residents separately, both series exceeded the pre-crisis level.

Table 7: Nights spent in hotels and similar establishments 2000-2011 in EU-27. (Source: Eurostat, 2013).

	Number of nights spent in hotels and similar establishments, *in millions*											
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010 (e)**	**2011(e)**
Total	1428	1433	1406	1392	1417	1481	1525	1578	1573	1511	1554	1630
Residents	781	783	769	765	773	809	820	848	849	840	841	871
Non-residents	647	650	637	627	644	672	705	730	724	671	713	759

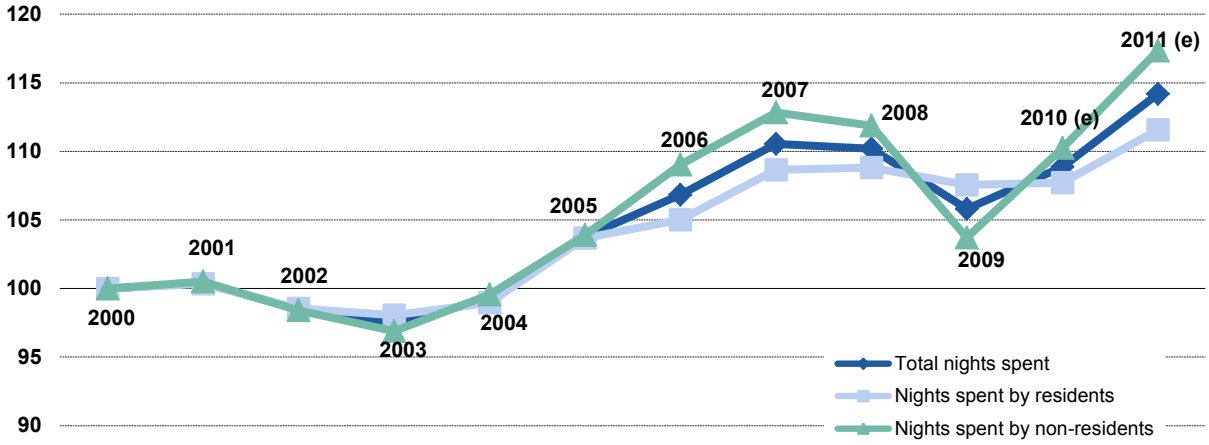


Figure 14: Trends in number of nights spent in hotels or similar establishments, EU-27, 2000-2011 (index: 2000=100) - Source: Eurostat 2013).

European regional differences in tourism growth

The WTO 2020 Vision presented in the introduction of the report also includes predictions for different number of tourist arrivals (figure 1) and different growth rates (figure 2) in different European regions. The Southern, Central/ Eastern and Western European regions are those receiving the highest numbers of International tourists, while the Northern region and the Eastern Mediterranean region receive fewer.

Differences in European tourist generating regions

The WTO study also predicts the development of the tourist generating regions. The majority of the outbound European tourists originate from Western and Northern European regions. And this pattern is predicted by WTO to continue also in the future as the annual growth rates are fairly similar for all regions. However, these predictions may be influenced by the political changes in Europe and the integration of many Central/Eastern European countries into the EU. Tourism growth rates are higher in these countries.

No long-term predictions of growth in Domestic tourism

The WTO growth scenarios only covers the trends in international tourism (inbound and internal tourism) while future changes in domestic tourism is not predicted in any scenarios. However, (as will be described later, see figure 1.12), domestic tourism is also growing but not quite as fast as International tourism. Domestic tourism in EU27 had an approx. average annual 2.4 % growth rate between 1995 and 2005 (based on Eurostat 2007 data on overnight stays in EU27).

Many factors influences tourism growth

Making predictions of the future growth of a highly complex phenomenon such as tourism is rather difficult. As described in a previous working paper (Kaae, 2005), a high number of factors of change may affect the growth and distribution of tourism. Key drivers include five main categories (for detailed description see Nordin 2005, Eurostat 2006):

- Political factors (e.g. the effects of 9/11, Madrid 2004 bombs, new EU member countries).
- Economic factors (e.g. the recession in Germany, trends in GDP, employment, consumer prices, etc.).
- Social, health and weather factors (e.g. focus on access for all including disabled, outbreak of foot and mouth disease in GB 2001/2002, floods in Central and Eastern Europe 2003 etc.).
- Market and accessibility factors (demographic changes, ageing, new holiday patterns with more but shorter holiday trips, increased interest in nature, authentic places, culture and adventure tourism, increased access from low cost carriers, development in 'proximity tourism' – tourism close to home for weekend trips).
- Technology factors (e.g. development of Internet and e-commerce, information and communication technologies (ITC), multimedia, mobile technologies (GSM, UMTS), and navigation systems (GPS), destination management systems etc.)

Many of these issues are unpredictable in a longer perspective.

Implications of tourism growth

The growth in tourism contributes to economic growth and employment in the receiving regions. Tourism also has a number of both positive and negative socio-cultural effects on host communities (e.g. crowding, traffic problems, litter, noise, trampling of nature, acculturation, increased awareness of local identity, increased understanding of other cultures, etc.) and different strategies of coping are used (See Dogan 1989, Doxey 1975, Black 1996, Boissevain 1996, Pearce, Moscardo & Ross 1996, Murphy 1985, Brown & Giles 1994, Butler 1975, 1980, Kaae 1999, 2007).

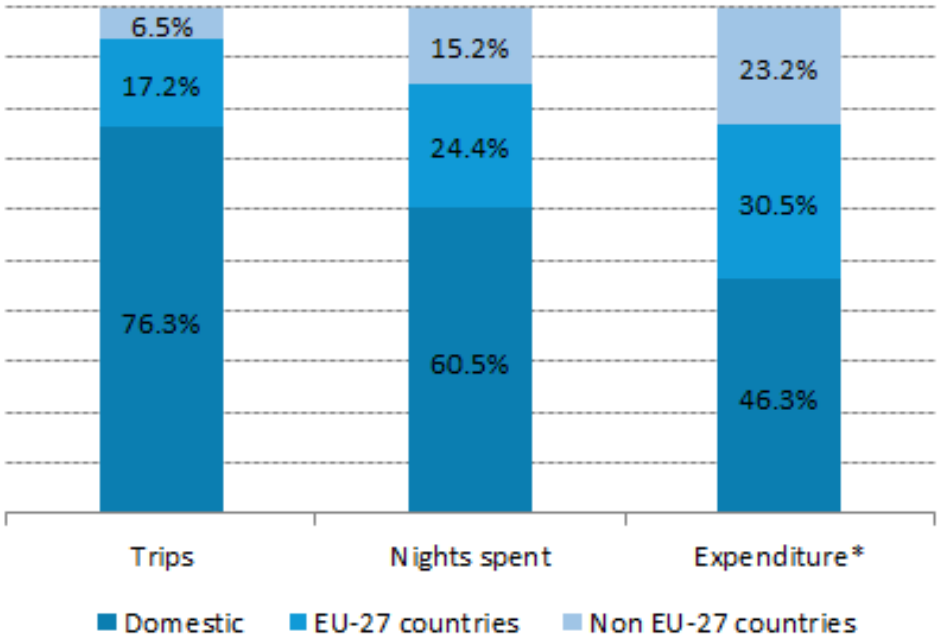
In addition to the social and economic impacts on the receiving regions, tourism has significant impacts on the environment in destinations and through transport (see later section).

Finally, tourism has a range of spatial implications in the form of tourism facilities, services, infrastructure etc. But these are not separated from other land use categories and consequently very difficult to assess.

4 Territorial dynamics of tourism – current performance

Tourism is a leading global industry representing 5% of the world GDP and 8% of employment worldwide. Europe is still the most visited tourist destination worldwide with the highest density and diversity of tourist attractions, and tourism continues to expand at an average growth rate of 2.8% in international tourist arrivals in Europe (2000-2008). However, tourism is growing at even higher rates in other regions of the world.

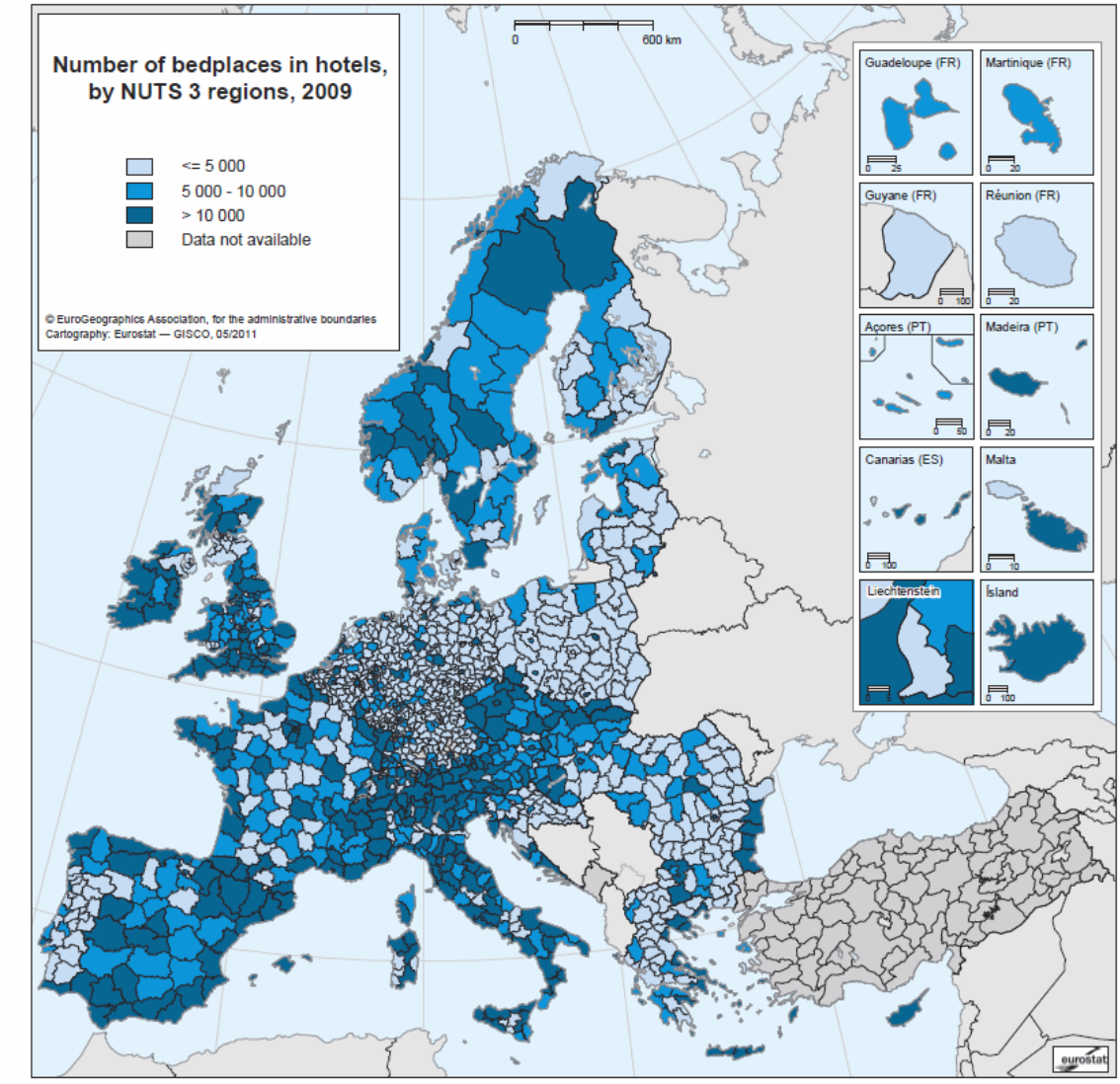
The tourist industry is a key sector of the European economy generating over 10% of EU GDP (directly or indirectly) and employing 9.7 million people in 1.8 million businesses (Eurostat cf. Joint Research Centre (2013). Europeans travel extensively. In 2011, the residents of the European Union (EU27) made 1.04 billion holiday trips and spent 5.7 billion nights on these trips while tourist expenditure amounted to EUR 338 billion (Eurostat, 2013). However, more than 3 out of 4 trips (76.4%) were domestic trips (i.e. trips in the tourist's own country) while 17.2 % of the trips were to another EU Member State and 6.5 % traveled outside the EU (Eurostat, 2013). Domestic trips accounted for 60 % of the tourist nights spent and 46 % of the total expenditure (***figure 15***). Intra-EU travel accounted for 17.2 % of EU resident trips, 24.4 % of the nights spent and 30.5 % of the expenditure. Outbound trips of EU residents to countries outside the EU accounted for 6.5% of the trips, 15.2 % of the nights and 23.2 % of expenditure (Eurostat 2012). In addition to holiday trips, business tourists accounted for an additional approx. 0.2 billion trips in 2011 (not included here). A number of inbound tourists from outside the EU (in 2000 approx. 9% of tourism) are not included in this data.



* Expenditure: EU-27 estimate for the purpose of this publication, based on 20 MS data (not including BG, CZ, DK, EE, LT, AT and FI).
Source : Eurostat (online data codes: tour_dem_ttq, tour_dem_ttw, tour_dem_tnq, tour_dem_tnw, tour_dem_exhol, tour_dem_exholw)

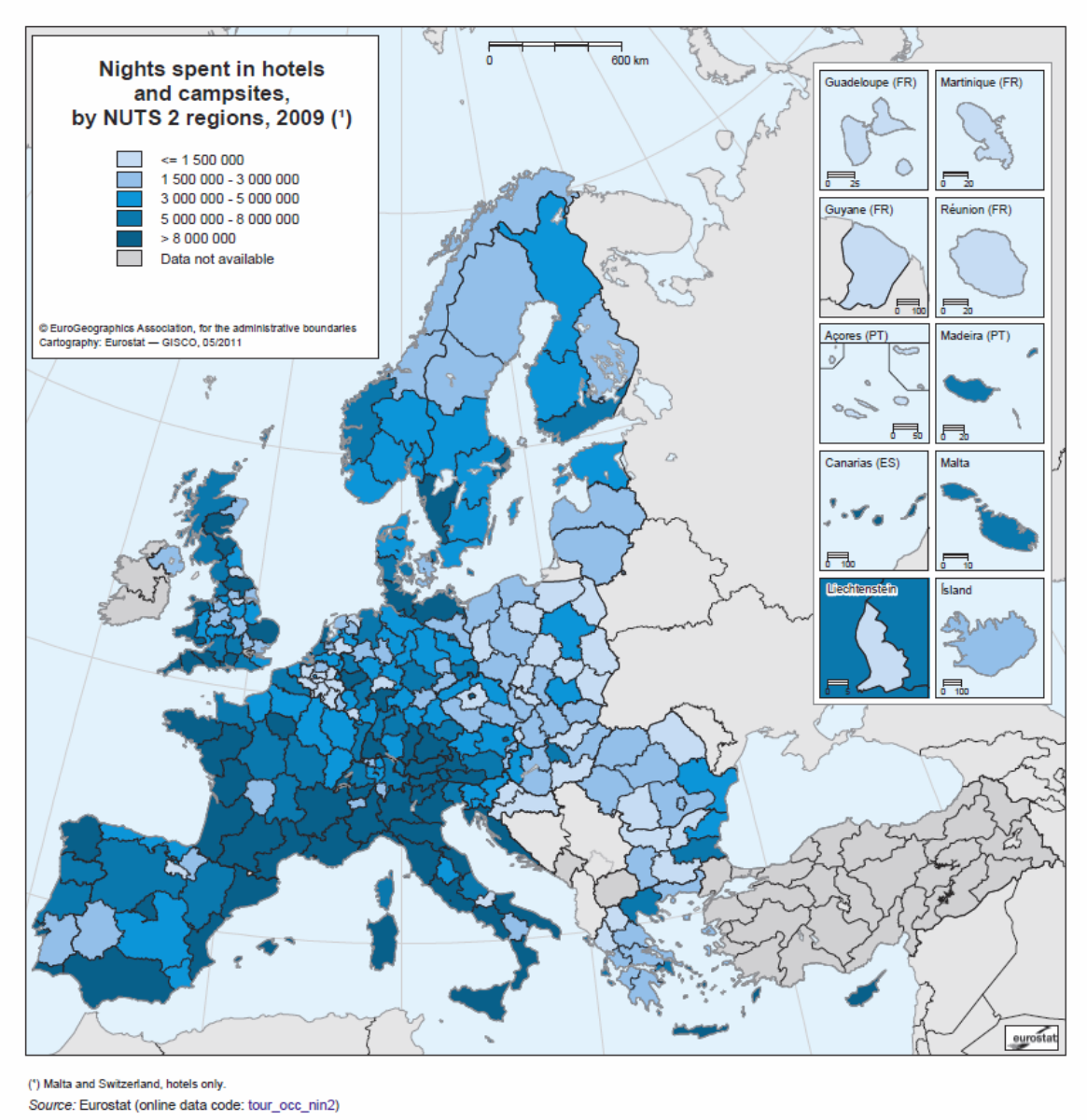
Figure 15: Outbound travels by EU27 residents in 2011 in percentage of trips, nights spent and expenditure on domestic, EU27 and non-EU27 countries) (Eurostat 2012).

The choice of destination may be determined by proximity and/or relative attractiveness (e.g. in terms of climate) and neighbouring or nearby countries were the preferred foreign destinations for holiday trips of nearly all the European tourists (Eurostat 2013). But the travel patterns differ among residents from various EU countries and the distribution of tourism flows and tourism facilities is highly uneven in the EU territories. The most visited countries are Spain, Italy and France. Parts of the spatial tourism patterns can be seen in ***figure 16*** of the distribution of hotel bed places at NUTS 3 regions in 2009, while ***figure 17*** shows the nights spent in hotels and campsites by NUTS 2 regions in 2009. Older but more complete maps of the distribution of all different types of bed places in total, their spatial intensity, overnight stays by Europeans and inbound tourists etc. at NUTSX levels can be found in the SENSOR project (Kaae at al. 2007).



Source: Eurostat (online data code: tour_cap_nuts3)

Figure 16: Number of bed places in hotels by NUTS3 regions 2009. (Source: Eurostat 2013).



(¹) Malta and Switzerland, hotels only.
Source: Eurostat (online data code: tour_occ_nin2)

Figure 17: Nights spent in hotels and campsites by NUTS2 regions in 2009 (Source: Eurostat 2013)

Eurostat (2012b) (see ***table 8 below***) estimate that the EU27 has a supply of approx. 202 000 hotels and similar establishments in 2011 as well as 271 000 other collective tourist accommodation establishments (such as campsites and holiday dwellings). This indicates an estimated 473,000 accommodation establishments. Hotels and similar establishments provided almost 12.6 million bed places, of which nearly half (46.4 %) were concentrated in three of the EU Member States namely, Italy (2.3 million bed places), Spain (1.8 million bed places) and Germany (1.7 million bed places). An addition 21 % is found in the United Kingdom (1.4 million bed places) and France (1.3 million bed places). So more than two thirds (67.6 %) of the bed capacity in hotels and similar establishments are found in five of the member countries. So these countries have a high potential for greening of this type of facilities.

In 2011, resident and non-resident (foreign) tourists spent over 1 600 million nights in hotels and similar establishments in the EU-27 (Eurostat 2012b).

Table 8: Tourism indicators 2006 and 2011 – number of units, bed places, nights spent and share of the population participating in tourism (Source Eurostat 2013b).

	Hotels & similar establishments (units)		Other collective accommodation establishments (units)		Bed places in hotels & similar establishments (1 000)		Nights spent in hotels & similar establishments (1 000) (1)		Share of the population (aged 15+) taking part in tourism trips of at least 4 nights (%)	
	2006	2011 (2)	2006	2011 (3)	2006	2011 (4)	2006	2011 (5)	2006	2011 (6)
EU-27 (7)	201.168	*202.380*	221.382	*270.603*	11.541	*12.585*	1.524.989	*1.637.326*	*54,9*	*51,9*
Belgium	1.955	2.091	1.429	1.415	124	131	15.371	17.966	45,1	48,2
Bulgaria	1.348	1.862	496	459	212	242	16.118	17.454	:	*6,5*
Czech Republic	4.314	4.612	3.302	3.045	236	262	25.889	27.880	51,6	58,4
Denmark	473	519	603	600	71	87	10.647	11.872	62,5	30,2
Germany	36.201	35.579	18.596	17.585	1.631	1.749	208.176	240.782	80,7	67,3
Estonia	341	374	610	784	26	31	3.761	4.595	22,7	58,8
Ireland	4.296	3.451	4.805	4.466	148	152	26.812	:	:	:
Greece	9.111	9.648	333	18.244	693	764	56.708	*68.855*	43,8	35,9
Spain	18.304	19.262	17.895	25.135	1.615	1.838	267.028	286.598	44,6	40,4
France	18.361	17.219	10.647	11.297	1.258	1.252	197.420	202.320	66,1	*63,6*
Italy	33.768	33.890	100.945	119.793	2.087	2.251	248.255	*261.518*	49,1	47,4
Cyprus	753	683	141	141	89	83	14.341	14.088	86,5	86,3
Latvia	321	496	72	145	20	27	2.600	2.826	18,3	26,0
Lithuania	338	379	177	159	22	26	2.385	2.837	26,3	37,6
Luxembourg	277	283	242	290	14	16	1.361	*903*	49,7	69,9
Hungary	2.032	*1.927*	1.024	*965*	159	*159*	15.808	*16.189*	35,0	48,2
Malta	173	149	6	7	40	38	7.288	7.529	:	35,9
Netherlands	3.099	3.194	4.055	3.773	192	214	31.759	34.549	68,0	70,5
Austria	14.051	13.134	6.406	6.875	573	594	77.391	82.327	62,2	59,6
Poland	2.301	3.285	4.393	3.754	178	253	21.820	29.182	32,7	33,2
Portugal	2.028	2.019	296	327	264	289	37.566	39.440	27,3	22,4
Romania	4.125	4.612	585	391	226	249	18.098	17.367	17,3	27,7
Slovenia	358	648	349	349	31	45	5.147	6.185	60,2	58,9
Slovakia	922	1.297	1.121	1.242	58	75	7.054	7.020	:	48,1
Finland	923	830	458	479	118	122	15.014	16.367	57,3	59,1
Sweden	1.888	1.998	2.120	2.145	201	225	24.210	27.990	75,0	78,7
United Kingdom	39.107	38.939	40.276	46.738	1.256	1.411	166.961	169.451	60,7	*58,2*
Iceland	308	343	287	485	17	21	1.728	2.280	:	:
Liechtenstein	46	40	111	108	1	1	118	117	:	:
Norway	1.119	1.115	1.163	1.136	151	178	17.755	19.203	75,0	76,1
Switzerland	5.693	5.396	:	:	272	274	34.848	35.486	:	72,7
Montenegro	:	:	:	:	:	:	:	2.969	:	:
Croatia	762	857	881	1.332	163	155	20.693	20.467	:	31,0
FYR of Macedonia	:	186	:	218	:	14	:	903	:	:

(1) Nights spent by residents and non-residents.

(2) Ireland and Iceland, 2010.

(3) Ireland, Malta and Iceland, 2010.

(4) Ireland, 2010.

(5) Greece, Luxembourg, the Netherlands, Poland and the United Kingdom, monthly data was used to calculate the annual figure.

(6) Greece, Italy, Poland and Switzerland, 2010.

(7) Estimates made for the purpose of this publication (in italics), compiled using the sum/average of the latest available data for the EU Member States.

Source: Eurostat (online data codes: tin00039, tin00040, tin00041, tin00043, tour_occ_nim, tin00045 and demo_pjanbroad)

Estimates of the total tourist bed capacity in all collective tourism facilities

While hotels and similar establishments have beds, other types of collective tourist accommodation are more problematic to measure – for example camping which depends on the overnight facilities brought by tourists themselves. To estimate the total bed space capacity in all collective accommodation facilities including camping and tourist dwellings, the SENSOR project (Kaae et al. 2007) used an estimation of 3 bed places per campsite and 4 bed places per holiday dwelling and estimated a total bed capacity of approximately 24.4 million tourist bed places in collective tourism facilities in the EU25 countries in 2004 (***figure 18***). The predominant accommodation type was the 10.8 million bed places in hotels and similar establishments (44 %) followed by 8.5 million bed places in camping facilities (35 %). Holiday dwellings provided 2.6 million bed places (11 %), while 2.5 million bed places were located in other collective establishments (10 %). There was an increase in the bed capacity from 22.8 million tourist bed places in the year 2000 to approx. 24.4 million in 2004. The collective bed capacity in 2013 is believed to be at least 1.8 million higher as the hotel bed capacity alone has grown from approx. 10.8 million in 2004, to 11.5 million in 2006, and to 12.6 million in 2011 (***table 8***). The growth in other collective facilities is reflected in the increase of around 50.000 new units. (see table above) with an unknown bed capacity.

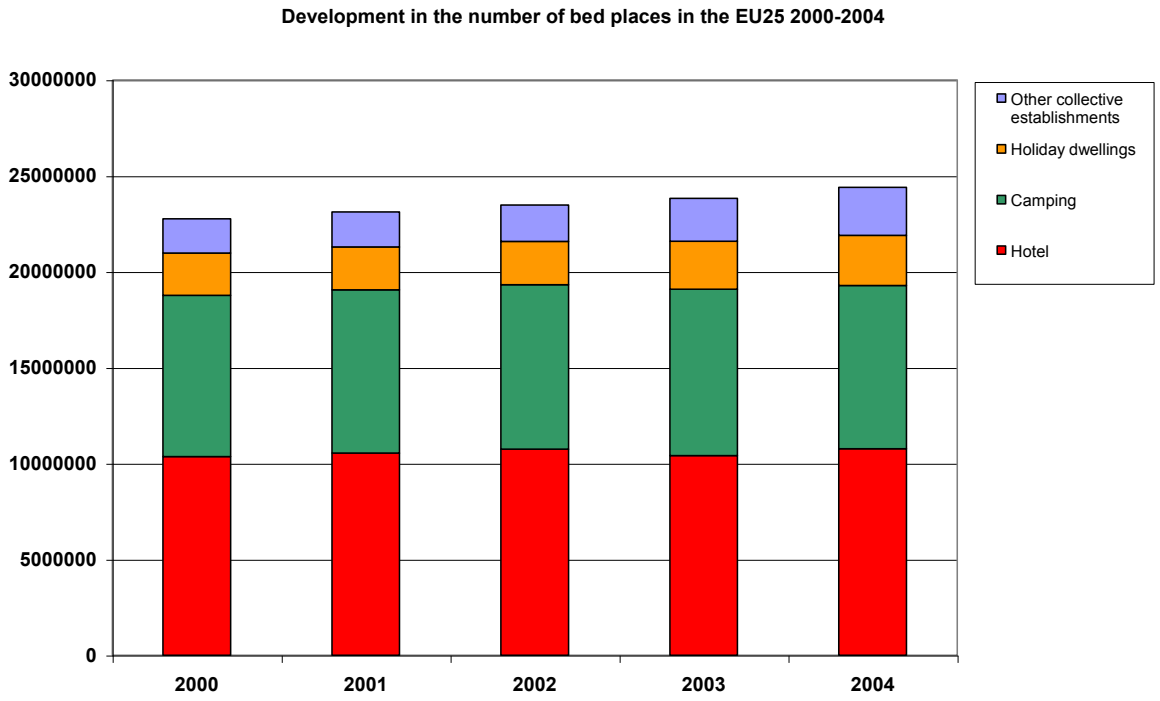


Figure 18: The development in the total number of collective bed places in the EU25 between 2000 and 2004 based on calculations in the SENSOR project (Kaae et al. 2007). NB. Some missing data in 2000 and 2001.(Source: based on Eurostat data).

Country differences in overnight bed capacity

As seen in ***table 8 above***, the tourist bed capacity is very unevenly distributed within the EU25. When using the calculations from the SENSOR project, the distribution of the total bed capacity in collective types of accommodation becomes very visible ***figure 19 below.*** As seen, France is the EU25 country with the highest collective tourist bed capacity of over 4.8 million collective bed places – predominantly in camping. Italy follows with 4.2 million bed places – half of these in hotels. In third place comes Germany with 3.3 million bed places also with hotels as the main category. Spain follows closely after with 2.97 million bed places also with about half of these in hotels. United Kingdom has 2.1 million bed places with over half of these in hotels. Far below these numbers are the Netherlands and Austria while Greece has missing data for some categories and most likely would have been more dominant.

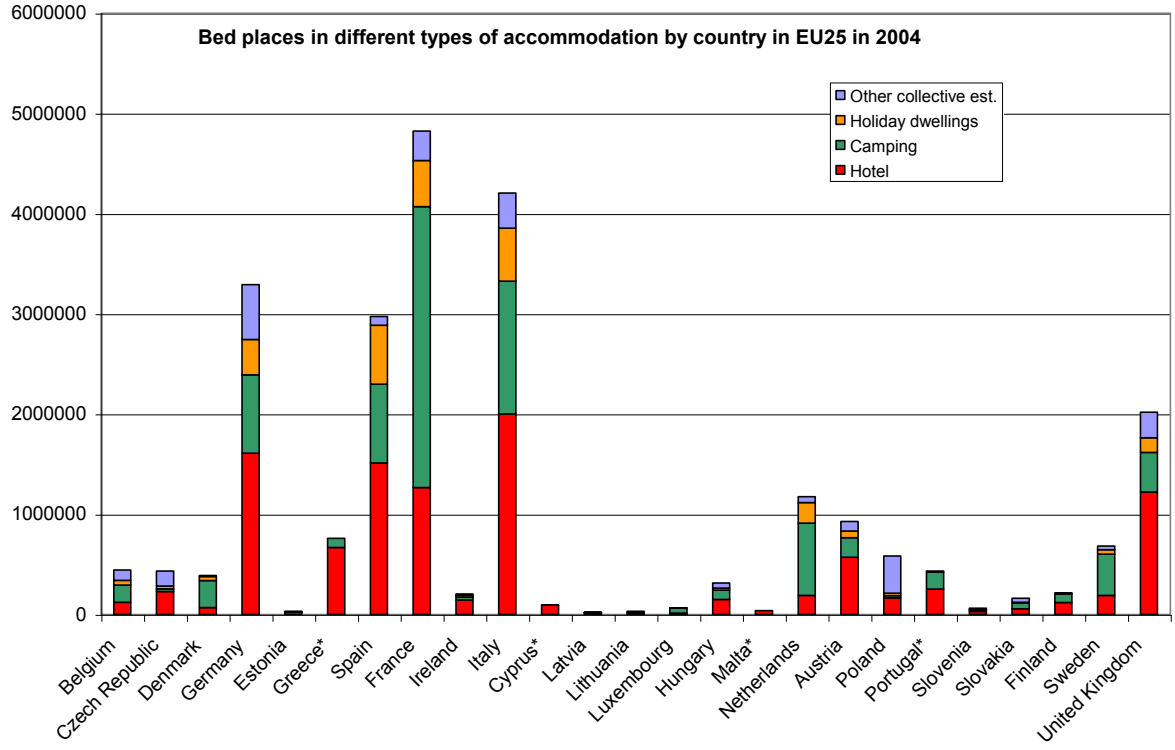
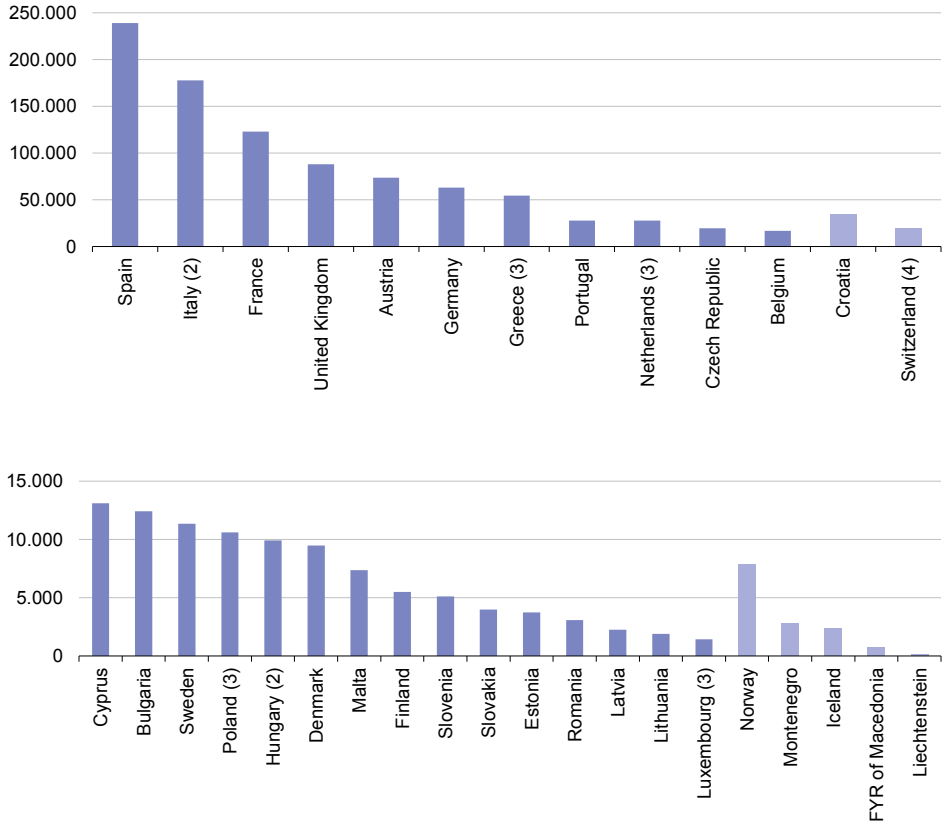


Figure 19: The collective tourist bed places by country in EU25 in 2004 based on calculations in the SENSOR project (Kaae et al. 2007).

International tourists

However, the bed capacity is used with different intensity and by both domestic tourists and international tourists. When looking at the registered overnight stays by non-residents in collective tourism facilities, the picture is somewhat different (***figure 20*** below). In 2011, Spain was the most common tourism destination in the EU for non-residents (people coming from other countries than the one measured), with 239.4 million nights spent in collective tourist accommodation, or almost a quarter (23.2 %) of the EU-27 total. Across the EU, the top three most popular destinations for non-residents were Spain, Italy (178.0 million nights) and France (123.0 million nights), which together accounted for 52.5 % of the total nights spent by non-residents in the EU-27. The least common

destinations were Luxembourg, Lithuania and Latvia but the effect of the size of these Member States should be considered when interpreting these values.



(1) Note the differences in the scales employed between the two parts of the figure; Ireland, not available.
(2) Provisional.
(3) Estimate based on monthly data.
(4) Includes only nights spent in hotels and similar establishments.
Source: Eurostat (online data codes: tour_occ_ninat and tour_occ_nim)

Figure 20: Tourism destinations – nights spent in collective tourist accomodations, 2011 (1 000 nights spent in the country by non-residents). *Note the differences in the scales employed between the two parts of the figure; Ireland, not available.*

Social tourism intensity

The number of nights spent (by residents and non-residents) can be put into perspective by making a comparison with the size of each country in population terms, providing an indicator of tourism intensity in social terms. As seen in ***figure 21***, using this measure, in 2011 the Mediterranean island destinations of Malta and Cyprus, as well as the alpine and city trip destination of Austria were tourist destinations in the EU-27 with the highest social tourism intensity. Malta had 18.5 tourist overnight stays per inhabitant, Cyprus had 17 and Austria 12.5 tourist overnight stays per inhabitant followed by Spain (8.4), Italy (6.4) , Greece (6.2) and France (6.2).

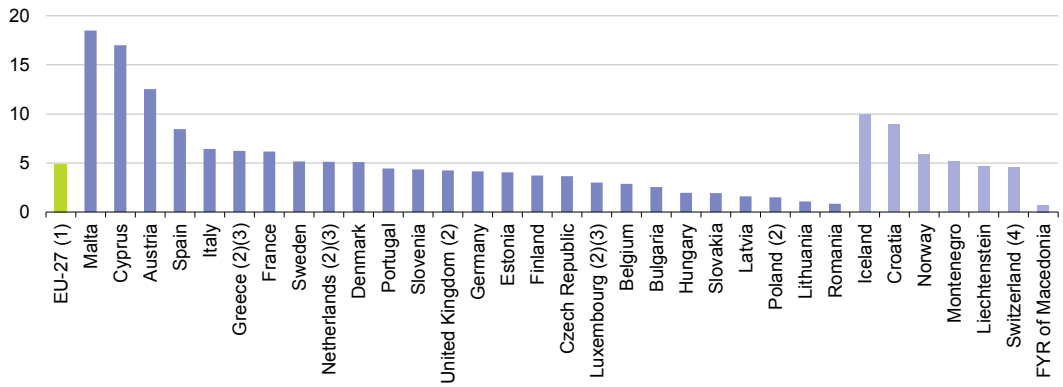


Figure 21: Tourism intensity, 2011 - Nights spent by resident and non-residents in collective tourist accommodation per inhabitant. Source: Eurostat 2013b).

However, the social tourism intensity is much more visible when looking at the regional levels as was done in the SENSOR project (Kaae et al, 2007). In this example, the tourism intensity was measured as the number of tourists in % of total peak season population (residents + tourists) by NUTSx level. As seen in ***figure 22***, the social tourism intensity is particularly high in some regions and islands in the Mediterranean and Alpine region. But also sparsely populated regions in Norway and Sweden have a relatively high number of tourists compared to the low population number.

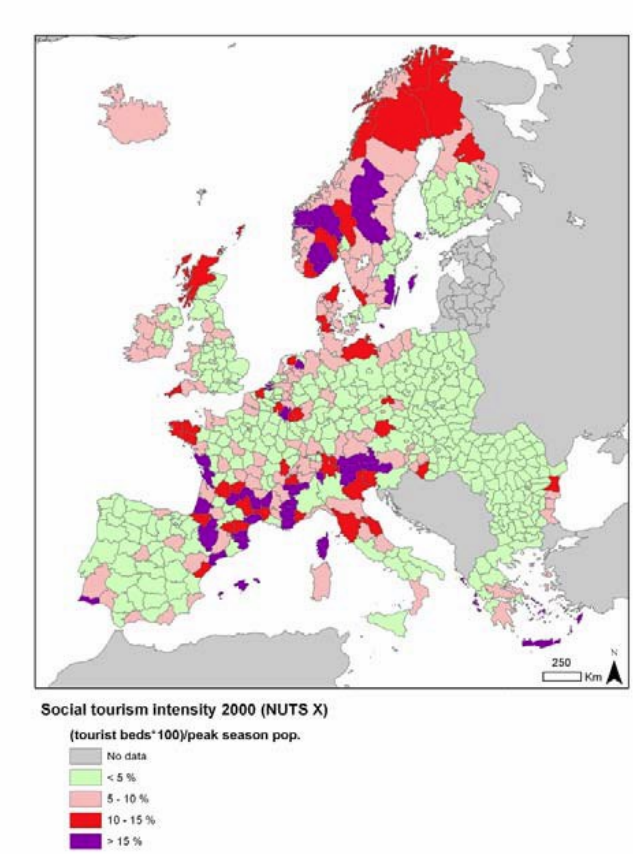


Figure 22: The social tourism intensity in year 2000 measured as tourists in % of total peak season population (residents + tourists) by NUTSx level (Source: SENSOR project 2007).

Spatial tourism intensity

From a territorial perspective, it is however the spatial intensity of tourism which is the most relevant. The intensity of tourism facilities (number of bed places per square kilometre) would be the best indication of land-use for tourism (although different tourism facilities have different spatial requirements. But also the intensity of use of the existing tourism facilities indicates the level of pressure on the resources in the area. As seen in **figure 23** the density of tourism nights are high in many Mediterranean and Alpine regions as well as in Germany, Benelux and UK.

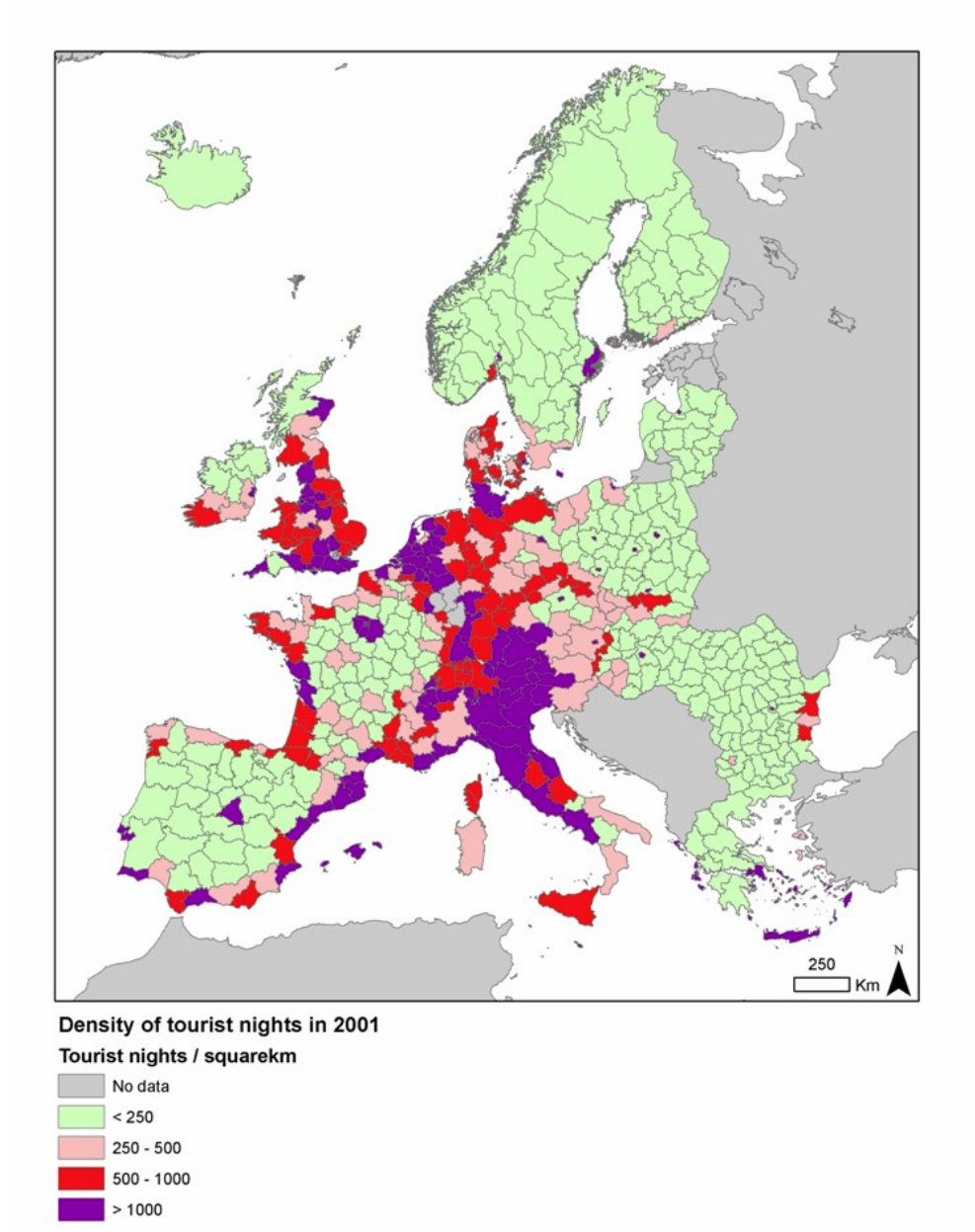


Figure 23: The number of tourists overnight stays (domestic + international tourists) per square kilometre (Source: SENSOR project 2007).

Travel flows into and within Europe

Although a bit old, the following figure illustrate that the tourism flows are unevenly distributed within Europe. The largest flow is the mass transfer of tourists from the colder northern regions of Europe southwards to countries bordering the northern coast of the Mediterranean. This amounted to around 116 million arrivals in 2000 – about one-sixth of all tourist trips worldwide at the time.

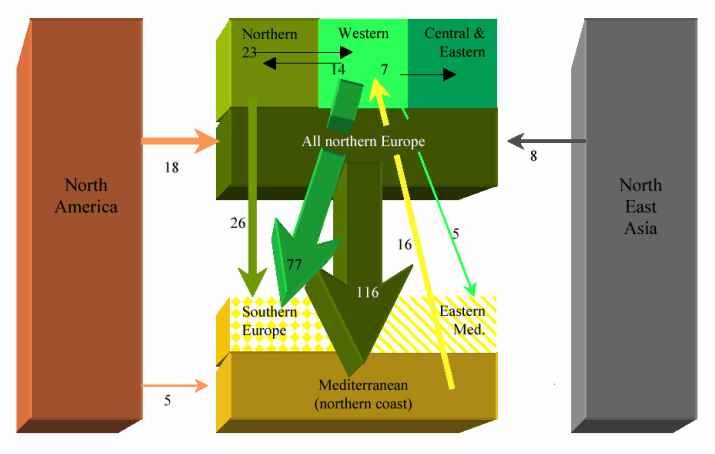


Figure 24: Major tourism flows within and into Europe, 2000 (million arrivals) (WTO, 2003)

Each country and regions function both as a tourist receiving and tourist generating region. There has been a general growth in both inbound and outbound tourism of most European countries as well as the domestic tourism within each country. The UNWTO 2020 tourism scenario predict a continued growth trend and hereby an increase in tourism flows and transport. Trends in tourist preferences towards more but shorter vacations, growth in low-cost airlines and other factors further add to this.

Based on the tourism analysis in the SENSOR project (Kaae et al 2007) the ***figure 25***, indicates the average direction of the holiday trips within the EU 25 with a strong north to south flow, and ***figure 26*** illustrates the prime directions of the tourism flows between EU 25 countries gravitating towards the southern part of Europe.

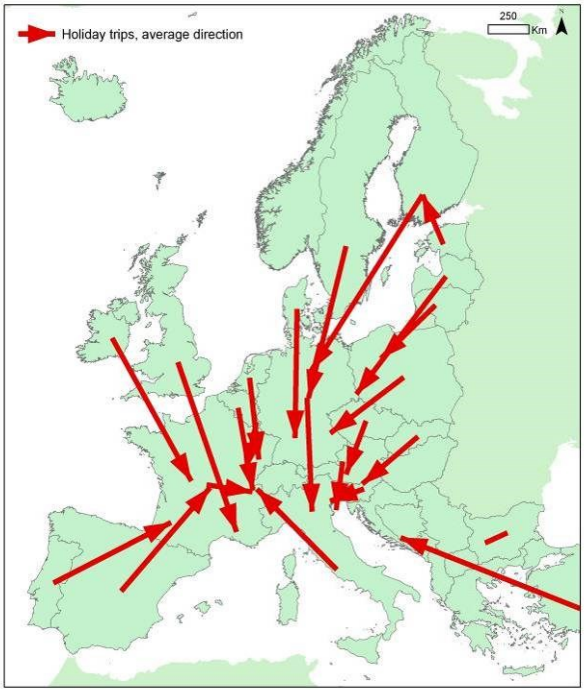


Figure 25: The average direction of tourism flows within the EU 25, 2001 (Source: SENSOR project 2007).

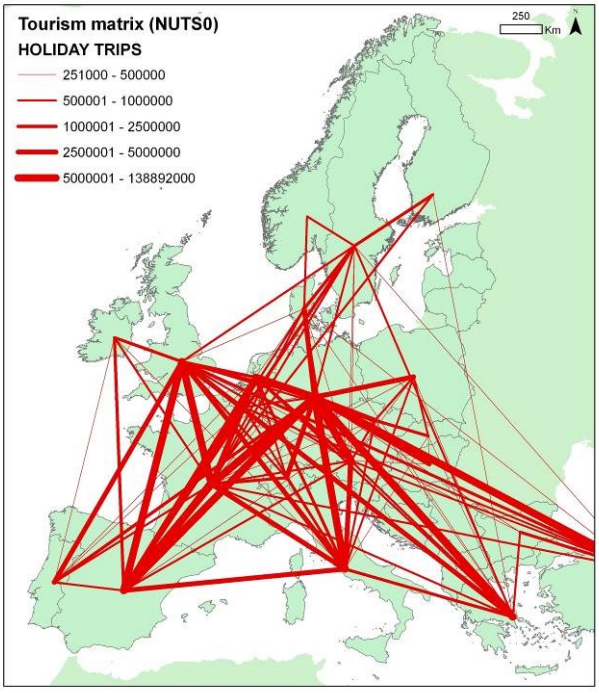


Figure 26: The prime directions of the tourism flows between EU 25 countries in 2001 (Source: SENSOR project 2007)

4.1.1 Modes of transport in tourism

The modes of transport used by tourists to some extent affect the land-use through infrastructure development. However, knowledge about the modes of transport (and distances travelled) by tourist is particularly relevant when measuring the environmental impacts. The environmental impacts are increasing not only as a result of generally increasing travels but also by shifts in modes of transport to increasing use of air travel which is more polluting per pkm.

As seen in ***figure 27,*** the car (private or hired vehicle) is the overall most used mode of transport used for tourism trips within the EU25. Most European holidaymakers prefer to use their own or hired cars (58%), while a quarter (24.9%) use air travel, 8.1% use railway, 7.6% use bus/coach while 1.7 travel by sea. Particularily the holidaymakers from Slovenia and France go by car, while air travel is highest from Ireland and the UK. The use of bus/coach is highest in Estonia (36.3%), while Greece has the relative highest share of sea travel (23.1%).

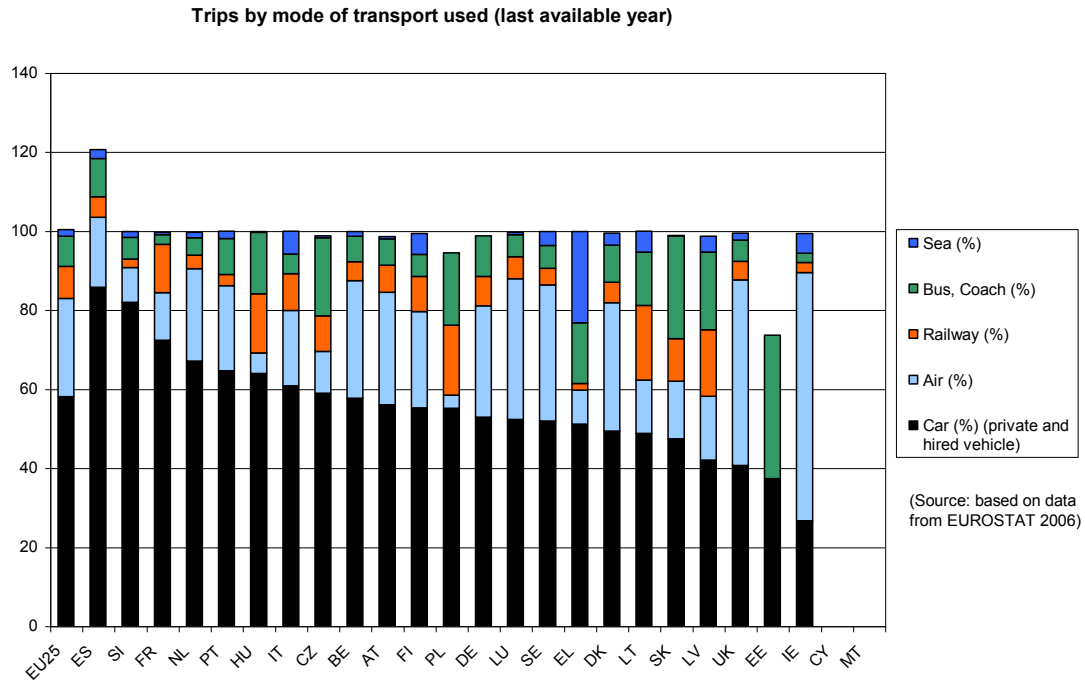


Figure 27: Breakdown of trips by mode of transport used (last available year) (Source: based on data from Eurostat 2006 – data problem for Spain needs to be checked with Eurostat).

Tourism´s share of overall passenger transport & environmental effects

A study of European tourism transport (DG Enterprise European Commission, 2004) estimates that tourism accounts for 17% of all passenger transport and over 80% of air travel. In the EU, there were 932 million tourism departures by EU25 citizen in 2001 and 59% were by car, 27% by air, 7% by coach, 5% by rail and 2% by ferry. These trips amount to 1739 billion pkm and resulted in emissions of 398 million tons of CO_2, 858 million kg NOx, and 16.7 million-kg PM emissions in 2001. Transport accounts for between 50% and 75% of all the environmental impacts from tourism (DG Enterprise European Commission, 2004). With the growth trend in tourism, these environmental impacts are increasing and contributing to increased greenhouse effect and decreasing air quality. Rather than a few yearly trips, there is now a tendency that people more frequently take shorter trips, but also go on travels further away from home. The increasing trip activities per capita makes tourism (and related impacts) grows faster than demographics account for.

Shifts in modes of tourist transport

Tourism transport is shifting and factors such as the rise of low-cost airlines have shifted tourism towards an increase in air transport while transport by train is declining. As seen in ***table 9***, the shares of different modalities per country for tourist transport in 1997 and 2001 (Schmidt, 2003) is shifting. The use of airplanes has increased in the period of 1997-2001 – in particular in island countries like the UK.

Overall, the tourism transport is increasing and even modes declining in share to other modes may actually be growing in terms of total transport work – but relatively less than e.g. air transport. Between 1997-2000 air travel more than doubled (+51%) while the road and railway both increased by 15%.

Table 9: Breakdown of holidays by mode of transport used, 1997 and 2001 (Source: Hans Werner Schmidt, 2003).

%	Private vehicle		Air		Rail		Coach		Waterway	
	1997	2001	1997	2001	1997	2001	1997	2001	1997	2001
B	:	57.9	:	28.9	:	5.5	:	7.0	:	0.6
DK [1]	42.5	45.0	34.5	35.7	7.8	5.6	10.6	10.3	3.7	3.2
D	55.3	51.9	27.4	29.8	6.5	6.9	9.0	10.7	:	:
EL	55.1	:	6.9	:	2.2	:	13.5	:	22.0	:
E	72.6	70.7	10.8	11.0	4.7	5.5	10.4	10.9	1.2	1.5
F	70.7	72.1	11.3	11.4	12.6	12.7	3.8	2.7	0.8	0.9
IRL	:	:	:	:	:	:	:	:	:	:
I	62.7	63.3	16.1	17.3	10.9	9.7	4.7	4.9	4.6	4.8
L	50.0	47.7	34.9	37.9	6.4	5.3	7.3	5.1	0.7	0.5
NL	:	64.3	:	22.9	:	3.6	:	7.1	:	1.8
A	:	54.9	:	28.5	:	5.2	:	9.6	:	0.5
P	64.2	70.5	15.5	14.3	4.8	3.3	13.8	10.0	0.9	1.8
FIN	56.0	53.7	22.6	22.5	9.0	10.7	7.9	7.2	3.6	5.0
S	61.1	:	22.2	:	7.6	:	6.5	:	2.4	:
UK	50.3	40.4	33.9	44.5	4.8	5.9	8.3	6.6	2.0	1.9

1) 2000 instead of 2001.

4.1.2 Trend towards more trips of shorter length

There is a shift in the travel patterns towards that the number of trips by Europeans is increasing but at the same time the length of stay is declining (***table 10***). This increases the tourism transport even more than what is expected from the overall growing tourism numbers (as measured in number of overnight stays).

Table 10: Breakdown of holidays by duration, 2000 and 2001 (Source: Hans Werner Schmidt, 2003).

%	2000			2001		
	4-7 nights	8-14 nights	15 or more nights	4-7 nights	8-14 nights	15 or more nights
B	41.4	36.0	22.6	39.0	39.4	21.6
DK	64.0	25.6	10.4	:	:	:
D	41.1	42.6	16.3	36.2	48.1	15.7
EL	:	:	:	:	:	:
E	48.3	25.9	25.8	47.4	25.5	27.1
F	53.9	29.6	16.5	:	:	:
IRL	:	:	:	:	:	:
I	49.6	28.5	21.9	49.6	28.4	22.0
L	48.2	33.2	18.4	49.6	33.6	16.8
NL	44.4	30.5	25.1	44.6	32.9	22.5
A	56.2	31.2	12.6	57.2	30.2	12.6
P	47.6	31.1	21.3	49.8	27.9	22.3
FIN	76.1	17.2	6.7	75.6	17.5	6.9
S	:	:	:	:	:	:
UK	59.7	31.0	9.3	60.2	30.1	9.7

Holidays are the dominant tourism purpose (92% of all tourism trips), but short stays that account for half of the holiday trips are rapidly increasing (22 % since 1977). The average length of stay has fallen from 6.9 nights per trip in 1997 to 6.4 nights in 2000.

4.2 Economics and employment in tourism

As seen in ***figure 1.31***, the earnings and spendings on International tourism is highly uneven among the EU25 countries. The top earners on International tourism are Spain, France and Italy, while the top spenders are Germany and the UK. As seen, also most other South European countries like Greece, Portugal, Cyprus, Slovenia, and Malta have higher earnings than spendings on International tourism. Furthermore, many of the new member countries spend less on International tourism than they earn. In contrast, most Northern European countries are net spenders on International tourism. But European also like to travel outside the EU25, and altogether, the EU25 countries earned 213350 Mio. Euro from International tourism in 2003, but spent 215840 Mio.Euro on International tourism. This resulted in a debit of 2490 Mio. Euro on the balance of payments of EU25 due to International tourism in 2003.

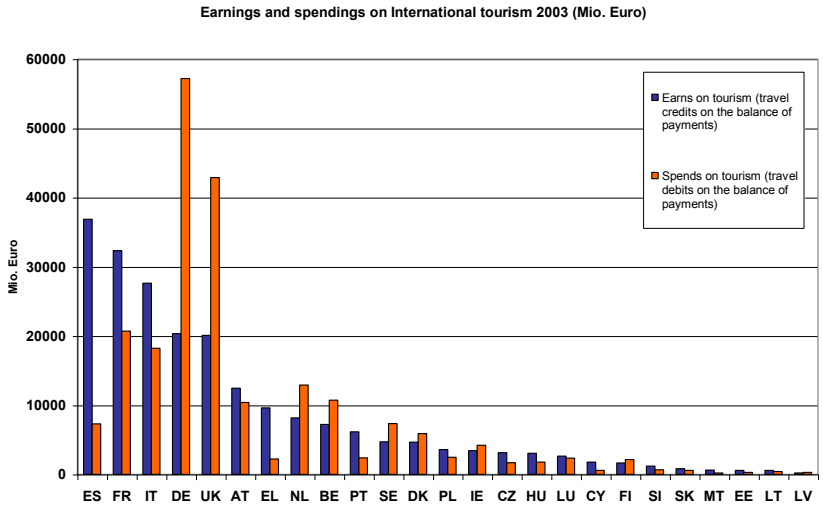


Figure 28: Earnings and spendings on International tourism 2003 (Mio. Euro) (Source: based on data from Eurostat 2006).

Employment

Employment in tourism is quite difficult to assess, as it is included across many different sectors (transport, travel agencies, accommodation sector, services, etc). One type of estimate covering part of the tourism sector is the hotel, restaurant and catering category (HORECA) which however also includes services offered to residents. However, it does reflect differences in the importance of tourism services across the EU25 countries.

Within the EU 25 countries approx. 7.6 million people are employed in the HORECA category.

As seen in ***figure 29***, employment is high in the UK, Germany, Spain, Italy and France – the top tourism countries in terms of the number of tourists.

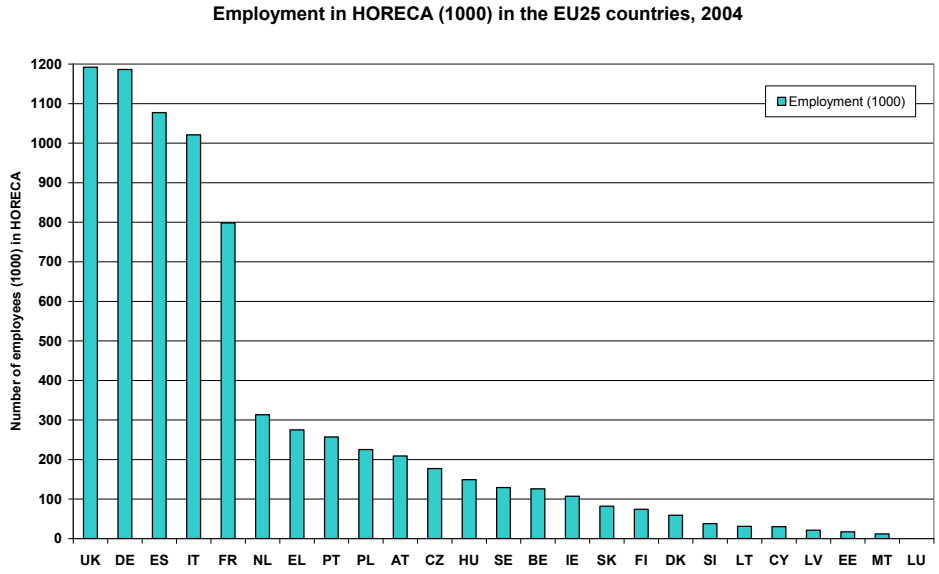


Figure 29: Employment in hotels, restaurants and catering category (HORECA) (in 1000) in the EU25 countries. (Data missing for Luxembourg). Based on data from Eurostat 2006.

The EU25 countries have 3.8 % employment in the HORECA category. HORECA may be a relatively important employment category in small countries. As seen in ***figure 1.33***, employment in HORECA is relatively highest in the small island states of Cyprus and Malta but also high in Greece, Spain, Ireland, Austria and Poland. In contrast HORECA employment plays a relatively smaller role in Poland, the Baltic countries and Scandinavian countries.

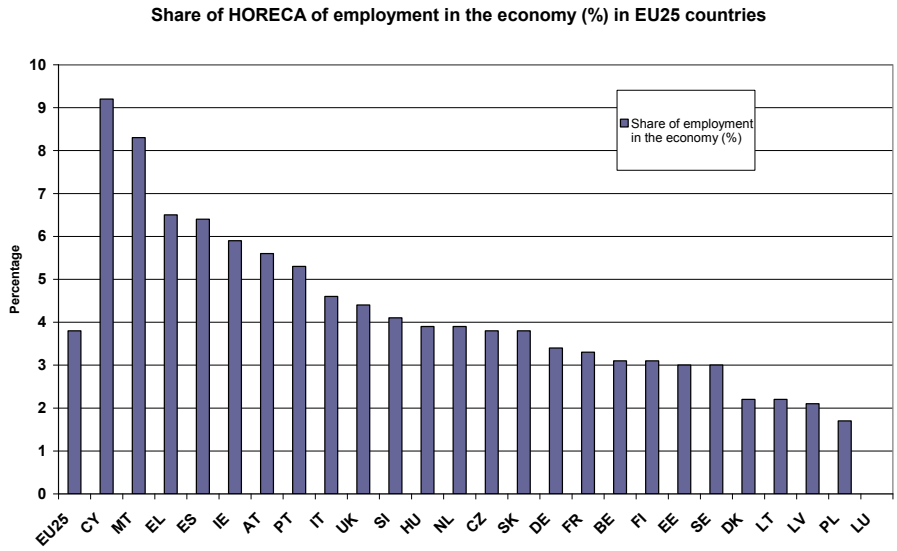


Figure 30: Share of employment in hotels, restaurants and catering category (HORECA) in the economy (%) in the EU25 countries. (Data missing for Lithuania). Based on data from Eurostat 2006.

Employment in the HORECA category is often part-time due to seasonality and fluctuations in tourist numbers. In the EU25 as a whole, 26% of HORECA employment is part-time. As seen in ***figure 31***, part-time employment is highest – in the Northern and most seasonally influenced countries such as the Netherlands, Denmark, the UK, Sweden, Ireland, Germany, Belgium and Finland while more full-time employment are found in the Southern and Central European countries.

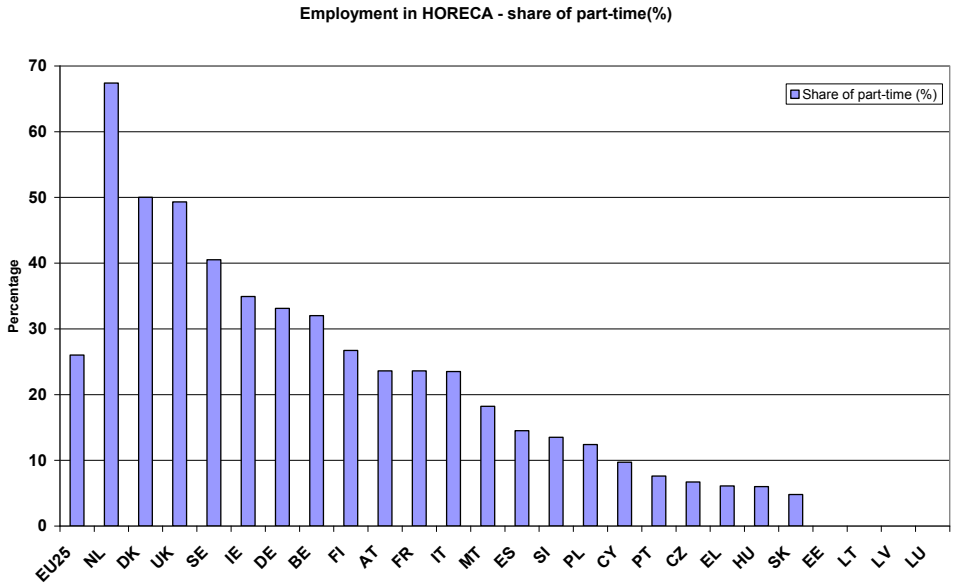


Figure 31: Share of part-time employment in hotels, restaurants and catering category (HORECA) (%) in the EU25 countries. (Data missing for Estonia, Latvia, Lithuania,and Luxembourg). Based on data from Eurostat 2006.

These types of employment are often filled with young people and/or women. In the EU25, 54.1 % of the employees in HORECA are women. As seen in ***figure 32***, the share of women employed in HORECA is higher in the Baltic countries, Finland and Poland, and smallest in Malta, Greece, France, Spain and Italy – countries where tourism is more a full-time job.

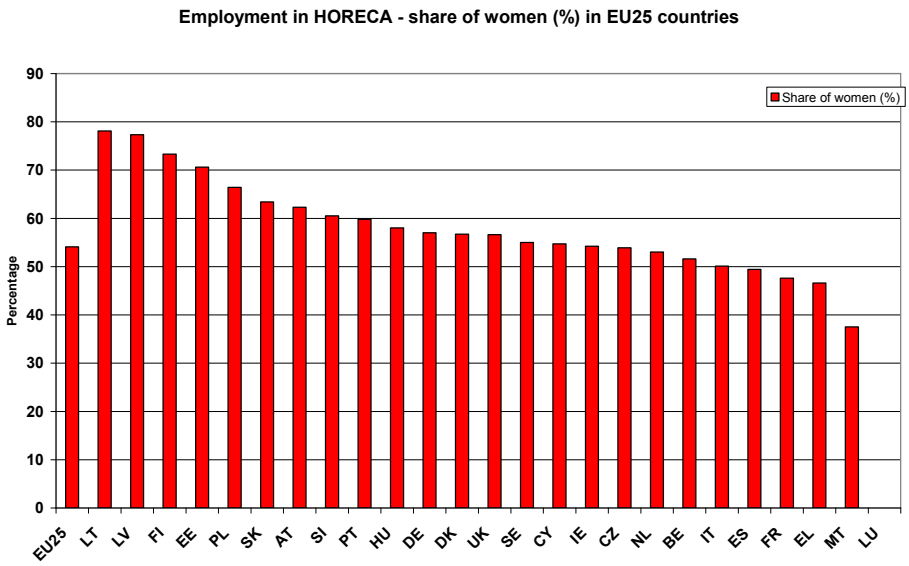


Figure 32: Share of women employed in hotels, restaurants and catering category (HORECA) in the economy (%) in the EU25 countries. (Data missing for Lithuania). Based on Eurostat data 2006.

Also when it comes to age are differences found. Overall in the EU25, 48.4% of the HORECA employees are between 15-34 years old. As seen in ***figure 33***, employment by young people is highest in the Northern and most seasonally influenced countries such as the Netherlands, Denmark, Sweden, the UK and Ireland while relatively fewest young people are employed in HORECA on Cyprus. Although somewhat related to countries with much part-time employment, the pattern also reflects differences in demographics.

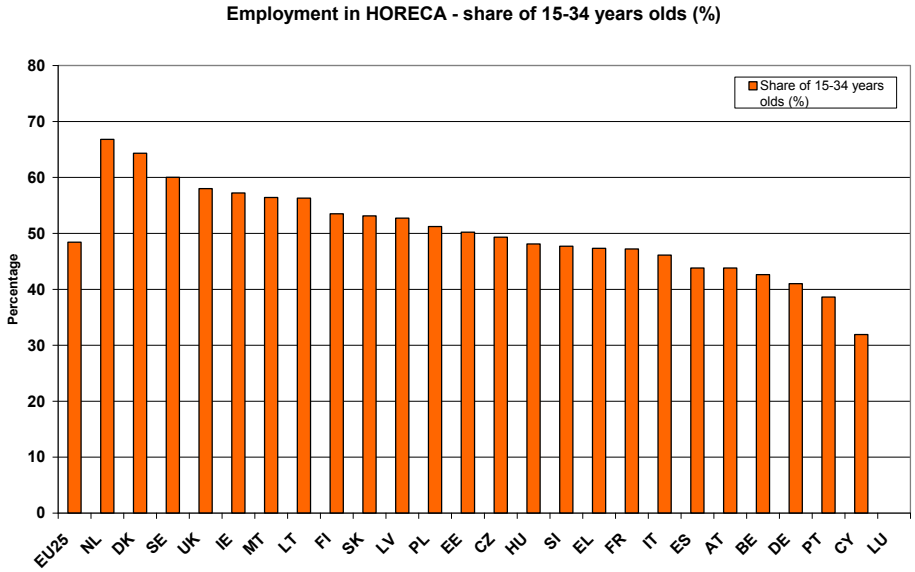


Figure 33: Share of 15-34 year olds employed in the hotel, restaurant and catering category (HORECA) (%) in the EU25 countries. (Data missing for Lithuania). Based on Eurostat data 2006.

But altogether, tourism increases the employment in the HORECA category (as well as in a number of other sectors). The types of jobs created are however often part-time in the more seasonal tourism regions, and often the positions in the HORECA category are filled with young people and women.

4.3 Spatial implications - hot spots for tourism and related impacts

The continued growth of the tourism industry has territorial implications of increased development, demand for transport and infrastructure, increased consumption of water, generation of higher amounts of waste and wastewater, higher energy use and emissions of GHG and other impacts. However there are potentials that through greening, tourism growth, environmental protection and social wellbeing can be mutually reinforcing (UNEP & UNWTO 2012).

As seen in the descriptions of the tourism patterns and tourism transport, tourism is highly unevenly distributed across Europe. Many factors influence this pattern including accessibility (see transport section), costs (see chapter on demand modelling), and the attractiveness of the different regions which will be further addressed in the attractiveness modelling later in this report.

Hot spots

In a sustainability perspective, this spatial concentration of high number of tourists has economic, environmental and social impacts in the affected regions. However, tourism is often concentrated even further locally below the NUTSx level (e.g. along the coasts). As such the NUTSX level only provides a general overview of high-pressure regions in a broad European context. And the analysis suffers from the MAUP-problem where differences in the mapping units influence results. To provide better analysis of the tourism concentrations into “hot spots” and the related high impacts, a more detailed mapping and analysis at the grid level would be needed. CLUE-S may play a role here but the overall data availability and the fact that tourism is currently included in the urban land use category makes it difficult to analyse this at a more detailed level.

At the NUTSX scale, the number of tourism bed facilities per square kilometre may provide the best available indication of the “hot spots” at the NUTSX level. However, the number of overnight stays per square kilometre would be a better indication, but this is only available at the NUTS2 level but can be disaggregated to NUTSx. But as seen in ***figure 1.37*** and ***figure 1.38*** below, both scales indicate that tourism is concentrated in the Mediterranean regions and in the Alpine regions as well as along the Atlantic and North Sea coasts.

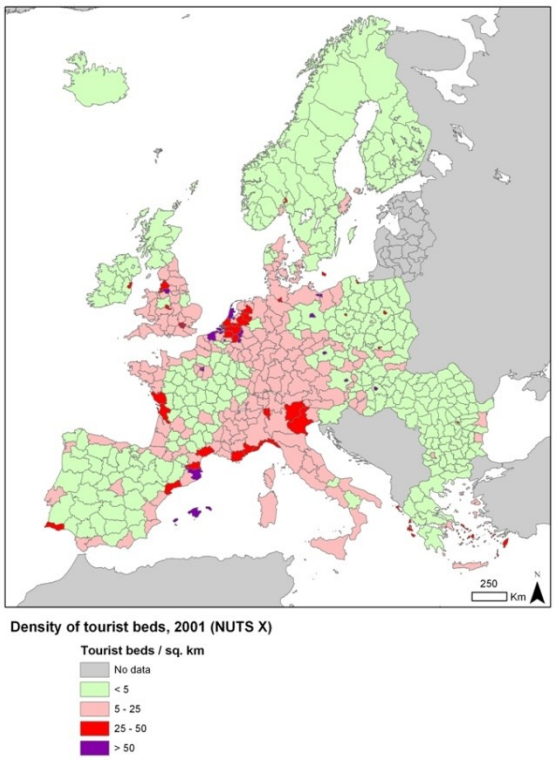


Figure 34: The number of tourism bed places per square kilometre in 2001 by NUTS x level (Source: SENSOR project 2007).

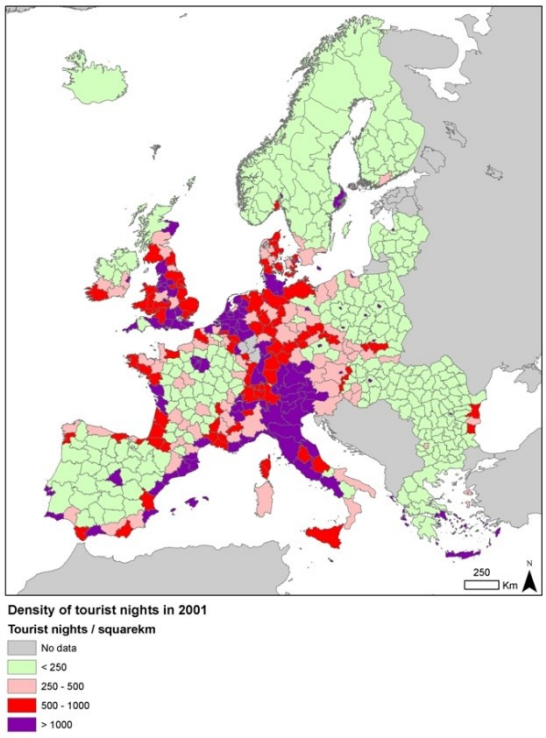


Figure 35: The number of tourists overnight stays (domestic + international tourists) per square kilometre in 2001 by NUTS 2 level (Source: SENSOR project 2007).

Tourism impacts and indicators of tourism pressure

Tourism provides economic, environmental and social impacts in the affected regions.

The **economic impacts** include that tourism provides income and employment in the affected regions. The data provided by the NACE categories on hotels and catering industry provides only a small slice of the tourism economy and also includes the use by local residents of these services. The tourism Satellite Account (TSA) provides an excellent instrument to measure the magnitude and economics of the very diverse tourism industry. It is however not fully implemented and EU25 data on tourism economic impacts are not yet available from Eurostat.

Tourism causes a range of direct and indirect **environmental impacts** and is at the same time highly dependent on high environmental quality (e.g. bathing water qualities, availability of drinking water, clean air etc.). Generally, the impacts increase with the number of tourists in a region but also the treatment systems available play a significant role in reducing these environmental pressures and reducing the environmental "foot print" from tourism (as well as from local households). A number of indicator options have been evaluated and the household waste and wastewater production from tourism has been added to the indicator list of the SENSOR project. For more details see the deliverables and indicator facts sheets on ENV8a and ENV8b (Kaae 2007).

The **social impacts** of tourism are also diverse and both positive and negative. Generally, the impacts increase with the number of tourists in a region and is affected by the number of residents (and related infrastructure) to "absorb" the incoming tourist flows. At this scale the number of tourists as a percentage of the total "peak season" population has been suggested as an indicator of social pressure. Another indicator is the availability of "forest and nature" in relation to the peak season population or reversed the number of people per square kilometre of nature. For more details see the deliverables and indicator facts sheets on SOC10a and SOC10b (Kaae 2007).

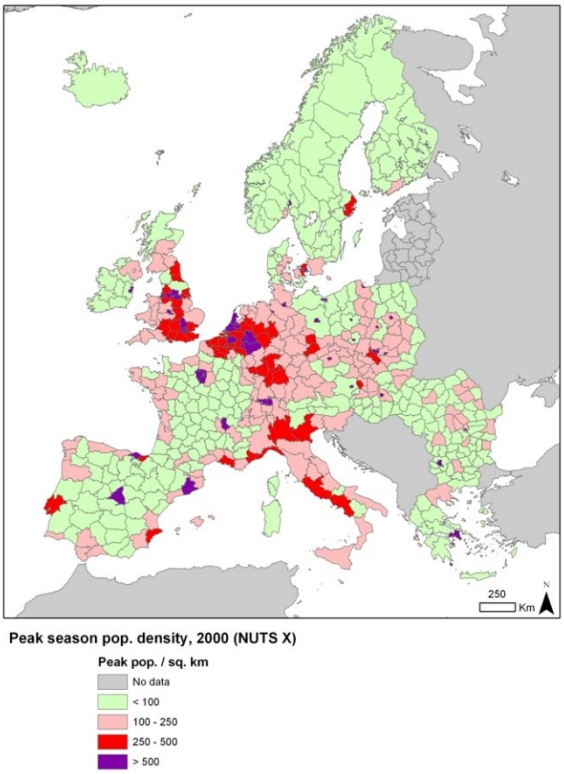


Figure 36: The peak population density (residents + tourists measured in bed capacity) per square kilometre in 2000 by NUTS x level (Source: SENSOR project 2007)

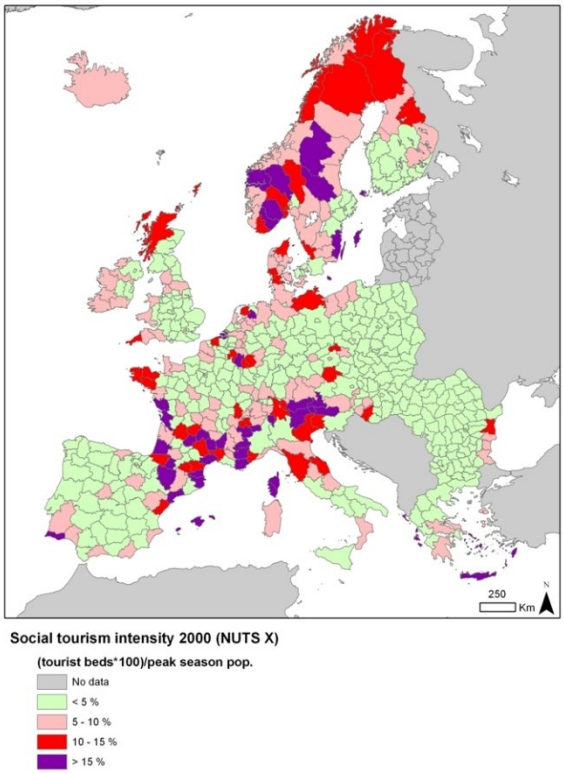


Figure 37: The social tourism intensity 2000 measured as Tourists in % of total peak season population (residents + tourists) by NUTS x level (Source: SENSOR project 2007)

4.1. Predicting growth in territorial perspective

As described in the introduction, the Tourism 2020 Vision forecast (WTO, 2001, UNWTO 2006) the high growth in tourism is expected to continue well into the future also in Europe. From a territorial perspective the spatial distribution of this growth is highly relevant. Currently, there is a very uneven distribution of tourism with very intensely used zones linked to attraction factors such as warm climate and coastline. However, not all regions are equally attractive to tourists and also an uneven growth of tourism and related facilities can be found.

Predicting the territorial location of future growth in tourism is naturally quite complicated, as many factors influence tourism and society. Nevertheless, this was attempted as part of the EU Project *Sustainable Impact Assessments: Tools and Environmental, Social and Economic Effects of Multifunctional Lands Use in European Regions* (SENSOR). In the SENSOR project, the tourism demand modelling established a bilateral flow matrix to predict the future number of tourist arrivals at the national level. These tourists are then distributed within the countries based on an attraction index for the NUTSX regions. The attraction index was derived from a modelling of tourist beds by NUTSX regions, based on available data, mainly physio-geographical characteristics such as land cover and access to the coast. Following this model, the attractiveness of a given NUTSX regions was by described from: GDP/capita, new member states, population density, Mediterranean coast, agricultural land cover, Atlantic coast or English canal, accessibility, nature land cover, other coasts than the Mediterranean, alpine areas, as well as urban land cover. Some of these attractions are clearly fixed assets (coast, alpine areas) but other will develop in response to development scenarios and policies (land use, GDP etc.). For further detail see *(Kaae et. al 2007, Nielsen and Kaae, 2007).*

The maps below indicate the modeling results of the SENSOR-project in relation to predicting the tourist bed densities per square kilometer by NUTSX region (***figure 38***) and the predicted growth in bed densities by NUTSX region 1994-2001 (***figure 39***).

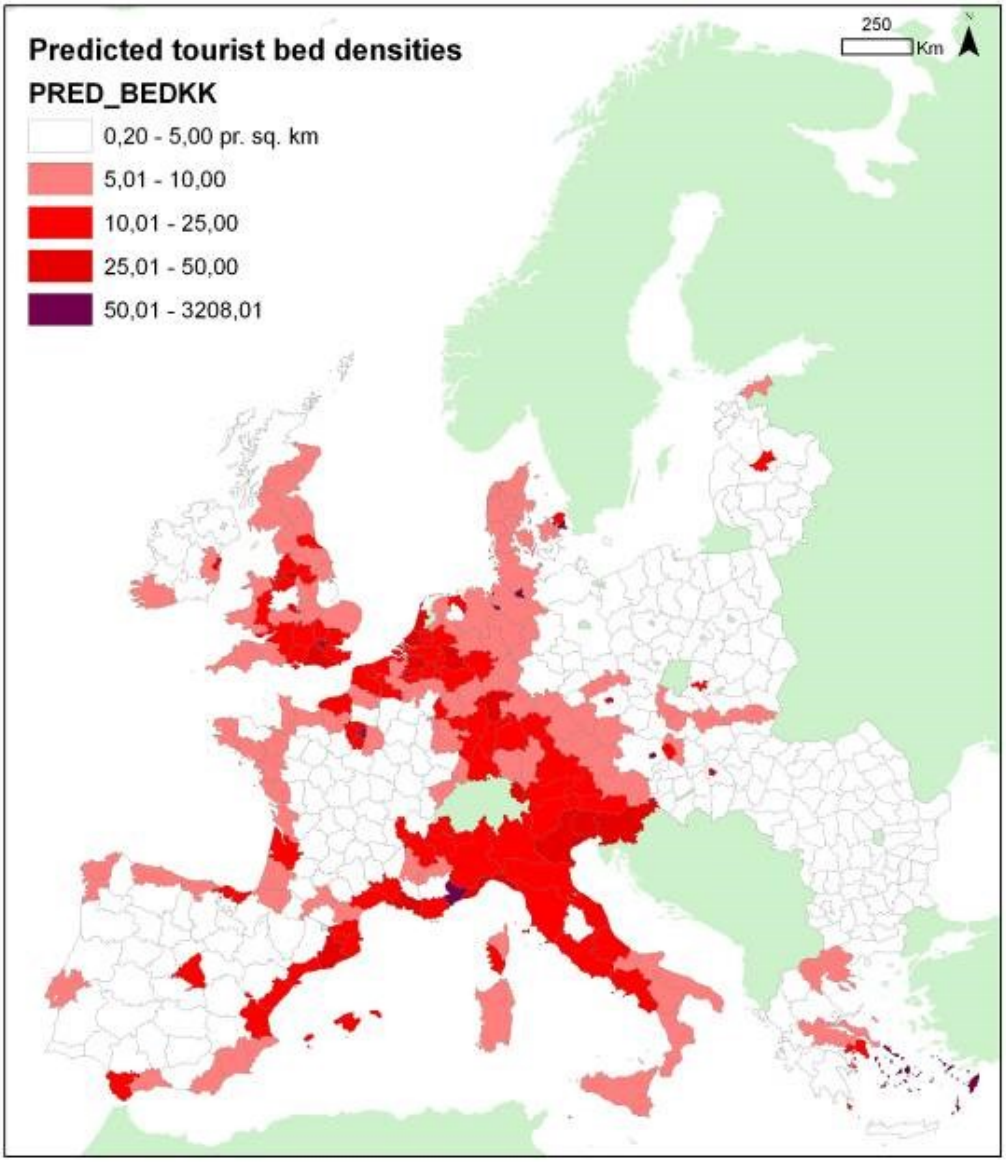


Figure 38: predicted tourist bed densities in NUTSX region, 2001 from SENSOR-project

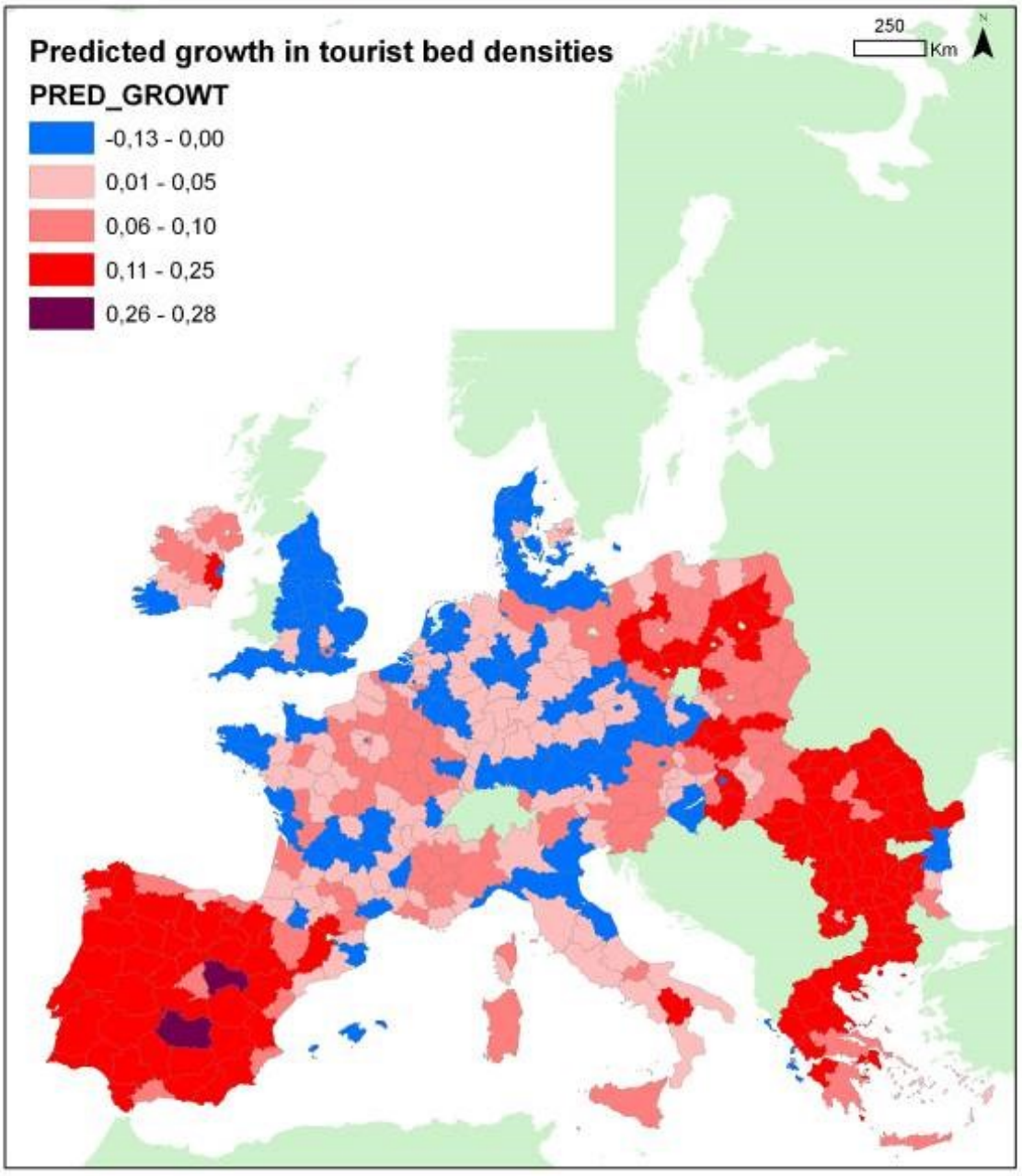
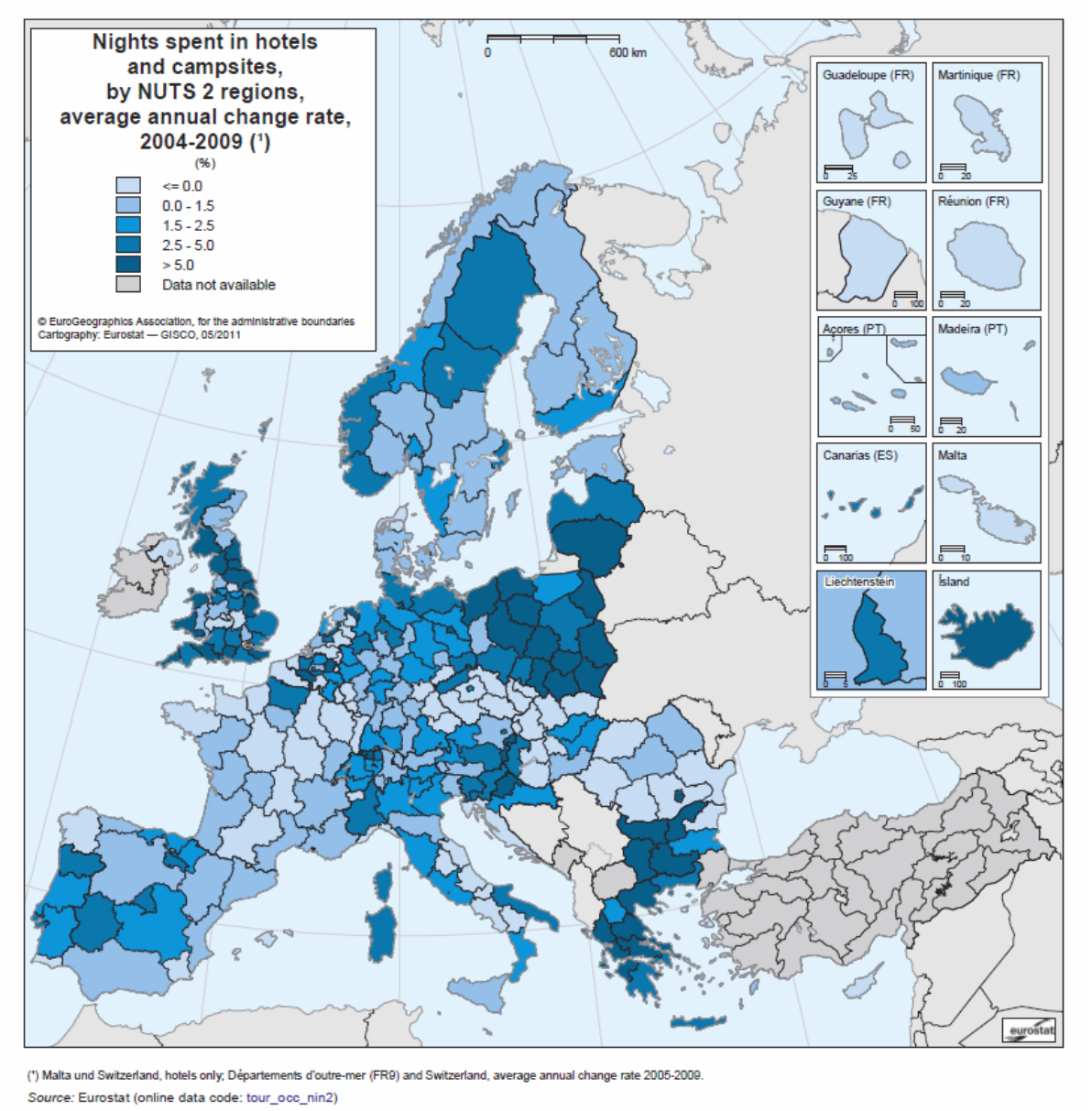


Figure 39: predicted relative growth in tourist bed densities by NUTSX region, 1994-2001 in SENSOR project (Kaae et. al 2007, Nielsen and Kaae, 2007).

When comparing this statistical modeling of growth in tourist overnight facilities (***Figure 39***) to the actual growth trends of tourist nights spent in hotels and campsites 2004-2009 (***Figure 40***), some pattern of similarity emerge with a high growth in the former Eastern European countries that are also new member states as well as in Greece, inland Spain and Portugal. It should be noted that facilities and overnight stays are not directly comparable and the actual growth trends (***figure 40***) does not cover all types of overnight facilities included in the modeling. But the general growth patterns are showing some shared tendencies including a move to places less developed by tourism. This may indicate a trend of new developments moving away from the most densely used tourism territories.



(*) Malta und Switzerland, hotels only; Départements d'outre-mer (FR9) and Switzerland, average annual change rate 2005-2009.

Source: Eurostat (online data code: tour_occ_nin2)

Figure 40: Nights spent in hotels and campsites by NUTS2 regions, average annual change rate in %. (Source: Eurostat).

Saturation tendency

An interesting aspect of the SENSOR modeling of tourism was identification of a saturation tendency with tourist beds in the NUTSX regions indicated by a negative sign for the variable beds/square km in 1994. The partial correlation efficient has been used to illustrate the association between growth rate and pre-existing bed density in ***figure 41***; and between growth in absolute number and pre-existing density in ***figure 42***. ***Figure 41*** indicates a steep decline in growth rate with increasing pre-existing densities. ***Figure 42*** indicates the effect on growth in absolute volumes.

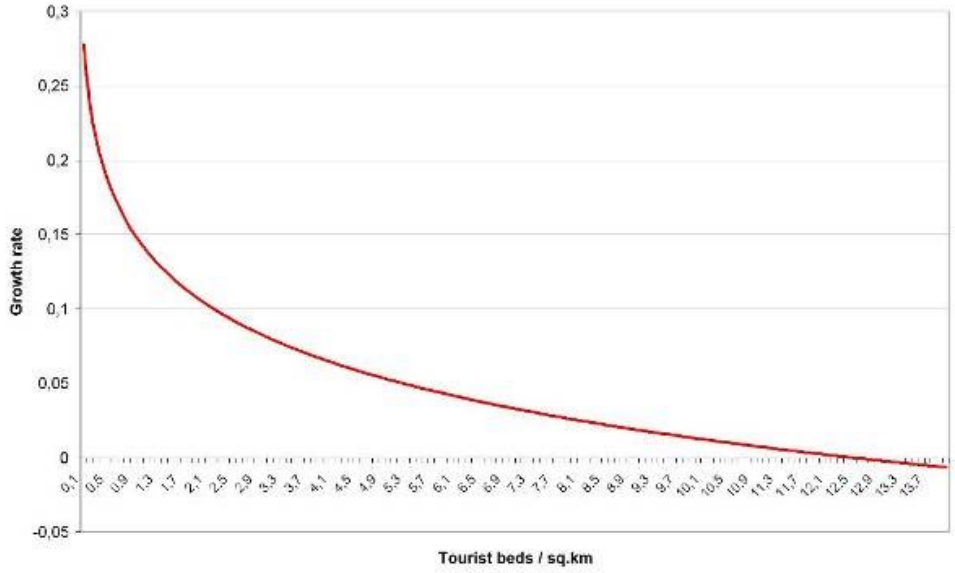


Figure 41: controlled relationship between bed density (1. axis)) and relative growth rate. (Source: SENSOR project Nielsen and Kaae, 2007).

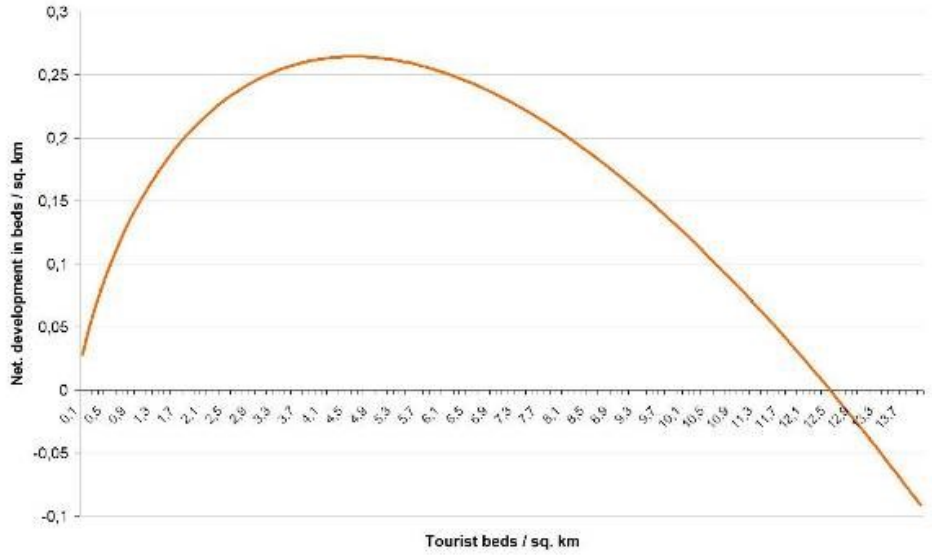


Figure 42: controlled relationship between between bed density (1. axis) and growth in bed density pr. year. (Source: SENSOR project Nielsen and Kaae, 2007).

The effect of the pre-existing density indicates a redistribution of tourism, between the NUTSX regions over time, in response to crowding or in pursue of new distinctive destinations.

5 Territorial dynamics of tourism

In keeping with a consistent approach across each of the sector reports in the GREECO project, the following tables identify and explain the relationship between the tourism sector and the pre-defined territorial dimensions that will shape the development of a greener economy in Europe. These are distinguished between Territorial Factors and Territorial Outcomes.

Territorial Factors are territorial dimensions that **drive, enable or hinder** the development of the green economy in European regions. Being territorial, they are place-based (as in non-uniformly distributed in space) and they depend on the local societal, cultural and political contexts, as well as how these contexts interact with socio-economic and environmental changes. This means that they account for the basis of how European regions differ in their "pre-conditions" for a transition towards a green economy.

Territorial outcomes are territorial dimensions, as new or existing territorial phenomena that are accentuated in one way or another by pursuing the green economy. They answer the question: for achieving some greening of the economy in a given sector(s), what territorial outcomes can we expect to take place? This means that they account for the basis of how European regions differ in their "possible effects" for a transition towards a green economy.

5.1 Territorial Factors

Table 11: Territorial factors of green tourism

Are the following *territorial factors* important in relation to greening of the sector:		
1. ***Settlement types***	***y/n***	***Why? Why Not?***
i. Urban areas	***Y***	Tourism is taking place in both urban and rural areas. Many larger cities in Europe – particularly the capitals are key points of arrival for tourists and also attracting the segments of tourists interested in the urban attractions and experiences. Within Europe, tourism is highly unevenly distributed with the majority of the tourism overnight facilities and services being located in a few of the older EU countries while growth of new facilities is higher in some of the younger EU member countries. SENSOR Map 1.14 here? Urban areas are generally more compact and with better developed infrastructure. This can have positive impacts on the implementation of greener practices in the tourism sector and the tourism consumer patterns (for instance environmentally friendly transport of tourists). For more details on greening of urban vs. rural areas see building sector.
ii. Rural areas		Tourism in rural areas is particularly concentrated in coastal areas, mountains, and other areas with natural assets, while areas dominated by agricultural production are less attractive tourism areas as analyzed in the EU SENSOR project on sustainable Impact assessment: Tools for environmental, Social and Economic Effects of Multifunctional Land Use in European Regions (Nielsen & Kaae 2007). Analysis of the spatial distribution of the existing tourism overnight facilities in the EU at the NutsX level (Nielsen & Kaae 2007) found that 79% of the variation in tourism bed densities and 39% of the variation in growth in tourism bed places through the 1990s can be explained by physio-geographical predictors in combination with

		GDP/capita and population. Prominent predictors of tourist attraction were the relatively 'fixed assets' of alpine areas in the region and access to the coast, but several variables also link the attraction modelling to other model outcomes from the SENSOR project. Population density, GDP/capita, urban and nature land cover are generally positively related to tourism loads, while agriculture is negatively related to tourism. The regression models were used to estimate the attractiveness of regions to tourists in relation to the scenarios in the SENSOR project. Furthermore, the regression results suggest the magnitude of a saturation tendency, implying that crowding at some destinations will gradually redistribute tourist to other regions within the country (Nielsen & Kaae 2007).
iii. Urban-rural interactions		Urban tourists may engage in visits to surrounding natural attractions and settings. Similarly, rural tourists may also include visits to urban settings in their tourism activities. Urban-rural interactions include an exchange of tourism goods and services such as food and beverage from the agricultural supply chain, the urban dependency on rural water supply, interactions in relation to energy, waste and waste water handling.
2. ***Land and land-based resources***	***y/n***	***Why? Why Not?***
i. Land consumption or dependence	***Y***	Tourism is strongly dependent on certain types of land-based resources such as nature areas, sea, lakes and streams, mountain regions and other aesthetically and recreationally attractive landscape elements. However also land-based elements in urban settings are important such as cultural landmarks, cityscapes and similar. At the same time, tourism is one of the main consumers of land for development of facilities and services hereby potentially undermining the quality of the destination. Spatial planning and land use intensity are key elements for developing tourism destinations while maintaining key land-based resources and biodiversity.
ii. Material Consumption or dependence	***Y***	The rapid development of tourism facilities and infrastructure requires high consumption of materials for construction. For material flows in tourism see ***figure 1***. Overall, tourism redistributes a high number of persons (over 5 billion overnight stays

		in the EU in 2011) and their consumption and environmental pressure to other regions/territories in an often concentrated geographical and seasonal pattern that creates peak loads and pressure on the infrastructure (energy and water supply, roads, wastewater treatment systems and so on).
iii. Energy consumption or dependence on specific energy types or systems	***Y***	Tourism-related energy consumption and associated emissions of GHGs fall into three subsectors: transport to and from the destination, accommodation and activities (UNWTO, UNEP, WMO 2008). The contribution of tourism in these three sub-sectors to global anthropogenic CO2 emissions in 2005 has been estimated at 4.95% (UNWTO, UNEP, WMO 2008). When including effects of radiative forcing, Scott and others (2010) found the tourism sector to contribute to 5.2–12.5% of all anthropogenic forcing in 2005 and this is particularly related to inclusion of aviation which represents 54–83% of the overall contribution of tourism to global warming. Most emissions relate to the transport of tourists, with aviation accounting for 40% of tourism's contribution to CO2, followed by cars (32%) and accommodation (21%) (UNWTO, UNEP, WMO 2008). Cruise ships have high emissions and account for around 1.5% of global tourism emissions (Eijgelaar and others 2010). Tourism-related transport consumption of energy is linked to travel mode and the averaged emission factors vary considerably. For transport in the EU, coach and rail transport are the most efficient, causing emissions of 0.022 kg CO2/pkm and 0.027 kg CO2/pkm, respectively. Emissions from cars amount on average to 0.133 kg CO2/pkm, while flights of 1,000 or more km cause 0.130 kg CO2/pkm, and short flights of less than 500 km 0.206 kg CO2/pkm. The high value for short-haul flights is due to the high amount of energy used for take-off and climbing. The most emission-intense mode of tourist transport is cruise ships (UNEP & UNWTO 2012). Energy use in accommodation includes heating and/or cooling, lighting, cooking (in restaurants), cleaning, pools and desalination of seawater in some arid regions. Generally, the more luxurious the accommodation, the higher energy use (UNEP & UNWTO 2012). Considerable differences in energy use and emissions per guest-night are found. For calculations of total emissions from accommodation, UNWTO, UNEP, WMO (2008) used an average of 19 kg CO2 per guest-night in international tourism,

		and 11.5 kg CO2 in domestic tourism. The emissions of a guest-night on a cruise ship can be as high as 313 kg (Eijgelaar et al 2010) or 20 times higher as the average for land-based accommodation. **In the destinations, tourists have a generally higher consumption of energy than do local residents. Consequently, greening of the tourism industry through more energy efficient buildings and facilities would have a relative higher effect on reducing energy consumption.** In a future perspective, tourism is expected to increase the contribution to climate change due to the strong growth trends that characterize the tourism sector, the rapidly growing number of people participating in both domestic and international tourism, trends to travel further and over short periods of time and the increased average energy-intensity of trips (UNEP & UNWTO 2012).
iv. Management of ecosystem services (types of ecosystems/landscapes; spatial characteristics of ecosystems; options for maintaining and developing these services)	***Y***	Tourism is highly dependent on natural assets and their ecosystem services – in particular certain types of landscapes such as the sea, mountains and other nature area are attractive to many tourists. But at the same time the rapid development of tourism facilities is also threatening landscapes and ecosystems. Or development of other sectors is deteriorating the qualities attracting tourists. Better destination planning and strategies can facilitate protection of landscapes and ecosystem functions are balanced with the development of different facilities and services. Tourists often seek recreational opportunities and the establishment of more parks and protected areas including marine parks may protect and restore ecosystems and enhance visitor experiences. Related interpretative facilities can increase awareness of tourists and local residents and the visitation can provide job opportunities for local residents. A large part of tourism is highly dependent on coastal and marine ecosystems and functions. Pressure on marine ecosystems such as coastal overdevelopment, discharge of wastewater with low treatment, and overfishing may not only reduce the quality of the ecosystem services, but also pose a threat to tourism industry itself which depends on attractive beaches and high water quality. Algae blooms,

		contaminated fish etc. can cause great harm to the reputation of a destination and to the tourism industry.
3. ***Market relations (Production; consumption; export, import) and innovation***	***y/n***	***Why? Why Not?***
i. Local/regional markets	***Y***	Tourism is an experience which is produced and consumed simultaneously. At the local destination level, it involves overnight facilities, food and beverage, local transport, use of water, energy and other types of consumptions with different market relations to local and regional markets. Inclusion of more local and regional products (e.g. food and beverage) into the tourism industry can reduce the import expenses, save food-miles, and enhance local identity. Local ownership of tourism facilities and local employment also benefits the local communities by providing a higher local multiplier-effect from tourism.
ii. National markets	***Y***	Domestic tourism is a substantial part of tourism. Of the 1.04 billion trips made by Europeans (EU27) in 2011, more than 3 out of 4 trips (76.4%) were domestic trips (trips in the tourist's own country). These domestic trips accounted for 60 % of the tourist nights spent and 46 % of the total travel expenditure by EU27 residents. The percentage of domestic tourists varies greatly among the EU countries from almost none in small countries such as Malta, Cyprus and Luxembourg to over 80% in Germany and Poland (Eurostat 2013). Tourists staying within their own country do not cause an export to other countries.
iii. EU markets	***Y***	The tourist industry is a key sector of the European economy generating over 10% of EU GDP (directly or indirectly) and employing 9.7 million people in 1.8 million businesses (Eurostat cf. Joint Research Centre 2013). Numbers may be even higher as preliminary estimates from tourism satellite accounts estimates total employment within the whole of the EU-27's tourism industry to be between 12 million and 14 million people (Eurostat 2012b). Of these the tourist accommodation sector employs 2.4 million people in the EU-27 (Eurostat 2012b).

		In 2011, the residents of the European Union (EU27) made 1.04 billion holiday trips and spent 5.7 billion nights on these trips while tourist expenditure amounted to EUR 338 billion (Eurostat, 2013). As described, most are domestic trips, while intra-EU27 travel to another EU Member State accounted for 17.2 % of the trips, represent 24.4 % of the nights spent and 30.5 % of the expenditure by EU27 residents on travels in 2011. Tourism is an international activity and Europe is still the largest tourist destination with 472.7 million international tourist arrivals in 2010 (UNWTO (2011b). Approx. 80 % of these are from European tourists and the rest inbound tourists from countries outside the EU27. The choice of destination may be determined by proximity and/or relative attractiveness (e.g. in terms of climate) and neighbouring or nearby countries were the preferred foreign destinations for holiday trips of nearly all the European tourists (Eurostat 2013). But the travel patterns differ among residents from various EU countries and the distribution of tourism flows and tourism facilities is highly uneven in the EU territories. The most visited countries are Spain, Italy and France. Tourism flows within Europe generally go from the north to the south. Large differences within Europe with high tourism intensity in certain regions such as the Mediterranean regions in the south Europe and the Alpine regions.
iv. Global markets	***Y***	Tourism is a leading global industry representing 5% of the world GDP and 8% of employment worldwide. Europe is still the most visited tourist destination worldwide with the highest density and diversity of tourist attractions, and tourism continues to expand at an average growth rate of 2.8% in international tourist arrivals in Europe (2000-2008). However, tourism is growing at even higher rates in other regions of the world and the European share of the world market has dropped from **58% to 52% in 20__ (find kilden igen).** Outbound trips of EU27 residents to countries outside the EU accounted for 6.5% of the trips, 15.2 % of the nights and 23.2 % of expenditure (Eurostat 2012)

4.	***Inter- and intra-territorial relations***	***y/n***	***Why? Why Not?***
i.	Within territories (place based; local cultures; relating to territorial/national policies)	***Y***	Within territories, the tourism enterprises and services are closely linked to areas of attractive qualities (e.g. the coastline, cultural attractions). It is a labor intense activity providing local employment particularly to women and young people and also supports the local economy by purchasing local goods. The tourism sector is cooperating with local communities for infrastructure, and other services and dependent on the local, regional and national policies related to this (e.g. regulations on development).
ii.	Between territories (networks; competition)	***Y***	Tourism is a competitive industry and characterized by a very high amount of SMEs and micro-enterprises. Destinations are also in competition for attracting tourists as are regional, national and international markets. Tourism organizations often provide networks for joint marketing and promotion of the many tourism enterprises at different levels. Some networks aim at greening the tourism industry (e.g. labeling programs beyond single enterprises) but generally focus is on general marketing to consumers.
iii.	Across territories (cross-border supply and demand)	***Y***	Tourism is frequently a trans-territorial activity where tourists cross borders and visit new territories. These patterns are dependent on supply and demand. Motives for travelling vary greatly and include both push and pull factors. Different destinations and territories have varying opportunities of matching some of these demands.
5.	***Place-based factors***	***y/n***	***Why? Why Not?***
i.	Competitiveness through strong local economies	***Y***	As the European population is becoming increasingly urbanized and economies centralized, many peripheral areas tend to be in decline and having weaker economies. **Tourism may to some extent counter balance this trend as tourists are often seeking contrasts to their everyday life when engaging in tourism. Areas in the periphery which are rich in natural amenity values and cultural heritage are often attracting tourists. Hereby, tourism may to some extent support the economies in peripheral regions where most other options are in decline. However, promoting accessibility to these localities will be crucial for them to tap into these**

		potentials. However, this must be carefully considered due to the potential for residual increases in resource consumption associated with domestic, private-car transport for this type of tourism. Tourism is a highly competitive business at all levels. Tourism also competes with other land-uses within regions for instance with agriculture in areas of water scarcity. A golf course consumes high amounts of water but is economically more attractive than agricultural production. More sustainable practices in tourism (and other sectors) can reduce the water consumption and provide for both sectors.
ii. Multi-functionality	***Y***	Tourism is a sector involving a range of functions and is cross-sectorial in nature. It is one out of several activities in multifunctional landscapes –particularly in the areas with many natural and cultural assets. The greening of the tourism sector includes better land-use planning in destinations to protect the qualities attracting tourists (e.g. nature, culture). This includes maintaining or even enhancing the different functions of the local area such as biodiversity, water supply and storage capacity, use of native species in landscaping, waste and waste water management practices etc.
iii. Tacit/experiential knowledge	***Y***	Large scale tourism businesses often have professional knowledge-management as part of their operations to keep updated on the performance of their competitors and the market. But the many SMEs and micro businesses in tourism have fewer data and resources and rely to a larger extent on tacit and experiential knowledge. Focus is primarily on marketing and attracting customers, while SMEs and microenterprises often lack the time finances and knowledge to undertake processes of greening their operations.
iv. PROXIMITY	***Y***	Tourism has to be at a certain distance away from the home of the traveler to be defined as tourism. But the overall travel patterns in tourism generally follow the concept of distance-decay. In choosing destination, most of the 1.04 billion holiday trips by European in 2011 was related to proximity and/or relative attractiveness (e.g. in terms of climate) and neighbouring or nearby countries were the preferred foreign destinations for holiday trips of nearly all the European tourists (Eurostat 2013).

6. ***Consumer relations***	***y/n***	***Why? Why Not?***
i. Are development and innovation consumer-demand driven?	***Y***	While tourism is demand driven, the greening of tourism is only partially consumer-demand driven. Some segments of tourists are becoming more environmentally aware and engaging in ecotourism and other niche-products, and an increasing demand for more sustainable tourism is reported. According to the International Ecotourism Society, ecotourism has an annual growth of 15%, which is four times faster than traditional forms of tourism (TIES ___cf. UN & UNWTO 2012). But the majority of tourism represents an activity where many tourists indulge in more excessive and care-free activities in comparison to their everyday life. This result in often substantially higher consumption of water, energy and more waste generated than in regular households.
ii. Are development and innovation producer driven?	***Y***	The greening of tourism is also not strongly producer-driven as the many SMEs and microenterprises dominating the tourism industry often lack the time, finances and knowledge to invest in these technologies. A few larger hotel chains have established programs to reduce energy, water and waste etc. in their operations and hereby increase sustainability. It greatly reduces expenses of operations and has a short pay-back time, and adds marketing value. A number of labeling programs exist to facilitate the greening of tourism businesses but still a very limited part of the over 25 million estimated tourist bed places in the EU are included in any of these. In some labeling programs, a number of businesses drop out after having gained the initial benefits of greening their operations, due to high fees and a perceived limited marketing effect. The producer-driven greening of tourism may in some cases be stimulated by special events and customers, where a green profile is attractive. For example, did the COP-15 meeting in Copenhagen in 2010 significantly increase tourism industry participation in labeling programs. It appears that the transition of the tourism industry to greener practices is not strongly driven by neither the industry nor by customers. Additional public sector and/or EU initiatives are needed to stimulate interest and investments in more

		sustainable practices and technologies in tourism. A range of activities and initiatives is ongoing in the EU as part of the 2010 Communication action plans (see policy section).
iii. Are development and innovation based on well-defined territorial conditions or on open access?	***Y***	The greening of tourism has some territorial conditions relevant for the development and innovation of for example energy technologies. Some types of renewable energy technologies are better suited to specific territorial conditions. Photovoltaic and other solar-based technologies naturally will have higher effects in southern European regions; wind power will be better suited in windy territories; geothermal energy is linked to regions of geothermal preconditions and so on. Finding the right solutions for the tourism businesses may also be influenced by local building styles (For example may some historic towns and buildings not be suitable for visible energy technologies) Similarly, the relevance of water saving initiatives is more urgent in arid southern regions where tourism is in competition with other land-uses such as agriculture. Development and innovation of more environmental practices and water saving initiatives is also particularly relevant for certain types of facilities such as golf courses and swimming pools in these regions. A range of technologies are already developed and described (e.g. in report by Joint Research Centre (2012).
7. ***Accessibility and mobility***	***y/n***	***Why? Why Not?***
i. Transport connections (transport of materials; transport of labor)	***Y***	Tourism by nature includes some type of travel of the consumers from home to and from the destination. Often the travel is the most environmentally impacting part of the trip (as seen in for example REAP-calculations in the UK – see ERNEST project best practices) Tourism-related emissions are estimated to contribute 4.95% of the global anthropogenic CO2 emissions in 2005 (UNWTO, UNEP, WMO 2008). Most emissions come from transport but also from accommodation (21%) and activities. Aviation is accounting for 40% and cars for 32% of the tourism generated CO2 in transport. Some types of transport are more energy efficient than others. Air transport generates the highest amounts of CO2 per passenger kilometer – in particular on

		short flights - while cars also contribute high amounts per pkm. Cruise ships are also high contributors and cruises are often combined with flights. The least emissions come from coach and rail. (Peeters et al. 2007).
ii. Regional Accessibility (access to markets; access to supply of materials; access to public services)	***Y***	Within the destination tourists may use a variety of transport. Some destinations have innovative approaches to combining public transport with e-bikes and other environmentally friendly transport in the destination (e.g. Alpine Pearls). The tourism industry relies heavily on access to supplies of goods and services (food, beverage, cleaning etc.) as well as public services (such as water, wastewater treatment, waste handling, infrastructure such as airports, public beaches etc.)
iii. Information connections (use of communication and information services; need of interaction; questions of consumer and producer cultures)	***Y***	Tourism is to a large extent utilizing ICT in booking and marketing. Also social media is highly used in tourism communication and information services. The many tools of communication has increased the consumers own packaging of their tourist experiences.
8. ***Policy and governance by territorial level***	***y/n***	***Why? Why Not?***
i. Scale of sector-based policy support		
• From the EU Level	***y***	The public sector (particularly the EU level) appears to be leading the initiatives of greening the tourism industry. The 2010 Communication provides the overall frame for most initiatives in tourism in the EU and a number of actions within four targets (see policy section). However, a large amount of policies from different policy areas affect tourism (see policy review and analysis by RPA 2012). Again, this is primarily due to the fact that tourism by definition involves the interaction between a number of sectors, primarily transport, buildings, waste and water management.
• From the national level		Most national governments have goals of improving the environmental performance in society – some specifically mention tourism.
• From the regional level		Some support from regional EU programs development of tourism including support of greening.
• From the local/municipal level		Physical planning, building codes, provision of infrastructure and services etc. all

		affect the tourism industry and the need for greening
ii. Role of other EU policies with territorial dimension		Tourism is related to a number of the different GREECO sectors and hereby to other EU policies with territorial dimension in greening transport, energy, water, waste, wastewater treatment, biodiversity, construction of buildings etc.
iii. Private versus public sector – led development. Are consumer organizations advocating for developing the green economy. At what political scale are they located?		Some tourism businesses (particularly large hotel chains) have voluntarily initiated greening of their operations and reduced their expenses of energy, water etc. as well as obtained a green image. A number of labeling programs are also available. Although consumer interest is increasing, the participation is still low among businesses. The tourism industry is fragmented and characterized by a high number of SMEs and microenterprises which often lacks the time, knowledge, and finances to initiate a greening of the industry even if the pay-back time is short.

5.2 Territorial Outcomes

Table 12: Territorial outcomes of green tourism

Territorial outcomes of greening the sector:	
Inter- and intra-territorial relations	The intra-and inter-territorial relations need to be strengthened to more jointly respond to the challenges of greening the tourism sector. Also cooperation with other sectors such as transport, buildings, water, waste, waste water and energy is needed to integrate the greening of tourism with the overall greening of society.
Settlement types	Tourism settlements in the green economy have buildings and facilities that are efficient in design and construction and existing facilities are refitted to meet new environmental standards. The tourism facilities operate with very limited use of water, rainwater is collected and stored – particularly in arid regions, and grey water is recycled for watering of gardens planted with native species adapted to the climate. The facilities also produce less waste (which is handled by proper waste management systems supplied by the community). Energy comes from renewable sources adapted to the facility (integrated into the building when possible) or nearby renewable energy facility (e.g. wind farms, geothermal, photovoltaic or similar) and may export excess energy produced to the grid to support other community functions.
Land and land based resources	Tourism settlements in the green economy are part of a comprehensive planning at all levels including a local community plan and local participation in the planning processes. The sites are spatially well planned to maintain or even restore natural ecosystem functions and protect natural and cultural capital. Furthermore, new protections and interpretative facilities are established to regenerate and increase public awareness and support of natural and cultural capital (e.g. marine or land based parks which provide a new visitor attraction, help depleted ecosystems to recover, and create new jobs for the community).

Market relations (Production; consumption; export, import) and innovation	**A focus on how particularly the many SMEs and micro enterprises in tourism can obtain high quality knowledge, neutral consultancy, and a 1:1 plan for greening of their business. Furthermore a simple financing scheme, where for example they keep paying their current expenses for energy, water and waste until the environmental investments are paid for, and then gain the savings.** Integration of a few key environmental (and possible social) indicator reporting in the TSA system where annual consumption of e.g. water and energy is reported at the individual tourism enterprise (baseline) and related to overnight stays. Secondly, savings from greening is reported. This reporting is rather simple (can be extracted from annual water and energy bills) and the reporting helps to increase awareness and highlight the benefits from greening. The new European Tourism Indicator System Toolkit for Sustainable Destinations (DG Enterprise and Industry 2013) provides a useful framework for such reporting.
Place-based factors	Focus on the territories with the highest tourism pressures, most limiting natural conditions (e.g. arid zones with land uses competing over water), and territories with the weakest supportive services (e.g. low levels of waste water treatment, problems with waste handling). Also, adaptation of technologies (e.g. energy generation) best suited to the territorial preconditions.
Accessibility and mobility	The greening of transport is a key issue for more sustainable tourism but a task to be solved within the transport sector. Particularly initiatives to convert short flights to rail, increase the efficiency of flights, convert car transport to more sustainable technologies (e.g. hydrogen or electric cars based on renewable sources) and more environmentally cruise ships (for example conversion of fuels to natural gas – see test area in the Baltic Sea area) can reduce the high environmental pressures from tourism transport. Within destinations more sustainable types of transport can be explored such as a combination of public transport to the destination with bus passes, e-bikes, and electric cars or similar to get around within the destination (e.g. Alpine Pearls concept) and development of infrastructure for cycling, walking, horseback riding and similar.
Policy and governance by territorial level	Tourism policies and governance is relevant at all levels from EU level to local destination level. Comparable data is however often available at Nuts 2 or Nuts 3 levels from

	Eurostat. The Tourism Satellite Account system is collecting information from individual enterprises, so there is a potential to extract data at even smaller territorial levels. The greening of tourism is closely related to initiatives across several other sectors (e.g. transport, energy, water, wastewater, waste handling, construction/buildings, biodiversity etc.) and variations in these across different territories within the EU. The UN & UNWTO report (2012:67) points out that nature-based tourism and the use of biodiversity as a business opportunity in tourism holds a promising value, but that in Europe the situation is still lagging and no comprehensive management of natural assets for recreational purposes is set by any overarching or supra-national organization. Involvement, coordination and cooperation in the development processes at the territorial level are needed to ensure the balance between tourism sector and general interests.

6 Legal and policy framework for greening of the tourism sector in the EU

The EU has a policy framework that is primed in eight of the ten sectors and is acknowledged as key for a transition to a green economy. Tourism sector falls mainly under the Member State competencies and there is currently no driving EU policy framework to support the greening of this sector.

General Policy framework for the tourism sector

There is limited number of tourism related policies and /or programmes in the Commission. A communication document on the renewed EU Tourism Policy Framework was initiated by DG Enterprise in 2010. The Europe 2020 Strategy positions the development of the competitiveness of the European Tourism sector as one of the actions of high importance which should contribute towards setting up the "framework for a modern industrial policy, to support entrepreneurship, to guide and help industry to become fit to meet these challenges, to promote the competitiveness of Europe's primary, manufacturing and service industries and help them seize the opportunities of globalization and of the green economy".

Legislative/ regulatory framework

Green tourism is a new topic for the EU and tourism is mainly discussed within the concept of sustainable development in relation to greening of the sector. In 2010, the European Commission released a Communication document titled "Europe, the world's No 1 tourist destination – a new political framework for tourism in Europe". The document brings together the discussions on tourism policy making and economic competitiveness while emphasizing that sustainability should be the key principle in achieving these objectives. The role of knowledge economy in facilitating environmentally and socially responsible innovative commercial actions in international markets is also highlighted.

6.1 Development of tourism policies in the EU

The involvement in tourism by the European Commission (EC) started in the early 1980s emphasizing the important role of tourism in the European economy.

In 1986 a Tourism Advisory Committee was established with representatives from all Member States and with the aim of facilitating exchange of information, consultation and co-operation on tourism. Today, the Advisory Committee is responsible for making information in the area of tourism available, especially on the measures taken at national level.

Tourism was an issue in several communications of the EC but no theme policy for tourism was formed in the EU. Focus was on the role of tourism in employment generation and the involvement of a large share of Small and Medium Tourist Enterprises (SMTEs). Also the role of tourism in social cohesion, especially for more remote areas of the Union made tourism apparent in discussions and communications.

The year 1990 was declared as "The European Year of Tourism" by the Council of Ministers to emphasize the role of tourism and to develop a coherent policy approach (Council Decision 89/46/EEC of 2.12.1988). Subsequently, a three-year Action Plan was developed to Assist Tourism (Council Decision 92/421/EEC of 31.07.1992).

In 1996, a Green Paper was adapted by the Commission (30 April 1996) in order to stimulate a debate on the EU's role in tourism. The paper proposed a First Multiannual Programme to assist European Tourism which received positive reaction from the other European institutions including the European Parliament, the European Economic and Social Committee and the Committee of the Regions. However, the Council of Ministers was not been able to reach a common agreement and by the year 2000, Commission officially withdrew its proposal.

In 1997 a Commission Conference on 'Employment and Tourism: Guidelines for Actions' was held in and a High Level Group on Tourism and Employment was established following up on the conference with the aim to examine the conditions under which tourism could maximize its contribution to growth and stability in employment in Europe. In the following years, a number of working groups were set up and reports were produced in several aspects affecting the competitiveness, and thus the viability and competence, of European tourism. Nevertheless, EU's involvement in tourism policy was in its infancy (UNEP & UNWTO 2012).

In 2001 a policy document 'Working together for the future of European tourism' was published with a focus on how best to exploit the European tourism sector's competitive potential.
In 2003 the policy document 'Basic orientations for the sustainability of European tourism' (COM(2003) 716 final) was published. This was stressing the need to ensure consistency of various EU policies and measures affecting the sustainability and competitiveness of the industry. It was calling for an EU wide drive to increase the economic, social and environmental sustainability of European tourism.

In 2005, the Commission proposed a new start for the Lisbon Strategy focusing the European Union's efforts on two principal tasks – delivering stronger, lasting growth and more and

better jobs. In this vein, EU renewed its interest and commitment to tourism and launched its *Renewed EU Tourism Policy: Towards a stronger partnership for European Tourism* in 2006 (COM(2006) 134 final). In this document, it was stated that "The main aim of this policy will be to improve the competitiveness of the European tourism industry and create more and better jobs through the sustainable growth of tourism in Europe and globally". Nevertheless, this document refers to a compilation of other EU policies which mostly indirectly relate to tourism.

In 2007 a policy document 'Agenda for sustainable & competitive European tourism '(COM(2007) 621 final) was published. It focused in sustainable practices to increase Europe's competitiveness as the most attractive tourism destination.

The Treaty of Lisbon sets a new legal basis dedicated to tourism and indicates that the EU shall complement the action of the Member States in the tourism sector, in particular by promoting the competitiveness of Union undertakings, aiming to reinforce the EU as the foremost tourist destination of the world.

In 2010, the European Commission published its communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions titled
Europe, the world's No 1 Tourist Destination – A New Political Framework for Tourism in Europe, which summarizes the main objectives for the future of European Tourism in accordance with EU's new *Europe 2020 Economic Strategy.* This new policy framework follows the aim formulated in the earlier communication of 2006 to strengthen the competitiveness of European tourism while nurturing and protecting the natural and cultural environment, and makes the industry resilient in meeting the challenge of climate change. Following the high-level conference on European tourism held in Madrid on 14 April 2010, which served as a 'summit' for the sector and the subsequent *Madrid Declaration* produced by the informal meeting of ministers of tourism organized on the initiative of the Spanish Presidency of the Council on 15 April 2010, three objectives were identified: (a) implementation of a consolidated European tourism policy, (b) strengthen sustainable competitiveness in the sector, and (c) recognise the added value of action by the EU on tourism.

To achieve these objectives, actions promoting tourism were grouped under the following four priorities which provide the skeleton for the new action framework for tourism:

- **Stimulate competitiveness in the European tourism sector;**
- **Promote the development of sustainable, responsible and high-quality tourism;**
- **Consolidate the image and profile of Europe as a collection of sustainable and high quality destinations;**
- **Maximise the potential of EU financial policies and instruments for developing tourism.**

Implementation of the many actions included in the 2010 Tourism Communication is ongoing and includes processes of consultation with stakeholders. Progress can be followed in the Rolling Implementation Plan published by the EU.

One example is the work on creating European tourism quality label covering sustainability issues and relating to environmental impact of tourism. The aim with this consultation is to propose a charter for sustainable and responsible tourism and establish a European prize for tourism businesses and destinations respecting the values set out in the charter (European Commission Enterprise and Industry Directorate-General, Consultation Document, February 2012).
The European Commission published a consultation document on 13.04.2012 seeking comments from stakeholders. For an overview of the 21 actions in the 2010 Tourism Communication see policy table below.

6.2 The key tourism policy – the 2010 Tourism Communication

The 2010 Tourism Communication includes four priorities which provide the skeleton for the new action framework for tourism:

(1) Stimulate competitiveness in the European tourism sector;
This includes the diversification of tourism based on the cultural and natural resources of the destinations. Initiatives such as the European cycle routes or pilgrimage routes which have a clear trans-national character are found here while there are plans to expand the actions to include the Natura 2000 network. Other actions included are related to the use of Information and Communication Technologies (ICT), especially by SMTEs; the professionalization of the industry mainly through training and life-long learning opportunities; seasonality mitigation, and the monitoring of tourism activity in the region.

(2) Promote the development of sustainable, responsible and high-quality tourism;
This includes the responsible use of natural resources, pressures on water, waste production, biodiversity, the use of clean energy, and preservation of natural and cultural integrity. The EC has introduced a number of tools to facilitate the sound environmental operation of the industry such as the EU Eco-label, the Community Eco Management and Audit Scheme (EMAS), the Network of European Regions for a sustainable and competitive tourism (NECSTouR) and the European Destinations of Excellence (EDEN).

(3) Consolidate the image and profile of Europe as a collection of sustainable and high quality destinations;
This includes the promotion of the image and the perception of Europe as a collection of tourist destinations in world markets, and particularly in certain countries (for example the United States of America, Japan, China, Russian Federation, India and Brazil). Relevant actions include the visiteurope.com website and the creation of a 'Europe Brand'.

(4) Maximise the potential of EU financial policies and instruments for developing tourism.

Key actions of the 2010 Tourism Communication

The 2010 Tourism Communication includes a number of actions within the four target areas (See list below).

List of key actions in the 2010 Tourism Communication

Target I. Stimulate competitiveness in the European tourism sector

ACTION 1 AND 2: (1) Develop a coherent strategy for diversifying the promotion of tourist services and capitalise on Europe's common heritage, particularly by creating a European heritage label, alongside actions such as European Heritage Days or the European Union Prize for Cultural Heritage; (2) Encourage the integration into tourism strategies of 'natural' heritage.

ACTION 3: The Commission will launch an 'ICT and tourism' platform for stakeholders to facilitate the adaptation of the tourism sector and its businesses to market developments in new information technologies and improve their competitiveness by making the maximum use of possible synergies between the two sectors.

ACTION 4: Commission communication on electronic commerce in the internal market.

ACTION 5: In order to support training in the tourism sector, the Commission will endeavour to promote the opportunities offered by various EU programmes such as Leonardo or the Competitiveness and Innovation Framework Programme (CIP) with its 'Erasmus for young entrepreneurs' and 'E-skills for innovation' strands.

ACTION 6: Provide a voluntary tourism exchange mechanism between Member States, enabling in particular certain key groups such as young or elderly people, people with reduced mobility and low-income families to travel, particularly during the low season.

ACTION 7: Develop a voluntary online information exchange mechanism to improve the coordination of school holidays in the Member States, without prejudice to their cultural traditions.

ACTION 8: In its annual communication, 'Consumer Markets Scoreboard', the Commission will monitor the market by measuring European consumer satisfaction with various tourism services (transport, hire, accommodation, travel, package tours).

ACTION 9: In the short term, the Commission will develop a pilot project aimed at networking research institutes, universities, public and private monitoring units, regional and national authorities and national tourism offices.

ACTION 10: In the medium term, based on the results of the pilot project, the Commission will promote the implementation of a 'virtual tourism observatory' to support and coordinate research activities by the various national research institutes and provide socioeconomic data on tourism at European level.

II. Promote the development of sustainable, responsible and high-quality tourism

ACTION 11: Develop, on the basis of NECSTouR or EDEN, a system of indicators for the sustainable management of destinations. Based on this system, the Commission will develop a label for promoting tourist destinations.

ACTION 13: Develop a European 'Qualité Tourisme' brand, based on existing national experience, to increase consumer security and confidence in tourism products and reward rigorous efforts by tourism professionals whose aim is quality of tourism service for customer satisfaction

ACTION 15: Propose a charter for sustainable and responsible tourism and establish a European prize for tourism businesses and destinations respecting the values set out in the charter.

ACTION 16: Propose a strategy for sustainable coastal and marine tourism.

ACTION 17: Establish or strengthen cooperation between the European Union and the main emerging countries (China, Russia, India, Brazil) and Mediterranean countries to promote sustainable and responsible tourism development models and the exchange of best practice.

III. Consolidate the image and profile of Europe as a collection of sustainable and high-quality tourist destinations

ACTION 18: Create a true 'Europe brand' in cooperation with the Member States to complement promotional efforts at national and regional level and enable European destinations to distinguish themselves from other international destinations

ACTION 19: Promote the visiteurope.com website in order to increase the attractiveness of Europe as a collection of sustainable and high-quality tourist destinations, particularly among emerging countries.

ACTION 20: "Encourage joint promotional actions at major international events or large-scale tourism fairs and exhibitions.

ACTION 21: Strengthen European Union participation in international bodies, particularly within the context of the World Tourism Organisation, the OECD, T20 and Euro-Med.

IV. Maximise the potential of EU policies and financial instruments for developing tourism

PREPARATORY ACTION launched in 2012 aiming at preparing the ground for future initiatives in the field of tourism and accessibility: Tourism Accessibility for all

6.3 Progress of the 2010 Tourism Communication

The 2010 Communication forms the framework for the overall tourism initiatives in the EU and an **Implementation Rolling Plan** Ensuring a Successful Implementation of the Tourism Communication (COM(2010) 352 FINAL) is published by the EU. This includes the following actions and for each a status describing a number of activities to support implementation as well as deliverables (Based on the latest available update 22.10.2012)

6.4 Main EU policy concerning green development of the tourist sector.

The following table describes the main EU policy concerning sustainable development of the tourism sector, with a specific focus on potential monitoring indicators, its underlying territorial implications, its current perofrmance, and its potential for having a transformative impact on the greening of tourism in Europe.

Type of policy and hierarchy	Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions
Name	**Europe, the world's No 1 Tourist Destination – A New Political Framework for Tourism in Europe (2010)**
Description	This communication summarizes the main objectives for the future of European Tourism in accordance with EU's Europe 2020 Economic Strategy. This new policy framework follows the aim formulated in the earlier communication of 2006 to strengthen the competitiveness of European tourism while nurturing and protecting the natural and cultural environment, and makes the industry resilient in meeting the challenge of climate change.
Targets	**(1) Stimulate competitiveness in the European tourism sector**. • promote diversification of the supply of tourist services • develop innovation and facilitate ICT uptake in the tourism industry • improve professional skills • encourage an extension of the tourist season • consolidate the socioeconomic knowledge base for tourism **2) Promote the development of sustainable, responsible and high-quality tourism** • encourage the responsible use of natural resources • take account of the environmental impact of activities (production of waste, pressure on water, land and biodiversity, etc.) • monitor sustainable management at destination level • facilitate the protection of the heritage and preservation of the natural and cultural integrity of destinations • streamline quality and quality evaluation in the tourism sector • raise awareness of responsibility and sustainability in the sector **3) Consolidate the image and profile of Europe as a collection of sustainable and high-quality destinations** • raise the profile of Europe as a world tourism destination and promote the image of Europe as a collection of diverse tourism destinations • facilitate joint promotion of Europe's transnational tourism products in

	world markets **4) Maximise the potential of EU policies and financial instruments for developing** **tourism** • ensure better integration of tourism into other EU policies • ensure that the proper application of legislation in force releases the sector's full competitive potential.	
Territorial implication	**Characterisation**	Territorial implications are especially found in relation to Target 1 – bullet 1: The diversification of tourism based on cultural and natural resources of the destinations. Target 2 – all bullets: The more responsible use of natural resources and preservation of natural and cultural integrity, biodiversity etc.
	Description	**Target 1**. Territorial differences in provision of diverse natural and cultural resources in destinations and their potential for tourism. Development of transnational thematic tourism products and services (e.g. cycling and pilgrim routes). **Target 2**. The EC has introduced a number of tools to facilitate the sound environmental operation of the industry such as the **EU Eco-label** the Flower established in 2009, the **Community Eco Management and Audit Scheme (EMAS)**, the **Network of European Regions for a sustainable and competitive tourism (NECSTouR)** and the **European Destinations of Excellence (EDEN)**. These tools are established and expanding. Territorial implications include an uneven distribution of tourism, tourism impacts, and various use of these tools across the EU territories. A key action in the 2010 Communication is a proposal to develop a **European Charter for Sustainable and Responsible Tourism**. A first draft has been developed and a stakeholder consultation took place in 2012. The Commission is working towards a "**European Tourism Label for Quality Systems**" in the form of a voluntary "umbrella" label which assesses and recognises tourism quality systems. A stakeholder consultation took place in 2012, and the Commission foresees to present a

		proposal for the European Tourism Label for adoption by the Commission during the first half of 2013. It will be scrutinised by the European Parliament and the Council, under the ordinary legislative procedure. A study by the Centre for European Policy Studies (CEPS, 2012) has analyzed the estimated options and legal instruments of this quality label. In parallel, the possibility to include sustainability criteria in the ETQL was analysed for 3 different options: Option A: provision of information on participation in an environmental scheme, such as the EU Ecolabel or EMAS. Option B: inclusion of specific environmental criteria inspired by other EU initiatives (e.g. the EU Ecolabel) and tailored to the tourism sector. Option C: compulsory participation in an environmental sustainability scheme.
Indicators	To ensure the successful implementation of the 2010 Tourism Communication, the progress of implementing different actions are followed and reported through an **Implementation Rolling Plan** with regular updates by the EC. (The latest is from 22.10.12) http://ec.europa.eu/enterprise/newsroom/cf/_getdocument.cfm?doc_id=7178 In February 2013 a **European Tourism Indicator System Toolkit for Sustainable Destinations** was published by the EU with 27 core and 40 optional indicators. http://ec.europa.eu/enterprise/sectors/tourism/sustainable-tourism/indicators/index_en.htm The Implementation Rolling Plan can be seen as an overall 'indicator' of the progress of the 2010 Communication and 21 specified actions (described below). In relation to tourism indicators, there is a prolifery of diverse indicators measuring the same but in different ways making the results non-comparable. Consequently, the indicators agreed upon in the European Tourism Indicator System Toolkit for Sustainable Destinations are suggested in relation to the different GREECO-topics.	
Distance to target (Graph or map should be provided in support of the distance to target analysis)	The EU provides an Implementation rolling plan on the progress of the 2010 Communication which is regularly updated. But for many actions do not have specified the desired level of implementation they hope to reach. A brief summary is provided below: **TARGET 1 Stimulate competitiveness in the European tourism sector.** **Action 1-2: A) Transnational thematic tourism products** (11 projects co-funded, 11-12 projects in progress) **B) Cultural Tourism and cultural routes** (5 projects co-funded, 5-6 expected to be funded) Seminar in the European Parliament. (200 participants online publication: http://www.coe.int/t/dg4/cultureheritage/culture/Routes/StudyCR_en.pdf)	

	Preparatory action “Promotion of European and transnational tourism products with special emphasis to cultural and industrial ones” (Co-financing of 4-6 new thematic transnational projects + 4-6 other thematic transnational products) **C) Research, Innovation and environment-related initiatives contributing to the diversification of the tourism offer**. (“EeB.ENV.2012.6.6-2 Concepts and solutions for improving energy efficiency of historic buildings, in particular at urban district scale”http://ec.europa.eu/research/participants/portal/page/cooperation?callIdentifier=FP7-2012-NMP-ENV-ENERGY-ICT-EeB) The new RTD Joint Programming Initiative (JPI) on "Cultural Heritage and Global Change: a new challenge for Europe" is expected to "encourage better collaboration between public and private sectors, as well as open innovation between different research activities and business sectors related to cultural heritage; including tourism, sustainable maintenance and construction or reconstruction of sites, buildings or landscapes and related business services". The ERA-net ERNEST project http://www.ernestproject.eu/coalap/pages-ernest/home.jsf EU Business and Biodiversity Platform (B@B) a dialogue mechanism on biodiversity with businesses (tourism is one of 6 priority sectors) Technical facility for information exchange (http://ec.europa.eu/environment/biodiversity/business/index_en.html) • Tourism Sector and Biodiversity Conservation: Best Practice Benchmarking (http://ec.europa.eu/environment/biodiversity/business/assets/pdf/sectors/FINAL_Tourism.pdf) • B@B Awards (http://ec.europa.eu/environment/awards/business_biodiversity_award.html?panel=0) **D) European Destinations of Excellence Network (EDEN)** 98 destinations awarded, 18 new projects co-funded. Envisage enlarging the network to the 3-4 runners up of each MS in each of the 5 awards 2007-2011, which could bring the critical mass up to 400-450 destinations. Up to 27 projects to be co-financed, Up to 27 ad-hoc grants to be awarded. **D) Visibility and promotion of different thematic tourism services and products** (A number of European stakeholders’ conferences held with public participation) **Action 3: ICT and tourism' platform for stakeholders to facilitate the adaptation of the tourism sector.** A) Demonstration project with analysis of the current ICT uptake by SMEs, foresight scenarios, and common framework for interoperability. The ICT and Tourism business support portal is expected to be delivered during 2013. **Action 4: Commission communication on electronic commerce in the internal**

	market Publication of a Communication on E-commerce. **Action 5: Training in the tourism sector** Promote the opportunities offered by various EU programmes such as Leonardo or the Competitiveness and Innovation Framework Programme (CIP) with its 'Erasmus for young entrepreneurs' and 'E-skills for innovation' strands**.** (Targeted sections for different tourism sub-sectors under EURES (the European Job Mobility portal), Tourism Skills and Competences Framework). **ACTION 6: Provide a voluntary tourism exchange mechanism between Member States**, enabling in particular certain key groups such as young or elderly people, people with reduced mobility and low-income families to travel, particularly during the low season. (Calypso and other programs funded) **ACTION 7: Develop a voluntary online information exchange mechanism to improve the coordination of school holidays** in the Member States, without prejudice to their cultural traditions. (School holiday patterns available as a planning tool for tourism stakeholders) **ACTION 8:** In its annual communication, 'Consumer Markets Scoreboard', the Commission will monitor the market by **measuring European consumer satisfaction with various tourism services** (transport, hire, accommodation, travel, package tours). **ACTION 9:** In the short term, the Commission will develop a **pilot project aimed at networking research institutes, universities, public and private monitoring units, regional and national authorities and national tourism offices**. (3 projects co-financed) **ACTION 10:** In the medium term, based on the results of the pilot project, the Commission will promote the implementation of a **'virtual tourism observatory'** to support and coordinate research activities by the various national research institutes and provide socioeconomic data on tourism at European level. (Virtual Tourism Observatory website, Enhanced TSA methodology and results at EU level, Eurobarometer report) **TARGET 2. Promote the development of sustainable, responsible and high-quality tourism** **ACTION 11:** Develop, on the basis of NECSTouR or EDEN, a system of **indicators for the sustainable management of destinations.** Based on this system, the Commission will develop a label for promoting tourist destinations. In February 2013 a **European Tourism Indicator System Toolkit for Sustainable Destinations** was published by the EU with 27 core and 40 optional indicators. http://ec.europa.eu/enterprise/sectors/tourism/sustainable-tourism/indicators/index_en.htm **ACTION 13:** Develop a **European 'Qualité Tourisme' brand**, based on existing

	national experience, to increase consumer security and confidence in tourism products and reward rigorous efforts by tourism professionals whose aim is quality of tourism service for customer satisfaction. (The Impact Assessment Report (CEPS 2012) also assessed the possibility to include sustainability criteria in the ETQL and recommended voluntary inclusion. The status of the ETQL is that the adoption of the draft proposal of the legislative initiative is foreseen by the end of 2012. **ACTION 15**: Propose a **charter for sustainable and responsible tourism** and establish a **European prize for tourism businesses and destinations** respecting the values set out in the charter. A set of principles and objectives for sustainable and responsible tourism in a form of a European Charter to be proposed (tentatively by the end 2012). In 2012, applications for the EU level awards collected, an award ceremony organised in Brussels. **ACTION 16**: Propose a **strategy for sustainable coastal and marine tourism**. (Proposal of a Commission Communication in 2013 in line with the work programme of DG MARE. Presentation of the consultation outcomes by DG MARE in the context of the European Tourism Day on 27 September 2012.) **ACTION 17: Establish or strengthen cooperation between the European Union and the main emerging countries** (China, Russia, India, Brazil) and Mediterranean countries to promote sustainable and responsible tourism development models and the exchange of best practice. (Possible signature of a Joint Statement between the Commission and the China National Tourism Administration (CNTA) in 2012. Enhanced participation of the Chinese Administration representatives to EU events and vice-versa) **TARGET 3. Consolidate the image and profile of Europe as a collection of sustainable and high-quality tourist destinations** **ACTION 18: Create a true 'Europe brand'** in cooperation with the Member States to complement promotional efforts at national and regional level and enable European destinations to distinguish themselves from other international destinations. (Communication campaign, promotion of pan-European thematic tourism products, the 'visiteurope.com' portal, promotion of Europe as a whole in overseas markets). **ACTION 19: Promote the visiteurope.com website** in order to increase the attractiveness of Europe as a collection of sustainable and high-quality tourist destinations, particularly among emerging countries. (Developing digital marketing activities through the "visiteurope.com" destination portal, increasing the pan-European content (such as thematic transnational products, routes and cultural corridors), Encouraging cooperation between European tourism authorities and main industry stakeholders to support the promotion of European and transnational tourism

	products. **ACTION 20: "Encourage joint promotional actions** at major international events or large-scale tourism fairs and exhibitions. (Implementation foreseen within action 18) **ACTION 21: Strengthen European Union participation in international bodies**, particularly within the context of the World Tourism Organisation, the OECD, T20 and Euro-Med. (Joint Management with OECD started in 2011, joint EU-OECD publication "Tourism Trends & Policies 2012" published in June 2012. Memorandum of Understanding was signed with UNWTO in 2012). **TARGET 4. Maximise the potential of EU policies and financial instruments for developing tourism** PREPARATORY ACTION launched in 2012 aiming at preparing the ground for future initiatives in the field of tourism and accessibility: Tourism Accessibility for all **Comments for GREECO report by author:** **Target 1** The monitoring of tourism activity in the region – the Tourism Satellite Account (TSA) system collects information on tourists and the economics of tourism activities in most member countries. Data on the environmental or social aspects of tourism are not collected within the TSA. **Target 2** In 2009, the European eco-label the 'Flower' had 354 certified tourist accommodation services and 56 certified camp site services in the EU (RPA and DG Enterprise and Industry 2012). However, the tourism accommodation sector in Europe consists of approx. 260,000 enterprises in 2006 (ECORYS report 2009) and only a small percentage of the market is certified and primarily in a few Member States. The Community Eco Management and Audit Scheme (EMAS) is also used in tourism. Policy analysis (RPA and DG Enterprise and Industry 2012) report significant positive impacts of this initiative. In 2005, 200 hotels and restaurants were registered with EMAS, making it the leading service sector for EMAS. In 2012 the numbers were 217 (Hoeve, 2012). This is a small number of the 1.8 million tourism enterprises in the EU including 260,000 in the accommodation category (ECORYS report 2009). The Network of European Regions for a sustainable and competitive tourism (NECSTouR) is established and active. The European Destinations of Excellence (EDEN) has since 2007 awarded approx. 98 winning destinations in 26 participating countries (EDEN 2011). Each year new destinations are awarded within a theme.

	Target 3 Relevant actions include the visiteurope.com website and the creation of a 'Europe Brand'. The visiteurope.com website has been established and Europe is promoted as a destination here. Sustainability is however only mentioned as a small subsection under planning of travels. **Target 4** The status of the aim to maximise the potential of EU financial policies and instruments for developing tourism is that these have been analysed in a 'Study on the impacts of EU policies and the measures undertaken in their framework on tourism' (RPA 2012). A number of recommendations are given in relation to the remaining three axes of the 2010 Communication. The study shows the high complexity of the tourism sector and the relations with many policies and measures across the different GREECO topics. A Study on the Competitiveness of the EU tourism industry (ECORYS 2009) point to a number of challenges and a road map where actions are needed in five major fields: support tourism demand, stimulate innovation and entrepreneurship, combine available resources more efficiently, ensure that development of tourism is sustainable and provide "oxygen" to the industry.	
Policy effectiveness	**Characterisation**	A framework not a single policy
	Description	Effectiveness depends on the success of the many initiatives within the framework – too early to assess a number of these. There is an Implementation Rolling Plan to ensure the successful implementation of the Tourism Communication with regular updates by the EC. http://ec.europa.eu/enterprise/newsroom/cf/_getdocument.cfm?doc_id=7178
Transformative character of policy	**Characterisation**	High potentials for transformation by greening of tourism industry – greening is particularly linked to target 2.
	Description	Overall, the 2010 Communication is providing a framework for a number of actions with high potentials for transforming the tourism industry in several ways including greening. But the small number of tourism enterprises with eco-labels or EMAS seems to indicate that the tourism sector has so far not been stimulated to participate in these programs or the greening of tourism. According to the ECORYS (2009:V) report, eco-innovation has hardly entered the tourism industry and the low absorptive capacity for innovation among SMEs, as well as limited knowledge about the concept of and need for

		innovation in many SMEs, makes the promotion and adoption of innovative practices a real challenge in a tourism industry dominated by SMEs (and especially microenterprises). In tourism accommodation, more than 70 % of the 260,000 enterprises are microenterprises with less than 10 employees ECORYS (2009:43) and the majority of these have only 0-1 employees (JRC report 2012:56). A transformation towards greening will be linked to successful involvement of the many SMEs and microenterprises in the process.
Green economy implication	**Characterisation**	High potentials for stimulating growth in the green economy through the conversion of tourism enterprises towards greener practices.
	Description	Particularly the suppliers of green technologies will increase employment and income.

6.5 Tourism and other sector policies

Tourism is a complex sector being affected by many different policy areas. A study of the impact of EU policies and the measures undertaken in their framework on tourism was completed in 2012 (RPA 2012). The study screened a number of EU policies in order to identify the synergies with tourism policy to allow for better mainstreaming of tourism in future work programs. The policies of relevance to or with impact on tourism are all reviewed in relation to the three first targets of the 2010 Communication. The more than hundred reviewed policies fall into the following categories (Categories marked in blue are potentially the most relevant to the GREECO focus on greening of tourism and territorial aspects):

- Agriculture and rural development;
- Climate change;
- Competition;
- Education and culture;
- Employment, social affairs and inclusion;
- Energy;
- Enlargement;
- Environment;
- Health and consumer protection;
- Home affairs;
- Communications Networks, Content and Technology;
- Internal market and services;
- Justice;
- Maritime affairs and fisheries;

- Mobility and transport;
- Regional policy;
- Research and innovation;
- Taxation;
- Trade; and
- Development and cooperation.

6.6 Other policies affecting tourism

Tourism is a cross-cutting sector and a number of policies enacted by the EC have an effect on tourism. These include:

- **Internal market policy**, the tourism sector should in future benefit fully from the integration of the European market in services.

- **Maritime policy** and the diversification of economic activities in islands and coastal areas through ecotourism. This is supported by the European Fisheries Fund (EFF). Small-scale fisheries and tourism infrastructure will also be supported through the EFF. The Fund also supports schemes for retraining in occupations, besides sea fishing, which may relate to tourism. Relevant actions are included in Priority Axis 4 "Sustainable Development" under which € 567 million have been allocated.

- **Rural policy** is also of considerable importance to the tourism sector. Through the European Agricultural Fund for Rural Development (EAFRD), the Commission can support, among other things, the establishment of businesses active within rural tourism, the development and promotion of agrotourism and capitalisation on the cultural and natural heritage of rural regions, including mountain areas. EARDF's financial planning for 2007–2013 in Axis 3 which includes both direct and indirect investments in tourism exceeds € 12 billion with a public expenditure of € 18 billion and private expenditure exceeding EU € 9 billion. Measure 313 of Axis 3 which regards specifically the Encouragement of tourism activities allocates almost € 731 million for EARDF contribution, € 1.1 billion of public expenditure and € 727 million of private expenditure. The LEADER programme has been an essential instrument in EU's rural policy.

- The Commission has foreseen the possibility of funding sustainable tourism-related projects through the **European Regional Development Fund (ERDF**), in support of socio-economic development. Under the "Convergence" the "Competitiveness and employment" and the "European territorial cooperation objectives", ERDF shall support more sustainable patterns of tourism to enhance cultural and natural heritage, develop accessibility and mobility related infrastructure and to promote ICT, innovative SMTEs, business networks and clusters, higher value added services, joint cross-border tourism strategies and inter-regional exchange of experience.

- **Environment and transport infrastructures** are financed by the Cohesion Fund.

- The European Social Fund's (ESF) co-finances projects targeting **educational programmes and training** in order to enhance productivity and the quality of employment and services in the tourism sector. The ESF provides also targeted training combined with small start-up premiums to tourism micro-enterprises.

- **The Competitiveness and Innovation Framework Programme (CIP)** supports the competitiveness of EU enterprises and especially SMTEs and since 2008, it has supported the creation of European networks for competitive and sustainable tourism. Through the Eco-innovation funding scheme, the EC wants to support innovative products, services and technologies that can make a better use of our natural resources and reduce Europe's ecological footprint. With its objective to bridge the gap between research and the market, CIP Eco-innovation contributes to the implementation of the **Environmental Technologies Action Plan (ETAP).** There is nearly € 200 million available to fund Eco-innovation projects between 2008 and 2013 while by 2013, ETAP will have distributed over € 12 billion towards eco-innovation projects through FP6, FP7 and other EU funding programmes (European Commission 2007b). 6 projects with a direct focus on tourism eco-management funded by CIP programme are presented. Their budget was € 2 million EU's contribution at an average of 56%. CIP has funded more projects which have an impact on tourism.

- In March 2009, Danuta Hubner, European Commissioner for **Regional Policy** announced that € 105 billion will be invested in the green economy through the **EU Cohesion Policy**. The funding which represents more than 30% of the regional policy budget for 2007–2013 is expected to have an impact on employment generation. The largest share of the money will be spent on helping member states to comply with EU environmental legislation. A further € 48 billion will go on achieving Europe's climate objectives, including € 23 billion for railways, € 6 billion for clean urban transport, € 4.8 billion for renewable energies and € 4.2 billion for energy efficiency. Research and innovation will also receive a boost, with € 3 billion given to SMEs to help develop environmentally-friendly products.

Other EU policies and programmes impacting tourism include:

- **European Regional Development Fund (ERDF)** – supporting more sustainable patterns of tourism to enhance cultural and natural heritage, etc. Environment and transport are also financed by the Cohesion Fund.

- **European Social Fund (ESF)** – co financing projects to enhance productivity and quality of employment and services in the tourism sector through education and training. Targeted training & small start-up premiums for tourism micro-enterprises.

- **European programmes for life-long learning** and **Erasmus for young entrepreneurs** – enabling people to travel abroad to learn or train, for example in the tourism sector.

- **European Agricultural Fund for Rural Development (EAFRD)** – support for improving the quality of agricultural products and the rural environment, and encouraging tourism as a way to diversify the rural economy.

- **European Fisheries Fund (EFF)** – encouraging diversification of fishery dependent areas through alternatives such as eco tourism.

- **Competitiveness and Innovation Framework Programme** – supporting the competitiveness of EU businesses, especially SMEs.

- Research supported under the **7th EU framework programme** for research & technological development (ICT, satellite applications, cultural heritage, land use) may help the tourism sector.

6.7 Policy-linkages between Tourism and other GREECO sectors

The nine sectors identified in the GREECO are:

- Bioeconomy (forestry, fisheries and agriculture)
- Building and construction
- Energy production
- Green research and eco-innovation
- Manufacturing
- Tourism
- Transport
- Water management
- Waste management

Below is a list of legislative instruments linking tourism to the other GREECO sectors. As seen there are many policy linkages in particularly between tourism and agriculture, marine affairs & fisheries, and transport. The list is based on the RPA 2012 policy study, and it serves to show that policy affecting the greening of tourism will in fact originate from policies primarily related to other sectors. At the same time, and following this list of cross-sector linkages, specific attention is given to the main tourism communication/policy for the EU.

Policies relating tourism and Bioeconomy (forestry, fisheries and agriculture)

The EC agricultural and rural development policy's main link to tourism is the promotion of an integrated view of rural tourism where resources, products, services and the local community are interconnected (RPA 2012:16).

Agriculture:

Legislative Instruments – agriculture and rural development

- Council Decision 2006/144/EC on Community strategic guidelines for rural development (programming period 2007 to 2013).
- Council Decision on the conclusion, on behalf of the European Community, of the Protocol on Soil Protection, the Protocol on Energy and the Protocol on Tourism to the Alpine Convention [2006/516/EC].
- Regulation (EC) No 178/2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.

Non-legislative Initiatives – agriculture and rural development

- Commission Communication - Employment in rural areas: closing the jobs gap [COM (2006) 857].
- Commission Communication - Better access for rural areas to modern ICT [COM (2009) 103 final].
- Commission Communication - The CAP towards 2020: Meeting the food, natural resources and territorial challenges of the future [COM (2010) 672 final].

- Commission Communication - Our life insurance, our natural capital: an EU biodiversity strategy to 2020 [COM (2011) 244].
- European Commission, Sustainable Tourism and Natura 2000 – Guidelines, initiatives and good practice in Europe.
- European Union Business@Biodiversity Platform - Tourism Sector and Biodiversity Conservation Guidance Document.

(Maritime Affairs &) Fisheries

Legislative Instruments - Maritime Affairs & Fisheries

- Directive 2008/56/EC establishing a Framework for Community Action in the field of Marine Environmental Policy (Marine Strategy Framework Directive).

Non-Legislative Initiatives - Maritime Affairs & Fisheries

- Commission Communication – Conclusions from the Consultation on a European Marine Policy [COM (2007) 574].
- Commission Communication - Towards an Integrated Maritime Policy for better governance in the Mediterranean [COM(2009) 466]
- Commission Communication - Developing the international dimension of the Integrated Maritime Policy of the European Union [COM(2009) 536 Final]
- Commission Staff Working Document - Maritime Clusters [SEC (2007) 1406].
- Commission Communication - Maritime Spatial Planning in the EU – Achievements and Future Development [COM (2010) 771].
- The European Union and the Arctic Region [COM (2008)763].
- Forthcoming Commission Communication - the Challenges and Opportunities Concerning Maritime and Coastal Tourism in the EU – subject to an ongoing public consultation.
- OURCOAST Initiative.
- Recommendation (2002/413/EC) concerning the implementation of Integrated Coastal Zone Management in Europe.
- Council Decision concluding the Convention for the Protection of the Mediterranean Sea against Pollution and the Protocol for the prevention of the pollution of the Mediterranean Sea by dumping from ships and aircraft [77/585/EEC] (Barcelona Convention).

Policies relating tourism and <u>Building and Construction</u>

Legislative Instruments

- Directive 2010/31/EU on the energy performance of buildings.
- Regulation (EC) No 66/2010 on the EU Ecolabel
- Commission Decision establishing the ecological criteria for the award of the Community eco-label for tourist accommodation service [2009/578/EC]; and Commission Decision establishing the ecological criteria for the award of the Community eco-label for campsite services [2009/564/EC].
- Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (and its subsequent amendments in 1997, 2003, and 2009).

- Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC.

Policies relating tourism and <u>Energy production</u>

Legislative Instruments

- Council Decision on the conclusion, on behalf of the European Community, of the Protocol on Soil Protection, the Protocol on Energy and the Protocol on Tourism to the Alpine Convention [2006/516/EC].

Non-legislative Initiatives

- Commission Communication - Energy Efficiency Plan 2011 [COM (2011) 109 final].

Policies relating tourism and <u>Green research and eco-innovation</u>

Legislative Instruments

- None identified.

Non-legislative Initiatives

- Commission Communication - Internet of Things: an action plan for Europe [COM (2009) 278 final].

Policies relating tourism and <u>Manufacturing</u>

Legislative Instruments

- None identified.

Policies relating tourism and <u>Transport</u>

Legislative Instruments

- Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community.
- Regulation (EC) No 261/2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights.
- Regulation (EC) No 1107/2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air.
- Regulation (EC) No 1371/2007 on rail passengers' rights and obligations.
- Regulation (EU) No 1177/2010 concerning the rights of passengers when travelling by sea and inland waterway.
- Regulation (EU) No 181/2011 concerning the rights of passengers in bus and coach transport.
- Regulation (EC) No 1008/2008 on common rules for the operation of air services in the Community.
- Directive 2009/12/EC on airport charges.

- Regulation (EC) No 2111/2005 on the establishment of a Community list of air carriers subject to an operating ban within the Community and on informing air transport passengers of the identity of the operating air carrier.
- Decision 2007/339/EC on the signature and provisional application of the Air Transport Agreement between the European Community and its Member States, on the one hand, and the United States of America, on the other hand.
- The Single European Sky was created by regulation which is composed of:
- 1) Regulation (EC) No 549/2004 laying down the framework for the creation of the single European sky (the framework Regulation);
- 2) Regulation (EC) No 550/2004 on the provision of air navigation services in the single European sky (the service provision Regulation);
- 3) Regulation (EC) No 551/2004 on the organisation and use of the airspace in the single European sky (the airspace Regulation);
- 4) Regulation (EC) No 552/2004 on the interoperability of the European Air Traffic Management network (the interoperability Regulation); and
- 5) Regulation (EC) No 1070/2009 amending Regulations (EC) No 549/2004,(EC) No 550/2004, (EC) No 551/2004 and (EC) No 552/2004 in order to improve the performance and sustainability of the European aviation system
- Regulation (EC) No 80/2009 on a Code of Conduct for Computerised Reservation Systems and repealing Council Regulation (EEC) No 2299/89.
- Regulation (EC) No 1073/2009 on common rules for access to the international market for coach and bus services and amending Regulation (EC) No 561/2006.
- Regulation (EC) No 1356/96 on common rules applicable to the transport of goods or passengers by inland waterway between Member States with a view to establishing freedom to provide such transport services.
- Regulation (EEC) No 4055/86 applying the principle of freedom to provide services to maritime transport between Member States and between Member States and third countries.
- Regulation (EC) No 889/2002 amending Council Regulation (EC) No 2027/97 on Air Carrier Liability in the event of accidents.
- Proposal for a Regulation on Union guidelines for the development of the trans-European transport network [COM (2011) 650/2].

Non-legislative Initiatives - Transport

- Commission Communication - An action plan for airport capacity, efficiency and safety in Europe [COM (2006) 819].
- Commission Communication - A sustainable future for transport: Towards an integrated, technology-led and user friendly system [COM (2009) 279].
- Commission Communication - Action Plan on Urban Mobility [COM (2009) 490].
- Passenger Rights Campaign.
- Commission Communication - Community guidelines on financing of airports and start-up aid to airlines departing from regional airports [2005/C 312/01].
- The Cancún Agreement, represents an important step on the road to building a comprehensive and legally binding framework for climate action for the period after 2012.

Policies relating tourism and <u>Water management</u>

Legislative Instruments

- Directive 2006/7/EC concerning the management of bathing water quality and repealing Directive 76/160/EEC (concerning the quality of bathing water).
- Directive 2000/60/EC establishing a framework for Community action in the field of water policy (Water Framework Directive).
- Directive 98/83/EC on the quality of water intended for human consumption.
- Directive 91/271/EEC concerning urban waste-water treatment.

Policies relating tourism and Waste management

Legislative Instruments

- Commission Decision establishing the ecological criteria for the award of the Community eco-label for tourist accommodation service [2009/578/EC]; and Commission Decision establishing the ecological criteria for the award of the Community eco-label for campsite services [2009/564/EC].
- Regulation (EC) No 1221/2009 on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC.
- Council Decision concluding the Convention for the Protection of the Mediterranean Sea against Pollution and the Protocol for the prevention of the pollution of the Mediterranean Sea by dumping from ships and aircraft [77/585/EEC] (Barcelona Convention).
- Recommendation (2002/413/EC) concerning the implementation of Integrated Coastal Zone Management in Europe.

6.8 Policy analysis and conclusions of RPA study

In the RPA study, a wide range of tourism-related policies are evaluated against their relevance for the priority areas of the 2010 Communication on Tourism. The conclusions related to the priority 2, 'development of sustainable, responsible and high quality tourism' are mostly relevant to the GREECO study:

The RPA study concludes that measures concerned with the protection of the marine and natural environment, such as the Bathing Water Directive and the Marine Strategy Directive can have a positive impact especially with regard to the quality of the tourism experience and tourist products provided in coastal and maritime areas.

The RPA study mention that the relationship between the environment and tourism is a complex one, as tourism activities depend on the quality and preservation of the environment, while, at the same time, potentially having a detrimental impact on the environment. This relationship is increasingly being recognised and has resulted in the development of a number of measures to minimise the impacts of different tourism-related activities on the environment. Examples of these include ecolabelling for tourist accommodation and campsites, although these appear to have had a limited uptake so far. Further to this, other new initiatives, such as the EU Business and Biodiversity Platform, the future European Charter for Sustainable and Responsible Tourism and the future European

Tourism Label for Quality Systems could contribute to ensuring a sustainable, responsible and quality tourism in the EU.

Finally, the RPA study state that the inclusion of air travel in the EU Emissions Trading Scheme from January 2012 could also contribute to the development of sustainable travel and tourism, provided that it does not impose excessive burdens on the industry and its competitiveness, especially with regard to other third country markets which are not covered by similar regulations.

Policy recommendations of RPA study

A number of recommendations are given by the RPA study and those of relevance to the GREECO study are included:

RPA Recommendation for Target 1. Stimulate competitiveness in the tourism sector:

- Investigate the barriers to the development of rural tourism and engage in a dialogue with relevant policy stakeholders to address these barriers. Such dialogue is more likely to include other policy areas such as the communications networks, content and technology, transport and environment, in order to ensure that environmental principles are observed and that the full potential to develop rural tourism capitalises on the advantages of the new communication technologies and booking trends. Any strategy to address the barriers is likely to be based on a bottom-up approach where local and regional stakeholders' proposals are fitted to broader policy objectives;
- Facilitate access to finance by micro-enterprises within the tourism sector and consider the impacts of legislation in the conduct of their operations (namely employment law, obligations under the Package Travel Directive and/or application of environmental standards);

RPA Recommendation for Target 2. Promote the development of sustainable, responsible and high quality tourism:

- Monitor the impacts on demand and supply from inclusion of aviation into the EU Emissions Trading Scheme and continue working with DG CLIMA and continue the dialogue with the civil aviation industry to curb emissions;
- Continue to work with Member States towards the commitments of the Cancún Agreement, with particular regard to tourism impacts, and develop knowledge exchange;
- Work with DG ENV to raise awareness among tourists and the industry stakeholders of EU eco-labels in the tourism sector;
- Measure progress under the Business and Biodiversity Platform for the tourism sector and explore the possibilities of combining it with additional aspects of environmental sustainability, e.g. reduction in emissions, management plans under the Marine Strategy Framework Directive, etc.;

- Continue work on the development of a European Tourism Label for Quality Systems, engaging in a dialogue with industry and other relevant stakeholders to increase buy-in;
- Investigate the actions needed to improve the quality of the services provided to tourists with reduced mobility (e.g. provision of guidelines if signed by industry or mandatory requirements). The new regulation on harmonized statistics on accessible tourism is likely to be invaluable to inform these actions; and
- Continue work with DG MOVE in assessing the impacts on tourism volume and quality of the new Trans-European Transport Network.

Recommendation for Target 3. Consolidate the image and profile of Europe as a collection of sustainable and high-quality destinations:

- Liaise with DG COMP for the Revision of the Guidelines on financing of regional airports, with a view to increasing the offer of tourist destinations within Europe, but also in line with sustainability principles and with special regard to environmental impacts;
- Work with DG EAC to promote strategic planning of cultural or sporting events with tourism strategies and raise awareness about the 2007 Guidelines on maximising the durable impacts of cultural and sporting events;
- Explore channels to raise awareness of European Heritage Label and monitor the impact on tourism visits numbers and the quality of tourists' experience; and
- Continue work with DG REGIO to develop macro-regional strategies which pay attention, amongst others, to tourism, in line with priorities of the 2010 Communication and in view of the new proposal for a Trans-European Transport Network.

7 Territorial potentials

It has been highlighted throughout this report that tourism is a complex sector overlapping several of the GREECO sector topics. The green economy initiatives within these sectors also apply to tourism. For example – greener transport will also result in greener tourism – particularly for aviation (e.g. if short flights are converted to rail/coach), cars and cruise ships. Similarly, many of the issues of greening new and existing buildings to higher environmental performance are applicable to the tourism overnight facilities and related enterprises (e.g. travel agencies). Initiatives to reduce energy and water consumption, waste, wastewater handling will have an even higher effect in tourism, as consumption patterns are higher in tourism than in regular households and because of the seasonality patterns that provide peak periods in these consumption patterns. Environmental protection and biodiversity is a key attraction in tourism and improvements may be linked to creating more attractions and to awareness raising (e.g. interpretative visitor facilities, educational activities). Initiatives in the agricultural sector towards greening will also be relevant to tourism through their consumption of food and beverages.

With all of this being said, the information on existing performance, territorial factors and outcomes and current policy provision shows that the greening of the core businesses of the tourism industry will be carried out predominantly at destination level and involving in particularly the approx. 280.000 accommodation enterprises and their supporting functions within the destination. As such, this primarily relates to the promotion of sustainability both by and for microenterprises and SME's, as well as improved consumption efficiency related to buildings, waste production and water demand. Again, this does not cover perhaps the main issue of resource dependency in the tourism sector – that of fuel consumption for transport.

The findings present throughout this report show that four key aspects will play a central role for achieving a greener tourism sector in Europe. As such, they are taken up individually in the following tables as a means of applying a consistent approach across the GREECO sectors and therefore allowing the tables to act as a scoping basis for the identification of European indicators to be used in the analysis of regional potentials of the green economy. The fours aspects are as follows:

- Destination planning and (sustainable) development strategies
- Government investment in public goods and services
- Supplier awareness and involvement in greening of tourism
- Consumer awareness and changing demands (but any major push for greening is at this point unlikely to come from consumers)

Table 13: Territorial potential relating to destination planning and development strategies

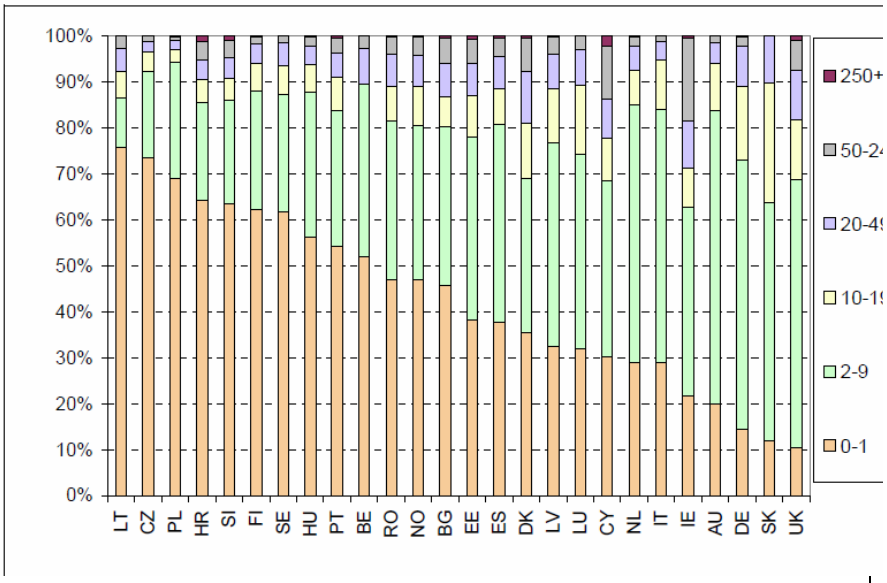
Factor "name"	Destination planning and development strategies
Description	During the early phases of tourism, uncontrolled development of tourism facilities caused a range of impacts in for example the Mediterranean region and not all countries in Europe may yet have effective planning and development strategies and processes in place to efficiently control tourism development and/or improve problems from existing facilities. Destination planning and development strategies are described in the UNEP & UNWTO study (2012) as the first step towards the greening of tourism. In developing tourism strategies, local governments, communities and businesses need to establish mechanisms for coordinating with ministries responsible for the environment, energy, labour, agriculture, transport, health, finance, security and other relevant areas. Clear requirements are needed in such areas as zoning, protected areas, environmental rules and regulations, labour rules, agricultural standards and health requirements particularly related to energy, emissions, water, waste and sanitation. (UNEP & UNWTO, 2012).
Specificity for the green economy	Integrating sustainability measures and green initiatives into the plans and strategies of tourism development before construction can reduce consumption patterns (e.g. water, energy); impacts (e.g. waste, wastewater, GHG emissions, and prevent loss of functions (e.g. nature areas, biological diversity). Planning and development strategies are relevant at all levels from regional, local community to the individual development site.
Provable impact on the green economy spheres	Tourism destination planning and development strategies are a pre-requisite for concerted actions of green economy initiatives beyond the individual business level.
Trade-offs: mixed +/- impacts on green economic	+ impacts

spheres?	
Externalities: impact on other sectors / case studies	+ impacts, creates better coordination of initiatives across sectors
Interactions with other factors	Yes - Strategies of greening and comprehensive planning and strategies are cross-sectorial by nature
Causal level of operation (proximate/direct versus underlying/indirect factors)	Destination planning and development strategies provide a framework for initiatives of greening.
Spatial level of operation (**internal versus external factors)**	All - but particularly relevant at destination level
Type of market force involved	**n/a**
Policy recommendations: making the link between policy and non-policy factors	Inclusion of tourism destination planning and development strategies in the public planning systems at all levels. Including assessment of the existing conditions and setting goals of greening. The new European Tourism Indicator System for Sustainable destinations provides a toolkit to be used at destination level. Some aspects relate to the public tourism policies and strategies. However, the overall collection of the indicators is likely to be a public task.
Possible indicators	In the **European Tourism Indicator System for Sustainable destinations (DG Enterprise and Industry 2013)** almost all indicators have linkages to destination planning and development strategies. In some cases, the presence of a public policy is an indicator in itself: **A.1 Sustainable Tourism Public Policy** • A.1.1.Percentage of the destination with a sustainable tourism strategy/action plan, with agreed monitoring, development control and evaluation arrangement. (Core indicator). • *A1.1.1. Percentage of residents satisfied with their*

	involvement and their influence in the planning and development of tourism (optional indicator) • *A1.1.1. Percentage of the destination represented by a destination management organisation (optional indicator)* **C.4 Protecting and Enhancing Cultural Heritage, Local Identity and Assets** • C.4.1. Percentage of the destination covered by a policy or plan that protects cultural heritage (Core indicator).

Table 14: Territorial potential relating to Increasing tourism industry awareness and investments in greening of tourism

Factor "name"	**Increasing tourism industry awareness and investments in greening of tourism**
Description	The tourism sector involves a diverse range of actors. The awareness of green tourism and use of labelling and environmental management systems appears to have developed primarily in a selection of larger-scale firms (UNEP & UNWTO 2012). Possibly because they have resources to invest and obtain large savings from improved environmental performances. Tourism is however dominated by small and medium-sized enterprises (SMEs) and microenterprises, and much of the potential for greening of tourism is found here (UNEP & UNWTO 2012: viii). As seen in ***figure 1***, on average over 80% of the approx. 280.000 tourism enterprises in the EU 27 are micro-enterprises (0-9 employees) and around 40-50 % of the microenterprises are very small with only 0-1 employee.



Size (number of employees) distribution of accommodation enterprises in the EU-27, by number of Enterprises. Based on EUROSTAT 2012 - data from 2008. (Source: JRC report 2012:56)

But often **SMEs and microenterprises lack the know-how and the skills to get information, funding and training for the greening of their business or development of new, green products**. The SMEs' and microenterprises' single greatest limiting factor for greening, however, is lack of access to capital.

In analysing the greening of the tourism industry, UNEP and UNWTO (2012) conclude that the private sector, especially small firms, can, and must be mobilized to support green tourism. While large scale firms more often engage in greening, there is a **lower awareness among SMEs and microenterprises** so specific **mechanisms and tools to educate small and medium-sized tourism related enterprises** are critical (UNEP and UNWTO, 2012). Tools such as the use of recognized standards for sustainable tourism, such as the Global Sustainable Tourism Criteria (GSTC), can help businesses improve sustainability performance, including resource efficiency, and assist in attracting additional investment and customers. (for more tools se policy recommendation factor later in this table)

Furthermore, it is concluded that **much of the economic potential for green tourism is found in small and medium-sized enterprises (SMEs)**, which need better access to financing for investing in green tourism. Governments and international organizations can facilitate the financial flow to these important actors with an emphasis on contributions to the local economy and poverty reduction. Public-private partnerships can

	spread the costs and risks of large green tourism investments. Besides reducing administrative fees and offering favorable interest rates for green tourism projects, in-kind support such as technical, marketing or business administration assistance, could also help. Further conclusions are that **investing in the greening of tourism can reduce the cost of energy, water and waste and enhance the value of biodiversity, ecosystems and cultural heritage.** Investment in energy efficiency has been found to generate significant returns within a short payback period. Improving waste management is expected to save money for tourism businesses, create jobs and enhance the attractiveness of destinations. The UNEP & UNWTO study also predict future tourism growth in different scenarios. Conclusions are that under a green economy investment scenario, tourism makes a larger contribution to GDP growth, while significant environmental benefits include reductions in water consumption (18%), energy use (44%) and CO2 emissions (52%), compared with the BAU (Business as Usual) scenario).
Specificity for the green economy	Greening of tourism enterprises is contributing directly to the green economy Tourism development is substantial and raising the awareness and investment in green tourism will contribute to the green economy. The UNEP & UNWTO study of greening of tourism suggest that governments can use tax concessions and subsidies to encourage private investment in green tourism. Time-bound subsidies can be given, for example, on the purchase of equipment or technology that reduces waste, encourages energy and water efficiency, the conservation of biodiversity and the strengthening of linkages with local businesses and community organisations. At the same time, resource and energy use as well as waste generation need to be correctly priced to reflect their true cost to society.)
Provable impact on the green economy spheres	Greening of tourism enterprises has great potential to positively impact the green economy. The tourism industry includes 1.8 million enterprises in the EU27 of which 280.000 enterprises are in the accommodation sector. The UNEP & UNWTO study (2012) analyses greening of the tourism sector and concludes that the business case for investing in these areas is sound and that the majority of tourism businesses primarily SMEs and microenterprises have potential to generate greater income and opportunity from green strategies.

	In short, greening will have both positive environmental, economic and social effects in the tourism sector.
Trade-offs: mixed +/- impacts on green economic spheres?	Only +
Externalities: impact on other sectors / case studies	Greening of tourism enterprises will affect sectors such as water, energy, waste handling and wastewater treatment as well as building constructions). The different labelling schemes for tourism facilities such as the EU Flower, Green Key, Nordic Swan and similar international schemes are in dialog with the enterprises and can indicate the effects of greening. Also EMAS is relevant. Case studies of relevance could be existing examples of green accommodation facilities – for example the CO2 neutral Crowne Plaza Copenhagen Towers utilising a range of technologies. Accor Hotels in the UK has experiences in water saving technologies. TUI Hotels and Resorts have experiences with different energy technologies. (More examples can be included) When the new European Tourism Indicator System Toolkit for Sustainable destinations (DG Enterprise and Industry 2013) starts to be tested/ implemented, valuable results may arise if case studies are undertaken.
Interactions with other factors	The initiatives taken in greening the tourism sector – with a focus on SMEs and microenterprises in the destinations are interrelated to several other factors: • Building and construction – a higher demand for more green construction materials and processes. • Water – lower consumption and better water management (storage facilities, water saving devices, fewer swimming pools & golf courses) • Waste – lower waste generation. • Wastewater - better treatment systems and hereby reduced discharge to the environment. • Agriculture – increased use of local and organic products in tourism.

	• Energy – less consumption and increased demand for environmentally friendly energy technologies. • Biodiversity – increased interest in protection.
Causal level of operation (proximate/direct versus underlying/indirect factors)	Direct
Spatial level of operation (internal versus external factors)	All levels
Type of market force involved	Tourism is a highly competitive business based on demand and the demand for green tourist products and facilities is currently only by a smaller segment. The greening of tourism is also not supply-driven to any large extent, as most small enterprises lack awareness, knowledge, time and funding to get involved. It is seen as a public governmental task to stimulate and facilitate the green economy transition of the supplier of tourism. European Union (EU) funds are available from several sources including structural funds and research projects.
Policy recommendations: making the link between policy and non-policy factors	The UN & UNWTO (2012) study points out that the high number of SMEs and microenterprises is a challenge and 'reaching out to such a wide variety of small businesses, across numerous sectors, continents and languages is a daunting task. Without **information, knowledge and tools**, greening will be nearly impossible. Nonetheless, engaging these critical actors is a necessary condition for a sustainable industry.' (UN & UNWTO 2012:56) The ITF-STD (2009) recommends that 'tourism businesses and government institutions in charge of tourism should **adopt innovative and appropriate technology** to improve the efficiency of resource use (notably energy and water), minimize emissions of greenhouse gases (GHG) and the production of waste, while protecting biodiversity, helping reduce poverty and creating growth and sustainable development conditions for local communities'.

	The UN & UNWTO (2012) study points to a range of **enabling conditions for engaging the industry:** 1) Tourism industry associations and wider industry platforms play an important role in **engaging tourism businesses in sustainability** as well as developing **practical tools** to respond to many common challenges. The tools mentioned include **Corporate Social Responsibility** and measures such as **triple bottom line reporting, environmental management systems** and **certification**. Furthermore, experience in many countries has shown that **concrete mechanisms and tools to educate SMEs** are critical, but are most effective when they are accompanied by concrete, actionable items. 2) That various international institutions engage in informing, educating and working collaboratively with the tourism industry to **integrate sustainability into policies and management practices**, and secure their **active participation** in developing sustainable tourism. At the national level, government and civil society engagement should be a critical part of these efforts to coordinate action. 3) An **increased use of industry-oriented decision support tools** would help speed the adoption of green practices. European examples include Hotel Energy Solutions, TourBench and SUTOUR. These tools provide assistance to tourism enterprises to identify potential investments and cost saving opportunities for sustainable decision making to ensure profitability and competitiveness. 4) **Bringing together disparate stakeholders in the tourism sector** in a **co-ordinated strategy to lead them towards a common goal.** Destination Management Organisations (DMOs) may expand their role from marketing and become a **strategic leader in destination development and management** and ensure a coordinated and well-directed effort in providing the widest possible range of support services to tourism SME's. 5) The promotion and widespread use of **internationally recognized standards for sustainable tourism** can provide support to monitor tourism business operations and management. The private sector tends to perform best when clear criteria, objectives and targets can be identified and incorporated into their investment plans and business operations. The **Global Sustainable Tourism Criteria (GSTC)**, from 2008 provides the most promising current platform to

	begin the process. Also, **standardised labels** can enhance sustainability and allow consumers to make informed choices. In addition to the mentioned awareness raising initiatives, knowledge, networking, and standardization activities a key aspect appears to be financial support. The UN & UNWTO study (2012:61) points out a number of enablers: **Enabling conditions for finance** 1) The single greatest limiting factor for SMEs in moving toward greener tourism is lack of access to capital for this type of investments. **Green investments must be seen as value-added investment** and made on their economic and financial merits, without prejudice. This will **require greater private sector awareness** of the value of green investment, and also policy coordination with Ministries of Finance and regulatory authorities. 2) **Regional funds for local tourism development** may help overcome financial barriers for green investments where investments also generate public returns (through positive externalities). Foreign direct investment (FDI), private equity, portfolio investment, and other potential funding sources should be also aligned with sustainable projects and strategies for the tourism industry. 3) **Mainstream sustainability into tourism development investments and financing**. In this regard, the **Sustainable Investment and Finance in Tourism (SIFT) network** is working to integrate the expectations of private investors, the leveraged strength of the financing and donor community, and the needs of developing destinations. The SIFT Network aims to establish a **common, voluntary standard to en-courage greater sustainability in tourism investments** by public, private and multilateral investors; **intensify financing of sustainable tourism projects; increase sustainable investments in the tourism sector; improve capacity of developing destinations; and leverage unique knowledge and reach others**. SIFT efforts should permeate to regional, national and local financial organizations (counterparts), and help integrate other global sustainable financial initiatives (for example UNEP-FI, Equator Principles) to support green investments in tourism. 4) **Establish partnership approaches to spread the costs and risks of funding sustainable tourism investments**. In the case of small and medium enterprises, for example, besides sliding fees and **favourable interest rates** for sustainability projects, **in-kind support** like technical, marketing or business administration

	assistance, could help to offset the cash requirements of firms by offering them services at low cost. In addition, loans and loan guarantees could include more favourable grace periods before the onset of payments, no personal asset guarantees, longer repayment periods, or even reduction of loan amount for prompt payments. Loans for sustainable tourism projects could be set up with guarantees from aid agencies and private businesses, lowering risk and interest rates. To become interested, the many SMEs and microenterprises need to see obvious and immediate benefits from greening and initiatives such as free consulting service on environmental improvement options neutral of business interests and simplified funding schemes that allow for immediate benefits and short payback time. Experience from successful implementation of greening at small scale outside the tourism sector may provide inspiration.
Possible indicators	Based on the European Tourism Indicator System for Sustainable destinations (DG Enterprise and Industry 2013): **A.2 Sustainable Tourism Management in Tourism Enterprises** A.2.1 Percentage of tourism enterprises/establishments in the destination using a voluntary verified certification/labelling for environmental/quality/sustainability and/or CSR measures (Core indicator). *A.2.1.1. Number of tourism enterprises/establishments with sustainability reports in accordance with the Global Reporting Initiative (GRI) (optional indicator)* **D.2 Climate Change** Percentage of tourism enterprises involved in climate change mitigation schemes—such as: CO2 offset, low energy systems, etc.—and "adaptation" responses and actions (core indicator) *D.2.1.1. Percentage of the destination included in climate change adaptation strategy or planning (optional indicator)* *D.2.1.2. Percentage of tourism accommodation and attraction infrastructure located in "vulnerable zones" (optional indicator)* **D.3. Solid waste management** D.3.1. Waste volume produced by destination (tonnes per resident per year or per month) (core indicator) *D.3.1.1. Percentage of tourism enterprises separating different types of*

	waste (optional indicator). D.3.2. Volume of waste recycled (percent or per resident per year) (core indicator) **D.4 Sewage Treatment** D.4.1. Percentage of sewage from the destination treated to at least secondary level prior to discharge (core indicator) *D.4.1.1.Percentage of commercial accommodation connected to central sewage system and/or employing tertiary sewage treatment (optional indicator)* **D.5 Water Management** D.5.1. Fresh water consumption per tourist night compared to general population water consumption per person night (core indicator). *D.5.1.1 Percentage of tourism enterprises with low-flow shower heads and taps and/or dual flush toilets/waterless urinals (optional indicator).* *D.5.1.2 Percentage of tourism enterprises using recycled water (optional indicator)* *D.5.1.2 Percentage of water use derived from recycled water in the destination (optional indicator)* **D.6 Energy Usage** D.6.1. Energy consumption per tourist night compared to general population energy consumption per person night (core indicator). *D.6.1.1 Percentage of tourism enterprises that have switched to low-energy lighting (optional indicator).* *D.6.1.1 Annual amount of energy consumed from renewable sources (Mwh) as a percentage of overall energy consumption (optional indicator).*

Table 15: Territorial potential relating to government provision and investment in public goods and services

Factor "name"	Government provision and investment in public goods and services
Description	Government spending on basic public goods and services such as water conservation, waste management, sanitation, public transport and renewable energy infrastructure, protected areas, and cultural assets can reduce the cost of green investments by the private sector in green tourism. The provision of these basic services is not only related to tourism but also benefits local residents and other businesses and community functions. Government investment in measures to reduces consumption and discharges to the environment may also save the cost of new infrastructure investments. Several of these public goods and services tend to be of higher standards in northern European countries (for example the treatment of wastewater) than in southern European regions. As the primary tourism flows are from the north to the south of Europe, the impact of a tourist night tends to be higher in the south (for example more discharge of wastewater BOD5 to the environment). The seasonality of tourism creates periods of high pressure on the public infrastructure and the capacities need to be dimensioned for high season use. Investment in higher level treatment technologies (e.g. tertiary treatment of wastewater can limit the discharge of pollutants into the sea and reduce the risk of algae blooms and depletion of the marine ecosystem. The sea is a key asset/resource for the tourism industry – in particular the large 'sea, sand, and sun segment'. Deterioration of the water quality can have severe economic consequences for the tourism industry. Public investments in highly efficient wastewater facilities would not only benefit tourism but the whole community, biodiversity, etc. Altogether, the provision of and investments in high quality public goods and services is important to the tourism industry and the community in general and may greatly reduce the environmental pressure in many popular tourist regions. This reduces the green investment needs in tourism business which can then allocate resources to further green investments at the facility level (e.g. water saving devices, photo voltaic energy …. And other investments more suitable to improve the greening of individual tourism

	facilities.
Specificity for the green economy	Government provision and investment in public goods and services are likely to be supportive of the green economy – both directly when developing new facilities and indirectly by providing a supportive green community frame which lets the enterprises focus on greening of their own facilities.
Provable impact on the green economy spheres	Improving and upgrading public infrastructure, goods and services will involve a greening in itself, but also sets the frame for enterprises not to have to address these individually (e.g. if the community energy supply is already from renewables, they do not need to establish their own system and can focus on reducing consumption). The UNEP & UNWTO study (2008) concludes that the investment requirement in conservation and restoration is small relative to the value of different nature areas incl. coastal zones, which provide ecosystem services essential for the foundation of economic activities and for human survival; the value of ecosystems for tourists remains undervalued in many cases. Investment in cultural heritage – the largest single component of consumer demand for sustainable tourism – is among the most significant and usually profitable investments.
Trade-offs: mixed +/- impacts on green economic spheres?	Only +
Externalities: impact on other sectors / case studies	Impact is cross-sectorial by providing a better framework for a number of greening processes.
Interactions with other factors	Improvements of the public infrastructure, goods and services provide a better framework that can reduce the cost of green investments for several factors (depending on the type of improvements).
Causal level of operation (proximate/direct versus underlying/indirect	Underlying/ indirect

factors)	
Spatial level of operation (internal versus external factors)	
Type of market force involved	Public investments
Policy recommendations: making the link between policy and non-policy factors	Public investments in high standard infrastructure, goods and services that provide a supportive collective frame for greening of tourism and other sectors. Hereby individual enterprises can focus on internal greening.
Possible indicators	Based on the European Tourism Indicator System for Sustainable destinations (DG Enterprise and Industry 2013): **D.1 Reducing Transport Impact** D.1.1.1. Percentage of visitors using local/soft mobility/public transport services to get around the destination (optional indicator) **D.2 Climate Change** D.2.1. Percentage of tourism enterprises involved in climate change mitigation schemes—such as: CO2 offset, low energy systems, etc.—and "adaptation" responses and actions (core indicator) *D.2.1.1. Percentage of the destination included in climate change adaptation strategy or planning (optional indicator)* *D.2.1.2. Percentage of tourism accommodation and attraction infrastructure located in "vulnerable zones" (optional indicator)* **D.3. Solid waste management** D.3.1. Waste volume produced by destination (tonnes per resident per year or per month) (core indicator) *D.3.1.1. Percentage of tourism enterprises separating different types of waste (optional indicator).* D.3.2. Volume of waste recycled (percent or per resident per year) (core indicator)

	D.4 Sewage Treatment D.4.1. Percentage of sewage from the destination treated to at least secondary level prior to discharge (core indicator) *D.4.1.1.Percentage of commercial accommodation connected to central sewage system and/or employing tertiary sewage treatment (optional indicator)* **D.5 Water Management** D.5.1. Fresh water consumption per tourist night compared to general population water consumption per person night (core indicator). *D.5.1.1 Percentage of tourism enterprises with low-flow shower heads and taps and/or dual flush toilets/waterless urinals (optional indicator).* *D.5.1.2 Percentage of tourism enterprises using recycled water (optional indicator)* *D.5.1.2 Percentage of water use derived from recycled water in the destination (optional indicator)* **D.6 Energy Usage** D.6.1. Energy consumption per tourist night compared to general population energy consumption per person night (core indicator). *D.6.1.1 Percentage of tourism enterprises that have switched to low-energy lighting (optional indicator).* *D.6.1.1 Annual amount of energy consumed from renewable sources (Mwh) as a percentage of overall energy consumption (optional indicator).* **D.7 Landscape and Biodiversity Protection** D.7.1. Percentage of destination (area in km2) that is designated for protection (core indicator) *D.7.1.1. Percentage of local enterprises in the tourism sector actively supporting protection, conservation, and management of local biodiversity and landscapes (optional indicator).* *D.7.1.2. Percentage of destination covered by a biodiversity management and monitoring plan (optional indicator).* **D.8 Light and Noise Management** D.8.1. The destination has policies in place that require tourism

	enterprises to minimise light and noise pollution (core indicator). *D.8.1.1. Percentage of the destination and percentage of population covered by local strategy and/or plans to reduce noise and light pollution (optional indicator).* **D.9 Bathing Water Quality** D.9.1. Level of contamination per 100 ml (faecal coliforms, campylobacter) (core indicator). *D.9.1.1. Number of days beach/shore closed due to contamination (optional indicator).*

Table 16: Territorial potential relating to consumer awareness and changing demands

Factor "name"	**Consumer awareness and changing demands**
Description	Tourism is demand driven and the UNEP & UNWTO study (2012: viii) concludes that 'tourists are demanding the greening of tourism. More than a third of travellers are found to favor environmentally-friendly tourism and be willing to pay between 2 and 40% more for this experience. Traditional mass tourism has reached a stage of steady growth. In contrast, ecotourism, nature, heritage, cultural and "soft adventure" tourism are taking the lead and are predicted to grow rapidly over the next two decades. It is estimated that global spending on ecotourism is increasing at a higher rate than the industry-wide average growth.' Although the demand for more environmentally friendly products such as ecotourism is growing, these are niche products in a very large market. The average consumers tend not to be very aware of the impacts caused by tourism. Among the consumers, going on a holiday is often associated with a break from the daily routines and engaging in more care-free behaviours and excess consumptions. Increasing the consumer awareness and changing demand toward more green/environmentally sound types of tourism will require substantial efforts and greening is not specifically consumer-driven. Also, awareness does not necessarily turn into actions. An overall push for greening of the bulk of the tourism industry is likely to have to come from the public sector (EU, national governments etc.) as also the tourism enterprises have a limited

	awareness and problems with funding of greening initiatives.
Specificity for the green economy	Raising consumer awareness also of tourists is highly relevant in relation to the green economy. Particularly changing demands of transport towards greener modes is relevant.
Provable impact on the green economy spheres	Consumer awareness of greening (all sectors) is highly relevant as it may lead to changes in demand for more green products and services. For tourism sector, this is particularly linked to more environmentally friendly transport and to the use of greener accommodation and services in the destination.
Trade-offs: mixed +/- impacts on green economic spheres?	+ Positive
Externalities: impact on other sectors / case studies	+ Positive
Interactions with other factors	Increasing consumer awareness in tourism and associated changes in demand is linked to transport, energy, water, waste, wastewater, building, biodiversity and agriculture.
Causal level of operation (proximate/direct versus underlying/indirect factors)	Increased consumer awareness and related changes in demand for more green products and services among tourists is likely to have a direct impact.
Spatial level of operation (internal versus external factors)	All levels – particularly related to destinations
Type of market force involved	Awareness raising is a voluntary process not directly associated with marked forces. But market forces may influence the transformation of awareness into changes in demand (e.g. if the greener travel alternatives are prized much higher).
Policy	Stimulate the inclusion of 'greening of tourism' in national, regional

recommendations: making the link between policy and non-policy factors	and local tourism policies. Awareness campaigns towards tourists and stimulating the tourism industry to provide more green tourism products to consumers. Promote the use of the European Tourism Indicator System for Sustainable destinations, establish data collection procedures (for example of key greening factors along with the Tourism Satellite Account reporting already in place), benchmarking destinations and eventually making the results available to tourists, so they can evaluate the green performance of the destinations. (see transport theme for policies that can change increase consumer awareness and associated transport patterns – particularly reduce aviation (e.g. convert short flights to rail/coach), increase consumer interest in greener cars. Initiatives to raise awareness of the highly polluting cruise ships and the impacts of flight/cruise combinations.
Possible indicators	Based on the European Tourism Indicator System for Sustainable destinations (DG Enterprise and Industry 2013): **A.4 Information and Communication** A.4.1 The percentage of visitors who note that they are aware of destination sustainability efforts (Core indicator) *A.4.1.1.The percentage of businesses that communicate their sustainability efforts to visitors in their products, marketing, or branding (optional indicator).* **D.1 Reducing Transport Impact** D.1.1. Percentage of tourists and same day visitors using different modes of transport to arrive at the destination (public/private and type) (core indicator) *D.1.1.1. Percentage of visitors using local/soft mobility/public transport services to get around the destination (optional indicator).* D.1.2. Average travel (km) by tourists to and from home or average travel (km) from the previous destination to the current destination (core indicator) *D. 1.2.1. Average travel (km) by same day visitors from and to destination (optional indicator).*

6 Conclusion and key policy messages

Based on the aspects presented in the report, a number of conclusions may be drawn:

The integration of sustainability in tourism policies and initiatives at the national, regional and local levels. The development of more sustainable tourism has increased in priority in the EU and particularly the 2010 Communication points to a number of actions to increase sustainability in tourism. Furthermore, the progress of implementation can be followed through a Rolling Implementation Plan. However, to become more widespread, the issue of sustainability need to be integrated in policies and initiatives at all levels down to the destination level.

Including tourism destination planning and sustainable development strategies in the public planning systems at all levels would increase the focus on sustainability (i.e. assessment of the existing conditions and setting goals of greening). It can contribute to better land-use planning and community integration.

Government investment in public goods and services

The availability of state-of-the-art infrastructure such as tertiary wastewater treatment plants, waste handling and recycling systems, public transport etc. is needed for the tourism sector to increase their environmental performance (as well as the impacts from the overall community). Currently, much wastewater is discharged untreated into the sea and negatively affecting bathing water quality, biodiversity etc. Providing these basic systems and public services is a community issue beyond the individual enterprise.

Increase consumer awareness and changing demand

Consumer awareness and changing demands play a central role for achieving a greener tourism sector in Europe. Consumption patterns are generally more excessive in tourism (e.g. higher per person water consumption and waste production) and there is high potential for reductions.

Increase industry awareness and involvement in greening for greening of tourism sector.

Among the key obstacles for the tourism industries to engage in greening is the highly fragmented nature of the industry and the high number of microenterprises and SMEs with limited resources (finances, time and knowledge) to get involved. Reaching out to a wide variety of small tourism businesses is a difficult task. Small enterprises need to see some obvious benefits and quite immediate results.

Local networks and initiatives to support the transition of tourism SMEs by supplying information, education, and concrete practical tools for engaging in greening initiatives.

The focus could be on promoting such tools as environmental management systems and certification as well as Corporate Social Responsibility and measures such as triple bottom line reporting. Destination cooperation and networks may provide support for this and stimulate the individual enterprises to join. In addition to knowledge, the provision of neutral consultancy and a concrete plan for greening of enterprises would make the transition more likely if combined with schemes for financing the greening.

Better use of investment support schemes in tourism

The development and spreading of simple investment support schemes for greening could be a good option for the small tourism enterprises, which would allow them to install the green technologies and keep paying their current expenses (or a bit less as an incentive) for energy, water, waste and waste water treatment until the environmental investments are paid for, and then gain the full savings.

The indicators for sustainable tourism and the environmental criteria of tourism need to be further developed and implemented.

Overall, the development of indicators for sustainable tourism such as the European Tourism Indicator System for Sustainable Destinations (DG Enterprise and Industry 2013) is a valuable tool but needs implementation. Having a consistent set of indicators will improve measurement of the baseline situation and the progress of greening in a comparable way across EU territories.

The existing measures of the performance of the tourism industry at national and EU-level are primarily of the socio-economic aspects (e.g., capacity and occupancy of tourist accommodation), while environmental aspects and 'greenness' of the tourism sector are not measured or reported systematically. Moreover, tourism is highly cross-sectorial in nature and relates to most of the other sectors (e.g., building and construction, energy, water management, transport), which makes it challenging to measure its direct impact on the economy.

One possibility could be to **introduce reporting of a key environmental data through the Tourism Satellite Account (TSA) system** which is already collecting information on tourists and the economics of tourism activities in most member countries. This could for example be the yearly consumption of water and energy in each tourism facility which may be extracted from energy and water bills. Also the level of waste water treatment at the facility the enterprise is linked to could be reported, as well as the waste handling systems. This would provide the opportunity for clarifying the per-guest-night consumption of water and energy and the residual waste (BOD5) not retained by wastewater treatment systems, and the amounts of waste per guest night.

These data on consumption patterns and related outputs to the environment (e.g. waste water quality after treatment) could help identify where the impacts of tourism are highest and where 'greening' initiatives in tourism would lead to the greatest improvements. This would also help increase awareness of the environmental issues in tourism, as the expenses and potential savings become visible. A systematic reporting of environmental data in tourism would allow the EU statistical office to increase the environmental reporting on tourism issues and obtain more of a triple bottom line reporting.

Harmonising environmental labelling programs

The proliferation of certification schemes in tourism is confusing to both tourists and the tourism industry. Currently, there are over 140 tourism supply chain certification schemes worldwide. Initiatives have been taken by the Partnership for Global Sustainable Tourism Criteria (GSTC Partnership - a coalition of more than 50 organizations working together to foster increased understanding of sustainable tourism practices) to establish **global criteria**

for sustainable tourism. The different certifications can then achieve GSTC recognition if their standards align with the Global Sustainable Tourism Criteria. This could be an option of the different European labeling schemes to use this global label as a tool for harmonisation. The EU Ecolabel (Flower) has a few hundred certified tourism enterprises but with approx. 202,380 hotels and similar establishments and 270,603 other collective accommodation establishments there is great opportunities for expanding environmental certification and obtain the savings (environmentally and economically). Studies of the greening of tourism indicate that there are high potentials for positive gains from greening of the tourism sector.

Another option would be to **include sustainability criteria in the "European Tourism Label for Quality Systems" (ETQL).** This has been analysed (CEPS 2012) for 3 different options: Option A: provision of information on participation in an environmental scheme, such as the EU Ecolabel or EMAS. Option B: inclusion of specific environmental criteria inspired by other EU initiatives (e.g. the EU Ecolabel) and tailored to the tourism sector. Option C: compulsory participation in an environmental sustainability scheme. Choosing more mandatory options such as B or C would increase focus on sustainability.

Coordination of greening of tourism with greening initiatives in other sectors

Tourism is highly cross-sectorial in nature and related to other sectors such as transport, building and construction, energy, water management, and waste management as well as marine affairs, biodiversity etc. Much of the greening initiatives are driven by each of the sectors and policy affecting the greening of tourism will in fact originate from policies primarily related to other sectors. Coordination of the greening initiatives across sectors is highly relevant for the tourism sector.

8 References

Aaron, T. (2010) Solar Power Serpent Highway Proposed for Santa Monica. http://buildaroo.com/news/article/solar-power-serpent-highway-santa-monica/ (access date 24.09.13).

Batta, R.N. (2009). Green tourism certification manual. Tokyo: Asian Productivity Organization (APO). Retrieved April 27, 2012. http://www.apo-tokyo.org/00e-books/GP-18_GreenTourism.htm# contents

Centre for European Policy Studies (CEPS) (2012) Estimated Impacts of Possible Options and legal instruments of the umbrella European Tourism Label for Quality Schemes. FINAL REPORT Submitted to the European Commission, DG Enterprise and Industry Within Framework Contract B4/ENTR/008/006. http://ec.europa.eu/enterprise/newsroom/cf/_getdocument.cfm?doc_id=7655

DG Enterprise and Industry (2012) Ensuring a successful implementation of the Tourism Communication (Com (2010) 352 Final) Implementation Rolling Plan (latest Update 22.10.2012). http://ec.europa.eu/enterprise/sectors/tourism/files/communications/com_implementation_rolling_plan_revised_en.pdf

DG Enterprise and Industry (2013) European Tourism Indicator System Toolkit for Sustainable destinations. http://ec.europa.eu/enterprise/sectors/tourism/sustainable-tourism/indicators/index_en.htm

DG Enterprise and Industry (2013) Tourism EU policy – background http://ec.europa.eu/enterprise/sectors/tourism/background/index_en.htm (Access date: 06.05.13)

Dodds, R. and Joppe, M. (2001). Promoting urban green tourism: The development of the other map of Toronto. Journal of Vacation Marketing, 7(3), pp. 261-267.

Eijgelaar, E. et al.(2010) Antarctic cruise tourism: the paradoxes of ambassadorship, last chance tourism' and greenhouse gas emissions. Journal of Sustainable Tourism. 18 (3), pp. 337 – 354.

ERNEST project best practices – http://www.ernestproject.eu/coalap/pages-ernest/home.jsf

European Union Business and Biodiversity Platform (201_) Tourism Sector and Biodiversity Conservation - Best Practice Benchmarking http://ec.europa.eu/environment/biodiversity/business/assets/pdf/sectors/FINAL_Tourism.pdf

European Commission (2010) Europe, the world's No 1 tourist destination – a new political framework for tourism in Europe. COM (2010) 352 final. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0352:FIN:EN:PDF

European Commission (2007) Agenda for sustainable & competitive European tourism . (COM(2007) 621 final). http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0621:FIN:EN:PDF

European Commission (2006) A renewed EU Tourism Policy: Towards a stronger partnership for European Tourism. (COM (2006) 134 final). http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0134:FIN:EN:PDF

European Commission (2003) Basic orientations for the sustainability of European tourism. (COM(2003) 716 final). http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0716:FIN:EN:PDF

European Commission (2001) Working together for the future of European tourism COM(2001) 665 final. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0665:FIN:EN:PDF

Eurostat (2008). NACE Rev.2; Satistical classification of economic activities in the European Community, Luxenburg: European Commission.

Eurostat (2012) Tourism in Europe: Results for 2011. Statistics in focus 28/2012 http://epp.eurostat.ec.europa.eu/portal/page/portal/tourism/data/main_tables (Access date 30.04.2013).

Eurostat (2012b) Tourism trends http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Tourism_trends

Eurostat (2013) Tourism statistics - top holiday destinations. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Tourism_statistics_-_top_holiday_destinations (Access date 29.04.2013).

Eurostat (2013) Tourism statistics – image of trips, ……. http://epp.eurostat.ec.europa.eu/statistics_explained/images/6/6f/Trips_Nights_Expenditure_EU27_2011.png

Eurostat (2013) Tourism statistics. http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Tourism_statistics

Font, X. and Tribe, J. (2001). Promoting Green Tourism: the Future of Environmental Awards. International Journal of Tourism Research, (3), pp. 9-21.

Global Sustainable Tourism Council (2013) International standards - Creating universal principles. http://www.gstcouncil.org/gstc-objectives/gstc-international-standards.html

Gössling, S., Simpson, M.C., Scott, D., Hall, C.M. and Gladin, E. (2008) Climate Change Adaptation and Mitigation in the Tourism Sector: Frameworks, Tools and Practices. UNEP, University of Oxford, UNWTO, WMO: Paris, France.

Holden, A. (2008) Environment and Tourism, Routledge, Oxon, London.

Joint Research Centre (2012) Reference Document on Best Environmental Management Practice in the Tourism Sector. http://susproc.jrc.ec.europa.eu/activities/emas/documents/TOURISM_BP_REF_DOC_2012j.pdf

Joint Research Centre (2013) Best Environmental Management Practice - The reference document for the Tourism sector. SUSproc Sustainable Production & Consumption. http://susproc.jrc.ec.europa.eu/activities/emas/tourism.html (Access date 30.04.2013).

Kaae, B. C. , Nielsen, T. S. , Hasler, B. & Neye, S. T. (2007) Sectoral analysis and tourism model: 2.2.1e SENSOR. 97 pp.

Kaae, B. C. (2012) Inspirationskatalog – gode eksempler på bæredygtig og innovativ turismeudvikling i nordiske yderområder (Inspiration catalogue – good examples of sustainable and innovative tourism development in Nordic Peripheral areas). Nordic Council of Ministries. 302 pp. Link: www.norden.org/da/publikationer/publikationer/2011-557

Lane, B. (2009) Thirty years of sustainable tourism. In S. Gössling, C.M. Hall, & D. Weaver (Eds.), Sustainable tourism futures (pp. 19-32). New York: Routledge.

Mair, J. and Jago, L. (2010). The development of a conceptual model of greening in the business events tourism sector, Journal of Sustainable Tourism, Volume 18, Issue 1.

Miljøstyrelsen (2010) Partnerskab for Renere Skibsfart - Handlingsplan 2010-2011. www.ecoinnovation.dk/pv_obj_cache/pv_obj_id_EB441533CCD1C77F252A6128F4D0D6D6A4F20500/filename/Skibspartnerskab_Handlingsplan20102011.pdf (Date of access: 24.09.2013).

Mowforth,M and Munt,I. (2003), Tourism and Sustainability: Development and New Tourism in the Third World

Nielsen, T.S. & Kaae, B.C. (2007) Tourism Geography in Europe. In Helming, K. Perés-Soba, M. & Tabbush, P. (eds.) Sustainability Impact Assessment of Land Use Changes. Pp. 181-209. Springer.

Nordic Innovation (2012) Green business model innovation in the tourism and experience economy, Nordic Innovation Publication 2012/ May 2012: http://www.nordicinnovation.org/Global/_Publications/Reports/2012/2012_08%20Green%20business%20model%20innovation%20in%20the%20tourism%20and%20experience%20economy_Case%20examples_web.pdf

Northern Light Energy (2013) Vehicle electrification – Iceland http://en.nle.is/VEHICLEELECTRIFICATION/Iceland/(Date of access: 24.09.2013).

Peeters et al. (2007) Major environmental impacts of European tourist transport', Journal of Transport Geography. 15, pp.83–93.

Risk & Policy Analysts Limited (RPA) (2012) Study on the impact of EU policies and the measures undertaken in their framework on tourism. Final Report. Volume 1: Measures. Prepared for DG Enterprise and Industry, Specific Contract No: SI2.ACPROCE043952800.

Risk & Policy Analysts Limited (RPA) (2012) A Guide to EU Funding Programmes for Tourism Stakeholders. Volume 2 of a Study on the impact of EU policies and the measures undertaken in their framework on tourism. Prepared for DG Enterprise and Industry.

Scott and others (2010)

Stockholm Environment Institute (2009) Stepping towards a low carbon future: development and application of a tourism footprinting tool in the South West.

Tommasini, D. 2011. Tourism Experiences in the Peripheral North, Case Studies from Greenland, INUSSUK, Arctic Research Journal 2.2011.

United Nations Environment Programme and World Tourism Organization (2012) Tourism in the Green Economy – Background Report, UNWTO, Madrid.
United Nations Environment Programme and World Tourism Organization (2005) Making Tourism More Sustainable – A Guide for Policy Makers.

United Nations World Tourism Organization (UNWTO) (2012) . UNWTO World Tourism Barometer, Advance Release (January 2012).

UNWTO. (2001). Tourism 2020 Vision. World Tourism Organization, Madrid.

UNWTO 2010a. Tourism and biodiversity – achieving common goals towards sustainability. UNWTO. Madrid, Spain. http://sdt.unwto.org/en/publication/tourism-and-biodiversity-achieving-common-goals-towards-sustainability

World Tourism & Travel Council. (2012). Travel & Tourism Economic Impact 2012. http://www.wttc.org/site_media/uploads/downloads/world2012.pdf

World Tourism Organization, United Nations Environment Programme and World Meteorological Organization (2008) Climate change and tourism: Responding to global challenges. UNWTO, UNEP and WMO, Paris and Madrid.

www.espon.eu

The ESPON 2013 Programme is part-financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. It shall support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory.

ISBN